CHAPTER 2

Human Development in Time and Place

GLEN H. ELDER JR., MICHAEL J. SHANAHAN, AND JULIA A. JENNINGS

INTRODUCTION

The life course and human development has flourished as a field of study during the past quarter century, extending across substantive and theoretical boundaries (Mortimer & Shanahan, 2003), and now appears in many subfields of the social, behavioral, and medical sciences. With this change has come an increasing appreciation for linkages between changing contexts and human development.

Acknowledgments: We thank Ross Parke, Avshalom Caspi, and Richard Lerner for thoughtful reviews of the earliest version of this chapter (Elder, 1998a) and to Lilly Shanahan for her valuable review of the second version (Elder & Shanahan, 2006). Rainer Silbereisen provided a most helpful review of the present version. Our special thanks to the staff of the Carolina Population Center for preparation of the first two versions of the chapter under a grant from Eunice Kennedy Shriver National Institute of Child Health and Human Development (NIH/NRSA T32 HD07168) and to Terry Poythress for her preparation of this version.

The term context refers to the social embedding of individuals and typically entails study of biographical, historical, and ecological variations. The social concept of life course refers to a temporal pattern of age-graded events and roles that chart the social contours of biography, providing a proximal context for the dynamics of human development from conception and birth to death.

Conceptual and methodological breakthroughs associated with the interdisciplinary life course framework, coupled with the dramatic expansion of long-term longitudinal studies, have generated more research and knowledge than ever before about behavioral adaptations in real-world settings around the globe. We are also increasingly aware of people as agents of their own lives. New avenues of research have opened, and the future offers exciting promise for understanding how dynamic views of context and the person—including biological dimensions—interact to influence achievements, exposure to stressors, physical and psychological well-being, and social involvements.
This contextualization of lives and developmental processes occurs through the patterning of social roles, events, and age distinctions; and in a multilevel context of family/primary group, neighborhood, community, economic region, and country. The meaning of historical time and context stems in large part from the ecological process of place and its multiple levels (Bronfenbrenner, 1979). A distinctive feature of this ecology is its social inequalities of class, ethnicity, and gender. They are expressed across individual lives and the generations in cumulative dynamics of advantage and disadvantage through childhood, adolescence, and the adult years.

We begin this chapter by viewing the evolution of life course thinking as a response to the challenges that stem from following children into young adulthood, middle age, and late life. This chapter is also a product of the remarkable growth of these studies from the 1960s to the end of the century. Life course ideas in developmental science, social roles and relationships, and concepts of the age-graded life course are prominent in this conceptual advance. By the end of the 1990s, a new synthesis, linking theory on social relationships and age, had become a theoretical orientation on the social life course and its influences on human development in historical and ecologically defined contexts. Multiple lives are interdependent in this developmental process.

The elementary concepts and perspectives of life-course theory are surveyed next, with emphasis on the individual life course, its institutionalized pathways, and its social and developmental trajectories and transitions. Early research on social change in lives has generated a set of mechanisms that link lives and developmental dynamics to changing contexts. These mechanisms include the life stage of people when they encounter drastic change to their environment, the social imperatives that structure adaptations to new situations, the control cycle that life change initiates (loss of personal control prompts efforts to regain such control), and the tendency for new situations to accentuate matching dispositions. These mechanisms are embedded in a conceptual framework on the life course and development that is defined by core paradigmatic principles—the life-long process of human development and aging, the timing of events in the life course, human agency, the interdependence of lives, and historical time and place. We discuss these mechanisms and principles by drawing on relevant theory and research.

Traditional thinking about the place or location of individuals is undergoing significant elaboration through ecological studies of human development. We turn to this work and the theoretical implications of research on social contexts and the flow of families and children between them. Lives are lived by entering and leaving social roles, groups, and places. What factors influence these decisions? How can we understand human agency and contextual effects as parents construct the residential life course of their children? We investigate such questions through studies of place and migration in the lives of families and children. Genetic dispositions are relevant to this process, and we refer readers to our prior edition of this chapter (Elder & Shanahan, 2006) for such coverage.

Ecological influences are expressed in part through the impact of their historical time on lives and developmental processes. Although studies have tended to consider ecological effects apart from historical context, we attempt to inform this section of the chapter with both perspectives. Three topics highlight their interdependence: (1) considerations in studying changing times in lives; (2) societal change in lives, with a focus on contemporary China and its rural–urban divide; and (3) the impact of social discontinuities on the life course of young people during the dissolution of the Soviet Union into multiple sovereign states (late 1980s) and the reunification of Germany (1991). These two events transformed life in Eastern Europe, especially for the young who faced a new world of opportunities and stresses. We conclude this chapter by noting that the contextual frontier on human development is moving toward an integration of ecological and temporal perspectives.

This is the only chapter in the present volume that does not refer to children in the title, a feature that reflects its intergenerational, life course, and longitudinal perspective. Longitudinal samples enable us to follow children into adolescence and then to young adulthood with its social roles of advanced education, military service, parenthood, and work. According to this developmental life course perspective, children age into adulthood and its family roles, and parents eventually become grandparents. At any point in the life span, all ages are commonly represented in a person’s social world. The developmental significance of early life experience becomes most fully understood in the context of the later years.

THE DEVELOPMENT OF LIFE COURSE THEORY

The magnitude of intellectual development in life course studies is suggested by considering studies of person and society during the 1950s. In his widely read The Sociological Imagination, C. Wright Mills (1959) encouraged
“the study of biography, of history, and of the problems of their intersection within social structure” (p. 149). Mills started with the individual and asked what features of society produce such a person. He argued that the seemingly "personal problems" of one's life are better understood as repercussions of broad social tensions. He had few empirical examples, however, and was not concerned with dynamic views of person and context. Rather, he focused on types of society and adult behavioral patterns, with little recognition of social change, development and aging, or even human diversity. In this age of the cross-sectional survey, studies that followed children and adults over part of their lives were very rare. This was especially true for longitudinal studies of people in their social and historical contexts. With this in mind, it is not surprising that a dynamic concept of the life course had not yet appeared in the scholarly literature and was not addressed in the seminars of leading graduate programs.

The unfolding story of life course theory up to the present owes much to path-breaking studies that were launched more than 80 years ago at the Institute of Child Welfare (now Human Development) at the University of California in Berkeley: The Oakland Growth Study (birth years 1920 to 1921) and the Berkeley Growth and Guidance Studies (birth years 1928 to 1929). These studies were launched around 1930–1931. When the studies began, no one could have imagined what they eventually would mean for the field of human development. The original investigators did not envision research that extended into the study members' adult years, let alone into the later years of middle and old age.

There were many reasons for this focus on childhood and adolescence. Except for support from the Laura Spelman Rockefeller Foundation, funds for longitudinal studies were virtually nonexistent. The National Institutes of Health (NIH), major funders of such studies today, were not established until after World War II. With support from NIH, the classic Framingham Longitudinal Heart Study of the adult years was launched in 1946 and has evolved into a multigenerational project. However, the idea of adult development had not yet captured the attention of social, behavioral, and medical science. A mature field of adult development and aging was still decades away from becoming a reality. In the United States, the National Institute of Aging was not established until the mid-1970s.

Nonetheless, these barriers did not restrict the studies from continuing into the adult years and middle age. The Institute of Human Development contacted members of the Oakland Growth Study for interviews in the late 1950s, and another follow-up, scheduled in 1972 to 1973, joined the lives of all study members, some parents, and offspring, in an intergenerational framework. The Berkeley Guidance and Growth Studies became part of this follow-up. By the 1970s, Block (with the assistance of Haan; see Block & Haan, 1971), had completed a pioneering longitudinal study focused on continuity and change in personality from early adolescence to the middle years in the lives of the Oakland and Berkeley study members. Also during the 1970s, Vaillant (1977) followed a panel of Harvard men (recruited as students between 1939 and 1942, known as the W. T. Grant Study) into the middle years of adulthood, assessing mechanisms of defense and coping.

Another study at the Institute of Human Development (Elder, 1974/1999) placed the lives of members of the Oakland Growth Study and Berkeley Guidance Study in the Great Depression and traced the influence of hardship on family life, careers, and health up to midlife. Using data from a retrospective life history survey, this study also investigated the impact of military service in World War II and the Korean War on men's lives. To cap off this active decade, investigators at the institute conducted a multifaceted study that revealed patterns of continuity and change in social roles, health, and personality, with a distinctive emphasis on life patterns across the middle years (Eichorn, Clausen, Haan, Honzik, & Mussen, 1981). Both historical cohort comparisons and intergenerational connections were part of this project.

At Stanford University, a research team headed by Robert Sears actively followed members of the Lewis Terman sample of talented children into their later years. The Terman Study had become the oldest, active longitudinal study at the time, with birth years extending from 1903 to the 1920s. By the 1990s, the project had assembled 13 waves of data spanning 70 years (Holahan & Sears, 1995), and research was beginning to show the historical imprint of the times on the study members' lives, from the 1920s to the post–World War II years and into old age (Crosnoe & Elder, 2004; Shanahan & Elder, 2002). Over 40% of the men entered military service during World War II and 25% were involved in war industries on the home front (Elder, Pavalko, & Clipp, 1993). The lives of women in the Terman sample vividly reflect the gender-role constraints of society on their employment.

This extension of the child samples to the adult years provided an initial momentum for the scientific study of adult development and sharpened awareness of the need
for a different research paradigm that would pay attention to human development beyond childhood and to contexts beyond the family. Such work offered great promise for illuminating the intergenerational dynamics of parents and their children. The extension also documented the implications of early childhood experience for health in later life, a domain of major scientific significance in the 21st century (see Herd, Robert & House, 2011). Child-based models of development had little to offer because they did not address development and aging in the adult life course and were not concerned with changing social contexts. For the most part, the Oakland and Berkeley studies of continuity and change from childhood to the adult years were limited to evidence of correlational patterns between measures at time 1 and time 2 (Jones, Bayley, Macfarlane, & Honzik, 1971). The intervening years and their mechanisms remained a “black box.” Little, if anything, could be learned about linking events and processes from such analysis.

This observation also applies to Kagan and Moss (1962) who studied children in the Fels Longitudinal Study from “birth to maturity” by using correlation coefficients to depict behavioral stability across the years. Their approach ignored the diverse paths children take into adult life. By age 23, some of the study members followed a path to college, full-time employment, and marriage, and others entered military service or mixed employment and education. The timing of such transitions was important in determining their meaning and implications. For example, adolescent marriage and parenting are coupled with more social and economic constraints than the same transitions that follow a normative timetable, whereas late family formation maximizes the disruptive effect of young children. However, these considerations of timing and context—so richly descriptive of lives—were of little interest. In large part, this inattention reflected the view that continuity of behaviors and psychological dispositions required little explanation aside from the label “stability.”

Empirical studies of children into the adult and midlife years revealed major limitations to conventional knowledge of human development, which, in turn, posed major challenges for the future study of behavior:

- To replace child-based, “ontogenetic” accounts of development with models that apply to development and aging over the life course.
- To think about how human lives are organized socially and develop over time, exhibiting patterns of constancy and change.
- To relate lives to an ever-changing society, with emphasis on the developmental effects of social change and transitions.

As a whole, these challenges represent a view of human development advocated by proponents of contextualized development (e.g., Cairns & Cairns, 2006) and by the early Chicago school of sociology (Abbott, 1997), especially William I. Thomas. In the first decades of the twentieth century, a time of transformation in U.S. society, Thomas made a persuasive case for studying social change as “experiments of nature” in the lives of immigrants and children. Inspired by The Polish Peasant in Europe and America (Thomas & Znaniecki, 1918), researchers began to use life-record data to investigate the impact of social change. Before most of the innovative longitudinal studies had been launched, Thomas urged in the mid-1920s that priority be given to “the longitudinal approach to life history” (Volkart, 1951, p. 593). He claimed that studies should investigate “many types of individuals with regard to their experiences and various past periods of life in different situations” and follow “groups of individuals in the future, getting a continuous record of experiences as they occur.”

Social transformations of the 20th century raised many questions about historical variations beyond family life and kinship, such as schools, neighborhoods, and communities. In the classic Middletown studies (Lynd & Lynd, 1929, 1937), findings on families during the 1920s seemed to have little relevance to family life in the Great Depression. Life course theory emerged in response to such issues and to the challenge of an aging population as well as the rapid growth of longitudinal studies. In the terminology of this chapter, the life course refers most broadly to a theoretical orientation (or paradigm) that provides a framework for the study of changing lives in changing contexts. To use the distinction of Merton (1968), theoretical orientations establish a common field of inquiry by defining a framework that guides research in terms of problem identification and formulation, variable selection and rationales, and strategies of research design and analysis.

Based in large part on sociocultural theories of age and social relationships (Elder, 1975; Neugarten, 1968; Ryder, 1965), the concept of life course refers to a sequence of age-graded events and roles that defines the sociological contours of biography. A sociocultural perspective gives emphasis to the social meanings of age. Birth, puberty, and death are biological facts, but their meanings in the life course are social facts or constructions. Age distinctions
are expressed in expectations about the timing and order of a transition or change in state, whether relatively early, on time, or late. The life course can be linked historically to specific transitions and to the meanings of cohort membership (Riley, Johnson, & Foner, 1972). Birth year locates people in specific birth cohorts and thus according to particular social changes. The social life course of individuals is embedded within specific birth cohorts and their ecological dynamics. These dynamics may take the form of cumulative processes of life course inequality.

These dynamics may be expressed as cumulative processes of social inequality from early childhood into the adult life course. Disparities in socioeconomic status, ethnicity, and gender can initiate processes of disadvantage or advantage that increasingly differentiate people over the life course. There are numerous scenarios of cumulative disadvantage, such as the early death of a parent, which results in a child’s depressed feelings, behavior problems in school, erratic attendance, and the eventual loss of opportunity. Potential turning points along this life course can liberate youth from the grip of this negative dynamic such as through residential change that improves family life and the school environment (Wachs, Chapter 21, this Handbook, this volume).

G. H. Elder, this chapter’s senior author encountered such ideas about age and the life course in the 1960s, shortly after arriving at the Institute of Human Development (at UC Berkeley in 1962) to work with sociologist J. A. Clausen on the Oakland Growth Study. The dramatic changes of families and individual lives across the 1930s focused his attention on the patterning of lives and connections to a changing socioeconomic environment. Codes that captured trajectories were needed for people’s lives instead of the conventional codes for status at a point in time such as socioeconomic status (SES). The link between age and time provided an important step in this direction. The resulting perspective suggested a way of thinking about the social construction of individual lives, along with ideas from the life-history tradition of the early Chicago School of Sociology. Children of the Great Depression (Elder, 1974/1999) represented the published version of this initial effort to fashion a life course framework.

Since its inception, the field of life course studies has expanded its purview beyond historical variations to include dynamic contextual variations within and between cohorts—the ecology of human development (Bronfenbrenner, 1979). Studies revealed dramatic cohort diversity with respect to poverty experiences and economic fortunes, residential mobility, and neighborhood composition (Shanahan, Silloway, & Hofer, 2000). Each life is marked by social change in these respects, and the life course framework is useful in studying how these dynamics shape lives and also how the social aggregate of individual life patterns affect social institutions, such as schools and labor markets.

### Bringing Contexts and Temporality to Lives and Development

The socioeconomic context of human development became a compelling social issue in the hard times of the Great Depression (1930s), but the economic crisis did not place this theme on the research agenda of the California longitudinal studies, the Oakland and Berkeley projects (see Duncan, Magnusson, & Votruba-Drzal, Chapter 14, this Handbook, this volume). They continued to reflect the research interests of the investigators rather than the economic depression. The Oakland Growth Study focused on physical growth and development, a long-time interest of a codirector, and employed methods of social observation in field settings. The Berkeley Study under Jean Macfarlane’s leadership stressed the collection of data on family relationships and parental influences. Data collection for both projects included information on the socioeconomic relationships of family life, but the investigators did not make effective use of the data in empirical research. It would be difficult to know from study publications that the Oakland and Berkeley children were growing up during the Great Depression.

The absence of a socioeconomic-cultural context beyond the immediate family in the Berkeley Study was noted by a faculty member whom Macfarlane had invited to one of the study’s seminars. In a letter dated September 25, 1941, this person (identity unknown) expressed dismay concerning the neglect of material culture. In his view, family was overemphasized at the expense of other cultural factors. With reference to the case of a young girl in the study, he observed that “she is described as a person of almost any age in almost any society.” Despite an inadequate contextualization of development, the early Berkeley and Oakland studies made sure that measures of the material culture were used in data collection across the 1930s and thus ensured that these data would be available to subsequent generations of investigators. As a result, the senior author was able to carry out a longitudinal study of “children growing up in the Great Depression.” The Oakland data archive included socioeconomic information for 1929...
The Development of Life Course Theory

11

(before family income change) and 1933, the very worst year of the economic depression.

This Great Depression project evolved from the senior author’s research affiliation with the Oakland study at the Institute of Human Development in the 1960s. Trained in both sociology and psychology, Elder had been hired by the new director of the institute, sociologist Clausen, to work toward a design for coding the Oakland data. The ever-changing families of the Oakland Study sensitized Elder to the need for temporal concepts and measures and focused his attention on “ways of thinking about social change, life pathways, and individual development” (Elder, 1998, p. 1). But how to conceptualize them? His prior work on adolescence and the transition to adulthood introduced him to the research of Neugarten (1968) on the meanings of age and age-graded expectations and timetables. This anthology includes Neugarten’s pioneering papers from the 1950s and early 1960s. Other age concepts on historical time and timing were associated with birth year and age cohorts, as developed by Ryder (1965).

Role theory and the social capital of linked lives provided another way to think of the life course and its relation to other lives. The concept of role transitions by life stage indicates whether the transitions are early or later in a person’s life. Roles and their behavior could be viewed in terms of experiences that are brought to them and in terms of the time span of “being in that social role,” as well as according to issues of continuity and discontinuity associated with leaving a role. Along with the traditions of life history and career studies, the concept of life cycle was perhaps the most prominent perspective on a person’s life at the time, especially regarding family life. In a life cycle of generational succession, the young person is socialized to maturity, gives birth and nurtures members of the next generation, grows old, and dies. Each concept has relevance to a person’s life path. Role theory, as well as the life cycle, became part of an effort at the Institute of Human Development to develop a theoretical approach to individual lives and human development that would be useful for a study of the Oakland cohort across the Great Depression. With family income available for 1929 and 1933, the Oakland study could assess the extent of socioeconomic deprivation and its consequences among families and the study members.

This approach to lives in changing times and places has evolved into a prominent theoretical orientation on the life course in the twenty-first century. Notable developments have occurred across the social and behavioral sciences, from sociology (Elder, 1974/1999, 1975, 1985; Riley et al., 1972), demography (Ryder, 1965), history (Hareven, 1978, 1982; Modell, 1989), and anthropology (Kertzer & Keith, 1984), to ecological models (Bronfenbrenner, 1979) and life-span developmental psychology (Baltes & Nesselroade, 1979). Major examples include:

- Recognition of a life course perspective on human development that extends from the prenatal period to maturity, late life, and death. The rapid growth of longitudinal studies that link childhood to the adaptations of later life has facilitated what might be called a “whole life course” approach to human development and aging (Elder & Giele, 2009). An understanding of the trajectory of human development and aging begins in the prenatal years. This observation is a foundational theme of the Millennium National Longitudinal Study in the United Kingdom. The project was launched during 2000 and 2001 as a study of how the British people age from birth to old age and death.

- Life-history calendars for the collection of retrospective accounts of life events have been applied to numerous longitudinal studies (Cасi et al., 1996; Freedman, Thornton, Camburn, Alwin, & Young-DeMarco, 1988; Brückner & Mayer, 1998). Retrospective life history methods enable investigators to collect information on the life history of people and their world, though retrospection always entails some error of recall.

- Greater appreciation for the necessity of longitudinal and contextually rich data (Phelps, Furstenberg, & Colby, 2002; Ferri, Byrner, & Wadsworth, 2003; Hauser, 2009). In a special issue of Science, Butz and Torrey (2006) refer to the longitudinal study design as one of the greatest innovations of the 20th century in the social sciences—“a living observatory and potential laboratory augmented by case study and ethnography.” Byrner (2014) describes the longitudinal survey as “the essential tool for meeting the challenges of a (developmental) science that needs to adapt continually in response to social, economic, technological, and political change.”

- Appropriate statistical techniques have been developed for multilevel, longitudinal studies. They include hierarchical linear and trajectory models along with structural and dynamic person-variable and person-centered techniques (Bergman, Magnusson, & El-Khouri, 2003; Collins & Sayer, 2001; Little, Schnabel, & Baumert, 2000). Significant advances have also been made in the study of historical and cohort effects through new age-period-cohort methods that provide better estimates and identify explanatory mechanisms (Yang & Land, 2013). The past two decades have also witnessed major
advances in the study of “the ecology” of human development. Sampson (2012) has used the term *ecometrics* to refer to social observational methods in studying urban and rural places (see also Wachs, Chapter 21, this *Handbook*, this volume).

- **Cross-disciplinary models of collaboration**, particularly with psychology and history as well as biology and the medical sciences (Elder, Modell, & Parke, 1993; Levy & the Pavie Team, 2005). These models include new and exciting developments in subfields devoted to the study of physical and emotional well-being (Halffon & Hochstein, 2002; Hertzman & Power, 2003; Kuh, Ben-Shlomo, Lynch, Hallqvist, & Power, 2003). New initiatives from the Maternal and Child Health Bureau emphasize the life course perspective, such as the formation of a Maternal and Child Health Life Course Research Network. The objective of the network is to facilitate life course studies that inform Maternal and Child Health programs, policy, and practice and improve “health outcomes for mothers and children.”

- **A growing awareness that**, beyond history and the differing experiences of cohorts, *social change may entail an ecological change within cohorts* through diverse life histories (Shanahan, Mortimer & Kruger, 2002). Aspects of a social ecology are typically intercorrelated, and their synergistic interactions are critical to an understanding of time and place.

These developments represent significant advances in studies of the life course and human development. Life course theory today has much in common with interactionist thinking at the micro level, with its emphasis on transactions between person and ecology (see Magnusson & Stattin, 2006)—but it also attends to the organizations and reorganization of social structures and pathways through life. As might be expected, life course theory shares many objectives and concepts with Bronfenbrenner’s ecology of human development (1979; with Morris, 2006), especially its multilevel concept of the environment. However, life course models bring a more temporal perspective to the environment and individual. The life course paradigm also shares the ambition of life-span developmental psychology in rethinking the nature of human development and aging (Baltes, Lindenburg, & Staudinger, 2006), but it is more contextual in orientation and application. Indeed, the contextual limitations of the Oakland and Berkeley life-span studies in the early 1960s motivated efforts to place lives and developmental processes in historical time and social pathways.

These connections with life course theory and research add up to a much larger intellectual advance, one framed by relational developmental systems thinking in a multilevel, dynamic perspective known as developmental science. From the 1998 edition of the *Handbook of Child Psychology* and in the sixth edition, Lerner (2006, p. 6) observed that students of human development have witnessed “a sea change that perhaps qualifies as a true paradigm shift in what is thought of as the nature of human nature and in the appreciation of time, place, and individual diversity for understanding the laws of human behavior and development.” Consistent with the central theme of this chapter, Lerner asserted that “one must appreciate how variables associated with person, place, and time coalesce to shape the structure and function of behavior and its systematic and successive change” (2006, p. 7).

The principal traditions that led to an interdisciplinary framework of life course theory are illustrated by Figure 2.1: life-span development, social roles and relationships, and age and temporality. We begin with life-span concepts of development because this line of work prompted efforts to contextualize developmental processes across the life span. Two theoretical traditions in social science, social roles/relationships and age, provide a way to think about the social life course. Social roles and role transitions are basic elements of the life course, but they are timeless. That is, a role transition is not specific in terms of when it occurs. Chronological age brings time and timing to the social life course, and thus makes it more dynamic as a contextualization of development. Age data on birth year also locate individuals in historical time and in relation to ecological processes.

Life-span development refers in some ways to the longitudinal research that was underway at the Institute of Human Development when the senior author joined the staff to work with the Oakland Growth Study (in 1962). Bayley and Honzik were involved in longitudinal studies of intellectual development from childhood into the adult years (Jones et al., 1971). Other longitudinal studies focused on the stability of temperament dimensions from the early years into adulthood. Block had launched a program of research that used the California Q Sort to assess personality in adolescence and the adult years for a longitudinal study of life-span trajectories of personality. This project became *Lives through Time* (Block & Haan, 1971). In method, most especially, this ambitious study represents a path-breaking example of a person-centered study of life-span trajectories of personality. However, this project, as well as others noted earlier, was seriously
underdeveloped on the contextual side. None of them provided an understanding of the lived lives of the study members in historical time.

Pioneering work under the theme of life-span concepts features the studies and writings of Erikson (1950) on ego identity and psychosocial stages of development as well as the foundational contributions of Baltes (1997) to the evolution of life-span developmental psychology, from the late 1960s into the 21st century. This contribution includes his conceptualization of the process of selective optimization with compensation, a metatheory of development and aging discussed more fully in the pages to come. In a younger generation, Lerner (1982, 1991) emphasized the relative plasticity and agency of the organism, the multidirectionality of life-span development, and the lifelong interaction of person and social context. The concept of developmental task, perhaps first defined by Havighurst (1949), also represented a way of viewing development across socially defined life stages. The concept alerts the analyst to the possibility that different experiences and skills tend to be highly salient at different points in life. However, empirical evidence for distinct psychosocial stages is not compelling. The perceived or defined life course can change with aging through successive life reviews (Staudinger, 1989) in which the past is assessed in light of the present.

In the theoretical tradition of “social relations,” we come to a long prominent way of thinking about a person’s lived life, with a focus on the sequence of social roles, their socialization, and self or identity. The sequence establishes a life course that links the person to others. Central to this tradition is Merton (1968) on role sets and reference groups, Rosenberg (1979) on self-esteem, and Bronfenbrenner (1970) on socialization, to name a few. Early work in this tradition includes the studies of Thomas (Thomas & Znaniecki, 1918) on social roles and transitions in life histories, Mead (1934) on socialization and the self, Hughes (1971) on work and the self, Lewin (1948) on power-dependence relations, and Vygotsky (1978) on language, the self, and social relationships.

Studies of intergenerational relations have expanded from two to three and now even four generations, with important contributions from Jackson (2000) and his three-generation study of African Americans along with a rural Iowa longitudinal study of three generations (Elder & Conger, 2000). The most impressive multigeneration longitudinal study to date was initiated by Bengtson circa 1970 (Bengston, Putney & Harris, 2013) on contemporary issues of the generation gap. Launched in the greater Los Angeles region, this study has continued into the present century with four, and even five, living generations.
14 Human Development in Time and Place

Several topics illustrate distinctive contributions to the third strand of life course theory—age and temporality. Every event in life is marked by an age, such as marriage and the birth of children. Birthday celebrations mark each new year for a young child who is surrounded by adults who are getting older. In the first volume of the Annual Review of Sociology (Elder, 1975), the senior author’s essay focused on two life course perspectives based on age, the role of age and birth year in a cohort historical perspective, and a sociocultural perspective involving age expectations, identities, and norms. Social and cultural anthropologists, such as Mead (1963) and Linton (1942), observed and wrote about the role of age-graded societies and lives. Early contributions to the scholarship of age, the role of age and birth year in a cohort historical perspective, and a sociocultural perspective involving age expectations, standards, and norms in pioneering studies during the 1950s and 1960s. Neugarten (1968, 1996) at the University of Chicago’s Committee on Human Development developed a social psychology of age across the life span. She explored concepts of age expectations and identities, standards, and norms in pioneering studies during the 1950s. In the 1970s, sociologist Riley (1972) proposed a framework on age strata and cohorts for a macroscopic perspective on aging, drawing on Ryder’s influential perspective (1965) regarding cohorts in the study of social change. A cohort perspective based on people born in a particular year or a specific historical time soon began to appear with some frequency, as in studies of women’s work by Uhlenberg (1974), research on role sequences in the transition to adulthood by Hogan (1981), and Birth and Fortune, a volume by Easterlin (1987). In the field of social history, accounts of institutional and cultural change brought historical insights to the lives and pathways of young people (Modell, 1989) and adults (Hareven, 1978, 1982). With these brief overviews in mind, we turn to the development of life course theory, beginning with life-span concepts of development.

Life-Span Concepts of Human Development

A number of efforts in the psychological sciences have been made during the post–World War II era to link developmental trajectories to social structure. However, research questions did not ask about the implications of environmental change for the developing individual. The theory of psychosocial stages formulated by Erikson (1950) paid attention to cultural variations, but historians report little empirical support of his stages across time and place (Mitterauer, 1993). In The Seasons of a Man’s Life, Levinson (1978) outlined a theory of life structure that ignored variations in social structure and culture over historical time. Psychosocial transitions were affixed to age as if immutable to institutional change, such as the midlife transition between ages 40 and 45. For Erikson, Levinson, and other ontogenetic theorists, the starting point is a sequence of stages through which all persons must pass. This perspective views the social context as a “scene or setting” through which the person—loaded with his or her “natural predispositions”—must pass. By contrast, the life course paradigm views the interplay of social context and the organism as the formative process, making people who they are. Individuals do not “develop according to their natures” but, rather, they are continually produced, sustained, and changed by their social context (see Gottlieb, Wahlsten, & Lickliter, 2006).

Proponents of life-span developmental science addressed the challenges of such a view by seeking a perspective on development and aging across the life span that emphasized cultural influences and learned experiences or skills in patterns of aging. In theory, historical and cultural variations emerge as potentially influential sources of human adaptation and development. As Baltes (1979, p. 265) observed, “restricting developmental events to those which have the features of a biological growth concept of development is more of a hindrance than a help.” Baltes (1993, 1994) played a lead role in the conceptual articulation of life-span development since the 1960s. More than most proponents of this perspective, he interacted with life course ideas and distinctions over the decades (see Baltes et al., 2006). One panel exchange between Baltes and Elder on life-span developmental psychology and life course theory was held at the 2004 Ghent meeting of the International Society of Behavioral Development.

The following propositions on life-span development are not new in themselves but they add up to a distinctive perspective:

- **Life-span development results from lifelong adaptive processes** in which some are cumulative and continuous, and others are discontinuous and innovative, showing little connection to prior events or processes.
- **Ontogenetic development is local, specific, and time bound**, so it is never fully adaptive. There is no pure advance or loss in development.
- **Age-graded influences are most important in the dependency years, childhood/adolescence and old age**, but
The Development of Life Course Theory

History-graded and nonnormative influences are most consequential across the early and middle years of adulthood.

- Changes occur in relation to positive and negative events, gains, and losses, with the likelihood of expected losses increasing. Biological resources decline over the life span, but cultural resources may increase through the cultivation of wisdom and problem solving.
- Life-span development entails selection, optimization, and compensation. These mechanisms seek to maximize gains and minimize losses or declines. Selective optimization with compensation represents a “life-span model of psychological nature of human aging and the ubiquitous, age-related shift toward a less positive balance of gains and losses” (Baltes, 1993, p. 590).

The way these mechanisms or strategies work in later life is illustrated by an interview with the renowned concert pianist Arthur Rubenstein. When asked how he remained a successful pianist in his later years, Rubenstein referred to three strategies: “(1) he performed fewer pieces, (2) he now practiced each more frequently, and (3) he introduced more ritardando in his playing between fast segments, so that the playing sounded faster than it was” (Baltes, 1993, p. 590). The strategy of selection is illustrated by Rubenstein’s concentration on fewer pieces, the more frequent practice illustrates the use of optimization, and the increasing reliance on contrast in speed exemplifies a strategy of compensation.

This psychological model of successful aging has relevance for development at all ages including childhood and adolescence. Adaptations in adolescence can be viewed through the guidelines of selective optimization in which gains are maximized and risks, losses, or deprivation are minimized (see Heckhausen, Worsch, & Schulz, 2010). Youth select activities in which they are competent (e.g., athletics, academics, military service, or street life) and optimize benefits through an investment of resources, time, energy, and relationships. Life-span developmentalists such as Baltes have enriched our thinking about development and aging across the life course, and they have given some attention to the role of social, cultural, and historical forces in developmental processes.

However, their perspective on life-span development generally fails to apprehend social structure as a constitutive force in development. The problem stems from the framework’s conceptualization of context—it refers to age-graded, history-graded, or nonnormative influences. Age-graded influences shape individual development in largely normative ways for all people; history-graded influences shape development in different ways for different cohorts; and nonnormative influences reflect idiosyncrasies (such as physical) (see Stearns, Chapter 20, this Handbook, this volume). This conceptualization is unduly restrictive in two senses. First, within-cohort variability largely reflects non-normative influences, which are not easily subject to scientific study (Dannefer, 1984).

As a result, the social basis for within-cohort differences becomes a residual category. Second, as Mayer (2004) noted, life-span psychology views historical and nonnormative influences as idiosyncratic (i.e., unique, non-repeating), leaving only age-graded influences, which are thought to be largely based on biology and age norms. Because the larger social forces that lead to age norms are of little interest, within-cohort regularities in behavior are explained solely by personal attributes (biology and institutionalized norms).

In the final analysis, the study of contextual influences in cohorts is hampered because it produces largely invariant patterns through such age-graded influences, or it cannot be studied because of its seemingly random nature. Some of these issues were dampened by the initial enthusiasm of Baltes for cohort studies and the analysis of interindividual differences in intradividual change. But in retrospect, it appears that Baltes’s volume on cohort studies with Nesselroade in 1979 was followed by a decline in his regard for them. Nevertheless, some life-span investigators (e.g., Heckhausen, 1999) have continued to assess the link between broader social contexts and individual functioning across the life course. In the field of developmental science, there are numerous examples of this line of work, such as Silbereisen’s Jena research program on social change and human development, with its featured research on the impact of German Unification. We provide an overview of this research on pages **.

Social Relations: Roles and Sequences

The second column of Figure 2.1 refers to how an individual’s life pattern is structured by multiple role sequences, their transitions, and “linked lives.” Transitions into and out of social roles across the life span entail both social and personal changes in status and identity (Glaser & Strauss, 1971). Changes in major social roles, such as from living with parents in a dependent role and then moving to an independent household with a spouse, generally represent a change in life stage to the status of an adult. This process involves human agency in the selection of role options as well as social influences and constraints.
Human Development in Time and Place

The life cycle represented a dominant model of the social life span from the early 1900s to the 1960s. In its most precise definition, life cycle refers to a sequence of roles in parenting, from the birth of children through their maturity and departure from the home to the birth of their own children. In a life cycle of generational succession, new-borns are socialized to maturity, give birth to the next generation, grow old, and die. The cycle is repeated from one generation to the next in a human population (O’Rand & Kreeker, 1990). As reproductive cycles, the life cycle can vary greatly in tempo through variations in the timing of childbirth, whether very early or late in life between the generations.

Role change in one generation has consequences across the generations, ascending and descending (Burton, 1985). When the eldest daughter has a child before the age of 13, her mother may become a grandmother before the age of 30 and a great-grandmother before the age of 50. A sequence of early childbearing across the generations weakens the generational and age foundation for family authority and social control. Family authority over a newborn child tends to shift upward from the teenage mother to the grandmother. By contrast, late childbearing slows the cycle and minimizes age similarities across adjacent generations. Entry into later-life relationships may provide the social control to stabilize a person’s life and minimize involvement in unconventional and dangerous activities. In their Boston sample, Sampson and Laub (1993) reported that bonds to conventional figures provided a route of escape from delinquency for a number of men with a childhood history of delinquency.

During the familialistic post–World War II years, the life cycle became well known as the family cycle, through the writings of Glick and Hill, as a set of ordered stages of parenthood defined primarily by variations in family composition and size (Elder, 1978). Major transition points included courtship, engagement, marriage, birth of the first and last child, the children’s transitions in school, departure of the eldest and youngest child from the home, and marital dissolution through the death of one spouse. This sequence of life stages is based on an assumption that bears children and remains intact up to old age and death. Deviant patterns are excluded, such as marriages without children, those preceded by children, the widowed and divorced whether with or without children, and serial marriages (see also Ganong, Coleman, & Russell, Chapter 4, this Handbook, this volume).

The emerging complexity of contemporary family life did not fit this concept of the life cycle. First, childbearing has become increasingly uncoupled from marriage. Children are increasingly born prior to marriage or outside of marriage altogether. In the United States, the prevalence of divorce from the 1960s to the present has led to multiple families in a person’s life and to the likelihood that most children will experience a single-parent household before they enter adulthood (e.g., Fussell, 2002). Even with these limitations, the life-cycle concept and its family cycle tell us much about the social matrix of one’s life—the linked lives. They knit together a full array of family relationships through life stages and the generations, providing insight into family processes such as socialization and social control over the life span. They connect the developing person and his or her career.

Another feature of this complexity emerged as mothers increased their involvement in the labor force over the last quarter of the 20th century. This upward trend posed another limitation for the life-cycle framework and suggested the need for a dual career perspective to study these families and the lives of their members. However, even in the early 1970s, a prime era for life-cycle research, Young and Willmott (1973) found that studies of work and family were typically proceeding along separate paths with no substantial effort to investigate their interdependence and coordination problems. This observation contrasts rather strikingly today with a flourishing study of the interlocking trajectories of work and family life (Drobnic, Blossfield, & Rohwer, 1999; Moen, 2003). Life course models have been constructed to capture this dynamic.

In all of these ways, the life cycle of family roles entailed shortcomings in thinking about the life course of children and their parents. The temporality of age addresses some of these limitations by supplementing its relational approach with a temporal and contextual perspective. Entry into social roles in the life cycle may follow a certain temporal order, but these role transitions are not temporally located in a person’s life. For example, a life-cycle model of a person’s life might locate marriage before the first birth, but it would not indicate whether the marriage occurred at 20 or 40 years. The evidence suggests that event timing matters because social timetables, age norms, and age-graded sanctions influence behavior.

The concept of generation in the life-cycle perspective occupies a common historical location relative to historical events such as the economic recession that occurred between 1980 and 1983. A parent generation may have birth years that span 30 years, a period that could include eras of economic boom and bust in the 20th century. As such, it is apparent that generational role or position
cannot offer a precise way of connecting people’s lives to changes in society, whereas age and/or birth year does offer such a perspective.

A social role-generation perspective and a temporal-contextual perspective based on age are complementary in thinking about the social life course embedded in a social-historical context. One of the best research examples of why this convergence is important comes from *The Polish Peasant in Europe and America* (Thomas & Znaniecki, 1918). This pioneering work was described in the 1960s as “the greatest single study done thus far by an American sociologist” (Nisbet, 1969, p. 316). The lives of immigrants embodied the discontinuities of the age; they were socialized for a world that had become only a memory. The societies they left and entered—the Old World and the New—presented contrasting pathways for individual adaptation and development. Matters of social and historical time are clearly relevant to this project, and yet, Thomas and Znaniecki were largely insensitive to them.

For many years, the social role/life cycle perspective continued to offer a valuable way of thinking about the social patterning and interdependence of lives, although limited in a number of respects that we have noted. In the 1970s, this approach was combined with new understandings of age to form life course models with the analytic virtues of both theoretical traditions: linked lives across the life span and generations, coupled with the temporality of age and context through an age-graded sequence of events and social roles, embedded in birth cohorts. These models were also enriched by life-span concepts of human development that feature the agency of individuals in constructing their lives.

**Age and the Life Course**

A greater understanding of the meanings of age in people’s lives during the 1950s and 1960s provided a way of thinking about the relation of historical location and its ecology to life patterns with its events and social roles across the life span. The link between age/birth year and historical time occurred in large part through the influential essay of Ryder (1965) on the cohort as a way of studying social change and its effects on people and populations. Riley et al. wrote a comprehensive work on this topic in *Aging and Society* (1972). This important volume relates birth cohorts and age-graded roles. Both Ryder and Riley provided conceptual models for this relatively undeveloped field of study at the time.

Before Ryder’s essay on cohorts, the birth years of study members in surveys and longitudinal studies were most unlikely to be considered a way to locate people in history. Even the historical context of empirical studies received minimal attention (Thernstrom, 1964), although Bronfenbrenner (1958) demonstrated the importance of doing so by showing that the findings of two surveys of social class and childrearing made sense when one noted that they were carried out in different eras of the 20th century. Ryder’s influential essay increased the sensitivity of social scientists to the historical context of lives and their birth cohorts.

In addition, the surge of newly initiated longitudinal studies provided a dynamic approach to age and its meanings across the life span. This fresh perspective on age reflected the pioneering work of Neugarten (Neugarten, 1968, 1996; Neugarten & Datan, 1973) at the University of Chicago’s Committee on Human Development during the late 1950s and 1960s. Her work with colleagues revealed the variability of lives. People do not move across their lives in concert with others of the same age. They vary in the age at which they enter and leave key social roles.

In what follows, we more fully describe contributions to the two research traditions on age and the life course, the link between age cohorts and an age-graded perspective on life patterns. In combination, they bring temporality and context to a social perspective on the life course.

**A Cohort-Historical Perspective**

Birth year or date of entry into a system such as school graduation locates the individual according to historical time and related social change. With age peers in the cohort, the individual is exposed to a particular segment of historical experience as he or she moves across age-graded roles. To grasp the meaning and implications of birth year and cohort membership, the investigator specifies the distinctive historical events and processes at the time as well as characteristics of the cohort, such as its size and composition. These characteristics are themselves a consequence of historical changes in birth and death rates, immigration, and migration.

As successive cohorts encounter the same historical event, they do so at different life stages, defined by social roles, maturity, and life experiences. This means that adjacent cohorts bring different life experiences to the change. Ryder (1965, p. 846) stressed this life-stage principle in his account of cohort differences in the life course. As each cohort encounters a historical event, whether depression or prosperity, it “is distinctly marked by the career
stage it occupies.” This mark may take different forms. One type of outcome involves cohort differences, such as the less adverse effects of hardship among the older Oakland boys in the Great Depression study versus the much younger Berkeley boys (Elder, 1974/1999). For another perspective, consider age at entry into World War II. The age range spanned 20 years: Some recruits were launching their adult lives, whereas others were in their mid-30s with families and careers.

In addition to cohort effects, history may take the form of a period effect when the influence of a historical change is relatively uniform across all age groups. Rodgers and Thornton (1985) found that marriage and divorce rates did not vary across the 20th century by age groups. On rates of marital dissolution, they observed that “the big picture is one of overwhelmingly historical effects that influenced all subgroups of the population substantially and surprisingly equally” (p. 29). Concerning divorce, they referred especially to the rising level up to the 1930s, the decline in the Great Depression era, a rapid recovery to the extraordinary peak of divorce in the mid-1940s, and then to the upward trend during the 1960s and 1970s. The precise explanation for such period influences was not determined.

When theory and research focus on the cohort level, the linking mechanisms between lives and changing times have been difficult to pin down. Cohorts can be merely “black boxes” with no information on causal dynamics and linkages. Speculation frequently takes the place of disciplined explication. Another issue concerns environmental variation within cohorts. Thus, some children may be exposed to the economic stress of a plant closing, whereas others are insulated from such stresses by their father’s different place of employment. In response to such heterogeneity, more studies are investigating specific types of differential social change within a single birth cohort (George, 2009).

The age-graded life course. During the late 1950s and early 1960s, Neugarten directed a research program that featured the concept of a normative timetable and individual deviations from age expectations. The timetable refers to the social meanings of age, as defined by people’s expectations regarding events and social roles. In theory, age expectations specify appropriate times for major transitions, and violations of them may lead to adverse consequences, from informal sanctions to lost opportunities. There is an appropriate time for entering school, leaving home, getting married, having children, and retiring from the labor force. With colleagues (Neugarten, Moore, & Lowe, 1965), Neugarten observed a high degree of consensus on age norms across some 15 age-related characteristics in samples of middle-class adults. The data not only show a general agreement among men and women on the appropriate age for a woman to marry but also support the hypothesis that informal sanctions are associated with relatively early and late marriage. Moreover, the women were aware if they were on time, late, or early with respect to marriage and other major role transitions.

This pioneering line of research has been extended in fruitful ways by Settersten. He and Hagestad carried out a study of the perceived deadlines in both family and education/work transitions in the 1990s among men and women in the Chicago area (Settersten, 2003). A large majority of the respondents claimed that there were deadlines for this type of transition, but Settersten noted that the big challenge in this area is to clarify what is meant by the term age norm. Research on age norms has been limited by the fact that the identification of an age norm typically requires the observation of a relevant sanction—the two phenomena cannot be studied independently. Settersten also made the point that deviations from age expectations and timetables may entail consequences that have nothing to do with informal sanctions as we know them. A very late marriage, for example, increases the risk of childlessness.

For many decades, age-grades were inferred as possessing common significance for members without evidence of their meaning to these individuals. When do young people assume the perspective of an adult? Neugarten was one of the first developmentalists to pose such questions, and she did this work with a sample of adults during the 1950s. She found (see Neugarten & Peterson, 1957) that men with lower socioeconomic status tended to perceive a more rapid passage through the major age divisions of life than did middle-class men: Maturity, middle age, and old age came earlier in the lower SES strata, owing perhaps to class-linked laboring jobs and stresses. The men who relied on mental skills in a sedentary occupation foresaw a relatively long period of productivity, whereas the manual worker expected a relatively short span of productive activity, followed by retirement.

Contemporary studies of the meanings of age status have focused on the transition to adulthood. Entry into family roles (marital and especially parental) are typically most predictive of an adult definition of self, and this is what Shanahan, Mortimer and Porfeli (2005) observed from a contemporary longitudinal study of the young adult transition in an urban sample of midwestern Americans. It is also the case that entry into these roles has been delayed significantly across the 20th century, owing in part to employment and advanced education opportunities.
Consistent with this interpretation, Americans in their 20s who perceived themselves to be relatively late in the transition to adulthood were found to be most committed to an advanced path of higher education in a national longitudinal study (Benson & Elder, 2011). Young people who defined themselves as adults ranked lowest in socioeconomic origin and educational plans. Similar to Neugarten and Peterson’s finding of life course acceleration in later life among adults in the lower SES, these young people were following an accelerated subjective path to adult status.

Research on age and the subjective life course represents an example of how investigations of the meanings of age have opened up a way to think about identity in a context of changing roles across the life course. The sequence of age-graded roles and statuses depicts a social trajectory of the life course, and its transitions from one role to another that influence how young people view themselves and others.

**Converging Research Traditions in Life Course Theory**

Contemporary theory on the life course and its social dimensions differs from the perspectives of an earlier era by joining the life-cycle processes of social relationships with the temporal and contextual aspects of age. In *Children of the Great Depression* (Elder, 1974/1999), the social role perspective was combined with the analytic meanings of age for linking family and individual experience to historical change, and for identifying age-graded trajectories across the life course. Both theoretical strands provide essential features of a social life course on matters of time, context, and process. The life course is age-graded through social institutions and structures, and embedded in relationships that constrain and support behavior. In addition, people are located in historical settings through birth cohorts and are linked across the generations by ties of kinship and friendship.

By integrating social relationship concepts and age-based distinctions on social trajectories, along with life-span concepts of the person, the life course framework offered a promising approach to the contextual study of human development in longitudinal samples (Figure 2.1). Both the individual life course and a person’s developmental trajectory are connected with the lives and development of others. Life course theory thus took issue with life-span studies that viewed human development as an unfolding process that is not coactive with social and cultural processes in historical time. Moreover, the life course paradigm is responsive to the call by Lerner (1991, p. 27) for more attention to contextual variability and represents a perspective in the field of developmental science (Cairns, Elder, & Costello, 1996) that extends across system levels and disciplines.

The contextual perspective of the life course framework has much in common with Bronfenbrenner’s ecology of human development, now called bioecology theory (Bronfenbrenner & Ceci, 1994). His *Ecology of Human Development* (Bronfenbrenner, 1979) proposed a multi-level view of the sociocultural environment, from macro to micro, but it did not include a temporal perspective on individual development across changing environments. Some years later, Bronfenbrenner (1989, p. 201) noted this major lacuna in his work and proposed the concept of *chronosystem* with its three interacting components over time: (1) the developing person; (2) the changing environment; and (3) their proximal processes. This concept has not been widely adopted, but Bronfenbrenner’s ecological perspective has appeared in numerous contextual studies of child development, especially in the field of neighborhood influences (Bronfenbrenner & Morris, 2006; Leventhal, Dupéré, & Shuey, Chapter 13, this *Handbook*, this volume).

Human development in life course theory represents a process of organism-environment transactions over time in which the organism plays an active role in shaping its own development. The developing person is viewed as a dynamic whole, not as separate strands, facets, or domains such as emotion, cognition, and motivation. The course of development is embedded in a dynamic system of social interchanges and interdependencies across and within levels. As noted by Bronfenbrenner (1996), this dynamic in life course theory is illustrated well by the interlocking lives and developmental trajectories of family members who are influenced differently by their changing world. We turn now to perspectives and basic concepts that link the social life course and developmental processes.

**Elementary Life Course Concepts and Perspectives**

For a study that is framed in terms of changing times and places, the objective is to link historical and spatial processes with individual development by examining multiple levels of the social environment (Elder & Russell, 2000). Starting with the macro level, societal change may transform social institutions, communities, and cultures,
and in so doing establish developmental constraints for choices and generate individual agency at the micro level. The multilevel nature of the life course and human development invites different points of entry, each with specific questions, ranging from cultures and institutions to human biology and the genome (Shanahan & Porfeli, 2002). A single study commonly employs different entry points for aspects of the same project. Thus a project motivated by the impact of rural change on children’s social and emotional development should be framed by an initial focus on the transformation of rural communities and the economic well-being and hardships of families within these communities. Such a study would be incomplete without reference to the adaptive patterns of parents and children: their developmental trajectories of behaviors, psychological profiles, and health.

Indeed, empirical studies of the farm crisis (1980 to early 1990s) in the United States, as it played out in central Iowa, tell us that the distinction between families engaged in farming versus families living in the small rural towns was key to linking social change and young people’s lives. Parts of this study might also investigate the determinants of specific emotional or social outcomes and relevant protective resources in the family, a point of entry that centers on the developmental status of the child. Still other entry points might begin with the interchange of parents and child or with sibling relationships. Each point could become a framing statement for an independent study, although all entry points provide insight into a central guiding question about context. By studying diverse aspects of the same problem, the processes of social change and individual development give life to variables otherwise considered “social addresses,” such as SES, sex, and ethnicity.

Considerable leverage in conducting such studies is provided by concepts and perspectives that bridge social change, place, and individual development, theoretical tools that reflect decades of empirical study. To understand this conceptual bridge, we turn to elementary concepts. First, we begin with multiple levels of the life course, ranging from institutionalized pathways to cumulative patterns of context, which shape the individual life course.

Developmental science is ultimately directed to the study of adaptive and maladaptive patterns of change and constancy at the level of the person. Yet institutionalized pathways provide a broad context for development and set the stage for cumulative patterns of social experiences that shape the individual’s life course. Second, other temporally sensitive concepts—most notably, trajectory, transition, and turning point—are taken up with particular emphasis on the properties of social transitions (see Table 2.1). Third, we focus on linking mechanisms that have proven highly useful in the study of change and place. Beginning with studies of children who were born before the Great Depression, research has revealed a set of mechanisms that link context and the individual life course and, as will be seen in subsequent sections, these mechanisms have proven highly probative in the study of place. The paradigmatic themes of life course theory draw on these elementary concepts and mechanisms, underscoring the socially dynamic basis for individual development.

### Social Pathways, Cumulative Processes, and Durations

Social pathways, cumulative patterns, and the duration of experiences represent dynamic views of context. Pathways typically refer to sequences of social positions in and between organizations, institutions, and phases of life. Institutionalized pathways generally have specified time

<p>| TABLE 2.1 Central Concepts of the Life Course: Social and Developmental Dynamics |</p>
<table>
<thead>
<tr>
<th>Conceptual Description</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Pathway: Sequences of positions within and between institutions, organizations, and phases of life</td>
<td>Tracking within schools; occupational career ladders; transitions from school tracks to labor markets</td>
</tr>
<tr>
<td>Duration: Time spent in a social status or role, span of exposure</td>
<td>Years in poverty; years married</td>
</tr>
<tr>
<td>Cumulative Effects: Increasing effect of earlier experiences with the passage of time (akin to compounding interest)</td>
<td>Effect of education on health becomes stronger as people age</td>
</tr>
<tr>
<td>Chaotic Events: Sequences of risky or salutary experiences across development</td>
<td>Chain of risk: Life events often lead to further life-events; institutionalization in childhood increases likelihood of additional risks</td>
</tr>
<tr>
<td>Social Trajectory: Behaviors that likely coincide with pathways</td>
<td>Income stream from an occupational career line</td>
</tr>
<tr>
<td>Developmental Trajectory: Behavioral pattern over time, often associated with coinciding social patterns in context</td>
<td>Pattern of change in depressed affect through adolescence is associated with patterns of stressors during the same period</td>
</tr>
<tr>
<td>Transitions: Discrete change in social role, set of roles, or membership in social organization</td>
<td>Transition to first grade to adulthood, to a new school</td>
</tr>
<tr>
<td>Turning Point: Change in social circumstances that markedly alters life course, often because of the meaning of the event</td>
<td>Transition to a new school may be associated with substantial improvement</td>
</tr>
<tr>
<td>Knitting-Off Experience: Turning point that renders earlier life course much less consequential</td>
<td>Military service can interrupt nascent antisocial career; marriage may have similar effect</td>
</tr>
</tbody>
</table>
boundaries, what Merton (1984) called “socially expected durations.” Children who are held back in school become aware of their lagging status on the educational ladder (Alexander, Entwisle, & Dauber, 1994), and company managers talk about the relation between age and grade in prospects for promotion to senior rank (Sofer, 1970, p. 239). A growing body of research also considers early entry into adult roles—what Burton (2007) aptly called “adultification”—as well as pathways into retirement (Kim & Moen, 2002). Whether a new phase of life, emerging adulthood, now characterizes pathways into adulthood is a lively topic of inquiry (Bynner, 2005).

In addition to their age-graded nature, pathways structure the direction that people’s lives can take. Pallas (2003, p. 168–169) observed that pathways have distinct features that govern how strongly people’s trajectories and behaviors are shaped, including, for example, the number of options a pathway leaves open in the future, the extent of mobility that is likely to be experienced, stigma and extrinsic rewards, and the importance of personal choice. Some pathways provide future opportunities and chances for upward mobility based on personal motivation, whereas others effectively block promising avenues irrespective of one’s efforts. Importantly, these pathways reflect social arrangements as found, for example, by McFarland (2006) in how a particular high school chooses to implement a math curriculum.

Pathways are also multilevel phenomena reflecting arrangements in place at levels of culture, the nation-state, social institutions and organizations, and locale. To varying degrees, people work out their life course in established or institutionalized pathways. At the macro end of this multilevel system, governments generally establish pathways (Leisering, 2003). At micro levels, institutional sectors (economy and education) or local communities (school systems, labor markets, and neighborhoods) guide the pathways. Each system level, from macro to micro, socially regulates, in part, the decision and action processes of the life course, producing areas of coordination or discord and contradiction (e.g., marriage, divorce, and adoption laws). At the primary level of the individual actor, some decision pressures and constraints are linked to federal regulation, some to the social regulations of an employer, and some to state and community legislation.

Mayer (1986) had the nation-state in mind when he identified important societal processes, “which impose order and constraints on lives” (pp. 166–167). These include the cumulative effects of delayed transitions, institutional careers, the historical circumstances associated with particular cohorts, and state intervention. Growth of the state in social regulation counters the modern tendency toward individualism. At the personal level, the state “legalizes, defines and standardizes most points of entry and exit: into and out of employment, into and out of marital status, into and out of sickness and disability, into and out of education. In doing so, the state turns these transitions into strongly demarcated public events and acts as gatekeeper and sorter” (p. 167). To be sure, each nation-state represents a unique configuration of laws, rules, and norms that structure the life course. Viewed from this vantage point, cross-national and historical studies become highly strategic in studying societal forces and individual lives and indeed they have become increasingly common as diverse countries collect data containing the same information. The Panel Study of Income Dynamics in the United States (launched in 1968) has become a model for nationwide longitudinal studies in Europe, as in Great Britain and Germany.

Multilevel accounts of the life course are well illustrated by studies of the transition to adulthood (Settersten, Furstenberg, & Rumbaut, 2005), which highlight how changing institutional arrangements and cultural understandings shape pathways by comparing and contrasting different countries and historical periods. Billari noted that such comparisons are especially powerful among European countries. Each has distinct socioeconomic, political, and cultural features and yet, particularly with the formation of the European Union, they have a growing sense of common identity (Billari & Liebfrbro, 2010). His empirical work suggests that the transition to adulthood is becoming increasingly prolonged and diverse (e.g., increasing childbirth outside of marriage), but that this “European pattern” is clearly in evidence in northern Europe and is now diffusing across the rest of the continent. Studies may also examine changing societal arrangements by taking a historical view within a circumscribed geographical area (e.g., Bras, Liebbro, & Elzinga, 2010).

Within this broader literature on the transition to adulthood, much attention has been paid to transitions from secondary school to work because of its dramatic variability across countries and serious consequences for economic growth and income trajectories for people (Kerkhoff, 2003; Marshall, Heinz, Kruger, & Verma, 2001). For example, considerable structure is provided working-class German youth in a secondary-level system that in theory joins industrial training and education in an apprenticeship system. In principle, placement in a skilled craft is assured for youth who complete their
apprenticeships. American adolescents encounter the least amount of articulation between schooling and workplace. Vocational training in secondary schools is not closely linked to specific industries, their recruitment, and skill needs. In many less-developed countries, youth are forced to leave school early to support their families; in turn, their lowered educational attainment results in low wages, which forces their children to leave school early as well (Shanahan, Mortimer, & Kruger, 2002). This intergenerational cycle of disadvantage illustrates how pathways from school to work can reproduce across the generations.

Prior to entry into work, however, young people encounter educational pathways. As with career lines, pathways of education have been institutionalized in historical time, extending through later grades and into college (Shanahan, Miech, & Elder, 1998). Perhaps problematically, vocational training after high school is often not considered desirable for students, unlike the situation found in many European countries. Studies of the educational system in the United States reveal that these pathways begin very early in life and that their effects cumulate to produce marked differences among students and workers. Thus—drawing on data from the Beginning School Study in Baltimore—Entwisle, Alexander, and Olson (2003) documented educational pathways that begin to take form in the first grade. In a school where 88% of the students were on subsidy, every first grade student received a failing mark in reading in the first quarter. In low-SES schools more generally, the average first grade reading score was 1.64 (below a C), in contrast to students in high-SES schools, who averaged 2.15 (above a C). Even controlling for family background and standardized test scores in this Baltimore study, African American children received lower first-grade reading and math scores, and these ethnic differences were subsequently magnified.

Although students of all ethnicities and SES groups benefited from schooling to the same degree, low-SES students’ reading ability decreased during the summer vacation, whereas high-SES students’ reading improved. Given initial differences in reading and math ability and these invidious summer trends, Entwisle, Alexander, and Olson (2003) concluded that “the long-term persistence of early rankings means that inequities visible in the first grade translate into deficits all along the line” (p. 239). Indeed, recent studies drawing on this sample show that first grade attributes—including temperamental factors, grades, and standardized test scores—predict educational attainments at age 22 (Entwisle, Alexander, & Olson, 2005; see also, Kerckhoff, 1993).

Research also suggests the importance of organizational characteristics of schools for educational pathways and their implications for human development. As Eccles (2004) observed, schools are multilevel systems reflecting macro-regulatory systems (national, state, and local laws and policies) and “mini-regulatory” systems, including, for example, the school as a formal organization and networks of teachers (see Crosnoe & Benner, Chapter 7, this Handbook, this volume). At the level of the high school, sequences of courses define educational career paths. Drawing on this insight, McFarland (2006) found that different high schools generate different patterns of “curricular flows” as students progress through math courses. One school exhibited a differentiated ability model, whereby students progressed according to their ability and had options to continue in math should they encounter failure. Another school showed a different pattern, “upstream and out,” whereby students either succeeded and continued in their math courses, or dropped from the sequence altogether.

Ideally, studies of the developmental consequences of life course change take into account the potential constraints and options associated with particular pathways. McFarland (2006) observed that curricular flows rendered students as “constrained agents” who had goals and ambitions but were ultimately enabled and constrained by the organization of their school’s curriculum. And as Eccles’s Person-Environmental Fit Model details, the developmental status of the student conditions the effects of pathways and their experiences (Eccles et al., 1993). Thus, the study of pathways and development calls for detailed attention to reciprocal patterns between structures of opportunities and constraints, and the capacities of the student.

Social pathways often bring with them cumulative processes, which refer to the growing implications of earlier experiences for later outcomes. The defining feature of accumulation is that the effects of earlier differences are magnified when predicting future behaviors, very much like compounding interest leads to an exponential growth in savings (DiPrete & Eirich, 2006). Accordingly, cumulative processes suggest that the effects of small differences earlier in development “grow” according to some exponential function over the life course (Alexander, Entwisle & Olson, 2014). Some evidence suggests the cumulative effects of early unemployment on future earnings (an effect referred to as scarring), and of early disadvantage for obesity and other aspects of health. For example, the effect of education on future self-rated health is time compounding, with poorly educated people showing increasingly lower
self-rated health through adulthood (Willson, Shuey, & Elder, 2007). However, there is surprisingly little evidence for cumulative processes in the sense of compounding interest, and a wide variety of model specifications remain completely untested (DiPrete & Eirich, 2006; Ferraro, Shippee, & Shafer, 2009).

Cumulation depends on duration, the span of time between changes in state. However, not all durations have cumulative effects. Some experiences persist, but their implications are best understood as linear. Furthermore, the full implications of long and short exposures to a situation depend on the nature of the situation itself. The concept of duration has been especially influential in studies of the permanence of marriage and employment, and the effects of stressors, SES, and poverty. For example, is divorce preceded by a lengthy period of family conflict? Little is known about the qualitative nature of experiences of long and short durations, although a lengthy involvement tends to increase behavioral continuity through acquired obligations, investments, and habits (Becker, 1964). The longer the duration of marriage, for example, the greater the chances for marital permanence (Cherlin, 1993); alternatively, marital happiness is likely to decline at all marital durations, with accelerated declines occurring during the earliest and latest years of marriage (Van-Laningham, Johnson, & Amato, 2006). Much more needs to be known about the quality of marriages of differing durations (Teachman, 2008) and their development implications.

A particularly telling example of the complexity of durations and their potential meaning is found in Mortimer’s 2003 St. Paul longitudinal study of adolescent employment (Staff, Mont’Alvao, & Mortimer, Chapter 9, this Handbook, this volume). With monthly educational and employment data, Mortimer and her colleagues developed a typology of work patterns through high school based on duration (whether the student worked more than 18 months through the 48 months of high school) and intensity (during periods of employment, whether the student worked, on average, more than 20 hours per week). Mortimer, Staff, and Oesterle (2003) showed that ninth graders with higher educational promise—as indicated by grades and aspirations—opted for less intensive work. Low intensity workers were also more likely to save their earnings for college. In turn, “steady workers” (high duration, low intensity) are more likely to earn a BA degree within 9 years of high school graduation than high duration-high intensity workers. Indeed, among students with low levels of educational promise, those who chose a steady work pattern were more likely to receive their BA than their low promise, high-duration/high-intensity counterparts. Such findings suggest that work of differing durations and intensity has distinct meanings and consequences and highlights the misleading nature of cross-sectional studies.

Many processes refer not to the duration of a particular social circumstance but rather to the triggering of chains of interrelated events, which have significant implications for later well-being and attainment (Rutter, 1989). Behavioral continuities across the life course are likely to be found in social interactions that are sustained by their consequences (cumulative) and by the tendency of these styles to evoke maintaining responses from the environment (reciprocal) (Caspi, Bem, & Elder, 1989). In cumulative continuity, both individual dispositions and family values are likely to favor the choice of compatible environments, which reinforces and sustains the match. Thus, antisocial youth tend to affiliate with other problem youth, and their interaction generally accentuates their behavior, producing over time what might be described as cumulative disadvantages (Cairns & Cairns, 1994; Sampson & Laub, 1997; Simmons, Burgess, Carlton-Ford, & Blyth, 1987b). Reciprocal continuity refers to a continuous interchange between person and environment in which reaction forms action and then by another cycle of action and reaction. As with cumulative continuity, the net result of reciprocal continuity is the cumulation of experiences that tend to maintain and promote the same behavioral outcome. Baldwin (1895) referred to such interchanges as “circular functions” in ontogeny. The ill-tempered outburst of an adolescent may provoke a cycle of parental rage and aggression, a widening gulf of irritation, and, finally, parental withdrawal, which reinforces the adolescent’s initial aggression (Pepler & Rubin, 1991). Over time, the interactional experiences of aggressive children can establish attitudes that lead them to project interpretations on new social encounters and relationships, thereby ensuring behavior that affirms the expected behavior. Aggressive children generally expect others to be hostile and thus behave in ways that elicit hostility, confirming their initial suspicions and reinforcing their behavior.

A growing body of evidence raises questions about the mechanisms that link early social experiences—particularly forms of inequality—with later health and well-being (Power & Hertzman, 1997). Drawing on the Dunedin sample, for example, Poulton et al. (2002) show that children’s SES (based on occupational categories) is an important predictor of physical health at age 26 even with their adult SES controlled. Children growing up in
households marked by low SES conditions have poorer health—defined, for example, by the body-mass index and cardiorespiratory fitness—when compared with children who grow up in high SES households, regardless of the children’s adult SES. The mechanisms that link such early experiences with later physical well-being are not well documented, although plausible mechanisms include health-related behaviors, especially during adolescence (Bauldry, Shanahan, Boardman, Miech, & Macmillan, 2012). The larger point, however, is that there is now abundant evidence that social pathways, cumulative process, and durations are notably associated with human development, although mechanisms that link these dynamic social experiences and the individual are typically not well-understood.

**Trajectories, Transitions, and Turning Points**

Social pathways and cumulative experience present temporally sensitive descriptions of context. Social trajectories provide a dynamic view of behavior and achievements, typically over a substantial part of the life span. Transitions refer to a change in state or states such as when youth leave home. A substantial mechanism in the course of a behavioral trajectory, often during transitions, may represent a turning point.

Trajectories and transitions are elements of established pathways, their individual life courses, and developmental patterns. Among individuals, social roles evolve over an extended span of time, as in trajectories of work or family; and they change over a short time span. The latter may be marked by specific events, such as children entering school for the first time, completing the first grade successfully, and graduating from high school. Each transition, combining a role exit and entry, is embedded in a trajectory that gives it specific form and meaning. Thus, work transitions are core elements of a work-life trajectory, and births are important markers along a parental trajectory.

Trajectories and transitions refer to processes that are familiar in the study of work careers and life events. The language of careers has a distinguished history in the study of work careers and life events. Work careers have been represented as career advancement, whether early or late, rapid or slow (Wilensky, 1960). The term career also has been applied to the trajectories of marriage and parenthood (Hill & Foote, 1970). All of these uses fall in the more inclusive definition of a life course trajectory. The term does not prejudge the direction, degree, or rate of change in its course.

Developmental trajectories are also integral to life course theory, especially when they are studied as interdependent with the changing dynamics of social trajectories (George, 2009). In a four-wave study of early adolescents, based on growth-curve models, Ge, Lorenz, Conger, Elder, and Simons (1994) found that (a) the trajectories of depressive symptoms increased sharply among European American girls, surpassing the symptom level of boys at age 13; (b) the increase for girls was linked to their exposure to an increasing level of negative events; and (c) the initial warmth and supportiveness of a mother minimized the subsequent risk of depressed states and negative events among daughters. Studies such as these have inspired many efforts to interrelate developmental trajectories and context, although frequently neglecting the changing nature of social circumstance. Increasing attention is being devoted to the study of classes of behavioral trajectories based on the supposition that people may be qualitatively distinct in their developmental patterns (Bauer & Curran, 2004).

According to this perspective, the population is heterogeneous with respect to behavioral trajectories; as such, distinct subgroups can be identified, and their covariates examined. Perhaps most famously, Moffitt (1993; see also Moffitt, Caspi, Harrington, & Milne, 2002) hypothesized that aggregate patterns in antisocial behavior conceal two distinct groups: (1) a small percentage of youth engaged in antisocial behavior at every stage of life (“life-course persistent”) and (2) a larger percentage of youth engaged in antisocial behavior during adolescence only (“adolescence-limited”). Indeed, drawing on semi-parametric models, researchers have uncovered evidence for unique trajectories of antisocial behavior (e.g., Nagin & Land, 1993). With greater use of such models there has been increasing appreciation for methodological issues (see Bauer & Curran, 2003 and accompanying exchanges; Eggleston, Laub, & Sampson, 2004; Nagin, 2004) and theoretical nuance that complicate the search for qualitatively distinct types of behavioral trajectories. Nevertheless, this approach raises exciting possibilities for linking behavioral patterns with change and stability in context and experience.

The multiple role trajectories of life patterns describe strategies of coordination or synchronization. Various demands compete for the individual’s or family’s scarce
resources such as time, energy, and money. Goode (1960) argued that an individual’s set of relationships is both “unique and over-demanding,” requiring strategies that minimize demands by scheduling and rescheduling transitions where possible. To cope with simultaneous, linked trajectories, the scheduling of events and obligations becomes a basic task in managing resources and pressures. The needs of children and financial requirements, for example, play important roles in determining work and leisure options.

The meaning of a transition has much to do with its timing in a trajectory. Consider the case of parenthood: the earlier the event, the greater the risk of social and health disadvantages for mother and child (Furstenberg, Brooks-Gunn, & Morgan, 1987). Early life transitions can have developmental consequences by affecting subsequent transitions, even after many years and decades have passed. They do so through behavioral consequences that set in motion cumulative advantages and disadvantages, with radiating implications for other life domains. A Baltimore study of adolescent mothers who were followed from 1966 to 1984 (Furstenberg et al., 1987) showed that variations in personal resources (e.g., IQ) during adolescence affected their economic success by influencing how they timed and ordered early events from marriage to education or employment. From the vantage point of this study, the quality of transition experiences early in life may foretell the likelihood of successful and unsuccessful adaptation to later transitions across the life course.

Transitions to parenthood during adolescence in the Baltimore panel raise another important general distinction: Life transitions can be thought of as a succession of mini-transitions or choice points. The transition from marriage to divorce is not simply a change in state, but begins with disenchantment and extends across divorce threats, periods of separation, and the filing of divorce papers. Different causal factors may operate at each phase of the process. “Origin” influences that increase the risk of disenchantment are likely to differ from those that sustain the process toward marital dissolution. In like manner, we can think of the transition to motherhood in adolescence as a multiphasic process in which each phase is marked by a choice point with options and social constraints. Developmentalists tend to view transitions as discrete events that occur in a relatively short period. Consequently, very little is known about the sequence of mini-transitions leading to full transitions.

The apparent contrast between institutionalized transitions and personal, idiosyncratic “transition experience” can misrepresent reality. In many cases, life transitions are an institutionalized status passage in the life course of birth cohorts and a personalized transition for individuals with a distinctive life and social history. The latter may represent an individual working out of the former. These faces of a transition apply to the normative transitions of life, from birth to school entry, marriage, parenthood, and retirement. Transitions of this kind may seem more predictable and structured than non-normative events, but all transitions can be sorted according to their extent of structures or degree of external regulation, duration, timing, predictability, and novelty.

Life transitions into different environments facilitate this process by representing potential turning points in a trajectory for a troubled life course. Such turning points are sometimes referred to as “knifing off” past experiences, which can allow for new opportunities and behavioral patterns. One example of a turning point is the desistance from criminal activity, a knifing-off experience that involves a transition into new situations that provide monitoring, social supports, growth experiences, and the emergence of a new self-identity (Laub & Sampson, 2003). Military service, gainful employment, and marriage are all new role commitments that provide opportunities for a break from the past and social integration (see also Bouffard & Laub, 2004).

A further example of turning points—this time in an educational trajectory—is found in a study of feeder patterns into high school (Crosnoe & Benner, Chapter 7, this Handbook, this volume). In the U.S. school system, pathways between middle school and high school are structured in different ways, affecting the proportion of one’s middle school classmates who attend the same high school. Schiller’s (1999) study of how differing feeder patterns affect subsequent grades is revealing. Among students receiving mostly Cs in middle school, high school math grades decrease as the proportion of one’s classmates in the same high school increases. The reverse is true among students receiving mostly As in middle school: High school math grades increase as the proportion of one’s classmates in the same high school increases. As Schiller notes, when middle school students disperse into many high schools, opportunities seem to open up for students at the bottom, as peer networks are disrupted. Consistent with a turning point, the old social world is knifed off and new opportunities for growth and identity change present themselves.

The concept of turning point also applies to the particular way people view their life trajectory—a subjective account of lived experience involves some degree of
change in situation, behavior, or meaning. Maruna’s (2001) interview study of desistance among ex-convicts is one of a few research efforts to investigate the changing nature of the self during a turning point. Important themes in the life narratives of desistors include acknowledging past crimes, understanding their genesis, and recasting the self as in control and with newfound purpose. Clausen (1995) used detailed analyses of life histories to assess the subjective turning points of people who have been part of a longitudinal study for 60 or more years. Based on this work, he concluded that “one’s life does not have to take a different direction for a person to feel that a turning point has occurred. But one must have a feeling that new meanings have been acquired, whether or not life experiences are much changed” (p. 371).

Similarly, Reynolds and Turner (2008) showed that the implications of life-events for mental health depend very much on their meaning to the individual. Life-events that call into question basic understandings of one’s life (or assumptive states) have a much bigger effect on depressive symptoms than do life-events not so classified. And as McLeod (2012) observed, stressors of all manner can trigger distress depending on their meaning; in turn, the source of the individual’s meaning is found in social and culture structures that characterize a time and place. Across different societies—and within societies, across historical periods—the same events are viewed as more or less stressful depending on changing institutions and cultural meanings.

Social Change and Life Transitions

The concepts reviewed in the previous section provide ways of thinking about social change and its implications for human development. Accordingly, social change refers to a broad range of transitional phenomena such as residential moves or a change of school. Additional contributions to this perspective come from mechanisms that link transitions and life patterns to historical change, and from paradigmatic principles that define the life course as a theoretical orientation. As a whole, these linking mechanisms—life stage, situational imperatives, control cycle, and accentuation principle—represent different understandings of the connections among individual lives, transitions in the life course, and the changing social world. These mechanisms are embedded in a theoretical framework defined by paradigmatic principles of the life course. Consider, for example, the principle of human development and aging as a lifelong process. The sequence of role transitions in the life course establishes different life stages, such as leaving home for kindergarten and its peer group experiences. This transition accentuates initial student differences in preparedness and maturity; and the situational imperatives of the classroom call for conformity to classroom standards of behavior. Teacher control in the classroom orientss individual student efforts toward greater self-regulation on the part of the child. Each educational transition contributes to a cumulative developmental and social process.

The paradigmatic principles draw on these mechanisms in charting the perspective of life course study—the principles of lifelong development and aging, human agency in making choices, the importance of timing in lives, linked lives, and historical time and place (Elder, 1998b). These principles represent more general theoretical themes that collectively define the analytical scope of life course theory. The mechanisms refer to why the effects of transitions differ in populations, whereas the principles apply beyond the scope of transitions, to properties of the life course as a sequence of age-graded roles.

Linking Mechanisms

The Depression studies focused on differences between cohorts born at opposite ends of the 1920s; because of their differing birth years, these young people occupied different life stages when the economy collapsed.

Life-Stage Principle

The life-stage principle holds that young people of different ages are likely to be exposed to the same slice of history but at differing points in development, creating unique patterns of social change and, at the level of the person, opportunities, challenges, strengths, and vulnerabilities. Viewed differently, children in the same family experience social changes in differing ways because of their differing ages. Indeed, the Oakland children passed through adolescence during the worst years of the Great Depression, but the Berkeley children became teenagers in World War II. Consequently, job scarcity, financial pressures, and emotional stress represented defining features of the Oakland cohort’s transition from childhood to young adulthood. By contrast, members of the Berkeley cohort were exposed to the “empty households” of World War II when older parents worked from sunrise to sundown in home-front industries.

Consider the Berkeley males who entered the Great Depression when they were highly dependent on family
nurturance and vulnerable to family instability. Economic hardship came early in their lives and represented a prolonged deprivational experience, from the economic valley of the 1930s to the war years and departure from home. By comparison, the Oakland males were older and more independent when hardship hit their families. They assumed important roles in the household economy and entered adulthood with a more crystallized idea of their occupational goals. Despite some handicaps in education, they managed to end up at midlife with a slightly higher occupational rank (Elder, 1999). The vulnerability of the younger Berkeley boys is consistent with the results of other studies that show that family stressors are especially pathogenic for males in early childhood (e.g., Rutter & Madge, 1976).

**Situational Imperatives**

Another linking mechanism involves situational imperatives, the behavioral demands or requirements of a new situation. The more demanding the situation, the more individual behavior is constrained to meet role expectations. In emergency family situations, helpful responses become an imperative for members, as in hard-pressed families during the worst years of the Great Depression. Rachman (1979) referred to these imperatives as “required helpfulness.” The Oakland children were old enough in the early 1930s to be called on to meet the increased economic and labor needs of their family, and a large number managed to earn money on paid jobs and to help in the household. This money was often used to cover traditional family concerns such as school expenses.

In deprived families, girls generally specialized in household chores and boys were more often involved in paid jobs. This gender difference made girls more dependent on the family and generally fostered greater autonomy among boys. Adolescent jobs in the 1930s typically included what might be regarded as odd jobs in the adult world, from waiting on tables and clerking to delivering newspapers and running errands. Employment of this kind may seem developmentally insignificant, although it had the important implication that people counted on them—they mattered. Indeed, staff observers rated the working boys as more energetic and efficacious than nonworking boys. The flow of influence was no doubt reciprocal. The more industrious were likely to find jobs and success in work that would reinforce their ambition. With additional chores at home, working boys experienced something like the obligations of adult status. To observers who knew them, they appeared to be more adult-oriented in values, interests, and activities when compared to youth who did not have jobs.

**Control Cycles**

Situational imperatives are elements of new situations that characterize control cycles, which, as described by Thomas (see Elder & Caspi, 1988), refer to changing relations between expectations and resources that affect a sense of personal control. A loss of control stems from a process in which resources fall below expectations. This change motivates efforts to restore control by adjusting expectations, resources, or both in terms of their relation. During the Great Depression, heavy income loss tended to affect children, sometimes adversely, through family adaptations to such deprivation. These include the reduction of family expenditures, the employment of more family members, and the lowering of living standards (Elder, 1974/1999). Equilibrium in these financially strained families was achieved when expectations matched resources. The psychology of this cyclical process is well described by what Brehm and Brehm called reactance (1982). Feelings of reactance occur whenever one or more freedoms or expectations are threatened or eliminated. Such emotions spur efforts to regain or preserve control. “It is the threat to control (which one had) that motivates an attempt to deal with the environment” (p. 375). Once control is achieved, expectations may be raised, thereby setting in motion another round of equilibrating initiatives.

**Accentuation**

The final mechanism, known as the accentuation dynamic, relates transition experiences to the individual’s life history of past events, acquired dispositions, and meanings. When a transition heightens a prominent attribute that people bring to the new role or situation, the change is said to be an accentuation effect. Entry into new roles or situations is frequently an accentuation dynamic that tends to amplify “preexisting” behaviors. From this perspective, early transitional experiences become prologues for adult transitions that increase heterogeneity over the life course. We see this development in longitudinal studies of divorce and their increasing attention to behavioral changes initiated by it across the life course and the generations (Amato, 2000; Amato & Cheadle, 2005). In children, as well as adults, the divorce transition appears to accentuate dispositions that were present well before the event itself. For example, boys with behavior problems after a divorce were frequently engaged in problem behavior before the divorce.
Human Development in Time and Place

TABLE 2.2 Mechanisms Linking Transitions to Development

<table>
<thead>
<tr>
<th>Principle</th>
<th>Examples from Children of the Great Depression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life Stage: The effects of social change are contingent on the age of the person experiencing it.</td>
<td>Differing effects of the Great Depression were observed among members of the Oakland (older) and Berkeley (younger) cohorts.</td>
</tr>
<tr>
<td>Situational Imperatives: Social demands of new situations shape appropriate behavior for the context.</td>
<td>During economic crisis, each member of the household was expected to make role-specific adjustments to scarcity and contributions to household economy.</td>
</tr>
<tr>
<td>Accentuation: Behavioral patterns before transition are magnified with social change.</td>
<td>Irritable fathers tended to lose their tempers under the pressures of economic deprivation.</td>
</tr>
<tr>
<td>Control Cycles: When confronted with new situations and loss of control, people strive to reassert control over their setting and biography.</td>
<td>During the Great Depression, families developed strategies to adjust the household economy.</td>
</tr>
</tbody>
</table>

As a whole, these linking mechanisms—life stage, situational imperatives, control cycle, and the accentuation dynamic—represent different understandings of the connections among individual lives, transitions in the life course, and the changing social world. These mechanisms are embedded in a theoretical framework defined by paradigmatic principles of the life course.

Paradigmatic Principles

Like the mechanisms reviewed in the previous section, the paradigmatic principles emerged from studies of Children of the Great Depression (Elder, 1974/1999) and subsequent research (Elder, Johnson, & Crosnoe, 2003). Collectively, they define life course as a theoretical orientation that provides a framework for studying phenomena at the nexus of social change, social pathways, and developmental trajectories.

The Principle of Life-Span Development

Human development and aging are life-long processes. Over the years, the life span has been represented as a sequence of life stages, from infancy and early childhood to old age. Each stage became an age-specific domain for specialized study. However, we recognize now that developmental and aging processes are most fully understood from a life-long perspective (Kuh, Power, Blane, & Bartley, 1997). Behavioral patterns at midlife are not only influenced by current circumstances and by the anticipation of the future, but also by prenatal and early childhood experiences and, in some instances, by intrauterine experiences and the circumstances of prior generations. Long-term studies are documenting the relation between late-life adaptation and the early years of life-span development. Life course epidemiology has experienced explosive growth, as the precursors to adult health are explored among early sensitive periods, chains of risk, cumulating disadvantages, and their temporal complexities extending over many decades of life (Kuh & Ben-Schlomo, 2004; Bauldry et al., 2012). Such research has been propelled by national longitudinal studies of birth cohorts in Great Britain, marked by birthdates of 1946, 1958, 1970, and 2000. These cohorts are all scheduled to be followed into the later years of life (Ferri, Bynner, & Wadsworth, 2003).

This long-scale temporal frame poses major challenges as well as exciting opportunities. The longer a life is studied, the greater the risk of exposure to social change. The lives of people in their 80s or 90s are thus most likely to reflect the particular contours of a society, with its unique pattern of social changes occurring over many years. In this sense, each birth cohort will result in distinct biographical patterns. Longitudinal data archives generally lack adequate information on social change, however, particularly in the details of social relationships, social organizations, and residential ecologies. Indeed, many longitudinal data collections do not extend beyond the respondent’s self-reports, making nuanced understandings of the person’s social setting very difficult. With increasing frequency, geographic codes are enabling investigators to assess contextual changes and their effects on lives.

Another challenge posed by the principle of life-long development and aging centers on the reality that each study typically begins “midstream” in the lives of respondents. Studies of adolescent behavioral patterns typically begin at some point during that phase of life, but such studies come with the strong assumption that what happened in the first decade of life is of negligible consequence. Given the strong tendencies toward behavioral continuity—often reflecting continuity of social settings—the researcher may be attempting to explain small amounts of behavioral change. This challenge may be especially acute for studies of the later life course, when decades of experiences—largely unmeasured—are not available for study. The point is well illustrated by a study of mastery among the elderly (Pearlin, Nguyen, Schieman, & Milkie, 2007). Mastery in old age reflects intractable hardships in early life, status attainment processes through adulthood, and stressors in old age. However, all of these factors are mediated by a sense of life course mastery,
the belief that one has directed and managed her or his life across the decades. Ideally, such complexities would be studied with data extending from childhood to old age. Transient experiences across the life course involve individual initiatives, situational constraints and opportunities, the dispositions and prior experiences that people bring to new situations, and the influence of others. Although many factors influence lives, young people play an important role in constructing their own lives though the choices they make.

_The Principle of Human Agency_

Individuals construct their own life course through choices and actions they take within the opportunities and constraints of history and social circumstance. Elements of human agency have been prominent in studies of lives (see Haidt & Rodin, 1999; Thomas & Znaniecki, 1918) and are central to studies that relate lives to broader social contexts. People make choices in constrained situations that enable them to exert a measure of control over their life course. These choices ensure a degree of loose coupling between social transitions and life stages. Even during the economic turmoil and distress of the 1930s, families engaged in many strategies in the face of severe constraints: Mothers found jobs amid scarce options, and many of their children carried responsibilities in the home and community.

In _American Lives_, Clausen (1993) focused on the question of agency in lives, with emphasis on the formative adolescent years of Californians who were members of the Oakland and Berkeley Guidance studies. He hypothesized that competent adolescents who think about the future with a sense of personal efficacy are more effective in making sound choices and in implementing them during the transition to adulthood. These more “planful decisions” lead to greater success in work and family through adulthood. Indeed, the highly competent males in adolescence were most likely to achieve a successful start through education, occupational careers, and family, apart from the influence of IQ and SES background. Moreover, this beginning anticipated achievements across the life course, even into the 60s. The young men with a planful competence were more likely to have stable marriages and careers and tended to find satisfaction and fulfillment during their final decades.

Do these findings reflect the special circumstances of the study members’ early adult years—the beginning of World War II and an unparalleled era of prosperity? Postwar benefits for veterans encouraged them to obtain a college education, but what if we stepped back a decade of two so that both a Great Depression and global war loomed ahead? To do this, we turned to the Lewis Terman data archive (Holahan & Sears, 1995), a longitudinal study of the brightest Californians. This study of talented children was launched in the 1920s, a time when California’s economy seemed to offer unlimited opportunity. Half of the children were born before 1911, the other half by the early 1920s. By selecting only the most able of California’s children for the study, Terman could direct his attention to great promise and the expected rise of talent to positions of accomplishment and leadership.

But history changed this trajectory (Shanahan & Elder, 2002; Shanahan, Elder, & Miezch, 1997). The older cohort had completed most of its post–high school education by the time of the stock market crash and looked ahead to a stagnant and declining labor market, whereas the younger men faced the prospects of going to college in the later years of the Depression decade. Lacking good job prospects, a substantial number of the older men stayed in graduate school, extending their list of degrees. By contrast, World War II reduced significantly the educational opportunities of the younger men, but having no impact on the education of the older men who were well past the college years.

With these different historical paths in mind, it is not surprising that planful competence in adolescence had much greater relevance for the future of the younger men, when compared to the older cohort. The planfulness of the older men in adolescence had no effect on their chances for advanced education and career achievement. In large part, this outcome reflects the process of “warehousing” in which the young prolong their stay in school during economically troubled times. School persistence had less to do with personal motivation than with a way of getting out of hardship situations. Parallels between the Terman studies and early 21st-century cohorts of young people completing their educations are striking. Unprecedented numbers of young people around the world are completing university degrees, only to find little opportunity in the labor market. The Terman studies suggest a disabling, to some degree, of their sense of agency, as their adult lives reflect a lack of meaningful opportunities in the workplace. Yet many people will retain a high sense of agency even in the face of such challenges, a form of resilience that has not been adequately studied to date.

The constraints of social structures on agency extend beyond societal change, and powerfully reflect dynamics within the family and among peers. Bozick et al. (2010) examined educational expectations from the fourth grade...
Early childbearing had similar consequences from socioeconomic hardship to the loss of education. Later. Early marriage tended to produce life disadvantages, whereas others were still unmarried a decade among their cohort entered marriage before their 20th birthdays, they perceived first parent. They also vary in when they perceive first job, establish an independent domicile, share a household with a friend, marry, have children, see children leave home, and lose an adverse effect increased with the number of years a child lived in a single-parent household, the reports of family members into higher tracks; and, most importantly, tracks reflected several social and cultural features. Students in lower tracks often were not as informed about courses as their higher track counterparts; administrators were often resistant to moving Latino/a American and African American students into higher tracks; and, most importantly, tracks fostered a sense of identity that few students were willing to abandon to “move up” to higher tracks—often despite their ability to perform at “higher tracks”—reflected several social and cultural features. Students in lower tracks often were not as informed about courses as their higher track counterparts; administrators were often resistant to moving Latino/a American and African American students into higher tracks; and, most importantly, tracks fostered a sense of identity that few students were willing to abandon to “move up” to higher tracks. Thus, even when faced with new options, many students prefer continuity because of how they come to view themselves and “how the world works.”

The Principle of Timing

The developmental antecedents and consequences of life transitions, events, and behavior patterns vary according to timing in a life course.

Life-long processes of human development and human agency underscore ways of thinking about the timing of lives and their social contexts. As Neugarten (1968) showed in her pioneering work, people do not march through life in concert. They tend to vary by the age at which they pass through life transitions—when they begin and complete their schooling, enter a first job, establish an independent domicile, share a household with a friend, marry, have children, see children leave home, and lose their first parent. They also vary in when they perceive themselves as young, middle age, and old. In Children of the Great Depression (Elder, 1974/1999), some members of their cohort entered marriage before their 20th birthday, whereas others were still unmarried a decade later. Early marriage tended to produce life disadvantages, from socioeconomic hardship to the loss of education. Early childbearing had similar consequences.

All of these age variations can make a difference (Hogan, 1981) by setting in motion a dynamic of cumulative events and processes. The timing principle may suggest that different points in life represent sensitive periods during which life events and transitions affect age-specific vulnerabilities. Such a perspective is evident in many studies of the timing of poverty and cognitive development, which often are based on the assumption that deprivations have differing effects at different ages because of the course of neurological development. Another perspective, however, and one that is not mutually exclusive, is illustrated by these examples from the Depression studies: Different ages represent different constellations of opportunities, constraints, roles, and social connections, all of which condition the effects of transitions and stressors. To illustrate this point, we turn to the ages at which children experience the breakup of their family. The timing principle has been productively applied to a range of phenomena, however, including retirement, widowhood, first birth, age of onset of many physical and mental health challenges, degree completion, and unemployment spells.

No time is good for a child’s loss of a parent through separation or divorce, but the child’s age when such change occurs can make an important difference in its consequences. To address the impact of a single-parent household, Krein and Beller (1988) matched mother-daughter and mother-son samples from the National Longitudinal Surveys to investigate three relevant hypotheses: (1) the transition to single-parent status is most damaging during the early preschool years, owing to heavy time demands; (2) duration of residence lessens the educational achievement of offspring by diminishing social resources; and (3) boys are likely to be more impaired by the change than girls, owing to modeling processes (see also McLanahan & Sandefur, 1994). Although Krein and Beller designed precise measures of the age and length of time a child lived in a single-parent household, the reports of family structure are retrospective because the mothers were interviewed between the ages of 30 and 44. The offspring were interviewed when they were 14 to 24 years. However, such retrospective reports are reasonably accurate.

The study found that timing mattered, along with duration and gender: (a) the adverse effect on education was much greater for the preschool versus the later years, (b) the adverse effect increased with the number of years a child spent in a single-parent household, and (c) the adverse effect was more negative for males than for females. The strongest and most consistent timing and duration effects were obtained among European American males,
with family income controlled. African American females and males were next in line on effects, followed at some distance by European American females. Whether family income was controlled, the timing and duration of living in a single-parent household mattered least for European American females. The meaning of this result was not pursued in the study, although these young daughters of single-parent mothers may be protected by maternal support and the model of a self-sufficient woman.

The Principle of Linked Lives

Lives are lived interdependently and social-historical influences are expressed through this network of shared relationships. The principles of timing and linked lives address in complementary ways the temporality, process, and context of lives and human development. Interdependent lives highlight the role of significant others in regulating and shaping the timing of life trajectories through a network of informal control. This network can be thought of as a “developmental context” (Hartup & Laursen, 1991) and as a “convoy” of significant others through life (Antonucci & Akinyama, 1995). Whatever the plans of an individual, these “significant others” initiate or experience life transitions that produce transitions in his or her own life. As Becker (1964) once observed, the expectations and informal sanctions of these “others” channel behavior and the life course in certain directions.

Linked lives are expressed in Children of the Great Depression (Elder, 1974/1999) across the generations, in the parental marriage, and in the relationship of parents and siblings. Older and younger siblings influence each other directly through their encounters, whether nurturant, competitive, or conflictual (Brody, 1996). In an African American sample, Brody et al. (2003) found a significant link between the antisocial behavior of older and younger siblings, but it was strongest in disadvantaged neighborhoods that provided abundant opportunities for the younger sibling to express this behavior, when compared to siblings in affluent residential areas. Examples of an indirect path include the experience of parents with the eldest child that undermines or strengthens their sense of competence in parenting. A third potential sibling link involves the differential treatment of siblings by parents, relatives, or teachers. Little is known about continuity and change in sibling relationships from childhood into the adult years.

Family changes are especially relevant to the principle of linked lives and its implications. Hernandez (1993) referred to a number of revolutionary family changes in

Elementary Life Course Concepts and Perspectives

31
Human Development in Time and Place

Luthar, & Bengtson, 1985) creatively explored the ripple effects of teenage pregnancy across the generations. The age ranges of respondents in the early lineages were 11 to 18 for the young mothers, 25 to 38 for the grandmothers, and 46 to 57 for the great-grandmothers. The other lineage units were judged on time in transitions. The age ranges for mothers, grandmothers, and great-grandmothers were 21 to 26, 42 to 57, and 60 to 73, respectively.

Interdependent lives also extend beyond the family to friends, teachers, and neighbors. Theories of resilience commonly assume that positive influences can offset negative influences originating in the family (Luthar, 2003; Werner & Smith, 2001). A positive school environment of classmates and teachers might compensate for a child’s punitive family environment or a drug-infested neighborhood. Relevant to these issues is a short-term longitudinal study of adolescents in Prince George’s County in the area of Washington, DC (Cook, Herman, Phillips, & Settersten, 2002). The influence of nuclear families, friendship groups, schools, and neighborhoods was assessed in the lives of mainly African American and European American students in the seventh and eighth grades during the early 1990s. The quality of all four contexts had independent and additive influences on adult success, defined by a composite of school performance, social behavior, and mental health indicators. The effect of any one context was not large, but the total contextual effect proved to be substantial.

The Principle of Historical Time and Place

Individual life course is embedded in and shaped by historical times and places over a lifetime. One of the best examples of both historical and spatial variations in the life course and human development comes from studies of lives during military times. The immediate years after World War II, for example, were hard times in many parts of Europe and Asia, unlike the prosperity experienced in the United States. Children who grew up in financially strained families in California during the Great Depression frequently saw military service as a “bridge to greater opportunity.” Without getting into the details of selected studies, we note some basic features of the transition to military service, in eras of World War II, the Korean conflict, and the Vietnam War (Elder & Caspi, 1990). More generally, the effect of military service varies according to its historical time and place (MacLean & Elder, 2007).

First, military service tended to pull young people from their past, however privileged or unsavory, and in doing so it created new beginnings for developmental life changes. Basic training defined a recruit’s past as irrelevant. This definition encouraged independence and responsibility, separated recruits from the influence of their home community and family, and allowed a degree of social autonomy in establishing new ties. Basic training also promoted equality and comradeship among unit members, made prior identities irrelevant, required uniform dress and appearance, minimized privacy, and rewarded performance based on group achievement.

A second distinctive feature involves “a clear-cut break from the age-graded career,” a time-out in which to sort out matters and make a new beginning. Military duty legitimized a time-out from education, work, and family, and liberated the recruit from all conventional expectations for an age-graded career, such as expectations regarding progress and life decisions. Just being in the armed forces released the recruit from probing life-decision questions from parents (e.g., Have you decided on a job or career? When will you be promoted or get married?). This time-out would be far less timely for men and women who were mobilized in the midst of family and career responsibilities.

A third feature of mobilization offered a broadened range of developmental experiences and knowledge, including exposure to in-service skill training and educational programs, as well as exposure to new interactional and cultural experiences through service itineraries that extended across the country and overseas. Out of such experiences came a greater range of interpersonal contacts, social models, and vocational skills. Horizons were broadened and aspirations elevated.

The principle of historical time and place acknowledges the essential complementarity of two perspectives—historical and ecological. The impact of historical time is expressed through its ecology. Thus the Great Depression’s impact varied in manifestation by region and size of place in the United States. Many of the basic life course concepts just noted and the linking mechanisms and principles emerged from an historical study of children who were influenced by the Great Depression, though the project paid little attention to ecological variations. However, remarkable progress in recent decades has been made in applying such analytic tools in spatially oriented research on changing neighborhoods, communities, and societies. This work investigates migration, a form of social change that begins with the geographic movement of people from one context to another. Progress to date reflects increasing sophistication with respect to sampling, research design, and measurement. We turn now to a consideration of these advances.
LIVES AND CONTEXT: HUMAN AGENCY AND SOCIAL OPTIONS

Contexts of human development generally bring to mind social environments at a point in time, but the life course framework views environment as highly interactive and temporal. A child’s social network is not a fixed social structure but rather a dynamic system of social relationships. A key feature of this process involves the continual entry of new participants and the departure of members through mortality and exit transitions such as residential change. Although communities vary greatly on residential stability, most gain and lose a significant number of residents over several years. Ever since the 1960s, the increasing application of longitudinal designs to the study of lives has encouraged a corresponding study of their temporal social environments as well, and of the interplay between the lives of individuals and their changing world.

Context, in this chapter, refers to a range of settings, from clusters of houses to neighborhoods, villages, communities, and regions. The residential unit is common to all of these settings, but contexts may also include schools, daycare, and other social and physical environments that children are exposed to and interact with over the life course. Consider, for example, school mobility, or changes between schools (Crosnoe & Benner, Chapter 7, this Handbook, this volume), a source of change in children’s exposure to social and institutional environments that can be a positive or disruptive force in school performance and social and emotional well-being. The effects of these transitions, especially moves between grade school and middle school and middle school and high school, are dependent on timing, the interplay among transitions and other life events, and what resources the individual child brings to the transition. Earlier transitions from elementary to middle school are associated with negative student outcomes, as younger children may be less able to adapt to their changing contexts (Simmons & Blyth, 1987). A mismatch between children’s needs and their new, less intimate and more impersonal environments in middle school contributes to some of these negative effects (Eccles et al., 1993). However, if a change improves the person-situation fit for students, such as moves to schools that offer special programs and services that better suit a child’s needs, outcomes are more likely to be positive despite the potential disruptive effects of attending a new school. In addition, school moves and life transitions may have cumulative effects that persist and grow, like compound interest, through time.

Lives and Context: Human Agency and Social Options 33

As the number of school moves increases, or if school moves are coupled with one or more residential moves, family disruptions, and other major life events, the chances of negative outcomes for children increase (Simmons & Blyth, 1987). Children from disadvantaged socioeconomic and family backgrounds appear not only to have more disruptions associated with school transitions, but also fewer resources to draw on to cope with their changing lives and contexts (Beatty & the National Research Council, 2010). In the process of school mobility, social and institutional contexts, individual development and resources, and the cause of, or motivation for, moving interact in both time and place to influence a range of child outcomes, from test scores to measures of self-esteem.

An additional, well-studied source of change in place in the lives of children is migration. The scientific study of human migration has always involved a focus on the interplay between individual lives and changing environments, in theory if not in life record data, and it has told us much in recent years about how to think about the contextualization of human development. During the first decades of the 20th century, the early Chicago School of Sociology featured studies of neighborhoods (Leventhal, Dupéré & Shuey, Chapter 13, this Handbook, this volume) in cities and research on migration and immigration. Fifty years later, Wilson (1987) reinvigorated the contextual study of urban social disadvantage with his penetrating analysis of the causes of concentrated poverty. Similarly, Massey and Denton (1993) gave renewed visibility to the pervasiveness and consequences of segregation in American Apartheid. All of these developments in theory, methods, and research have contributed to a new ecology of human development, which we sketch in the following sections.

Context and the Life Course

Three life course themes are important in thinking about the contexts of children and young people. First, the contextual history of the individual is inextricably linked to his or her movement, both into and out of geographic places, most especially residential locations that are so much a part of one’s life course and a source of social ties and role models. For the young who are still dependent on their family, parents select a community or neighborhood of destination within various constraints. This choice making shifts to offspring as they leave home for other places, whether within or outside their community. The qualities of human agency (initiative, resourcefulness, optimism, determination) play an important role in this process.
Selection of a place in which to live or to attend school is not merely a unidirectional process, according to the new ecology of human development; it is a reciprocal process. People select schools and neighborhoods, and the latter select students and families through incentives and standards, among other processes.

Second, the sequence of single and multiple social roles across one’s life can be coupled with movement within and across places. Although frequently ignored, entry into a new social role may involve more than exposure to new responsibilities—it may also include exposure to a new geographic location, such as a new neighborhood, school, or workplace. This linked change in roles and contexts is common for young people as they leave home to make their way in education, work, and family. Geographic, social role and age-graded trajectories are interwoven across the life course as an evolving context of human development.

A third consideration is important in thinking about the contextual influences and constraints on human development—that all geographic places include individuals who did not actively select them. These individuals play a role in shaping contextual influences. In addition, these places are located in a surrounding environment (sometimes called an externality). The new interdisciplinary ecology of human development, which emerged during the last two decades of the 20th century (Sampson, 2012), has shown that a school or neighborhood’s location within this surround (e.g., encompassing area) makes a significant difference in the context’s developmental impact on its families and young people.

Conceptualization and Measurement

The increasingly nuanced understanding of the relation between lives and contexts that form this ecological perspective relies, in part, on improvements in how contextual units are conceptualized and measured (Wachs, Chapter 21, this Handbook, this volume). These advances are closely linked, as it is necessary to develop concepts about the nature of the effects of space and place before they can be measured. In assessing the influence of contexts on children’s lives, some important considerations include specifying the spatial extent of contexts, identifying and measuring contextual traits, and integrating the spatial aspects of context with the inherently temporal nature of lives.

In pioneering studies of ecological psychology, Barker and colleagues examined behavior settings, which consist of small, contained units such as classrooms, churches, and banks (Barker, 1968; Barker & Gump, 1964). Bronfenbrenner expanded the concept of context to include a nested hierarchy of ecologies, not unlike a Russian Matryoshka doll (Bronfenbrenner, 1979). These nested systems might include the family, but also the school, community, and nation. Following the works of Wilson (1987) and Massey and Denton (1993), neighborhood and community studies sought to investigate the effects of local areas on a range of outcomes. Multilevel trajectory statistical models were joined with new data collection methods regarding social ecologies (Sampson, 2012). Studies of neighborhood effects have demonstrated that the poverty rate, ethnic composition, and educational level of the census tracts, counties, and zip codes that children live in are important factors in their development.

Typically in neighborhood studies, administrative units associated with an individual’s place of residence, such as census tracts, are used as proxies for neighborhood or community. Indeed, demographers have long used geographic territories and the aggregate characteristics of residents to describe places, sometimes called “compositional effects” (Voss, 2007). However, recent work has advanced the measurement of context beyond administrative or census geography to include spatial territories that are more meaningful representations of the places in which people reside. For example, Matthews, Detweiler, & Burton (2005) developed an approach called “geo-ethnography,” which combines ethnographic information on families and neighborhoods with geographic information system (GIS) technology. With this approach, they are able to situate families and children in both space and time as they go about their daily activities. This work demonstrates that the lived experiences of families extend beyond the fixed spatial contexts of census tract and neighborhood.

Understanding the spatial extent of contexts and contextual processes has been expanded through the consideration of extralocal processes, or spatial externalities (Sampson, 2012). Rather than simply focusing on the effects of neighborhood of residence on individuals, one may also consider the effects of adjacent neighborhoods on individual or aggregate outcomes. This allows higher-order processes, such as the social structure of the city, to be considered in tandem with local effects. For example, Sampson and colleagues (Sampson, Morenoff, & Earls, 1999) showed that a neighborhood’s spatial proximity to areas with high levels of social control for children and adult-child exchange confers advantages beyond the characteristics of that particular neighborhood.
Neighborhood advantage and disadvantage are the result of more than local conditions. Social and political dynamics that extend beyond the borders of any particular neighborhood shape local contexts. Consider how extralocal decision processes can undermine the quantity and quality of resources that are available in a community. Decisions regarding the incorporation or annexation of territory can exclude minority-inhabited areas from rural municipalities. Such exclusion creates disadvantaged residential areas lacking infrastructure (such as sewers), services (including policing), and local political representation (Marsh, Parnell, & Joyner, 2010). Under such conditions, residents are exposed to greater health risks and lower property values. In this manner, selective annexation contributes to ethnic segregation and unequal access to resources (Lichter, Parisi, Grice, & Taquino, 2007).

However the geographic boundaries of places are defined, places have some qualities that can be summarized by the traits of their inhabitants, such as median income or ethnic composition. Yet other aspects of places must be approached in a different way. As the understanding of contextual effects has become more nuanced, it has been recognized that places have traits that are more than simply the aggregate of the local population. With increasing interest in neighborhood effects, it has become clear that community-level properties are worthy of systematic measurement in their own right. The term *ecometrics* was coined to describe the growing set of methods and techniques used to produce and evaluate measurements of ecological settings (Raudenbush & Sampson, 1999).

An important addition to the study of context is the application of techniques of systematic social observation, or SSO (Reiss, 1971), to the measurement of the qualities of neighborhoods. This measurement system provides metrics of places that are independent of the perceptions of survey respondents. For example, in a study of responses to crime in Baltimore neighborhoods, interviews were conducted with residents that included questions about the perception of the neighborhood (Taylor, Shumaker, & Gottfredson, 1985). Then, trained raters walked the streets surrounding the respondents’ homes and collected information on a range of physical and social traits, including housing layout, traffic volume, and persons loitering (Taylor, 1997). This early work demonstrated that reliable and consistent measurements of observed neighborhood environments could be carried out.

The Project on Human Development in Chicago Neighborhoods (PHDCN) enlarged the ways in which contexts are conceived of and measured (Sampson, 2012). The project followed the example set by earlier work in that it combined family surveys with SSO while incorporating a breadth of additional material about community contexts. These studies aimed to capture aspects of community context that cannot be gleaned from methods that focus on individuals and families. A community survey addressed the structural and cultural organization of neighborhoods and interviews with community leaders who were included in a key informant study. Other aspects of community context were measured using a variety of sources, including census returns, police and court records, and health statistics. Follow-ups were conducted for the SSO, community survey, and informant interviews, allowing for the study of neighborhood stability and change.

Subsequent studies, such as the Los Angeles Family and Neighborhood Survey (L.A. FANS), have drawn on the materials developed for the PHDCN (Peterson, Sastry, & Pebley, 2007). The National Children’s Study (NCS) developed protocols for SSO that are applicable to rural contexts, such as Duplin County, North Carolina (Walter, Dole, Siega-Riz, & Entwisle, 2011). Rural contexts had previously proved challenging to measure with SSO methods designed for cities. Census tracts, often used as a definition of neighborhood or community, are less applicable to rural settings, and a commonly used observation unit, the block or block face, does not occur on rural roads. In addition, the NCS includes local measures of the environment, such as air quality, in its data collection effort.

Some social processes occur at the neighborhood or community levels that are not well captured by aggregate data. For example, collective efficacy is a social process that is measured and evaluated at the community level. Broadly defined, it indicates the social cohesion among neighbors and their willingness to intervene for the common good (Sampson, Raudenbush, & Earls, 1997). Just as individuals vary in self-efficacy, communities also vary in the extent to which they achieve collective action. Neighborhoods ranked high on collective efficacy are associated with lower levels of violence, as well as a variety of other outcomes including increased supervision and monitoring of children (Sampson, Morenoff, & Gannon-Rowley, 2002). One of the mechanisms through which collective efficacy operates is the activation of social ties to bring about community action.

The measurement and conceptualization of contexts and contextual processes is an essential first step in understanding how individuals and contexts interact, yet it is
also important to connect contexts with the temporal flow of lives. Local networks of social ties represent another dimension of contexts that have consequences for children. In Coleman’s study of high school completion (1988), frequent residential mobility decreased the chances of high school graduation. Residential moves may entail the loss of social capital, as local social ties are severed, adversely affecting educational outcomes. A study of residential mobility in Toronto demonstrated that life course concepts, specifically the concept of linked lives, offers a more nuanced understanding of the connections between local social ties and high school completion (Hagan, MacMillan, & Wheaton, 1996). Children from families with low levels of parental support are more susceptible to the negative effects of moving than children from families with high levels of support, suggesting that parents can partially compensate for the loss of social capital.

Children’s social networks also change over time. Friendships are moving sets and systems of relationships that change frequently during childhood (Rubin, Bukowski, & Bowker, Chapter 5, this Handbook, this volume). In a longitudinal study of almost 700 youth, Cairns and Cairns (1994) tracked, among other things, the stability and change in peer groups. Moving by changing schools or classrooms and taking up new activities provide new opportunities for forming friendships, and, as a result, the peer groups of children and adolescents can be rather fluid. Indeed, spatial propinquity is one of the most important factors in forming and maintaining childhood friendships. Despite the changeable nature of peer groups, they have a lasting impact, as members of the same social groups in childhood tend to have similar outcomes later in life, including the experience of dropping out of school and bearing children in the teenage years. Early peer affiliations may place constraints on subsequent pathways for children, or new friendships may repeat the features of earlier ones.

Children are exposed to a sequence of different contexts over varying durations and periods in their development. There are certain times when they are more susceptible to the influence of their ecological settings. For example, it has been demonstrated that early exposures have important and enduring effects. In a longitudinal study of children in British Columbia, exposure to concentrated disadvantage in kindergarten (i.e., a composite measure of several dimensions of social and economic inequality), had a lasting effect on reading comprehension scores at Grade 7 (Lloyd, Li, & Hertzman, 2010). The effect of neighborhood concentrated disadvantage during Grade 7 had no independent effect on reading scores, implying that early exposure had significant and enduring effects.

Duration of exposure to contexts is another important consideration in assessing the interaction of ecological effects and the life course. Wheaton and Clarke (2003) found a lagged and cumulative effect of childhood socioeconomic disadvantage on mental health in young adulthood. Young adults’ current exposure to socioeconomic disadvantage had no effect on mental health net of the effects of childhood exposure. Using the PHDCN data, Sampson, Sharkey, and Raudenbush (2008) found that early exposure to neighborhood disadvantage has lagged effects on verbal scores several years later. The effects of exposure to concentrated disadvantage on verbal ability were long lasting rather than instantaneous. Contextual influences vary by “dosage,” and the frequency, intensity, timing, and cumulative exposure to a particular context are determinants of the strength of neighborhood effects (Galster, 2011).

A complete understanding of context and the life course includes an integration of the spatial aspect of places with the temporal dynamics that characterize the life course. Places are not static entities, they change as their inhabitants enter and exit, the physical environment alters, and local social dynamics shift. Consider the Nang Rong study in rural Northeast Thailand, an example of a longitudinal study of both changing individuals and their changing environments, with emphasis on the transition to adulthood. Because this study illustrates many of the concepts of context and lives, we provide a full account of it. This multidisciplinary project began as a community-based rural development intervention in 1984 (Walsh, Rindfuss, Prasartkul, Entwisle, & Chamratrithirong, 2005). Nang Rong is a rural, formerly frontier area, dominated by smallholder agriculture, with rice and cassava as principal crops. Once the frontier closed, in-migration to the region ceased and a period characterized by out-migration to urban areas, labor migration, and development efforts began. Several waves of social surveys and migrant follow-up studies were supplemented by a wealth of contextual information, including aerial and satellite image time series, and other detailed geographic information. With this information, analysts were able to track individual, community, and environmental change over time. Modeling efforts also link individual and household behavior with land use change (Entwisle, Malanson, Rindfuss & Walsh, 2008).

Studies using data from the Nang Rong project illustrate concepts that tie contexts to the life course, particularly exposure to new contexts and opportunities associated
with young adult migration and the effects of the duration and cumulative exposure to contexts. With a longitudinal design, and a series of migrant follow-ups, these data are well suited to study the transition to adulthood, which in Thai society involves the completion of education, entry into the labor force, marriage, and the initiation of childbearing. In Nang Rong, migration is an important component of the transition to adulthood because both short- and long-term labor migrations are common for men and women. As young people leave the parental home and natal village, they are exposed to new contexts that influence and are influenced by the changes in roles and statuses that occur during the transition to adulthood.

In Thai society, there are strong norms about the ordering of employment and marriage, especially for young men, who are expected to be financially equipped for marriage. Though migration tends to delay marriage in Western contexts (Rindfuss, 1991), in Nang Rong, both young men and women who participate in labor migration marry sooner than their counterparts who remain in their village of origin (Jampaklay, 2006). For women, the positive effect of migration on marriage remains even after controlling for schooling and employment, whereas for men, the effect of migration on marriage is entirely explained by employment. There are differences between migrants and nonmigrants not only in the timing of marriage, but also in the village of origin of their spouses. Migration exposes young people to new social groups, and as a result, they are more likely to marry individuals from outside of their village. Young people who seek work in nonagricultural settings, such as factories, are even more likely to marry individuals who migrate.

Migration experiences also influence entry into childbearing. However, the effect of migration on childbearing varies by family formation stage, suggesting that the new settings migrants are exposed to operate differently at different points in the life course. For instance, migrant status is associated with higher fertility, but only among low-parity (0 or 1) women, who are in the early stages of family formation (Edmeades, 2006). Migration influences fertility by encouraging early entry into marriage, and thereby earlier childbearing. Despite the earlier initiation of childbearing by migrants, cumulative urban experience over the life course has a dampening effect on total fertility, as urban migrants adopt the lower childbearing norms of city dwellers. Thus, the effect of migration experiences and urban contexts play out over an extended period, and one must consider an entire childbearing career to gain a complete understanding of its relation to migration.

As we have noted, contexts are not static entities in the lives of children. They move through different contexts as a result of residential mobility, changing schools, and changing roles in the course of their lives and development. It follows that the context of human development is a system of complex and reciprocal interactions between individuals and their ecologies. Places can shape and influence the trajectories of children, often in complicated ways, as in the case of lagged and cumulative effects. Young people also shape their contexts, as they choose certain actions, such as labor migration, or build networks of friends. However, no understanding of the relation between individuals and their contexts is complete without considering the ways in which individuals select or are sorted into particular contexts.

Selection and the Life Course: A Social Process

Some young people leave their community to seek work, whereas others stay behind. Individual qualities tied to agency, such as initiative and resourcefulness, are certainly factors in determining who migrates. However, the selection of places to live, work, and attend school are not solely determined by individuals. Through mechanisms such as structures of opportunities, limitations, and incentives, places also select people. The process of selection into and out of contexts illustrates how individual agency and broader structural factors combine to influence the contextual history of the individual.

In a study of Iowa adolescents conducted in the wake of the farm crisis of the 1980s, Elder, King, and Conger (1996) examined the pathways by which adolescents decide to remain near home or move to new communities. Residential choices are contingent on educational and work plans, but are also shaped by preferences to live near family. These preferences, sometimes established by 8th grade, before adolescents formulate concrete notions about future work or college, can set geographic boundaries on other choices, such as whether to attend an in-state college or search for work in the local area. Yet, adolescents’ preferences are influenced by changing conditions, such as the perception of limited job opportunities and family conflict, which weaken the inclination to remain near home. School performance and college prospects also change over time and can draw students away from family and community. Thus, residential decisions are formed in part by individual preferences, but are also molded by sets of social contexts, ties, and options, such as employment and educational prospects and the quality of family relationships.
Self-selection into situations and contexts represents a fundamental conceptual dynamic in the life course.
With every transition, individuals are faced with choices and decision making within the bounds of their knowledge, resources, opportunities, and constraints. Selection has also been treated as a methodological concern because failure to account for preexisting differences that contribute to selection can skew estimates of the outcome of interest.
Selection in this sense presents challenges in understanding cause and effect. For example, there are competing hypotheses about the relation between low SES and health (George, 2003a). Hypotheses of social causation assume that low SES contributes to poor health outcomes among young people. Social factors affect health either directly, through access to health resources, or indirectly, as in the case of exposure to stress and toxic environments.
Alternately, a social selection hypothesis states that poor health has social consequences that contribute to declining SES, such as impaired capacity to work. However, both hypotheses can be valid, because the relation between SES and health is reciprocal. Social factors may contribute to health at the same time that health may cause changes in social status.

Research concerned with the methodological dimensions of selection has prevailed for many years. Experimental designs were proposed to address selection effects through random assignment to treatment groups. The Moving to Opportunity (MTO) program represents an ambitious attempt to apply an experimental design to the implementation of housing assistance programs (Sanbonmatsu et al., 2011). The experiment was designed to assess whether moving from a high-poverty neighborhood to a lower-poverty neighborhood improves the social and economic prospects of low-income families. Selection bias makes this question difficult to answer because certain types of families, such as those possessing more resources, are more likely to move. To address this methodological concern, MTO provided a randomized design capable of parsing the differences between movers and nonmovers (for more detail on MTO and selection, see Elder & Shanahan, 2006).

Randomized designs, such as MTO, are rare and often impractical to implement. Despite some of the traction gained on the methodological challenges associated with selection, they offer an imperfect solution. For example, these designs cannot uncover the specific mechanisms through which neighborhoods influence well-being (Sampson et al., 2002). Selection is not solely the domain of methodology, because the process of selection into particular contexts can be viewed through life course theory, especially the concepts of agency and pathways (George, 2003b). From a life course perspective, selection represents a substantive research issue. In this light, contexts reflect prior experiences, or the pathways through which individuals become exposed to a particular environment.

As Sampson (2012) made clear, selection is a social process worthy of study in its own right. Sorting into and out of particular places can be seen as a series of linked processes that operate through individual actions and broader community and social structures. Individuals choose where to live, but make their choices within sets of preferences and constraints. Particular contexts may be characterized as recruiting and sorting individuals through incentives or obstacles to membership. Developing conceptual models of how selection occurs aids in understanding these processes. This is not the case when selection effects are merely statistically controlled (Casi, 2004).

When selection is considered a social phenomenon, it is possible to investigate the reciprocal processes by which contexts choose people and people choose contexts. Although not concerned directly with changes in place, several lines of research have elucidated the dynamics of selection processes. This reciprocal perspective is illustrated by the choices young people make as they decide to enter the voluntary armed forces, the workforce, or college. Using data from the National Longitudinal Study of Adolescent Health (Add Health), Elder et al. (2010) examined the role of disadvantaged background, lack of social connectedness, and behavioral problems in drawing young men into the military instead of college or the labor market. The volunteer military offers socioeconomic, educational, and developmental incentives and presents a set of risks including injury and death. Other options, such as enrollment in college, also have associated incentives, as well as prerequisites such as resources to meet tuition expenses and adequate academic performance. The results of Elder and his colleagues suggest that young people weigh the advantages and disadvantages of joining the military against alternative paths.

Access to resources is a factor in the decision, as the most advantaged are more likely to attend college, whereas the most disadvantaged may not meet the minimum requirements for enlistment. Prior experiences are also important, as students with less stable families, low levels of social support, and involvement in problem behaviors such as fighting are more likely to enlist than their respective counterparts. Social ties may also lead students to
select into different tracks, as those with friends in the military or a family history of military service are more likely to enter the military rather than college or work. When students exit school, a variety of individual and social factors interact with a set of institutional incentives and obstacles to channel young adults toward college, the work force, or the military. The benefits and costs incurred by joining the military vary with the particular background of the individual, but the goal of maximizing opportunities drives decisions that are made within the constraints and opportunities afforded by an individual’s own set of traits (Wang, Elder, & Spence, 2012).

Students are faced with selection into certain pathways before they leave school and make choices about entering work, the military, or college. School tracking, or the selection of students into different curricula based on previous performance, can allocate students to different pathways, such as college preparation or vocational training. Yet, there is great variation among tracking systems in selection criteria and the possibility to move between different tracks (Gamoran, 1992). In some schools, tracking may be a strong signal of student’s future achievement, especially when it permits advantages to accrue to students who already have them (Lucas, 1999), but there is a significant amount of contextual variation. In some cases, students elect their curricular track, but in other instances a track is chosen for them. Regardless of whether the track is elective or not, it places a student on a path that has consequences for their future educational and occupational trajectories.

Young adults also exercise agency when they leave the parental home and select the community in which they will reside. However, these acts of agency are not disconnected from the reciprocal selection processes that occur between individuals and contexts. For example, although a young person may choose the community in which to reside after leaving the parental home, subsequent residential changes may occur that are out of his or her control, such as shifts in neighborhood composition. These changes illustrate how the reciprocal relation extends beyond individuals and their contexts to include the people around them.

In a study of geographic change during young adulthood using PHDCN and the Panel Study of Income Dynamics (PSID), Sharkey (2012) observed patterns of continuity and change in residential conditions between childhood and adulthood in segregated urban areas. Among young adults who exit segregated cities, he observed a trend toward ethnic equality, as young adults move into more integrated neighborhoods. Yet, as these individuals move further into adulthood, there is a reproduction of initial neighborhood inequality. Sharkey described this process in terms of “selected” and “unselected” change. Young adults who “select out” of extremely segregated areas end up returning to segregated areas later in life. One explanation for this trend is the process of “unselected change,” or change in the neighborhood environment that occurs around individuals. Such change, in this case increasing segregation, runs counter to the preference of the individual for an integrated neighborhood. Put another way, “selected change” leads young adults into relatively integrated environments, but “unselected change” contributes to increasing segregation around them over time.

The agency of young adults is a factor in selection into residential areas, but it is only one part of a reciprocal process, as residential environments change around individuals. In Sharkey’s words, “to understand change, one must move beyond an exclusive focus on individual choices and instead consider systems of interrelated decisions made by individuals responding to the change occurring around them” (2012, p. 21). So, neighborhood inequality is transmitted from childhood to adulthood not only because of individual choices, and the choices made by other people in their community. Neighborhood contexts change as their inhabitants change, but some qualities of neighborhoods, such as segregation, are also reproduced over time. Thus, a complete understanding of selection into a context requires the consideration of individual choices as well as overarching structures (in this case ethnic and class segregation) and the decisions of others.

Much of the work that stems from a renewed focus on contextual influences owes a debt to the ecological models of Barker, Bronfenbrenner, Lewin, and their students. When principles of life course theory are connected with increasingly nuanced understandings of place and context in the new ecology of human development, we gain a fuller appreciation of the ways in which lives shape places and places shape lives. This bidirectional interaction of contexts and the life course sheds light on the processes through which individuals self-select or are channeled into contexts. The inherently temporal nature of the life course, which is concerned with change, trajectories, and human agency, reminds us that people are not entities on which static contexts exert influence. Contexts are constantly changing as well, and the interplay between people and contexts often depends on the timing, duration, and intensity of exposures and interactions. We turn now to a consideration of the developmental impact of social change in historical time and place.
The study's generalizations are uncertain. Also uncertain between rural and urban places. In view of this variation, Great Depression varied among cities, East and West, and Japan. Even in the United States, conditions during the Depression experience in Great Britain, Germany, and Bay, California. The book also describes a very different diversity of people—the 1920s, the San Francisco East fi and place, de
defined by culture, social institutions, and c historical time who were born and reared in a speci
fi
findings. Consider of a study's analyst would not be able to determine the generality regarding historical change. Lacking such a cohort, the are advised to add a comparative cohort to obtain insights ence of social change and its social ecologies, researchers
fl
In designing a longitudinal study to investigate the in
u-
fluence of military experience (Lee, Vaillant, Torrey, &
in
these two studies have been used to assess the life course influence of military experience (Lee, Vaillani, Torrey, &
fl
1997). In addition, data collection of longitudinal studies has been influenced by the Great Recession that took place between 2008 and 2011 (Vuolo, Staff, & Mortimer, 2012), resulting in the collection of more detailed information on socioeconomic adaptation.

Studying Lives in Context: Some Considerations

In designing a longitudinal study to investigate the influence of social change and its social ecologies, researchers are advised to add a comparative cohort to obtain insights regarding historical change. Lacking such a cohort, the analyst would not be able to determine the generality of a study’s findings. Consider Children of the Great Depression (Elder, 1974/1999), which is based on children who were born and reared in a specific historical time and place, defined by culture, social institutions, and diversity of people—the 1920s, the San Francisco East Bay, California. The book also describes a very different Depression experience in Great Britain, Germany, and Japan. Even in the United States, conditions during the Great Depression varied among cities, East and West, and between rural and urban places. In view of this variation, the study’s generalizations are uncertain. Also uncertain are generalizations across historical time such as periods of economic depression and prosperity.

However, it is still possible to focus on historical variations “within a specific birth cohort” because not all members are uniformly exposed to the same change. Consider the Oakland cohort with birthdates of 1920–1921 (Elder, 1974/1999). Some of the young people were exposed to severe economic loss in the 1930s, while others were largely spared hardship and family disruption. Variations of this kind were observed among families in the middle and working class as of 1929, enabling a delineation of nondeprived and deprived groups for systematic comparison. This design revealed enduring differential consequences for children’s life chances that extended into their middle years.

This study of children of the Great Depression eventually added a comparative cohort for the Oakland sample, the Berkeley study members who were born at the other end of the 1920s just prior to the economic collapse. With this extension, the project was able to show that the younger Berkeley boys were at greater risk of impaired development in hard-pressed families during the Great Depression than were the older Oakland boys. In the younger Berkeley cohort, boys in hard-pressed families tended to lose contact with their self-absorbed fathers, even when physically present. Cohort differences were generally reversed among the girls. The younger Berkeley cohort fared better, owing to the nurturance of the mother-daughter relationship and the social disadvantage of the Oakland girls who were going through physical and social maturation during hard times.

The Great Depression transformed the social world of the Oakland and Berkeley children, but this event proved to be merely part of their changing life story since they were exposed to the mobilization of World War II during the early 1940s and then the Korean War in the early 1950s. The Oakland cohort completed high school just prior to the onset of World War II and soon nearly all of the young men had entered the armed forces. Most of the Oakland girls were eventually drawn into the home-front labor force in the San Francisco region, especially the booming shipyards. The Berkeley children were too young for military service at the beginning, but three-fourths of the males served in the military between 1945 and the end of the Korean War in the early 1950s. Although Children of the Great Depression did not explore this wartime experience, the adult lives of both cohorts suggested that an understanding of them would be incomplete without investigating the lifelong impact of both economic
depression and war. To obtain essential life history data on the wartime experience and its effects, a research team in the mid-1980s obtained a completed military service questionnaire from men in both cohorts.

The men who grew up in financially strained families during the Great Depression frequently saw military service as a “bridge to greater opportunity.” However, just as *Children of the Great Depression* noted, the impact of this life transition depended on when it occurred in men’s lives—their life stage. According to the balance of costs and benefits, military service in both cohorts favored the recruit who entered shortly after completing secondary school. This time of recruitment came well before commitments to higher education, a marriage partner, children, and a line of work. By contrast, later recruitment tended to disrupt all of these activities (Elder & Caspi, 1990). The later the time of entry, the greater the disruption and life consequences among men in both birth cohorts.

Especially in the Berkeley cohort that was more adversely affected by hard times (Elder, 1986), young men with multiple disadvantages (such as a deprived family, poor grades, and feelings of inadequacy) were most likely to join up and to do so as soon as possible. In combination, these factors predicted early entry into military service and its pathway to personal growth and greater opportunity. Early entrants experienced greater life benefits from the service up to the middle years than did later entrants and their occupational achievements by age 40 showed no adverse effect of hard times. These benefits occurred through situational changes in the service that made recruits more ambitious, assertive, and self-directed as well as through government benefits to veterans in access to higher education and in loans for the purchase of housing.

The influence of military service remains largely a “black box” of unknown processes in the Berkeley and Oakland cohorts. However, insights regarding some of these processes have come from a compelling test of the early entry hypothesis. Two sociologists, Sampson and Laub (1996) made use of life record data on men who grew up in poverty areas of Boston (birth years, 1925–1930). More than 70% entered World War II. The sample came from a study of 500 delinquent European American boys (aged 10–17) who were committed to correctional schools in the state (Glueck & Glueck, 1968). They were matched with European American nondelinquents from the Boston schools. A rich body of life-history data collected on these study members between 1940 and 1965 provides unusual detail on the men’s service experiences (they entered at 18 or 19 and served over 2 years) including in-service training, special schools, exposure to military justice, and arrests. The delinquent boys ended up with a much longer string of antisocial events, and were less apt to obtain in-service training and veteran benefits from the GI Bill. But they were more likely to benefit from the service over their life course, when compared to the controls, and this pattern was especially true for men who entered the service at an early age. In-service training, overseas duty, and veteran benefits for education and housing significantly enhanced the job stability of men with a delinquent past, especially when they entered the service at a young age.

Life stage at exposure to Depression hardship and military duty in World War II tells contrasting stories of risk. “Young boys” were most adversely influenced by hard times, whereas older male recruits to the armed forces were at greatest disadvantage when they entered the service. Because these males were drawn to military service at an early age, they experienced its greatest benefits (as a benefit/cost ratio), thereby tending to counter the negative effects of their adversities in the Great Depression. For this cohort, the military clearly represented a pathway to greater opportunity through postwar prosperity, offsetting much of the damage of growing up in hard times. In this manner, they avoided becoming members of the “lost generation from the Depression years” that was forecast at the time. In the aftermath of military defeat in World War II, the war and postwar eras proved to be much harder and perilous for those who served in the armed forces of Germany and Imperial Japan.

The Oakland and Berkeley studies of the effects of social change used data from small longitudinal samples that were designed to address different questions. The initiation of these and other studies prior to the Great Depression and World War II provided a rare opportunity to investigate the impact of these historical events on study members’ lives. In the following section we look at more contemporary projects with much larger cohorts and samples. Their ecological units are also much larger in size, such as rural versus urban and entire provinces.

We begin with a comparative cohort study of the life course and health in regions of contemporary China that is based on methods that are particularly useful in the first stage of a social change project. The rural-urban divide provides the major ecological contrast, although significant advances have been made toward more detailed studies of ecological variations within the country. This section is followed by longitudinal studies of transforming change in
Human Development in Time and Place

Eastern Europe, with a focus on the life course and human development of young people as they make their transition to new political worlds. Contemporary ecological models of human development will enrich future extensions of these studies.

Social Change in Life Course Health: The Case of China

Research on societal change often requires a general analytic approach that maps the conceptual territory and identifies the primary influences for more intensive study like that provided by the Oakland and Berkeley studies. One such study design focuses on the age/period/cohort distinction. Age refers to aging, the life course and the study member’s life stage at any time; period indicates the historical time of survey measurement and context; and cohort refers to a group defined by year of birth or entry into the system, such as a child’s transition to primary school. Traditionally, an age/period/cohort analysis represents the initial step toward identifying significant effects that can then be investigated in a more focused and in-depth manner. The troubling statistical issue here is that each parameter is completely defined in terms of the other two, producing an unsolvable identification problem.

Recent advances in statistical evidence address this challenge. A book by Yang and Land (2013) presents applications of this advance within the history of age/period/cohort studies. A possible solution to the identification problem is to exclude one of the three components on the basis of substantive and/or methodological issues. The simplicity of this approach is an advantage as is its substantive relevance when the issue concerns study of an historical effect because this effect is expressed in terms of both period and cohort influences.

A good example includes only age and cohort in the model, with a focus on their interaction. Consider a pronounced downturn in the economy. A period effect tends to widen the gap between cohort trajectories over time and thus indicates a cohort effect. A longitudinal design also favors this interpretation because repeated observations over time for an individual generate a person/year data set that is distinguished by only a single indicator of time—it can be either age or period but not both. The best way to grasp these distinctions is to see them at work in a research project on a changing society, such as China.

Social change and rural–urban inequality are central themes of contemporary China, and, as Whyte observed (2010), socioeconomic prosperity is heavily concentrated in the urban sector which is still largely “walled off” for people who live in rural China, owing to the migration constraints of rural household registration. Over 60% of the Chinese population resides in rural provinces. A study by Chen, Yang, and Liu (2010) addressed the health consequences of social inequality and the rural–urban divide in China. They used survey data from the longitudinal China Health and Nutrition Survey, a collaborative project with institutions in the United States and China. The survey includes a five-wave data set that spans 13 years, from 1991 to 2004. The age span begins at 21 years and extends well into late life.

Multiple waves in the project enabled a cohort analysis of age change in health and its relation to historical, rural–urban, and life-stage contexts. Respondents aged as members of each 10-year cohort across the follow-ups, producing age-graded cohort trajectories of self-reported health. The cohort members were asked about their health on a standard 4-point scale in each follow-up. Numerous studies have shown that this global measure is predictive of subsequent health and mortality (Chen et al., 2010). SES was measured by education and per capita family income. The investigators used a theory of cumulative disadvantage to account for the enduring effects of socioeconomic inequality.

The analysis addressed the effect of social inequality on self-reported health across the life course (within cohort) and the question of whether this life pattern varied across cohorts (an intercohort or social change effect). As noted earlier, the study focused on the effects of age as well as cohort and their interaction, and excluded the period parameter from the analysis. Because cohorts vary by age across historical moments, any historical effects would likely generate cohort differences in age-related outcomes. The results clearly document a strong intraco-hort link between patterns of social inequality and health differentials across the life span. With adjustments for cohort, the data reveal a process of cumulative disadvantage involving both limited education and income—the socioeconomic differential in access to health care, health self-care, and social support is greater at older than at younger ages and is influenced by income and education. These findings are consistent with those obtained in the United States.

However, variations across birth cohorts differ sharply from those observed in the United States. The impact of educational attainment on mean level of health decreased across successive cohorts, from the older to the younger, a
Societal Dissolution and Unification: Their Impact on Young Lives

Very little is known about the lives of Europeans who grew up in the hard years of social displacement, institutional change, and extreme poverty after World War II (Judd, 2005), but studies of social transformation in Eastern Europe and the Central Asian sector of the continent provide vivid evidence of the human consequences of this era of personal change—from the break-up of the Soviet Union in 1990–1991 following “an era of liberalization” to the unification of Germany after 40 years of separation between West Germany and the German Democratic Republic.

These two examples of social change in young peoples’ lives represent contrasting processes. The dissolution of the Soviet Union led to 15 republics that became sovereign states. In a unique nationwide longitudinal study (Titma & Tuma, 2005), young people who began their schooling in the USSR suddenly found themselves in different countries defined by different cultures, socioeconomic systems, and life opportunities.

By contrast, the postwar history of Germany was shaped by its division into two countries, the Federal Republic of Germany in the west and the German Democratic Republic in the east within the orbit of the Union of Soviet Socialist Republics. Greater liberalization in the USSR during the late 1980s set in motion a process of change that led to the “fall of the wall,” separating West and East Germany, and the political process of unification. East Germans were incorporated into the Federal Republic of Germany as the latter’s social institutions and financial resources were transferred to the former East Germany. We begin this section with the Soviet Union’s dissolution and its life course effects because this process defined the larger context for German unification.

When the Soviet Union Dissolved

Imagine the beginning of a national longitudinal study of young people’s lives just prior to a political transformation that turned all of the society’s states into sovereign countries with different governments, socioeconomic structures, and cultures. This scenario actually occurred during the research project of sociologist Mikk Titma, which began in the 1980s in the Soviet Union and continued into the 1990s. The good fortune of such unexpected change is that he managed to continue collecting data on the lives of the study members in their diverse post-Soviet worlds. They were all secondary school
Human Development in Time and Place

The Paths of a Generation project (see Titma & Tuma, 2005) focused initially on the developmental trajectories of early life careers, but in the post-Soviet era it became a study of social change in socioeconomic attainment and loss. With his research team, Titma succeeded in following up most of the study members who were living in six successor states—Estonia and Latvia along the Baltic rim, Russia, Belarus, the Ukraine, and the Central Asian country of Tajikistan. The first follow-up occurred in 1988 to 1989, the second in 1993 to 1994, and the third in 1997 to 1999 when the study members were in their 30s. The analysis is based on approximately 12,000 young men and women.

As a birth cohort from the late 1960s, the study members were following a timely trajectory because they had completed their basic education before the dissolution of the Soviet Union and thus were able to move into the post-Communist era and take advantage of available opportunities for entrepreneurship, employment in a firm, and higher education. The basic level of education became less available in the post-Soviet era. Moving from the known world of Soviet control to an emerging, unfinished society entailed great uncertainty for many and no assured framework for expectations. Opportunities varied significantly from the Baltic States to Tajikistan. Estonia and Latvia were incorporated into the Soviet Union before World War II but they had greater commerce with the West than the other post-USSR countries. Indeed both achieved substantial growth in their market economy during the 1990s and established parliamentary democracies. Russia and the Ukraine along with Belarus (under strong Russian influence) lagged in the post-Communist decade, followed at the end by Tajikistan with its resemblance to Afghanistan in culture, economic development, and topography.

When a young person makes a transition into a new world of opportunities, risks, and constraints, as during the break-up of the Soviet Union, does he or she become a different kind of person? In life course terms, the answer would be, It depends. What life history of experiences, resources, and dispositions is brought to the new situation? Is the transition made with the support of other like-minded people? What kind of new environment is the person entering? Are there strong situational constraints to channel behavior? Caspi and Moffitt (1993, p. 315) proposed that “people become agentic when they encounter an unpredictable situation; whether they are impulsive or reflective, predatory or altruistic, lazy or conscientious, they are actively trying to reinstate predictability.” As Caspi and Moffitt suggested, this situation is the type of circumstance in which individual differences of personality are most likely to play an organizing role in channeling behavior.

Caspi and Moffitt’s account meshes well with the Titma study’s empirical findings on an “agentic theme,” expressed through education, abilities, goals, and self-efficacy. These agentic influences on young people before the Soviet Union’s demise predicted their adult success, as indexed by social class, occupational status, and total earnings in the post-Communist era. But this outcome of human initiative depended on whether the new society favored such initiative and offered relevant life opportunities for self-fulfillment. Social and economic success was consistently greater in the two Baltic societies, whereas Tajikistan ranked at the bottom. It is noteworthy that economic initiatives outside the main job during secondary school proved to be predictive of entrepreneurial activities in the adult years. Again this relation turned out to be strongest in the Baltic countries, owing partly to their opportunity structure for starting new businesses. Gender inequality was least evident in these Baltic societies.

Pervasive movement in social status, up but especially down, represents a distinctive feature of life in eras of disruptive change (see Titma & Tuma, 2005). Poverty and unemployment rates increased significantly as did rates of divorce and mortality. In the western part of the old Soviet Union, the size of birth cohorts in the 1990s declined by nearly half. Despite the social flux of the times, human capital (grades, educational level, etc.) consistently predicted young adult attainment during the 6 years that followed the end of the Soviet Union, with the most pronounced effects in the Baltic States.

The Unification of Germany

As liberalization pressures in the Soviet Union were pulling it apart in the late 1980s, demands for unification were building in West Germany and the German Democratic Republic, leading to the reunification of Germany in 1990. At the time, West Germany was 3 times the size of the GDR in population, and its economy, wealth, and educational-cultural institutions were appreciably greater as well. Despite such differences, the shared history of West and East Germany as well as the reach of Western media could well have blurred the expected differences.

Two major research programs in Germany have focused on the personal impact of unification—Mayer’s German Life History Study (Diewald, Goewiecke, & Mayer, 2006) and Silbereisen’s (2005) research over some 20 years on social change and human development. We begin
with Mayer’s sociological perspective on life course changes following the collapse of the German Democratic Republic, and then turn to Silbereisen’s Jena project with its interdisciplinary perspective. The Life History project is focused on the adult years, whereas the Jena project draws on surveys as well as longitudinal data spanning the years from childhood into young adulthood. These two projects are among our most impressive long-term studies of drastic social change in human lives.

The German Life History Study was launched in 1979 by using retrospective life history interviews on a succession of birth cohorts of West German adults (1919–1921, 1929–1931, 1939–1941, 1949–1951, 1954–1956, 1959–1961, 1964, and 1971). This method of data collection enables study of past years of the life course in the absence of relevant data archives. The ability to recollect prior life history accurately is an important issue, although all longitudinal data collection relies on the accuracy of memory. Nevertheless, the dependence on long-term recall is obviously greatest in retrospective life history projects. In such studies data collection instruments are designed to maximize accurate recall.

When the Berlin Wall fell, the research team took advantage of the opportunity to extend the project to East Germany because it represented “an exemplary case for studying the life course under the conditions of extreme societal discontinuities” (Brückner & Mayer, 1998, p.154). Retrospective life history data were collected through interviews with members of four East German birth cohorts (1929–1931, 1939–1941, 1951–1953, and 1959–1961). The respondents were surveyed again in 1993 and interviewed from 1996 to 1997 to cover the entire social transformation process and its impact on the lives of men and women. The remarkable span of birth cohorts in this research reflects the teams’ recognition that historical time and its correlated life experiences are important dimensions of the 20th-century life course in Central Europe.

Institutional differences between West and East Germany were observed to be very large on the eve of political and economic unification, especially in the realm of families, women, and children. State policies in East Germany provided families with access to housing, advocated equal employment opportunities for women, and offered abundant childcare, especially for working mothers. Young women in East Germany tended to marry earlier and had more children than women in West Germany, and yet they were also more likely to be employed. Introduction of a free-market system in East Germany removed support for these family services and nearly half of all East German workplaces were lost during the first years after the fall of the Berlin Wall (Pinquart, Silbereisen, & Juang, 2004). Rates of unemployment and poverty increased sharply. Marriage and childbearing rates declined significantly at this time in East Germany, along with a substantial delay in having a second child.

Consistent with life course studies (Elder, 1998a) the German Life History Study discovered that success in the new economy of East Germany had much to do with both life stage and gender (Diewald et al., 2006). Unemployment was highest among the youngest and oldest men. In the middle-age category, men were favored over women by employers. The middle-age category included men with work qualifications who also had enough work years ahead to be retrained if necessary. As an index of a particular life stage, age combined the influence of prior experiences and acquired skills as well as the constraints of aging in the second half of the life span. Thus, prior experience with work transitions enhanced the adaptive ability of middle-aged East Germans, even in a period of socioeconomic transformation. Reentering work after a phase of joblessness depended on age status to a greater extent for women than it did for men.

Despite the social disruptions and economic hardships associated with unification in East Germany, the Life History Study found that emotionally close relationships before 1989 tended to become stronger among young people and their families in the East. The evidence shows a high level of stability in marital relationships and family networks, suggestive of a compensatory adaptation to the hard times that was observed here as well as among American families during the Great Depression in the United States (Liker & Elder, 1983), especially when marital ties were relatively strong before the crisis. However, social ties associated with work in East Germany seldom survived the unification process. Many workplaces were closed down. Observations from the German Life History Study (Diewald et al., 2006) suggest that the rapid transfer of West German social institutions to the former East German region constrained the agentic influence of individuals, unlike the liberating shift toward self-direction among young men and women who were in their 20s following the dissolution of the Soviet Union and its control structure. The demise of Soviet control placed more emphasis on individual initiative.

This portrait from the Life History Study comes from adults in social roles and their constraining influence. East German organizational and institutional models were
quickly replaced after unification by a West German model in the Eastern region. Young people in East Germany were not constrained by adult roles and enjoyed opportunities for self-direction, especially in the transition from leaving home to establishing their social and economic independence. This age group was the target of Silbereisen’s Jena project on German unification, a research program focused on the years from childhood into the 20s. It collected a rich array of survey and longitudinal data on psychosocial functioning, including the qualities of human agency in adapting to social change.

Some 14 years after German unification, Silbereisen (2005) shared his reflections about the challenge of studying the developmental impact of this social transformation in his 2004 presidential address to the International Society for Behavioral Development at Ghent, Belgium. He noted that a great many errors had been made in poorly designed research to assess the resulting population change, including the comparison of birth cohorts from each region. In designing a framework for the Jena program of research, Silbereisen drew on the Oakland and Berkeley cohort studies of children who grew up in the Great Depression and were followed into the middle years of life (Elder, 1974/1999). Of particular relevance to studies of the effects of German unification, as he saw it, was the multilevel model of economic decline and recovery, the family and its adaptations to socioeconomic change, and the developing individual. He also borrowed concepts of mechanisms from this project that specified processes by which social change could make a difference in children’s lives. These included the control cycle process of losing control in a social transition, which then initiates efforts to regain it. Silbereisen expressed the hope that developmental scientists in the future would be “better prepared with adequate heuristics and theories on the nature of social and political transformations and their consequences” (2005, p. 4).

The Jena project was launched with two primary research foci: (1) the influence of German unification on the timing of life events in the transition to young adulthood, such as the age at leaving school and home, and (2) on adaptations to social change—the personal as well as social resources that favor successful adaptations, including qualities of human agency, commitments, and social support. The complexity of German unification as a social change contributed to mixed findings concerning the timing of life transitions and underscored the importance of a more adequate model of the unification process. It also revealed the need for more microtheories on variables that link social change to life course outcomes. This recognition led to the development of new models (Silbereisen & Chen, 2010) featuring perceived demands, stress, and personal control.

More attention to the mediational process highlighted qualities of human agency that were relevant to coping with social change, such as beliefs regarding one’s ability to make a difference in school or work. Studies of adaptation to social change have consistently shown that qualities of human agency are instrumental in successful coping (Titma & Tuma, 2005), and a series of studies by the Jena research group provides substantial evidence of this link. In a Leipzig sample of East German adolescents, Pinquart, Silbereisen, and Juang (2004) observed that youth who were highly committed to the old political system were likely to experience greater emotional distress after unification, but only if they lacked a sense of their own self-efficacy. Adolescents who identified with the old system and possessed stronger beliefs in their self-efficacy prior to unification did not experience such distress. In addition, the study found that higher self-efficacy predicted a decline in psychological distress over time.

The investigators also asked whether stronger feelings of self-efficacy among young adolescents would enhance their chances for a successful transition to work in adulthood. The longitudinal study began in 1985, well before German unification and it continued from ages 12 to 21. Only the noncollege study members were included in this research on the transition to employment (Pinquart, Juang, & Silbereisen, 2003). The investigators tested a model in which efficacious beliefs about academic achievement and academic success promote young adult employment and job satisfaction through career-related motivation and work aspirations. The empirical findings provided support for the causal sequence linking academic success, self-efficacy and career-related motivation to positive work life outcomes, and it is noteworthy that this sequence corresponds in many respects with those obtained in an American longitudinal study during the 2006 to 2011 economic recession (Vuolo et al., 2012). In both studies, efficacious beliefs are associated with career-related motivational striving, and stable employment during the young adult years.

Unification occurred at different times in the young lives of East Germans and had different consequences for adults, as noted in our review of findings from the German Life History Study. We might expect differing effects by age of students in the East German school system, which was radically transformed after unification. Silbereisen and his collaborators (Vondracek, Reitzle, & Silbereisen, 2010, p. 4).
1999) observed a significant differential effect by age on vocational preferences. Older youth who had a number of years in the old system experienced large changes in preferences (away from state-sponsored options), whereas those at a younger age with virtually all of their education in a Western-styled system displayed no differences in preferences. Another unstudied source of differential impact would likely involve very young children and their dependence on families that experienced socioeconomic hardships and marital stress, as suggested by the life stage findings from Children of the Great Depression (Elder, 1974/1999).

Empirical studies of the effects of German unification in this review are based on observations over a relatively short period of the life span. What will the long-term consequences be? The early years are not necessarily predictive of the later years. As in Titma’s post-Soviet cohort, the German young people and adults who fared well in the radically changed world that emerged from unification of East and West Germany tended to view themselves as agents of their own lives. And they were significantly better educated than other East Germans. In Children of the Great Depression, the post-Depression era of World War II and growing prosperity played a major role in the resilient accomplishments of this American Depression generation across the adult years. Hopefully, the next stage of the Jena project will follow up the lives of East Germans who experienced the social transformation of unification.

**HUMAN DEVELOPMENT IN CONTEXT**

The past half-century has witnessed an increasing tendency to view human development in context by linking complementary perspectives, temporal (historical/biographical) and ecological. The temporal perspective locates individual lives by birth year and cohorts according to *historical time*, and depicts their evolving biography across age-graded events, or *social time*. The ecology of a specific historical time is defined by distinctive institutional arrangements and cultural meanings. For individuals, the ecology of human development varies from such macrolevel attributes to the microlevel of social interaction across life stages in successive birth cohorts. The integration of these complementary perspectives represents a defining feature of the multilevel life course framework proposed in this chapter.

The two perspectives emerged at different times in studies of human development during the 20th century and only recently have converged in life course models. The temporal cohort perspective on life patterns and human development first appeared in the mid-1960s through research based on birth cohorts, especially in the seminal work of Ryder. An early cohort-historical study, *Children of the Great Depression* (Elder, 1974/1999), used longitudinal samples to investigate the lifelong impact of Depression hard times on Californians born in the 1920s. However, it paid little attention to the children’s ecology, other than to note regional variations in crisis. The study highlighted the developmental importance of taking historical time into account in longitudinal studies of children. But its nature remained largely unspecified beyond the economic hardship of families and children.

During this lengthy study of Depression children and their adult lives, Bronfenbrenner carried out an ecological study of socialization in societies with contrasting political systems, the United States and the USSR. In his book *Two Worlds of Childhood*, Bronfenbrenner (1970) observed that peer groups of students in the Soviet Union tended to reinforce adult approved patterns of conduct, whereas in the United States they more often exerted a contrary influence. This work was not informed by a perspective that locates children in historical context and follows them into adulthood. Consequently, it would not have been sensitive to the subsequent years of transforming change in the Soviet Union. In his now classic book *The Ecology of Human Development*, Bronfenbrenner (1979) drew on longitudinal studies of child development in historical times, although his ecological framework did not include a temporal perspective on the environment and individual.

To date, the most compelling research integration of these perspectives has been made by Sampson’s program of Chicago research that evolved from the Project on Human Development in Chicago Neighborhoods during the early 1990s. He invested heavily in the conceptualization, measurement, and analysis of neighborhoods and their outcomes. Data sources include longitudinal samples of young people, community surveys, systematic observations of neighborhoods, and network assessments, among others. Sampson’s contributions to the contextualization of human development reflect long-standing interests in community and criminology, as well as his longitudinal study of crime and the life course with Laub (Laub & Sampson, 2003; Sampson & Laub, 1993). Contemporary advances in studying the context of human development led Sampson (2012, p. 24) to propose that the 21st century may become “the era of context.”

Sampson (2012) vividly documents the payoff for understanding “lives in context” in *The Greatest City,*
a study of Chicago neighborhoods and their residents over a decade. Virtually all Chicago neighborhoods in his study, he found, were connected across the years through the movement of people, families and children, the old and the young. This movement typically linked neighborhoods of advantage as well as those of disadvantage, thereby perpetuating their inequality across historical time and the generations. Sharkey extended the Chicago research with Elwert (Sharkey & Elwert, 2011) by using nationwide longitudinal data to investigate the effects of neighborhood and family on cognitive ability across the generations. The study shows neighborhood and family to be “closely intertwined” environments that jointly influence the “developmental trajectories of individuals in ways that extend across the generations.”

The interplay of multilevel contexts and human development has come a long way toward recognition of the centrality of this perspective in the field of developmental science. The flourishing study of the life course and human development is one example of such progress, and Bronfenbrenner’s (Bronfenbrenner & Morris, 2006) ecology of human development is another in studies of neighborhood influences. Both fields emerged from awareness of the neglected social world of children in developmental studies. The historical context and ecology of development still remain largely unintegrated in research, although we see encouraging movement toward their integration in this chapter and volume.

REFERENCES


50 Human Development in Time and Place


52 Human Development in Time and Place


54 Human Development in Time and Place


Queries in Chapter 2

Q1. See titles of Chapters 6 & 21; reword?
Q2. Please provide page numbers when available
Q3. Please provide intext citation for Table 2.2.
Q4. The last entry in the second column seems to be incomplete; please check.