PATHWAYS TO ADULTHOOD IN CHANGING SOCIETIES: Variability and Mechanisms in Life Course Perspective

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Abstract  The transition to adulthood has become a thriving area of research in life course studies. This review is organized around two of the field’s emerging themes. The first theme is the increasing variability in pathways to adult roles through historical time. The second theme is a heightened sensitivity to transition behaviors as developmental processes. Accounts of such processes typically examine the active efforts of young people to shape their biographies or the socially structured opportunities and limitations that define pathways into adulthood. By joining these concepts, I suggest new lines of inquiry that focus on the interplay between agency and social structures in the shaping of lives.

OVERVIEW

In their 1986 contribution to the Annual Review of Sociology, Hogan & Astone proposed a population-based, dynamic approach to the transition to adulthood. Accordingly, they emphasized the contextual and institutional factors that explain differences in the transition to adult roles across different societies, among social strata within a society, and through historical time. Research since then has consolidated and expanded this view considerably, focusing on markers of the transition to adulthood. These markers include leaving school, starting a full-time job, leaving the home of origin, getting married, and becoming a parent for the first time. Many investigations have emphasized central tendencies in these life course events (for example, the median age at first marriage). Research of the past two decades, however, has increasingly focused on the variability of these markers (George 1993, Rindfuss et al 1987), including their dispersion (for example, variation in age at first marriage), their variable sequencing, their degree of co-occurrence, and the duration of intervals among them.
This review explores two central themes. First, trends reveal significant changes in the transition to adulthood through historical time. Part one evaluates influential arguments that the modernization of societies has coincided with the standardization and individualization of the life course. Standardization appears in the increasing “compactness” in the ages of school completion, marriage, parenthood, and beginning one’s career, whereas individualization is found in increasingly diverse sequences of these markers. In turn, these trends have been complicated by short-term economic fluctuations and discrete historical events and, within cohorts, by social inequalities such as gender, race, and socioeconomic status.

Greater diversity in the transition to adulthood has inspired research that explores the second theme, the widespread adoption of a developmental stance by sociologists as they link the experiences of youth and adulthood. The transition to adulthood is now viewed less as a discrete set of experiences that are temporally bounded in the life course and more as an integral part of a biography that reflects the early experiences of youth and also that shapes later life. Part two considers this developmental stance as it reflects both young people’s active efforts to shape their biographies and the structured set of opportunities and limitations that define pathways into adulthood. In the concluding section of this essay, I identify several methodological innovations that are well suited to the study of the transition to adulthood.

HISTORICAL PATTERNS IN THE TRANSITION TO ADULTHOOD

The timing and sequencing of transition markers have changed through historical time, simultaneously reflecting long-term trends and short-term fluctuations between cohorts, as well as variability within cohorts (Hogan 1981). The modernization of societies is often considered the underlying process driving long-term trends that differentiate successive cohorts, but short-term economic changes and discrete historical events have complicated these trends. In turn, differences within cohorts reflect inequalities due to race, gender, and socioeconomic status.

Long-Term Patterns in Transition Markers: The Modernity Argument Evaluated

Paradoxically, many commentators argue that modernization has promoted both standardization and variability in the transition to adulthood. Kohli (1986) argued

1“Modernization” has assumed many meanings since its early use in European sociological theory and subsequent dissemination across the American social sciences. Common to many conceptions, however, is a constellation of societal changes thought to mark a break with previous forms of social organization: rapid technological changes, the emergence of market economies, urbanization, industrialization, the decline of agricultural life, secularization, broad-based political participation, the use of currency, and the spread of science (e.g. Ross 1994, Singal 1998).
that the life course has become less determined by the family and locale (the individualization hypothesis) and at the same time more standardized by age (the age-grading or institutionalization hypothesis). According to this argument, individualization and standardization reflect the modernization of society, especially changes in labor markets (see also Beck 1992) and the increasing role of the state in people’s lives (see also Mayer & Muller 1986). Empirical evidence suggests that the transition to adulthood has indeed both standardized and diversified, although these trends reflect many historical developments. It may be that the transition to adulthood has become especially diversified since the 1960s.

**Standardization of the Life Course** According to Kohli (1986), the organization of public services, transfer payments, and employment opportunities by age renders the life course more orderly and calculable. Similarly, Buchmann (1989) maintained that the rationalization of the economy and polity have promoted institutionalization of the life course. The state increased the number of rights that an individual could claim on a universalistic, standardized basis through the twentieth century, but at the same time it restricted the individual’s right to organize many aspects of life (for example, with respect to education and entry into and exit from the labor market).

Consistent with these arguments, several strands of evidence suggest that the transition to adulthood has standardized. Examining the prevalence of different female life course patterns (for example, spinster vs widowed mother) among cohorts of women born between 1830 and 1920, Uhlenberg (1969) observed a convergence on the “typical” female life course pattern, involving survival to age 20, marriage, having children, and surviving with husband until age 55. Among women born in 1830, ~21% experienced this “typical” pattern in contrast to ~57% of women born in 1920. He also observed a narrowing of the age range in which women typically married and had children. The primary factor promoting standardization of the life course was improvement in mortality rates brought about by the management of contagious and infectious diseases such as smallpox (see also Uhlenberg 1974).

Similarly, between 1880 and 1970, it took 80% of both men and women markedly less time to leave the household of origin, marry, and establish their own household among those who experienced these transitions (Modell et al 1976). Modell & Goodman (1990) likewise observed greater “compactness” among the transition markers between 1900 and 1960 in both the United States and Britain, reflecting the upward movement of the median age of school-leaving and the decline in the median age of marriage (see also Hogan 1981, Modell et al 1978, Stevens 1990, Winsborough 1979, 1980). Indeed, drawing on multivariate analyses, Hogan (1981) reported that a measure of modernity—reflecting the educational experiences of the population, life expectancy, infant and youth mortality rates, and percentage of youths in the labor market—is significantly associated with a compression of the transition markers for the cohorts born between 1907 and 1946 (for a review of additional supporting material, see Hagestad & Neugarten 1985).
Thus, the transition to adulthood has standardized in that the time it took most people to pass through a range of transition markers has constricted since the early nineteenth century. Theoreticians have emphasized the critical role of “modernity” in explaining this long-term pattern, but, more precisely, compression of the transition markers from about 1830 to 1920 primarily reflected improvements in health, whereas standardization since roughly 1905 has reflected the expansion of the educational system (Hogan 1981, National Center for Educational Statistics 1995). After World War II, the removal of the draft, the expansion of the economy, and the GI Bill operated in joint and complex ways to standardize transition behaviors (Stevens 1990).

Individualization of the Life Course Many theorists also maintain that as people were freed from the traditional constraints of family and locale, they were able to exercise more agency in the construction of their biographies (e.g. Beck 1992, Giddens 1991). In fact, Graff (1995) maintained that an understanding of one’s life course as a deliberate project was not common before the nineteenth century. Previously, the individual’s life was powerfully shaped by the exigencies of family life, especially the illness or death of a parent or sibling (e.g. Hareven 1982). Consistent with these arguments, Modell and his colleagues (1976) observed that, between 1880 and 1970, the familial and nonfamilial transition markers increasingly overlapped, creating more diverse sequence patterns.

Hogan (1981) provided empirical evidence for variability in the sequencing of markers among cohorts born between 1907 and 1946. The percentage of men experiencing an “intermediate nonnormative” order of transition markers (beginning work before school completion, or marriage before beginning work but after school completion) increased from ~20% in the cohorts born between 1907 and 1912 to ~30% for men born in 1951. The prevalence of “extreme non-normative” ordering (marriage before school completion) increased from <10% among cohorts born between 1907 and 1911 to >20% for cohorts born between 1924 and 1947. Modernity has a large negative effect on the prevalence of the normative pattern, but a large positive effect on the prevalence of the extreme non-normative pattern. That is, in times of greater educational attainment, lower infant mortality, greater longevity, and fewer youths in the adult labor market, men are more likely to make an extremely non-normative transition to adulthood. Thus the available evidence suggests a trend toward individualization of the life course as found in the increased variability in the sequencing and overlap of transitions.  

The New Individualization Some commentators further argue that the process of individualization has become markedly different or accelerated since the late

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2Stevens (1990) likewise observed greater overlap among the markers through historical time, although this may be limited to mixes of familial and nonfamilial transitions (e.g. workforce entry and marriage). His analysis also suggests, however, that the sequencing of transitions has remained unchanged (with some exceptions), in contrast to arguments about
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1960s. According to Kohli, “the new thrust of individualization” occurs against the “background of a regulated labor market and . . . public social security systems” (Kohli 1986, p. 303). Within the framework of a highly predictable life course, people are able to improvise considerably in the planning of their lives.

Buchmann’s (1989) argument is different, emphasizing that the highly standardized trajectories of school, work, and family have been “shattered” by several structural and cultural developments since the 1960s, leading to new levels and forms of individualization. Links between educational certification and occupational status have been weakened, the “half-life” of occupational training and expertise has decreased substantially, the family has reached new levels of instability, and cultural representations of love and work emphasize flexibility, choice, and impermanence.

The processes underlying this new individualization, and whether such a trend even exists, are subjects of controversy. The new individualization hypothesis is difficult to demonstrate by empirical study because it requires a systematic analysis of the timing and sequencing of adult transition markers based on an adequate time series both before and after the mid-1960s. Although no such study has been conducted, some evidence suggests that the transition to adulthood has indeed become more variable since the 1960s.

First, transition markers have “decompressed,” yet continue to overlap. In their study of the compactness of transition markers, Modell & Goodman (1990) observed increasing compactness of the markers from 1900 to 1960, at which point spacing between them started to diverge. Yet overlap among some of the markers persisted, arguably representing heightened complexity. [Stevens (1990) also observed the decompression of markers, but this was limited largely to familial markers and began in the 1970s.]

Also, new pathways have emerged, and greater variability in the sequencing of markers is observed (Buchmann 1989). This basic impression has been supported by much research that documents loose couplings among marriage, parenthood, and home leaving (Goldscheider & Goldscheider 1993), as well as the increased likelihood of returning to higher education after leaving school, transferring from a community college to a university, and mixing employment with schooling and parenthood (Bingham & Giele 1998, Morris et al 1998). Modell’s (1989) detailed analysis of courtship and marriage shows that the school-work-marriage sequence of earlier times became less prevalent between 1920 and 1975, as did the marriage-coitus sequence (see also Rindfuss 1991, Rindfuss & Parnell 1989). Activities constituting family formation become further complicated by cohabitation beginning in the 1980s (Bumpass & Sweet 1989, Bumpass et al 1991). These strands of evidence suggest that the life course may have experienced heightened individualization since the late 1960s, especially in the emergence of new pathways into adult roles.
Short-Term Intercohort Trends: The Economy and Discrete Historical Events

Trends in the transition to adulthood are also differentiated by changing economic circumstances and historical events. Although many well-documented factors complicate long-term trends in specific transition markers (e.g. the sex ratio in an area influences the likelihood of marriage), contemporary research has emphasized economic conditions as a source of intercohort variations in the transition to adulthood with respect to first births, courting patterns and marriage, educational continuation, and entry into the labor market. Research on the timing of first births and the acquisition of a first job is illustrative. Further, discrete historical events involving the mass mobilization of youth (most notably, war) often lead to very different transition patterns among successive cohorts.

Economic Change and the Timing of Markers Unemployment, inflation, and economic reorganization in the form of sectoral shifts have exerted substantial period effects on the age of first birth, affecting all cohorts in the child-bearing years (Rindfuss et al 1988). For example, delays in parenthood have been observed since the 1960s; between 1966 and 1976, first births to women > 30 years of age increased ~33%, but the number of women in that age group increased only 6%. Likewise Rindfuss and his colleagues (1996) showed substantial percentage increases in births among women > 30 and percentage decreases among women <25, between 1973 and 1988. These trends are thought to reflect in part economic opportunities: women’s work has shifted to career-oriented, white-collar jobs, especially the professions (Mare 1995), which are perceived to penalize workers for time spent out of the labor force and to foster preferences for nonfamilial responsibilities and rewards.

Patterns of delayed parenting among cohorts of the Great Depression and World War II vividly illustrate intercohort variability due to economic change (Rindfuss et al 1988). The unemployment rate during the Great Depression delayed first births among women aged 25 and 30, but not among women 35 years of age; it may be that women were less willing to delay childbearing past age 30 because they were uncertain how long hard times would last and were pressing biological realities. In the postwar period, however, the inflation rate uniformly delayed first births among women aged 25, 30, and 35. In contrast, first births occurred earlier for all women of childbearing age during the economic boom immediately after World War II, as well as during the war years themselves.

With respect to employment, the transition to a full-year job took longer for a cohort making the transition in 1980 than for a 1960 cohort (Morris et al 1998). This difference can be explained in part by a greater likelihood of “switching”

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from nonparticipation to participation in the labor force in the more recent group. Indeed, the number of switches was greater and the duration of years between the first and last switch was longer for the 1980 cohort. Morris and her colleagues speculated that this increased “career turbulence” is due in part to a shift from jobs in manufacturing and government to the retail and business sectors, which pay low wages and suffer high turnover. These authors noted, however, that changes in the industrial distribution cannot explain all of the differences between the two groups. Further changes within sectors, perhaps at the level of the firm, are also relevant.

In addition to documenting the central role of economic conditions in the transition to adulthood, these and similar studies offer several general lessons about economic influences. First, previous research tended to assess the economy in static, objective terms, to the neglect of dynamic, complex measures involving both objective (e.g. unemployment rate) and subjective indicators (e.g. perceived employment prospects among those looking for work). Yet, as Rindfuss and his colleagues (1988) noted in their study of first births, prospective mothers tended to evaluate their life chances and formulate plans according to their past experiences and to their projections of opportunity in the future. This intuitively appealing position suggests the importance of young adults’ interpretations of their economic circumstances, past, present, and future.

Second, measures of the economy typically have emphasized the level of opportunity (e.g. the unemployment rate) to the neglect of how opportunity is distributed. Yet as Morris & Western (1999) argue, sociologists may have prematurely abandoned research on economic sectors and their social implications (see also Kerckhoff 1995; for an exception, see Schömann et al 1995). In short, the use of dynamic and complex measures may enhance the value of economic factors in explaining changes in the transition to adulthood.

**Mass Mobilization and Knifing-Off Experiences** In addition to economic fluctuations, discrete historical events, especially wars, have altered the transition to adulthood. In World War II, military service often created a “social moratorium,” a postponement of the acquisition of adult roles and responsibilities (Elder 1986, 1987). Indeed, younger entrants were significantly more likely than older entrants to enter the war before they acquired full-time jobs, married, or completed their education. Service in the military at an early age maximized the discontinuity between youth and adulthood, redirected the life course through delayed entry into family roles, and provided opportunities for educational and occupational advancement. In contrast, entry into the military at a late age often coincided with the disruption of nascent family life and careers, leading to, for example, a greater likelihood of divorce (Pavalko & Elder 1990).

The “knifing-off” experience of military service, separating youth and adulthood, was particularly beneficial for men from disadvantaged backgrounds (Elder & Hareven 1993, Xie 1992). The pronounced benefits of knifing-off experiences are illustrated in a study of the Glueck sample of juvenile delinquents (Sampson
& Laub 1996). The positive effect of being sent overseas on wages and economic status at age 32 was significantly greater among delinquents than among a non-delinquent control group. As Sampson & Laub observed, “overseas duty emerged as a crucial life experience because it facilitated the knifing off of past disadvantages (e.g. poverty or deviant peers) and stigmatization of the criminal justice system.” Mass mobilization can prove deleterious, however, even during the same war (for the case of German veterans, see Mayer 1988, Mayer & Huinink 1990; for Japanese veterans, see Elder & Meguro 1987).

Social Stratification and Intracohort Variability

The general analytic model—positing long-term trends in the transition to adulthood marked by short-term economic fluctuations and discrete historical events—is further complicated by social inequalities within cohorts. Compared with early historical periods, many differences in the transition markers today are becoming less dramatic across subgroups of society, although differences remain by economic resources (e.g. Oppenheimer et al 1997, Oppenheimer & Lewin 1999), gender (Mare 1995, Spain & Bianchi 1996), and race (Farley 1996, Mare 1995, Tucker & Mitchell-Kernan 1996).

Several emerging research themes have been especially promising with respect to social inequalities in the life course. First, researchers now have a heightened sense of the spuriousness of many purported racial differences, which often reflect compositional differences such as family background. For example, Ahituv et al (1997) show that racial-ethnic differences in choices made about school and work during the transition to adulthood largely disappear when parental education and income, family structure, and aptitude test scores are controlled. Indeed, among youths who are comparable in these respects, black and Hispanic youth are more likely to prolong school and less likely to remain idle (that is, not in school or in the workplace) than white youths.

Second, however, compositional effects do not always account for racial and ethnic differences, and, in many instances, progress has been made in identifying possible mechanisms that underlie racial and ethnic differences in transition behaviors. This has been the case especially for black-white differences in the timing of marriage and first births. Childbirth before marriage is much more common among blacks than whites; in 1992, two thirds of all black births occurred outside wedlock, compared with one quarter of all white births (see Spain & Bianchi 1996). Many of these births are to teenage mothers (Cherlin 1992). Research now identifies a wide range of possible explanations for this pattern, including, for example, the lack of men who are economically attractive as marriage partners (Wilson 1996), and the lack of role models and opportunities that would otherwise encourage postponing intercourse and pregnancy (Brewster 1994).

Finally, although differences in the life course may reflect criteria such as income, gender, or race-ethnicity, it is probably unfavorable combinations of these factors that define groups that are markedly at risk. This is vividly demonstrated
in the study by Oppenheimer and her colleagues (1997) of the economic attractiveness of men and the timing of their marriage. About 48% of both black and white males with 16 years or more of schooling had married within 4 years of finishing school. With lower levels of educational attainment, however, black-white differences began to emerge; among high school graduates, ~20% of black males had married within 4 years of graduation, compared with 40% of white males. The differences became even more pronounced when difficulty of career progression was taken into account; among males who had less than a high school diploma and experienced difficulties starting their careers, ~5% of blacks were married within 4 years of finishing school, in contrast to ~25% of whites. Life course differences are greatest when inequality is viewed as a multidimensional phenomenon that encompasses combinations of race, gender, and economic resources.

MECHANISMS IN THE TRANSITION TO ADULTHOOD

Growing diversity in the transition to adulthood has coincided with one of the most significant advances in life course studies, the widespread adoption of a developmental stance by sociologists as they link the experiences of childhood, adolescence, and the phases of adulthood (Elder 1998). This fresh orientation reflects interest in how people formulate and pursue their life goals, but also how people are constrained and enabled by socially structured opportunities and limitations. The mechanisms considered in this section reflect these central elements, emphasizing social psychological and structural factors that promote variability in the transition to adulthood.

Agency and the Pursuit of Goals

As the duration, sequencing, and directionality of movement between age-graded statuses become more tenuous during the transition to adulthood, it may be that social psychological factors become more important in determining the life course (Mortimer 1994). An interesting set of these factors describes agency in the life course, defined as the active process of choosing of appropriate institutional involvements, organizational memberships, and interpersonal relationships. Life course agency has been examined in terms of planful competence and biographical orientations, although it also reflects social psychological constructs often not considered in a life course framework, including indicators of defense mechanisms and mental illness.

Agency and the Transition to Adulthood

According to Clausen (1991a), planful competence refers to the thoughtful, assertive, and self-controlled processes that underlie one's choices about institutional involvements and interpersonal relationships. Planful competence is especially well suited to life course research in two respects. First, although these traits can be found in approaches to competence and
personality (e.g. conscientiousness), planful competence is uniquely concerned with the capacity to select social settings that best match an individual’s goals, values, and strengths. That is, planful competence describes the self’s ability to negotiate the life course as it represents a socially structured set of age-graded opportunities and limitations.

Second, Clausen (1991b, 1993) maintains that a planful orientation during mid-adolescence (about ages 14 and 15) is especially relevant to the life course because it promotes realistic decisions about the roles and relationships of adulthood. Self-reflexivity, confidence, and self-regulation during mid-adolescence lead to better choices during the transition to adulthood, choices that in turn have implications for later life. Drawing on extensive longitudinal archives from the Berkeley and Oakland samples at the Institute of Child Welfare, Clausen (1991a, 1991b, 1993) demonstrated that planful competence in senior high school (ages 15–18 years) had pervasive effects on functioning in later life, including marital stability, educational attainment for both males and females, occupational attainment and career stability for males, and life satisfaction in later adulthood (see also Clausen & Jones 1998).

Yet Clausen focused on planfulness as a personality construct to the neglect of how it is manifested in social settings. In fact, some evidence suggests that planfulness has little consequence for later life in times of restricted choice. For example, among men whose lives were disrupted by the Great Depression and World War II, planfulness had little effect on educational attainment, in contrast to cohorts of men whose lives were not similarly disrupted (Shanahan et al 1997). Likewise, the capacity to make choices has been less influential among youth of the former German Democratic Republic (East Germany), with its relatively high level of state control over the individual’s biography, when compared with youth from the former Federal Republic of Germany (West Germany) (Silbereisen 1999).

Heinz and his colleagues (1998) propose a different approach to agency with their concept of the “biographical orientation.” According to this perspective, agency in the life course refers to “entire planning-performance-outcomes sequences,” especially as the individual’s decisions bear on education, work, and family life. Drawing on interview data from German youth in diverse career paths, Heinz and his colleagues developed a typology of biographical action orientations, defined as stable modes of coping with occupational opportunities and constraints. For example, the “wage worker habitus mode” is a biographical orientation that regards extrinsic characteristics of work (e.g. job security) as most important, whereas the “company identification mode” emphasizes good interpersonal relationships at work. In contrast to Clausen’s formulation of planful competence, these modes are linked to social structures, especially the worker’s class background. For example, in Heinz’s German sample, the “wage-worker habitus” mode is most common among working-class males who are training to become mechanics. These orientations help explain both how individuals choose occupations and how they adapt to the economic and social realities of their chosen work.
Although young people may have clear goals and plans during the transition to adulthood, the inability to carry through with these plans in everyday settings may seriously detract from one’s agency in the life course. Thus, the manner in which people respond to challenges and stressors may account for differences in the transition to adulthood. Some defense mechanisms (that is, coping patterns) are immature and counterproductive (e.g., projection and denial), but others are mature and effective (e.g., humor and anticipation) (Vaillant 1993). Drawing on extensive longitudinal data from several studies, Vaillant observed that the maturity of one’s coping responses to stressors—typically assessed between ages 20 and 47—was significantly and often strongly correlated with job success and marital stability at age 47 and life satisfaction at ages 60–65 (see also Snarey & Vaillant 1985).

An inability to self-regulate may also interfere with critical transition markers. Externalizing disorders (especially conduct disorders) significantly affect educational attainment. For example, people with a prior mental disorder have a 10% lower probability of college graduation compared with people with no prior history of disorder; the link between psychiatric problems and educational attainment is strongest among those with conduct disorder or substance abuse (Kessler et al. 1995). Similarly, in a noteworthy longitudinal study Miech and his colleagues (1999) showed that the number of externalizing symptoms—reflecting conduct disorders, as well as attention deficit disorders—significantly curtails educational continuation. The relationship between symptom counts and educational continuation is potentially important given the substantial prevalence of externalizing symptoms in community samples. As Kessler and his colleagues observed, however, very little is known about how psychopathology interferes with entry into the labor market. The same may be said of less pathological indicators of the ability to function in social settings, such as self-regulation and sociability.

Social Structures and Variability in the Life Course

Social psychological considerations suggest that young people exhibit variability in the transition to adulthood because of individual differences in life course agency, but the social organization of opportunities for and constraints on them can also differentiate transition behaviors. Research has emphasized differences in the ways that school and work are connected, both cross-nationally and in the United States, as well as the variable nature of family experiences during childhood and adolescence.

Institutional Connections Between School and Work

Institutionalized connections between school and work have been conceptualized as networks of associations among educators, students, and prospective employers (for a review, see Rosenbaum et al. 1990), as well as articulated links between positions in the educational system and labor market. Many studies have examined the articulated connections between positions in the educational systems and labor markets of Western countries (Heinz 1999), particularly the United States, Germany, and...
Britain. Germany organizes the transition from school to work with a standardized vocational education and training system comprising a set of "clearly marked" institutionalized pathways between the educational and occupational systems (Heinz 1997). (Countries with a similarly structured system can be found, for example, in Switzerland, Austria, and Denmark.)

In contrast, many Western societies (including the United States, Canada, and Britain), and countries of Eastern Europe have systems with less structure: The majority of students have common educational experiences, educational certificates are not closely related to qualifications for specific occupations, and vocational training occurs in the workplace. Unstructured systems require each student to construct "one's own individualized amalgam of school and work" (Mortimer & Krueger 2000).

Cross-national studies indicate that the German system produces less variability in the transition to work than do the open systems of the United States and Britain. Among students with similar levels of education, there is more variability in job placement in the United States than in Germany (DiPrete & McManus 1996). Earnings for entrants into the labor market in the United States are also more variable across levels of education than in Germany. Heinz (1997) emphasizes the "equalizing" force of the German system with its provisions for students who do not receive tertiary education, noting that systems that "glorify" higher education with few provisions for the non-college bound result in more fragmented transitions into work and more variability among workers in job placements (see also Kerckhoff 1995, Marshall 1997).

Kerckhoff's (1993) model of diverging pathways is a longitudinally sensitive tool for further research in this area. The model's central insight is that the advantages or disadvantages of one's position in the educational and occupational systems will cumulate as individuals increasingly diverge in their educational and labor market attainments. He observes this pattern of increasing divergence through the early life course in a British sample, and a similar pattern is likely to be obtained in the United States. The analyses by DiPrete & McManus, as well as the work of Heinz and others, suggest that divergence after education may be less prominent in Germany than in the United States, because the former has strong training programs for those not electing higher education. In any event, cross-national studies drawing on Kerckhoff's (1993) orientation would be of great value in identifying the implications of various school-to-work systems for variability in educational and occupational careers.

Within the United States, one also observes substantial diversity in connections between school and work. Unlike youths in many Western countries, secondary students in the United States are heavily engaged in paid work, experiences that are typically disconnected from the school curriculum and not related to their future careers (National Research Council 1998). Paid work is common through high school, but young people differ markedly in their timing and levels of involvement in employment, as well as the quality of their work experiences, differences that have implications for the transition to adulthood. Students who work long hours
are less likely to continue schooling after graduation from high school (Carr et al 1996, Ruhm 1997, Steel 1991), although paid employment is associated with a series of positive work-related consequences after high school, including getting a job, longer employment, and higher income (Mihalic & Elliott 1997, Ruhm 1995, Stern & Nakata 1989).

Drawing on a community study that is unique for its detailed work histories, Mortimer & Johnson (1998) noted that students differ considerably in the duration of paid work (i.e. number of months worked during the academic year) and its intensity (number of hours worked per week among those employed) through the high school years. Boys with a high-duration, low-intensity work pattern—employed a long time during high school but limited in their work hours—attend school more months each year during 2 of the 4 years after high school than all other boys. In contrast, boys with a high-duration, high-intensity pattern had the lowest level of schooling. As the authors note, “... high intensity work during high school is associated with indicators of an accelerated transition to adulthood—a more hasty withdrawal from the student role for boys, and more rapid incumbency of full-time employment for boys and girls.”

Dynamic Accounts of Family Life: Variability Within Cohorts  Links between early experiences in the family and transition behaviors are now well established. Different family experiences, associated with variations in family structure and economic resources, often lead to different pathways into adulthood. Several conceptual distinctions have emerged to describe the diversity of family experiences through time, and together they represent a fundamental reorientation from viewing families as snapshots to viewing families as longitudinal complexities (Martinson & Wu 1992).

First, a common analytic strategy considers whether an adverse event (such as divorce or a poverty spell) has ever occurred in the life of a child. For example, Cherlin et al (1995) examined transition behaviors among British youths who lived with both parents at age 7. Young men or women between the ages of 7 and 16 who had experienced the divorce of their parents were more likely than youths who had not experienced the divorce of their parents to leave home because of friction, to cohabit before marriage, and to parent a child before marriage. Research likewise links divorce with socioeconomic attainment through adulthood and propensities to marry at a young age and to cohabit (Furstenberg & Teitler 1994, Goldscheider & Goldscheider 1993, McLanahan & Sandefur 1994, Thornton 1991).

Second, the persistence or duration of a specific family circumstance may be salient to transition behaviors. Numerous studies show that it is the duration of poverty—not poverty status at a single point in time—that is associated with poor psychosocial functioning through youth and with disadvantaged profiles during the transition to adulthood (e.g. Duncan & Brooks-Gunn 1997, Haveman et al 1991). On the other hand, net of economic resources, the stability of family structures may lead to positive outcomes, owing to a greater stability of roles, rights, and responsibilities within stable family structures. For example, results from Goldscheider
& Goldscheider’s (1998) study of home-leaving suggests that nonparental adults contribute to the higher education of children when these unrelated adults are members of a stable living arrangement. Little research has investigated how the duration of time spent in living arrangements other than two-parent households shapes development. It may be, for example, that the transition into a stepfamily has negative effects on a range of outcomes among youths, but that youths from stepfamilies that remain together for an extended period do not differ from youths with both biological parents.

Third, a growing number of studies suggest that the number of changes in early family life may be associated with stresses in the family. For example, the number of times a child’s household moves is significantly related to high school completion, a relationship that holds with extensive controls (Haveman et al 1991). Indeed, the number of moves, the number of parental separations, the number of remarriages, and the number of other changes in family structure are jointly significant in predicting high school completion. This finding is consistent with the “focal theory of change,” which maintains that young people are better able to cope with significant life events serially rather than simultaneously (Coleman 1974; see also Simmons & Blyth 1987). Similarly, Aquilino (1996) reported that, among young people born to unmarried mothers, an increase in the number of family transitions experienced through youth decreases the likelihood of postsecondary education, but increases the likelihood of residential independence and the transition to work by age 18 (for additional examples, see Teachman et al 1996, Wu 1996).

Fourth, specific patterns of change may be worthy of investigation. That is, some changes in families may prove more salient than others to development. For categorical variables, this may involve changes from one state to another (e.g. specific sequences of household living arrangements). Hill and her colleagues (1999) showed that the sequence involving mother-only to two-parent and back to mother-only households by age 15 adversely affects years of school completed among sons and increases the risk of premarital birth among daughters, compared with those who spent their entire youth in a two-parent household. Other research shows that, compared with children growing up in intact families, children who experience the transition from intact to single-parent, stepparent, or other nonparental living arrangements have earlier residential independence, earlier marriage and cohabitation, and a lower probability of school completion (Aquilino 1991, 1996; Goldscheider & Goldscheider 1998; McLanahan & Bumpass 1988; McLanahan & Sandefur 1994; Michael & Tuma 1985). Not all family changes are alike in their capacity to influence development and subsequent transition behaviors, an observation that warrants both specific theories about family change and finely grained empirical analyses.

For variables that are not categorical, a trajectory approach can be used to depict change as a continuous, directional stream. For example, Wu (1996) assessed change in economic resources by way of the slope of income regressed on three measurement occasions. He found that change in parental income significantly increases the likelihood of premarital birth, controlling level of income and
other family experiences. Similarly, Amato & Booth (1997) showed that change in parental income can have enduring effects on offspring in the young adult years; a decline in income in the family of origin is associated with less parental assistance to their married offspring, as well as lowered marital quality in the offspring’s marriage.

Finally, some research suggests that the timing of experiences may render them more or less salient for development, although there are difficulties with this analytic strategy. As Allison & Furstenberg (1989) observed in the context of divorce, it is difficult to disentangle the age at which an event is experienced and the duration of time between the event and subsequent measurement of the outcome variable. That is, divorce by parents of older children may be identified as “more salient,” although this may reflect the recency of a negative experience. Furthermore, developmental psychologists have offered differing schemes to identify sensitive age periods (e.g. Sroufe & Rutter 1984), but research has yet to examine this range of possibilities.

Nevertheless, research suggests that the timing of negative family experiences may be important. For example, Haveman and his colleagues (1991) examined how the number of residential moves, years that the mother worked, years in poverty, and years on welfare affect high school completion. They observed a heightened sensitivity to these factors from ages 12 to 15 years with respect to school completion, a finding open to the recency interpretation. On the other hand, some evidence suggests that both divorce and a lack of economic resources are most detrimental during early childhood (e.g. Alwin & Thorton 1984; Duncan & Brooks-Gunn 1997, especially Table 18.3; Krein 1986; Krein & Beller 1988).

Although studies that draw on these distinctions have enhanced our understanding of the connections between youth and the transition to adulthood, the relatively small number of studies that consider issues such as number of changes and sequence of changes do not lead to consistent results. In part, this may reflect methodological issues, including, for example, the failure to simultaneously consider family structure and income or to control possible endogenous factors, perhaps with sibling designs (e.g. Teachman et al 1997). In part, it reflects the preliminary nature of attempts to address these complexities. As the analyses by Hill and her colleagues (1999) suggest, it is combinations of timing and changes in family structure that matter, but these complexities matter differently for boys and girls and for various outcomes. They further noted that such findings call for theoretical developments that can direct the analyst’s attention among the myriad of possibilities.

Thus far, researchers have identified a range of possible mechanisms by which these dynamic experiences shape adaptation through childhood, adolescence, and the transition to adulthood: a lack of stable role models, heightened family stresses, lowered levels of parental investment, weakened emotional bonds between parents and their children, lowered levels of social capital and social control, the inability to provide settings conducive to cognitive and psychosocial development, and a lack of hope in one’s future. Yet inquiries into human lives must take the concept
of adaptation seriously; how do changes in the family adversely affect children, but, as important, how do people counter these threats to their well being?

Most research shares an underlying assumption that the relationships of interest involve negative family circumstances and troubled developmental outcomes. Such an assumption deserves further scrutiny. In fact, there is surprisingly little consensus on the magnitude of the poverty and divorce effects for different outcomes and whether short-term developmental consequences persist into adulthood (Lichter et al 1999, Rein & Winship 1999). More generally, researchers have noted the small magnitude of relationships between putative stressors and distress (e.g. Shanahan & Mortimer 1996). This is well illustrated for poverty experiences by Mayer's (1997) systematic statistical analyses of several different nationally representative data sets. She concluded that family income during childhood is only modestly associated with a variety of negative outcomes in late adolescence (e.g. behavioral problems) and early adulthood (e.g. teen pregnancy, male unemployment, and so forth).

This form of variability—transition behaviors that do not reflect a challenging or disadvantaged experience of childhood or adolescence—requires more sociological investigations focused on resilience, a concept that has traditionally referenced positive outcomes in the face of adversity. Drawing on Coleman's (1988) work on social capital, Furstenberg & Hughes (1995) explained that networks of affiliations may protect people who are otherwise at risk for adverse outcomes such as failing to complete high school or to continue education beyond the secondary level. These social connections may include networks of parents within a community, the availability of community resources, and positive relationships with peers, teachers, and other potentially significant adults (e.g. Laub & Sampson 1993, Laub et al 1998). Despite adverse circumstances, many parents and nonparental adults nevertheless provide positive role models and nurturing relationships, as one finds, for example, among rural families contending with the farm crisis (Elder & Conger 2000) and among families of the inner city Furstenberg et al 1999.

The Dynamic Interplay Between Person and Context: Bounded Strategic Action

Young people are strategic in that they foster plans and pursue them, but they are also constrained by the limits that attend their position in the educational and occupational systems. Very few studies attempt to examine transition behaviors with this dualism in mind, although extant research suggests ways to conceptualize the problem.

A well-established research tradition raises the possibility of a cyclical or "reciprocal" relationship between social structures and purposive action (House & Mortimer 1990). For example, it may be that unemployment among young people leads to decrements in self-concept (including efficacy), psychological distress, and a lowering of expectations about work (Mortimer 1994); these processes in turn debilitate the job search and application process, creating a cycle between
joblessness and lowered motivation to find work. This dynamic may apply to the quality of one’s work and attempts at upward occupational mobility, as well as dating experiences in high school and one’s active orientation toward mate selection and marriage.

A different perspective is offered by studies of educational tracking, which suggest that social structures foster orientations underlying selections into positions in the stratified educational system (the socialization process) and allocate individuals into these same positions (the allocative process) (Gamoran 1996). That is, the experiences that are associated with positions in the stratified school both foster active strivings toward and channel people into the same destinations.

Research also suggests, however, that an appreciable percentage of students have unrealistic expectations for the future (Agnew & Jones 1988); other students have plans that are congruent with their previous experiences, but they are nonetheless “blocked” from fulfilling them (Hanson 1994). These findings call for more detailed studies of how young people formulate their plans and expectations regarding future school, work, and family roles. Why are some people’s plans and aspirations reasonable whereas those of others are not? Beyond this, do young people with similar plans adopt similar life course strategies? Or does strategic action directed to the same goal differ by socioeconomic status, race, or gender? And how do people react to setbacks at school, at work, and in family life? These types of questions bridge sociology, with their emphasis on situated action and the life course, and psychology, with their emphasis on goals, motivation, and coping strategies.

ANALYTIC STRATEGIES AND THE TRANSITION TO ADULTHOOD

Demographers have been prominent in the study of the transition to adulthood and, consequently, the knowledge base reflects their methods. Research in this area typically uses event-history models to examine the timing of and precursors to established transition markers such as school completion and the birth of a first child.

Perhaps a major limitation has been the almost exclusive reliance on these markers. First, in many cases, one marker is chosen as a critical indicator of adulthood, although researchers reasonably disagree on which marker is most appropriate. Second, the markers are often not discrete, clearly bounded occurrences, as the use of event history or logistic-regression models would suggest. For example, the transition to work, traditionally operationalized as one’s entry into a full-time, civilian job after leaving full-time schooling, is now recognized as a complex process that commences during high school for most youth (Ahituv et al 1997, Mortimer et al 1999). Third, unlike typical demographic transitions (e.g. birth and death), many aspects of the transition to adulthood are reversible; for example, young people may experience a divorce and later remarry or leave the home of
origin and later return. Fourth, as Marini’s (1987) meticulous research shows, some of the markers are sensitive to how they are operationalized. She also noted that the predictors of a marker are contingent on the sequence in which the marker occurs. For example, marriages before and after the completion of school are likely to have different precursors.

In fact, the independence that all of these transitions connote is complex and multifaceted, suggesting the use of latent constructs. For example, drawing on latent transition analysis (Collins & Wugalter 1992), one can study the latent variable “transition to adulthood” as it reflects a sequence of stages, or “latent statuses.” A model could be tested according to which the transition to adulthood reflects progression through the following three latent statuses: (a) finished school, (b) finished school and started a full-time job, and (c) finished school, started a full-time job, and married. This model can then be compared with alternative specifications (e.g. a non-normative order of markers or a sequence involving reversibility among the statuses). Such an approach can offer valuable descriptive information, including the proportion of young people in each latent status and the probabilities of transition from one status to another. Moreover, predictor variables can be incorporated into such a model, allowing one to examine the precursors of a latent status. In any event, given rapid methodological developments in the latent analysis of categorical variables (e.g. von Eye & Clogg 1996), researchers have new tools for viewing transition markers as observed indicators of a latent phenomenon.

A second modeling innovation involves Abbott’s (1995) optimal-matching strategy, whereby the similarity of life histories can be evaluated. In the context of the transition to adulthood, one could classify cases by their degree of dissimilarity to Hogan’s normative sequence of transition markers. Predictors and consequences of non-normative transition patterns could then be examined. This approach has the advantage of viewing the transition to adulthood as a sequence of events that, when viewed together, form a unity that may have distinct precursors and implications for later adulthood.

Both latent transition analysis and the optimal matching strategy identify patterns of transition markers into adulthood and their precursors, thus allowing researchers to examine how pathways into adulthood vary by race and ethnicity, gender, income, and other variables. Methods that draw on Boolean algebra could also be used to identify complex combinations of precursors to transition patterns. Ragin’s (1987) Qualitative Comparative Method identifies sets of conditions that must be met before an outcome occurs (e.g. in the context of historical sociology, a revolution, or strike). Singer and his colleagues (1998) illustrated this basic approach in the context of life course studies, linking detailed life histories of women who had experienced depression with mental health categories in later life (e.g. resilient or depressed). This approach could also be used to interrelate complex patterns of experiences in childhood and adolescence with the transition to adulthood.

Beyond the use of objective markers, surprisingly little attention has been paid to the subjective understanding of adulthood as a self-attributed status. That is, respondents are sometimes asked to assign hypothetical people to various stages
of the life course based on their student, marital, work, and similar status positions, but very few attempts have been made to assess whether people view themselves as adults (Settersten & Mayer 1997). Yet as Aronson’s (1998) ethnographic work suggests, young people not uncommonly describe themselves as adults without having experienced many transition markers, whereas others have passed through most markers but do not consider themselves adult. More refined measures of self-perceived adult status would allow researchers to examine the connections between transition markers, life circumstances, and self-perceptions.

Finally, life course sociologists need to develop closer collaborations with scientists who are interested in biosocial processes, including behavioral geneticists and endocrinologists. Such collaborations will entail the collection of new forms of data (such as blood assays; for a useful example and discussion, see Booth & Dabbs 1993) and the use of research designs and statistical models that enable examination of the additive and interactive effects of genetic heritability and environment (Shanahan et al 2000).

With respect to behavioral genetics, sociologists have emphasized the central role of family experiences in shaping the transition to adulthood, and yet, as Udry (1995) cogently observed, studies of family influence are vulnerable to alternative explanations based on genetics. Consider relationships observed between early experiences in the family of origin and the timing of first births. It may be that early maturing mothers transmit a genetic predisposition toward early puberty and the same genes produce traits in the mother, which affect her parenting (Rowe 2000). Is early menses due to the home environment, including parenting, or the genotype, or, most likely, is it due to a complex network of context-genotype interactions? Furthermore, to the extent that context does matter for transition behaviors like parenthood and marriage, these behaviors reflect contextual experiences that are not shared by siblings (Plomin et al 1990, Reiss 1995), including interactions between genes and the environment. Indeed, it is likely that a review of this literature in a decade will have as one of its major themes the integration of life course and biosocial paradigms.

CONCLUDING REMARKS

The early life course has been fraught with uncertainty throughout the modern era (Graff 1995), although evidence suggests that we are now experiencing heightened levels of variability in the transition to adulthood across many Western societies. The ensuing sense of uncertainty is not unlike the reactions to the social changes that led to the emergence of sociology (Mazlish 1991). These reactions, sometimes celebratory but more often concerned, are once again a special invitation to sociologists to study the reciprocal relations between life histories and social organization.

The possibility that the transition to adulthood has become less predictable and more precarious requires further study at the level of both the society and
the individual. When compared with whites, many racial and ethnic minorities—including some immigrant groups—are more likely to experience transition patterns that cast a long shadow over their adult lives, including diminished prospects for socioeconomic achievement and for a fulfilling family life. Yet these groups will constitute an even larger segment of the population in the future. Will they continue to have diminished prospects, and, if so, what are the implications for social order, productivity, and national identity?

Indeed, what steps can we take to maximize the life chances of all youth? Cross-national comparisons suggest more vocational guidance, more clearly marked connections between educational experiences and occupations, and more extensive educational programs for students who are not college bound (Kerckhoff 1995). A full answer to this question, however, requires two types of basic information. First, what are the transition experiences of young people based on race/ethnicity, gender, and socioeconomic status? Second, how is the transition to adulthood being experienced as a developmental process? How are goals for school, work, and family formulated, pursued, and modified? How do goal-directed behaviors interact with normative expectations and the social organization of schools and labor markets to define pathways into adulthood? By addressing these questions, sociologists can reveal how lives reflect the imprint of society, but also how society reflects lived experience.

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