TURNING POINTS IN THE LIFE COURSE: WHY CHANGE MATTERS TO THE STUDY OF CRIME*

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This article examines conceptual issues relating to continuity and change in crime over the life course. Building on past efforts, we first distinguish self-selection from a cumulative, developmental process whereby delinquent behavior attenuates adult social bonds (e.g., labor force attachment, marital cohesion). We then conceptualize various types of change and argue that social capital and turning points are crucial in understanding processes of change in the adult life course. These concepts are illustrated by examining person-based, life-history data drawn from the Gluecks' longitudinal study of 1,000 men. Although adult crime is clearly connected to childhood behavior, these qualitative data suggest that both incremental and abrupt change are structured by changes in adult social bonds. We conclude with some hypotheses and implications for future research on subjective contingencies, opportunity structures, and chance encounters as potential turning points for change, especially as they interact with race, class location, and historical context.

Several years ago we uncovered 60 cartons of case files in the basement of the Harvard Law School Library. These data constituted the classic longitudinal study of 500 delinquents and 500 nondelinquents initiated by Sheldon and Eleanor Glueck in 1940 (see Glueck and Glueck, 1950, 1968). While we were organizing and reconstructing the Gluecks' data, two important books rocked the field of criminology—*Crime and Human Nature* by James Q. Wilson and Richard Herrnstein (1985), and *A General Theory of Crime* by Michael Gottfredson and Travis Hirschi (1990). Although certainly different, the thrust of these books was to redirect criminological attention to the importance of childhood. For example, Gottfredson and Hirschi (1990) argue that effective child rearing in the early formative years of a child's

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development produces high self-control, which in turn is a stable phenomenon that inhibits crime throughout the life course. The work of Wilson and Herrnstein (1985) pushed the explanation of crime back even earlier in life to constitutional differences (e.g., impulsiveness and temperament) in interaction with familial factors (see also Grasmick et al., 1993; Nagin and Paternoster, 1991).

Ironically, then, as we were resurrecting the Gluecks' data, new life was breathed into the primary thesis of the Gluecks—childhood temperament and family socialization matter most, and thus the "past is prologue" (Glueck and Glueck, 1968:167). Although attracted to this renewed emphasis on the importance of children and families to the explanation of delinquency, we were troubled by the profound questions raised by the childhood-stability argument. Are differences in child rearing and temperament all we need to know to understand patterns of adult crime? Are childhood differences in antisocial behavior invariably stable? Why does continuity in deviant behavior exist? Perhaps most important, what about individual change, salient life events, and turning points in adulthood?

Challenged by these and other questions, we set out to examine crime and deviance in childhood, adolescence, and adulthood in a way that recognized the significance of both continuity and change over the life course. To do so we synthesized and integrated the criminological literature on childhood antisocial behavior, adolescent delinquency, and adult crime with theory and research on the life course (Sampson and Laub, 1992). By also rethinking the findings produced by longitudinal research, we were eventually led to develop an age-graded theory of informal social control to explain crime and deviance over the life span. We then tested this theory on the longitudinal data we reconstructed from the Gluecks' study (Sampson and Laub, 1993).

Building on these efforts, we turn to an examination of conceptual issues relating to continuity and change in antisocial behavior over the life course. With respect to continuity, we highlight the distinction between self-selection and cumulative continuity. We then unite the ideas of state dependence (Nagin and Paternoster, 1991) and cumulative continuity (Caspi and Moffitt, 1993a; Moffitt, 1993) in delineating a developmental, sequential model of crime across the life course. With respect to change, we explicate the relevance of the adult life course and the various meanings of change. Our major thesis is that social capital and turning points are important concepts in understanding processes of change in the adult life course. We illustrate these concepts using qualitative life-history data drawn from the Gluecks' study. Overall, our goal is to advance a framework that challenges theories of crime which "presuppose a developmental determinism in which childhood experiences set the course of later development" (Bandura, 1982:747). To set the stage, we briefly highlight the theoretical framework on change from our recent study (Sampson and Laub, 1993).

AN AGE-GRADED THEORY OF INFORMAL SOCIAL CONTROL

The central idea of social control theory—that crime and deviance are more likely when an individual's bond to society is weak or broken—is an organizing principle in our theory of social bonding over the life course.¹ Following Elder (1975, 1985), we differentiate the life course of individuals on the basis of age and argue that the important institutions of both formal and informal social control vary across the life span. However, we emphasize the role of age-graded, *informal* social control as reflected in the structure of interpersonal bonds linking members of society to one another and to wider social institutions (e.g., work, family, school). Unlike formal social controls "emerge as by-products of role relationships established for other purposes and are components of role reciprocities" (Kornhauser, 1978:24).

Although rejecting the "ontogenetic" approach dominant in developmental psychology (see Dannefer, 1984), our theoretical framework nonetheless follows a developmental strategy (Loeber and LeBlanc, 1990; Patterson et al., 1989). The specific developmental approach we take views causality as "best represented by a developmental network of causal factors" in which dependent variables become independent variables over time (Loeber and LeBlanc, 1990:433). Moreover, developmental criminology recognizes both continuity and within-individual changes over time, focusing on "life transitions and developmental covariates... which may mediate the developmental course of offending" (Loeber and LeBlanc, 1990:451). This strategy has also been referred to as a "stepping-stone approach" whereby factors are time ordered by age and assessed with respect to outcome variables (see Farrington, 1986).

A similar orientation can be found in interactional theory as proposed by Thornberry (1987). Interactional theory embraces a developmental approach and argues convincingly that causal influences are reciprocal over the life course and that delinquency may contribute to the weakening of social bonds over time. Thornberry's perspective is also consistent with a person-centered approach to development as propounded by Magnusson and Bergman (1988:47). Namely, by focusing explicitly on "persons" rather than "variables" and examining individual life histories over time (see Magnusson and

^{1.} The life course has been defined as "pathways through the age differentiated life span" (Elder, 1985:17), in particular the "sequence of culturally defined age-graded roles and social transitions that are enacted over time" (Caspi et al., 1990:15). Two central concepts underlie the analysis of life-course dynamics. A *trajectory* is a pathway or line of development over the life span, such as work life, parenthood, and criminal behavior. Trajectories refer to long-term patterns of behavior and are marked by a sequence of transitions. *Transitions* are marked by life events (e.g., first job or first marriage) that are embedded in trajectories and evolve over shorter time spans (Elder, 1985:31-32). See also Sampson and Laub (1992).

Bergman, 1988, 1990), this strategy offers insight into the social processes of intra-individual developmental change in criminal behavior over the life course.

Although beyond the scope of this analysis, the first building block in our "sociogenic" developmental theory focuses on the mediating role of informal family and school social bonds in explaining childhood and adolescent delinquency (Sampson and Laub, 1993: Ch. 4–5). As elaborated more below, the second building block incorporates the subsequent continuity in childhood and adolescent antisocial behavior that extends throughout adulthood across a variety of life's domains (e.g., crime, alcohol abuse, divorce, unemployment).

Having provided a role for continuity, we nonetheless believe that salient life events and social ties in adulthood can counteract, at least to some extent, the trajectories of early child development. Hence, a third and major thesis of our work is that social bonds in adulthood—especially *attachment to the labor force* and *cohesive marriage* (or cohabitation)—explain criminal behavior regardless of prior differences in criminal propensity. In other words, we contend that pathways to both crime and conformity are modified by key institutions of social control in the transition to adulthood (e.g., employment, military service, and marriage).

In contrast to many life-course models, we emphasize the quality or strength of social ties in these transitions more than the occurrence or timing of discrete life events (cf. Loeber and LeBlanc, 1990:430-432). For example, marriage per se may not increase social control, but close emotional ties and mutual investment increase the social bond between individuals and, all else equal, should lead to a reduction in criminal behavior (cf. Shover, 1985:94). Employment by itself also does not necessarily increase social control. It is employment coupled with job stability, commitment to work, and mutual ties binding workers and employers that should increase social control and, all else equal, lead to a reduction in criminal behavior.

In short, our theory attempts to unite continuity and change within the context of a sociological understanding of crime in the life course. A major concept in our framework is the dynamic process whereby the interlocking nature of trajectories and transitions generates *turning points* or a change in life course (Elder, 1985:32). Adaptation to life events is crucial because the same event or transition followed by different adaptations can lead to different trajectories (Elder, 1985:35). That is, despite the connection between childhood events and experiences in adulthood, turning points can modify life trajectories—they can "redirect paths." For some individuals, turning points are abrupt—radical "turnarounds" or changes in life history that separate the past from the future (Elder et al., 1991:215). For most individuals, however, we conceptualize turning points as "part of a process over time and not as a

dramatic lasting change that takes place at any one time" (Pickles and Rutter, 1991:134; see also Clausen, 1990; McAdam, 1989:745; Rutter, 1989a, 1989b). The process-oriented nature of turning points leads us to focus on incremental change embedded in informal social controls.

To evaluate the refine our theory, we analyzed the natural histories of two groups of boys that differed dramatically in childhood antisocial behavior and delinquency that were followed into adulthood. More specifically, we reconstructed and examined the life histories originally gathered by Glueck and Glueck (1950, 1968) of 500 delinquents and 500 control subjects matched on age, IQ, ethnicity, and neighborhood deprivation. An exhaustive body of data (e.g., official records, observations, and personal interviews with subjects, parents, spouses, neighbors, and employers) was collected on these individuals in childhood, adolescence, young adulthood, and adulthood. Our analyses involved a multi-method, multi-measurement scheme that used quantitative and qualitative data (see Sampson and Laub, 1993, for details).

DISTINGUISHING SELF-SELECTION FROM CUMULATIVE CONTINUITY

Critics will argue that individual differences combine with self-selection to account for patterns of behavior across the life course. In brief, this counterargument goes as follows: Individuals with an early propensity to crime (e.g., low self-control) determined mainly by family socialization and individual differences (e.g., impulsiveness) systematically sort themselves throughout adulthood into states consistent with this latent trait. For instance, Gottfredson and Hirschi (1990:164–167) argue that delinquent and impulsive youths will choose deviant spouses, unstable jobs, and continue their delinquent ways in adulthood. If true, the adult life course is merely a setting within which predetermined lives are played out.

In one sense the self-selection thesis was supported in the Gluecks' study adolescent delinquents and nondelinquents displayed significant behavioral consistency well into adulthood. Delinquency and other forms of antisocial conduct in childhood were related not only to adult crime, but also to troublesome behaviors across a variety of adult domains (e.g., AWOL in the military, economic dependence, marital discord). This continuity persisted despite the fact that delinquents and controls were originally matched caseby-case on age, intelligence, neighborhood, and ethnicity.

The hypothesis of self-selection, however, leads to a more fundamental methodological implication—correlations among adult behaviors (e.g., job instability and crime) are completely spurious and should disappear once controls are introduced for prior individual-level differences in criminal propensity or low self-control (see Gottfredson and Hirschi, 1990:154–168). Although rarely examined directly, we believe the data do not support this

spuriousness hypothesis. In particular, our quantitative analyses revealed independent effects of marital attachment and job stability on adult crime. These results were consistent for a wide variety of outcome measures, control variables (e.g., childhood and adolescent antisocial behavior; individualdifference constructs, such as IQ, self-control, mesomorphy, and personality), and analytic techniques—including methods that account for persistent unobserved heterogeneity in criminal propensity (see Nagin and Paternoster, 1991). Rutter et al. (1990) have also shown the independent explanatory power of adult marital cohesion on adult deviance, self-selection notwithstanding.

At the same time, our theory incorporates the causal role of prior delinquency in facilitating adult crime by integrating the concept of state dependence (Nagin and Paternoster, 1991) with that of cumulative continuity (Moffitt, 1993). Although this role is potentially direct, we emphasize a developmental model wherein delinquent behavior has a systematic, attenuating effect on the social and institutional bonds linking adults to society (e.g., labor force attachment, marital cohesion). More specifically, the idea of cumulative continuity posits that delinquency incrementally mortgages the future by generating negative consequences for the life chances of stigmatized and institutionalized youths. For example, arrest and incarceration may spark failure in school, unemployment, and weak community bonds, in turn increasing adult crime (Tittle, 1988:80). Serious delinquency in particular leads to the "knifing off" (Caspi and Moffitt, 1993a; Moffitt, 1993) of future opportunities such that participants have fewer options for a conventional life. The cumulative continuity of disadvantage is thus not only a result of stable individual differences in criminal propensity, but a dynamic process whereby childhood antisocial behavior and adolescent delinquency foster adult crime through the severance of adult social bonds. In this view, weak social bonding is a mediating and, hence, causal sequential link in a chain of adversity between childhood delinquency and adult criminal behavior.

The thesis of cumulative continuity was supported in our quantitative analyses. As noted above, job stability and marital attachment in adulthood were significantly related to changes in adult crime—the stronger the adult ties to work and family, the less crime and deviance among delinquents and controls. Moreover, social bonds to employment were directly influenced by state sanctions—incarceration as a juvenile and as a young adult had a negative effect on later job stability, which in turn was negatively related to continued involvement in crime over the life course. Although we found little direct effect of incarceration on subsequent criminality, the indirect "criminogenic" effects through job stability were substantively important. Recent research by Nagin and Waldfogel (1992) also supports the cumulative continuity thesis in showing a destabilizing effect of convictions on the labor market prospects of a cohort of London boys. Our synthesis of cumulative continuity and state dependence recasts in a structural and developmental framework the original contentions of labeling theory—that official reactions to primary deviance (e.g., arrest) may create problems of adjustment (e.g., unemployment) that foster additional crime in the form of secondary deviance (Becker, 1963; Lemert, 1951; Tittle, 1988). As Becker (1963:24–39) has argued, the concept of a deviant career suggests a stable pattern of deviant behavior, which is sustained by the labeling process. More recently, Hagan and Palloni (1990) suggested that continuity in delinquent behavior may result from a structural imputation process that begins early in childhood (see also Tittle, 1988:78–81). They show that this process may even extend across generations, thereby explaining the effects of parental conviction on sons' delinquency regardless of family background and propensity to crime.

CUMULATIVE DISADVANTAGE AND STRUCTURAL BACKGROUND

Hagan's (1991) research further suggests that the deleterious effect of adolescent deviance on adult stratification outcomes is greatest among lowerclass boys, especially as mediated by police contacts. Middle-class boys who escaped the negative consequences of official labeling did not suffer impairment in adult occupational outcomes as a result of their adolescent delinquency. In other words, avoiding the snares of arrest and institutionalization provided opportunities for prosocial attachments among middle-class youths to take firm hold in adulthood. Similarly, Jessor et al. (1991) show that for middle-class youths, delinquency is not a major handicap with respect to adult outcomes. These studies suggest that the concepts of knifing off and cumulative continuity are most salient in explaining the structurally constrained life chances of the disadvantaged urban poor.

In short, there is evidence that cumulative disadvantage, state-dependence, and location in the class structure may interact. Among those in advantaged positions that provide continuity in social resources over time, nondelinquents and delinquents alike are presumably not just more motivated, but better able structurally to establish binding ties to conventional lines of adult activity. If nothing else, incumbency in prosocial middle-class roles provides advantages in maintaining the status quo and counteracting negative life events (e.g., last hired, first fired). Race, class, and crime also pervade the consciousness of American society more generally and employers in particular. Consider the widespread perceptions of blacks as "dangerous" and "criminal" as rationales by employers for discrimination in hiring (Kirschenman and Neckerman, 1991). We therefore merge the state-dependence thesis that historical time matters with a concern for structural location. Quite simply, the context of where *and* how long one has been in prior states is crucial in understanding later adult development.

SELF-SELECTION RECONSIDERED

Our theoretical conceptualization of cumulative continuity and the causal role of the adult life course does not negate the potential direct or unmediated effect of self-selection through individual differences. In other words, by distinguishing self-selection from cumulative continuity, we incorporate the independent effects of early delinquency (or individual propensity) and the dimensions of adult social bonding on adult crime. This distinction is consistent with recent research on homophily in social choices across the life course. For example, Kandel et al. (1990) studied mate selection and found considerable homophily—deviant individuals tend to select deviant marriage or cohabitation partners (see also Caspi et al., 1990). Nevertheless, social causation emerges as a crucial factor even in the face of such social selection. As Kandel et al. (1990:221) state, "Although individual choices are made, in part, as a function of the individual's prior attributes, values, and personality characteristics, involvement in the new relationship has further effects and influences on that individual." Similarly, Rutter et al. (1990) found homophily in the choice of marital partners but also a substantial effect of marital cohesion that held after taking planning of marriage partners into account.

The emergence of significant social causation in tandem with homophily (or self-selection) undermines the theoretical individualism that pervades social scientific thought. We believe that an overemphasis on self-selection stems from a "broadly perpetuated fiction in modern society" (Coleman, 1990:300):

This fiction is that society consists of a set of independent individuals, each of whom acts to achieve goals that are independently arrived at, and that the functioning of the social system consists of the combinations of the actions of independent individuals.

Consistent with our theory, social interdependence arises from the fact that actors have social investments in events and relationships that are partially under the control of other actors. Hence, the interdependent web of relations characteristic of social collectivities ensures the operation of constraints and opportunities in shaping behavior notwithstanding individual intentions.²

WHY CHANGE STILL MATTERS

Whether generated by self-selection or cumulative continuity, a focus on stability is nonetheless insufficient for understanding crime in the adult life

^{2.} Ecological constancy (e.g., community constraints) and continuities in the interpersonal environment may also underlie individual-level stability. In other words, behavioral patterns may show stability simply because the contextual environment remains stable. Hence, behavioral stability does not necessarily imply causal forces operating solely at the level of the individual (Sampson and Laub, 1992:78).

course. First, the stability of antisocial behavior is far from perfect. As the literature on prediction shows, childhood variables tend to be rather modest prognostic devices. In fact, a large percentage of false positives and false negatives is a common result (see, e.g., Loeber and Stouthamer-Loeber, 1987; Farrington and Tarling, 1985). The prediction literature thus reinforces the futility of an invariant or deterministic conception of human development (Jessor et al., 1991; Sampson and Laub, 1992).

Second, and equally important, rank-order correlations and other common measures of stability refer to the consistency of between-individual differences over time and consequently rely on an aggregate picture of relative standing. As Huesmann et al. (1984:1131) note, what remains stable over time is the position of an individual relative to the population. Stability coefficients do not measure the heterogeneity of individual behaviors over time and, hence, do not capture within-individual change.

Life is dynamic; change is clearly possible. Yet the theoretical conceptualization of change has been surprisingly neglected, not just in criminology (see Farrington, 1988; Sampson and Laub, 1992) but in developmental psychology as well. Indeed, in searching the literature, we found little conceptual work that directly confronts the problem.³ Moreover, Caspi and Bem (1990:569) have argued that when the term change does appear, it frequently refers to the mere absence of continuity. We thus consider more explicitly the meaning of change and how it comes about.

SOCIAL CAPITAL AND TURNING POINTS

Much of the confusion regarding change centers on the various meanings the concept conveys. According to the 1992 edition of *The American Heritage Dictionary of the English Language*, one definition of change is "to cause to be different"—to give a completely different form or appearance, to wholly transform or alter. This definition is most closely related to Caspi and Moffitt's (1993b) notion of "deep" or "real" change (e.g., a high-rate offender who suddenly desists and becomes a productive citizen). But change can also mean a modification, reshaping, or transition from one state, condition, or phase to another. For instance, a high-rate offender who begins to commit fewer crimes than expected based on age and prior criminal propensity changes because his or her trajectory has been modified. A third meaning of change is exchange or replacement with another, usually of the same kind or

^{3.} There is no doubt that substantial breakthroughs have been made in the statistical study of change (see especially, Kessler and Greenberg, 1981; Rogosa et al., 1982; Tuma and Hannan, 1984). However, as indicated by the subtitle of Tuma and Hannan (1984), this work has focused on "models and methods." Our motivation is the development of a conceptual framework on types of change and the social mechanisms underlying change processes.

category. An individual may change from use of beer and wine to use of marijuana and cocaine. Or offenders may change from burglary to robbery.

All of this leads us to think of change along a continuum and to investigate the underlying processes that enable people to change the course of their lives. We believe this may be accomplished by viewing the life course as a probabilistic linkage or chain of events (Rutter et al., 1990) and by unraveling the mechanisms that operate at key turning points (e.g., when a risk trajectory is recast to a more adaptive path [Rutter, 1987:329]).

In our view, "deep" change and "modified" change are of most interest; both are enhanced when changing roles and environments lead to social investment or social capital (Coleman, 1988, 1990; Nagin and Paternoster, 1992) in institutional relationships (e.g., family, work, community). As Coleman (1990:302) argues, the distinguishing feature of social capital lies in the structure of interpersonal relations and institutional linkages. Social capital is created when these relations change in ways that facilitate action. In other words, "social capital is productive, making possible the achievements of certain ends that in its absence would not be possible" (Coleman, 1988:98). By contrast, physical capital is wholly tangible, being embodied in observable material form (1990:304), and human capital is embodied in the skills and knowledge acquired by an individual. Social capital is even less tangible, for it is embodied in the relations among persons (1990:304). A core idea, then, is that independent of the forms of physical and human capital available to individuals (e.g., income, occupational skill), social capital is a central factor in facilitating effective ties that bind a person to societal institutions.4

Linking Coleman's notion of social capital to social control theory, we have argued that the lack of social capital or investment is one of the primary features of weak social bonds (Sampson and Laub, 1993; see also Coleman, 1990:307; Nagin and Paternoster, 1992). The theoretical task is to identify the characteristics of social relations that facilitate the social capital available to individuals, families, employers, and other social actors. One of the most important factors is the closure (i.e., "connectedness") of networks among actors in a social system (Coleman, 1990:318–320). In a system involving employers and employees, for example, relations characterized by an extensive set of obligations, expectations, and interdependent social networks are better able to facilitate social control than are jobs characterized by purely utilitarian objectives and nonoverlapping social networks. Similarly, the mere presence of a relationship (e.g., marriage) among adults is not sufficient

^{4.} Although space limitations preclude extended consideration, we also believe that *cultural* capital is central to understanding change. Cultural capital emerges in the form of adolescent cultural preferences that reflect transitional experiences in the life course (DiMaggio and Mohr, 1985). Cultural deficits stemming from identification with delinquent subcultures appear to diminish educational achievement and, hence, occupational outcomes in the transition to young adulthood (Hagan, 1991).

to produce social capital, and hence, the idea of social capital goes beyond simple structural notions of role change (i.e., married versus not married) to capture the idea of embeddedness.

Our theory thus maintains that adult social ties are important insofar as they create interdependent systems of obligation and restraint that impose significant costs for translating criminal propensities into action. In this scheme, adults will be inhibited from committing crime to the extent that over time they accumulate social capital in their work and family lives, regardless of delinquent background. By contrast, those subject to weak systems of interdependency (see also Braithwaite, 1989) and informal social control as an adult (e.g., weak attachment to the labor force or noncohesive marriage) are freer to commit deviance—even if nondelinquent as a youth. This dual premise enables us to explain desistance from crime as well as late onset, and it is consistent with Jessor et al.'s (1991:160) argument that change is "as much an outcome of the person's embeddedness in a socially organized and structured context of age-related roles, expectations, demands, and opportunities as it is of internal dispositions and intentions."

We also emphasize the reciprocal nature of social capital invested by employers and spouses. For example, employers often take chances in hiring workers, hoping that their investment will pay off. Similarly, a prospective marriage partner may be aware of a potential spouse's deviant background but may nonetheless invest his or her future in that person. This investment by the employer or spouse may in turn trigger a return investment in social capital by the employee or other spouse. The key theoretical point is that social capital and interdependency are reciprocal and embedded in the social ties that exist between individuals and social institutions. This conception may help explain how change in delinquent behavior is initiated (e.g., an employer's taking a chance on a former delinquent, fostering a return investment in that job, which in turn inhibits the deviant behavior of the employee).

Sullivan's (1989) research on gangs in New York also provides insight into racial, ethnic, and community differences in the influence of social capital on transitions to work. As they entered young adulthood, the men in the lowincome white neighborhood that Sullivan studied secured better-quality jobs than men in African-American or Hispanic neighborhoods. Whites were also better able to hold onto these jobs, in part because of their familiarity with the "discipline of the workplace" gained through personal networks and intergenerational ties (1989:100-105). Networks with the adult community thus differentiated the chances of white youths' escaping environmental adversity from those of their minority counterparts. In a similar vein, Anderson's *Streetwise: Race, Class and Change in an Urban Community* (1990) points to the importance of racial differences in intergenerational ties and the salience of those ties in facilitating employment among young males as they enter adulthood. Anderson (1990) focuses in particular on the sharp decrease

over time in African-American "old heads," who socialized boys in the world of work and adulthood more generally. These ethnographies underscore variations by race, ethnicity, and structural context in social capital and its role in promoting successful transitions to young adulthood (see also Short, 1990).

Thus, because individual-difference constructs and childhood antisocial behavior are independent of adult social capital and structural context in fundamental respects, another key aspect of our theory is the partial *exogenous* nature of the adult life course. This conceptualization opens the door for turning points that can redirect behavioral trajectories in the transition to adulthood. To be sure, we are not implying that individuals in our study became completely different or that they transformed their total personality as a result of social bonding in adulthood. We do not have the data to assess such transformations, nor would we expect that kind of change to occur given what we know about continuities over the life course. But we strongly contend that behavioral changes do occur and that adult life-course patterns are not solely the result of childhood socialization (Bandura, 1982).⁵

A PERSON-BASED, LIFE-HISTORY APPROACH TO CHANGE

Our research program has included an intensive qualitative analysis of the life-history records for a subset of men from the Gluecks' study (see Sampson and Laub, 1993: Ch. 9). In contrast to the traditional "variables oriented" approach dominant in criminology and the social sciences at large (see especially, Abbott, 1992; Katz, 1988), we have adopted a "person oriented" strategy that allows us to explore "patterns or configurations of relevant person characteristics in a developmental perspective" (Magnusson and Bergman, 1990:101). This approach enables one to investigate person-environment interactions, sequences of action, and individual change over time (see Abbott, 1992; Cairns, 1986; Magnusson and Bergman, 1988:47).

Consistent with our goal of integrating quantitative and qualitative methods, we used quantitative results to identify cases for in-depth qualitative

^{5.} A similar perspective on change is found in the literature on social movements. In studying the biographical consequences of activism, McAdam (1989) distinguishes between a radical transformation of one's life—conversion—and the more common form of personal change—"alternation." The latter is not as drastic as a conversion; it refers instead to changes in life that grow out of prior programs of behavior. Specifically, "the crucial difference between conversion and alternation centers on the degree to which the change is continuous with the individual's previous life and conception of self" (1989:745). Although alternation does not entail a radical break with the past, McAdam correctly notes that "it is not an insignificant social process. On the contrary, it is associated with most of life's turning points" (p. 745). McAdam's conceptualization of alternation parallels our discussion of "incremental" change. For additional discussion of change processes involved in conversions and role exits see Ebaugh (1988).

analysis. For example, based on the finding that job stability was an important predictor of desistance from crime, we selected cases that displayed high job stability (e.g., upper 15% of the frequency distribution) in combination with no arrest experiences as an adult. Similarly, we selected cases exhibiting low job stability (e.g., bottom quartile of the distribution) and arrest experiences as an adult. When there was a sufficient number of cases in a cell (usually on the diagonal), we randomly selected them for in-depth analysis (e.g., strong job stability and no offending in adulthood). We used a similar selection procedure for marital attachment. In total, we reconstructed and examined 70 life histories from the delinquent sample (see Sampson and Laub, 1993, for details).

Integrating divergent sources of life-history data (e.g., narratives, interviews), our qualitative analysis was consistent with the hypothesis that the major turning points in the life course for men that refrained from crime and deviance in adulthood were stable employment and good marriages. As an illustration of our thesis, consider the case history of a subject we call Charlie.⁶ Although Charlie had no official arrests during adulthood (ages 17–32), this pattern sharply contrasted with his criminal experiences in childhood and adolescence. As a juvenile, Charlie had 10 arrests, primarily for larcenies and burglaries. His first arrest occurred at the age of eight. Moreover, he was incarcerated three times (his first commitment took place when he was 11), and he spent a total of 30 months confined in reform schools.

At the age of 18, Charlie joined the U.S. Maritime Service. He was employed by the same shipping line for two and a half years, working the eastern seaboard from Canada to Cuba. Once every three months, he returned home. Charlie gave virtually all of his earnings to his mother to bank for him. His parole officer speculated that Charlie joined the merchant service to remove himself from detrimental neighborhood influences that were leading him to delinquency and crime. During this same period (ages 18-20), Charlie began a relationship with a woman who would eventually become his wife. Although classmates together in high school, they began "an active courtship via letters" while Charlie was in the merchant service.

At age 25, Charlie was living with his wife in East Boston. (He was almost 21 at the time of marriage and his wife was 19.) According to interview data, Charlie was devoted to his wife, and the couple appeared especially united in their mutual desire to advance economically. Their goal was to build their

^{6.} For the life histories we describe herein, potentially revealing information has been altered slightly in order to protect the confidentiality of subjects (e.g., the names of the subjects are fictitious). There did not seem to be any pattern in the selection of these cases with respect to IQ, personality traits such as aggressiveness, and early childhood experiences.

own home. Charlie was appreciative of his wife's cooperation and her enduring help and desire to advance economically. When asked for reasons for his reformation, he offered, "I'm married, older, and settled down now."

This portrait of Charlie's life did not change very much at his age-32 interview. He was living with his wife and two children in a suburb close to Boston. Charlie appeared happy and was especially devoted to his two children. In his spare time, he worked on home improvement. Throughout the age 25-32 period, Charlie worked at one job and had recently been promoted to foreman. He had been a machine operator at the factory where he now acted as the foreman. From interviewer notes, Charlie was described as an industrious worker with no problems on the job whatsoever.

In this article, we further advance the life-history, person-based approach to uncovering turning points and processes of change. Specifically, we selected cases for qualitative analyses that demonstrated a change in social bonds (a general measure combining job stability and marital attachment) from age 25 to age 32. Our analysis revealed evidence of both incremental and abrupt change. Incremental change usually occurred over a period of time in the context of an ongoing relationship or institutional affiliation (e.g., marriage); abrupt change was linked to a single event (e.g., entering the military). We also examined the investment processes that are involved as social capital is formed through the development of strong marital ties. Marital investment is a reciprocal process between husbands and wives that, if successful, encourages desistance from crime because of the strength of the social relations that are built up in the family. The life history of the subject we call Tony illustrates these investment processes.

Tony had five arrests during the age 17–25 period, including arrests for serious crimes such as armed robbery and burglary. He also served considerable time in penal institutions—32 months from age 20 to 25. Tony's marital situation at ages 17–25 was also rocky. At the time of his marriage, Tony was 22 and his wife was 17. His wife was in high school when she became pregnant, an event that precipitated their marriage. Shortly after the marriage, the couple separated on and off. They continued to experience poor conjugal relations throughout the early period of their marriage.

Despite marital discord and a record of crime as a young adult, Tony had no criminal activity (official or unofficial) during the age 25–32 period. What accounted for this change in behavior? Inspection of his life-history material reveals a distinct change in the marital relationship. At Tony's age-32 interview, his family situation had changed dramatically, to the point that the couple's conjugal relations were cohesive. Tony was described as a rather dependent type who clung to his wife. She was portrayed as a strong, sensible person whose interests were in the home and in her family. The couple had two sons, and overall there was a strong "we feeling" in the household.

According to Tony, his reasons for reformation included: (1) "I have

steady work," (2) "I have family responsibilities now," and (3) "I have learned my lesson"—he feared returning to prison. According to detailed interviewer notes and additional narratives, the strong influence of Tony's wife was the most important reason for his reform. Indeed, in what appears to be a form of marital social control seen in other cases described below, the interviewer wrote that Tony's wife "gives him good counsel and she sees to it that the subject follows her advice."

Other cases we examined revealed more abrupt change. For instance, one subject, Fred, had no arrests as an adult although he experienced five arrests as a juvenile, mainly for burglaries and larcenies. Fred was incarcerated in reform school for a period of nine months for his crimes. At the age of 16, he left school to go to work in order to support his mother and five siblings. Fred served in the U.S. Maritime Service for about 18 months at ages 17–18. He worked on oil tankers along the East Coast.

Throughout the age 17–25 period, Fred remained single. He was living with his mother and siblings in Boston at the age-25 interview. Fred fully supported his mother and two siblings who were still in high school. According to narrative data in the case file, Fred had refrained from marriage until his younger siblings were out of high school. He worked in several unskilled jobs (e.g., an oil and coal truck helper, an apprentice welder, and a factory worker) over this period. Fred stated that his "home responsibilities forced him to be a stable and regular worker."

A similar pattern is revealed in Frank's life history. Although he had eight arrests during the age 17–25 period, Frank emphasized at age 25 that he intended to marry later that year and was making an earnest effort to reform. He noted how hard it was for him to get a steady job because of his record. At the age-32 interview, Frank had no official or unofficial record of criminal behavior. He married and was living with his wife and child. He worked in a warehouse and, by all accounts, was a reliable worker (e.g., he had held the same job for the past five years). Frank did admit to some excessive drinking during the period, but he claimed that his drinking had tapered off since his marriage. He stated that his reformation stemmed from a variety of factors: (1) the influence of his wife—according to the interviewer, "she exerts pressure on the subject to conform and holds in check his aggression," (2) family responsibilities, (3) a long period of probation, (4) fairly steady work since 1957, and (5) fear of being "put away."

For George, a more incremental process of change was evident; it consisted of several circumstances, including leaving the city of Boston, becoming a parent, and finding a steady job. In his interview, George remarked: "Well, for one thing, I got out of Boston—I began to work steadily, and now I have a family—a son whom I always wanted. My father helped me to get back on the road to respectability and he has lived with us since we moved here. My wife always wanted me to do the right thing and I try to follow her advice. I got away from the old gang and the bookie racket which my uncle runs in the city. In a small town such as this, you have to go straight."

Another set of cases we examined pointed to the military as a "settling influence" or turning point in the life course (see also Elder, 1986). Given the available information in the Gluecks' case files, it is hard to uncover exactly what it was about the military experience that facilitated a change in behavior. Also, our finding of a positive influence is somewhat surprising given our results on the continuity of antisocial behavior from adolescence into adult domains, including misconduct in the military (see Sampson and Laub, 1993: Ch. 6). However, it is not inconsistent that the military can function to turn some men's lives around, even as it disrupts other men's lives (Elder, 1986) or provides yet another setting for some men to continue their criminal and deviant behavior (Gottfredson and Hirschi, 1990:165).

At his age-25 and age-32 interviews, Mickey was living with his wife and children. The subject married when he was almost 22 and his wife was nearly 21. A strong marital attachment between Mickey and his spouse centered around their home and children. Mickey joined the U.S. Navy while on parole from reform school and remained there for 13 years. According to narrative data, the subject stated that his enlistment in the military changed his outlook on life. "In the navy I was thrown in with guys from all over the country; some of them were well educated and had good backgrounds. I began to see that my thinking was way out of line and that I was probably wrong. I began to do things their way and things have gone well ever since."

This experience parallels that of another subject who spent a considerable period of time in the navy (seven and a half years) and had strong bonds to his wife and two sons. Similarly, other subjects in the study reported that they "matured in the service" or that the "army taught me a few things." Like Elder (1986), we find that for some men serving in the military can help surmount childhood disadvantage by recasting the past. Bandura (1982:753) argues that encounters in a closed milieu such as the military "have the greatest potential for branching persons abruptly into new trajectories of life."

We also examined a subset of men who experienced a significant decline in social bonding from ages 25 to 32. In these cases, it was difficult to detect clear turning points, but nevertheless certain patterns did emerge. For some men, a decline in job stability was due to changes in the labor market. Not surprisingly, layoffs, seasonal work, and factory closings all contributed to the weakening of ties to work. For one subject, his troubles in adulthood started when the company he was working for "folded." All employees were let go and his "good job" was simply gone. Macro-level transformations of the economy clearly bear on individual lives.

For several other cases the following scenario emerged. The subject married young, and often the marriage was forced due to pregnancy. Although

prior to marriage there was some evidence of excessive drinking by the subject, the subject's wife claimed that the subject had matured into his familial responsibilities, and initially the couple got along well. Work was typically of a seasonal nature (e.g., construction work) and weather dependent. But as the men became older (and while one would normally expect an increasing "conformity" or settling down), ties to marriage and work unraveled. There were separations, followed by reconciliations, followed by further separations. There was often evidence of physical abuse and nonsupport of children. The subject's wife objected to the subject's drinking and was not pleased by the financial uncertainty of seasonal work. The subject resented what he perceived to be "overprotectiveness" on the part of his wife and claimed she "nagged" him. Often the subject's drinking continued to be a problem, exacerbated in part by the fact that in certain jobs drinking seemed to be tolerated or even encouraged so long as one did not drink on the job (Vaillant, 1983:96–97). As a result, crime and deviance became more pronounced over time due to the severing of social ties to work and family.

IMPLICATIONS FOR FUTURE RESEARCH

As Clausen (1990) argues, the idea of turning points is an important concept in the study of lives. Turning points are closely linked to role transitions, and conceptually, they are helpful in understanding change in human behavior over the life course. We adapted this perspective to explore turning points in the lives of a sample of disadvantaged, persistent adolescent delinquents. Some positive turning points in the course of their lives were cohesive marriage, meaningful work, and serving in the military. Clear negative turning points were prolonged incarceration, heavy drinking, and subsequent job instability during the transition to young adulthood.

Having established that change does in fact occur, the key research question for the future becomes: Why do some individuals change while others do not? Learning more about turning points—especially in the transition from adolescence to adulthood—is critical for understanding the development of social capital and the facilitation of change in life trajectories. For example, what predicts strong marital attachment in adulthood? How do troubled youths achieve job stability and a strong commitment to work as adults? Is military service an effective vehicle for reshaping the life course of disadvantaged youths? What roles do structural factors and historical context play in determining strong bonds to family and work? More generally, how does one explain differential change among individuals?

Although these questions are complex and form the basis of our current work, we advance some tentative hypotheses. One is simply that there is an element of luck, randomness, or chance operating throughout the course of life. Bandura (1982) argues that chance encounters play a prominent role in shaping life paths. Namely, chance encounters introduce an element of unpredictability in life-course trajectories and thereby opportunities for change to emerge. As Bandura (1982:749) writes, "Although the separate chains of events in a chance encounter have their own causal determinants, their intersection occurs fortuitously rather than through deliberate plan." A more explicit theorizing of the roles of chance, "adventitious happenings" (Rutter, 1989b:33) or what Short and Strodtbeck (1965) many years ago called "aleatory" elements, may thus help to capture dynamic etiological processes.

The confluence of objective and subjective contingencies is also important in understanding the change process. In all likelihood, transitions involving structural role change, like marriage and employment, do not have the same meaning for everyone (Rutter, 1989a:20). For example, marriage and fulltime work provided an opportunity for men in our study to change the direction of their life-course trajectory, but not every man saw it that way (see also Clausen, 1990; Elder et al., 1991). In other words, structural role changes only provide the possibility for change to occur—its realization is mediated by individual contingencies. Hence, there is a need to conceptualize and measure objective and subjective elements of turning points.

Although beyond the scope of this analysis, macro opportunity structures for marriage and the labor market also play central roles. As recent research on work and occupations shows, employment outcomes have as much to do with structural features of the labor market (e.g., vacancy chains, segmentation of the labor market, ethnic enclaves) as it does with individual predispositions to work (Rosenbaum, 1984; Rosenfeld, 1992). Similarly, network and exchange theory emphasize the importance of role multiplexity and interdependence that combine with other structural features of collective life to introduce numerous avenues for positive and negative change (Cook and Whitmeyer, 1992). As Dannefer (1987:216) argues, most research on lifecourse transitions is too quick to attribute continuity to social-psychological processes of "accentuation" rather than "structured mechanisms of social allocation producing similar differentiating tendencies in successive cohorts." The channeling of prior differences and the tendency toward cumulation of advantage and disadvantage in employment (e.g., increasing inequality over time) are so general that they have been referred to as the "Matthew effect" (see Dannefer, 1987:216). Labor market research thus motivates a deeper appreciation of contextual forces and opportunity structures in the shaping of the life transitions of young adults.

Relatedly, variations in criminal propensity (e.g., low self-control) are incomplete as an explanation of adult crime because the latter's realization is dependent on criminal opportunity (e.g., lack of guardianship or surveillance; suitable targets). Ties to work and family in adulthood restrict many criminal opportunities and thus reduce the probability that criminal propensities will be translated into action. For example, those in stable employment and marital relations are typically subject to more structured routine activities and less free time than those in unstable roles (see the discussion of free time, types of employment, and opportunities that facilitate drinking in Vaillant, 1983:96–97). Some turning points in life may also reflect changes in the availability or profitability of criminal strategies (see Cohen and Machalek, 1988).⁷

As noted earlier, cumulative continuity and processes of change are likely to interact with race and structural location (Hagan, 1991; Jessor et al., 1991). In particular, there is increasing evidence that the probability of adolescent risks becoming transmuted into adverse adult circumstances is greatest among those in disadvantaged racial and economic positions. Whether it be environmental traps in the form of unemployment or arrest, research is needed to specify the dependence of trajectories on structural location.

Turning points and developmental change are bounded by historical context as well. The men in the Gluecks' study grew to young adulthood in a period of expanding economic opportunities during the 1950s and 1960s. They were also in a position to take advantage of numerous opportunities offered by the G.I. Bill. Prospects for current cohorts may not be as promising. The industrial base in America has changed dramatically over the past 20 years (Wilson, 1987), and there has been an increase in global competition and a decline in expectations for upward social mobility. There is a sense that good jobs are harder to find and keep today than in previous decades. Moreover, the military may not be the vehicle out of poverty in the 1990s as it was during the 1940s and 1950s (Elder, 1986). Consistent with the life-course perspective, we thus stress the importance of conceptualizing and measuring secular change at the macrosocial level, especially through explicit cohort comparisons (see Ryder, 1965). In this regard we believe a central topic for future research is the interaction of turning points with the varying structural locations and historical contexts within which individuals make the transition to young adulthood.

CONCLUSION

Our dynamic conceptualization of social capital and informal social control at once incorporates stability and change in criminal behavior. Change is central to our model because we propose that variations in adult crime unexplained by childhood behavior are directly related to the strength of adult

^{7.} We further recognize that some turning points may provide the opportunity for exposure to criminal and deviant peer networks. Moreover, it is possible that as social ties to criminal and deviant networks become stronger over time, the less likely one is to abandon them. More research is needed on the competing roles of conventional and deviant peer networks in generating social capital and the effect of turning points in reshaping the structure and relative influence of associational networks.

social bonds. Yet, we incorporate the link between childhood and adult outcomes, positing a cumulative, developmental process wherein delinquent behavior attenuates the social and institutional bonds linking adults to society (e.g., labor force attachment, marital cohesion). As such, we theorize that adult social bonds not only have important effects on adult crime in and of themselves, but help to explain the probabilistic links in the chain connecting early childhood differences and later adult crime.

Perhaps the key idea is ultimately a simple one—the adult life course matters, regardless of how one gets there. We do not deny the reality of selfselection or that persons may sometimes "create" their own environment. But once in place, those environments take on a history of their own in a way that invalidates a pure spuriousness or self-selection argument. Moreover, the self-selection view of the world is, in our opinion, much too deterministic and neglects the role of state sanctions, chance, luck, structural location, historical context, and opportunity structure in shaping the life course.

In sum, by redirecting attention to the significance of both pathways and turning points in the life course, we are optimistic about the possibilities for a new research agenda that has the potential to unify heretofore divergent conceptions of stability and change in human development. For example, Gottfredson and Hirschi (1990:177-178; Hirschi and Gottfredson, 1993) explicitly incorporate the role of opportunity in explaining criminal events. If opportunity matters for criminal events, surely it matters for the establishment of strong employment and marital bonds. More important, at one point Gottfredson and Hirschi (1990:115) allow for social control in explaining adolescent delinquency. In this sense we see some compatibility between our theory and Gottfredson and Hirschi's theory, especially if one conceptualizes variations in social control as partly influenced by variations in self-control (see also Hirschi, 1992; Hirschi and Gottfredson, 1993; Nagin and Paternoster, 1992). Therefore, while Gottfredson and Hirschi (1990) and Wilson and Herrnstein (1985) start off with a similar premise, they offer quite different possibilities for potential integration with our focus on change and informal social control across the adult life course. Future research is needed to examine these possibilities, especially the relative importance of stability and change throughout lives in varying contexts.

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