

Studying Women's Lives:  
Research Questions, Strategies and Lessons\*

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## Studying Women's Lives

### Introduction

My 20 years of involvement in prospective longitudinal studies spans a remarkable era in the study of lives.<sup>1</sup> The social discontinuities of the 1960s prompted new concepts of a life course embedded in social institutions and was ever subject to historical forces and cohort pressures. Data resources to match the temporal needs of this approach emerged as if by design. Major prospective studies were launched along with efforts to follow up the members of cross-sectional samples. At the same time, techniques of analysis were fashioned for an evolving life course, from the analysis of simple antecedent-outcome sequences to modified stochastic models and differential rates of change in trajectories.

The past quarter century also represents an era of striking social change in the contours and substance of women's lives. The change itself represents one source of progress in life studies. The increasing variability of women's life course through divorce and employment, in particular, called for models of individual choice and variation in contrast to the normative cycle by which nuclear families emerge and dissolve. One result of this development appears in the prominence of individual life histories in studies of family units and individuals. The multiple strands of women's lives, their interlocking dynamic and problematic implications, have received much attention from life course analysts (Moen, 1985). Active domains of study include divorce and remarriage (Cherlin, 1981), the single-parent household (mother as parent), and the scheduling of demanding careers with the needs of children.

Some of us may remember a time when social scientists studied individual careers, implying that they could be understood in splendid isolation. Only 20 years ago the individual career represented the usual way of viewing a person's life. Interlocking trajectories are now common in studies of families and lives, the interdependence of work, marriage, and parenthood, as well as the ties between individuals and the trajectories of family, kin, and friends (Plath, 1980). Emergence of the life course as a theoretical orientation (Elder, 1984) has brought greater research sensitivity to problems of interdependence in women's lives.

In what follows, I address three concerns that are relevant to life course studies: (1) the match between data and question, (2) archival challenges in doing life history research, and (3) some research questions that are unique to the life course framework. The first issue involves two strategies which have been applied to the matching of data and questions. One seeks to enhance or create data sets of life histories in the hope that they will fulfill research needs; whereas, the other moves from question identification to the data archive itself. Contemporary pressures, economic and otherwise, favor investment on highly meritorious data sets, but merit cannot be determined in the absence of specific questions. Any archive's importance resides in its match with the question. Literally hundreds of longitudinal data sets await the research questions that will infuse them with new vitality.

The second problem area reviews the archival challenge I faced in doing life history research with the Oakland Growth and Berkeley Guidance subjects. These archives are distinguished by their eclectic scope, as contrasted to highly specialized orientations, objectives, and measurements. The National Longitudinal Surveys exemplify the more specialized archive.

The third and last domain gives visibility to some questions we have pursued in studying historical change in lives and generational lineages.

This perspective on lives is limited mainly to the territory covered in my research. The archives I have used are neither totally prospective in design nor retrospective. The Oakland and Berkeley Study children have been followed across much of their life span, but they have also been asked to report on this past in retrospective accounts. These accounts appear mainly during their adult years from one follow-up to another. For example, the Berkeley subjects (Guidance Study) were interviewed at the approximate age of 30. At this time, they were asked to report about their life experiences from adolescence to the present. Retrospective life histories are clearly a less expensive data collection procedure than prospective longitudinal samples, and this of course is one reason why adult follow-ups try to use them along with genuine longitudinal samples. The pros and cons of prospective and retrospective life records are discussed very briefly in this essay.

### Matching Data and Research Questions

The relationship between life history data and research questions has changed dramatically over the past half century. In the 1920s, life-span questions exceeded the available "longitudinal" archives for pursuing them. Inspired by Thomas and Znaniecki's The Polish Peasant in Europe and America (1918-1920), studies in this decade began to use life records for the analysis of social change and individual trajectories. However, the life records were typically retrospective or based on documents. They were not generated by prospective longitudinal designs.

W. I. Thomas played a leading role in the use of life history records, though he never had access to genuine longitudinal data. He visited many of the newly-established longitudinal studies, including the Oakland and Berkeley projects, and he fully recognized the need to establish data archives that would be suited to the temporal questions being asked of life development. In the mid 20s, Thomas (Volkart, 1951:593) urged that priority be given to "the longitudinal approach to life history." Studies, he observed, should investigate "many types of individuals with regard to their experiences and various past periods of life in different situations" and follow "groups of individuals into the future, getting a continuous record of experiences as they occur."

Thomas's prescriptive agenda saw few empirical applications between the Great Depression and the 1960s' War on Poverty. This lack of development may well have something to do with the clash between the qualitative records advocated by Thomas, on the one hand, and the new positivism in social science following World War II on the other. In any case, this clash does not explain the growing popularity of individual life records in the post-1960s era, as seen in case studies of life documents (Runyan, 1982) or in the use of narrative life stories (Bertaux, 1981). This new wave of interest in the life course gained sustenance from a truly stunning upsurge in longitudinal studies during the 1960s. Countless studies with this design were launched at the time, and they were joined by efforts to follow up the members of initially cross-sectional samples (Mednick, Harway and Finello, 1984, I & II). The new longitudinal studies of the 60s include the monumental Project Talent which began with over 400,000 high school students in 1960 (Abeles, Steel, and Wise, 1980); the Bonn Longitudinal Study of Aging, launched in 1965 (Thomae, 1976); and the National Longitudinal Surveys

which extend across the 1970s. One of the best-known examples of the follow-up of a cross-sectional survey is the Wisconsin Project under the direction of William Sewell (Sewell & Hauser, 1975).

The rapid expansion of new longitudinal samples can be viewed in terms of a growing appreciation of life studies within a life course framework. A useful example is the well-known Michigan Panel Study of Income Dynamics (Elder, 1985). Initiated in 1968 to study the nature and persistence of poverty, the panel has been contacted each year to the present. It now has a sample size of nearly 20,000 individuals. At the National Institute of Mental Health, a consultant panel (Clausen, 1983) for the Behavioral Science Research Review produced an evaluation which argues most effectively for the support of longitudinal studies. Coupled with this recommendation is a proposal for greater attention to the problems of maintaining such studies over many years. Continuity of funding is one important aspect of the maintenance issue.

The costs of prospective studies are only partly financial. Even more noteworthy are those of time and labor. Both time and labor requirements are so demanding that the originating investigator frequently ends up collecting the data and not carrying out the actual analysis. Retrospective life records are one way to minimize such demands of data collection. The respondent reports on the present and future and also reports on the past. All follow-up studies employ this approach to some extent in order to collect life record data for the intervening years. A sample question might ask, "What jobs did you have over the past ten years?"

A major question in the use of retrospective life records has to do with the accuracy or general quality of the data. Accuracy becomes a problem when the investigator assumes that reports of the past tell us exactly what the past was like, regardless of memory error and the effectiveness of denial concerning painful experiences. In some oral history projects (Hareven, 1981), the investigator assumes that accounts of the past are merely that--a construction of what the past was like as expressed amidst all of present day circumstances and concerns. A number of techniques have been employed to maximize the accuracy of recalled facts about the life course (Elder, 1977), including the use of age-event matrices. Subjective states in the past are least accessible through retrospective histories. The question of when to use prospective and retrospective instruments to maximize cost-effectiveness in the study of lives is under consideration by analysts of panel data.

#### Archival Inventories and Judgements of Merit

As the number of longitudinal studies increased, the need for inventories became more apparent to the research community. Responding to this need, the Life Course Committee of the Social Science Research Council initiated and reviewed a major effort to develop an inventory of longitudinal investigations of middle and old age (Migdal, Abeles, and Sherrod, 1981). A total of 73 projects were included in the final inventory; a third of these were located overseas. As a whole, the projects meet the general premises of the life course perspective. They are prospectively longitudinal in the sense of repeated measurements on the same people and all focus on the middle to late years. The inventory was designed to "facilitate the maximum utilization of existing longitudinal data by making investigators aware of the potential for secondary analyses, the restudy of existing samples, collaborative research, and comparison of findings from different samples."

A sequel to this inventory is now available from the staff and membership of a "child development" subcommittee of the original Life Course Committee (Vordenik and Seward, 1985). A number of criteria were used in nominating appropriate longitudinal studies for the inventory. Acceptable studies had information on males and females who were 18 years old or younger, and they were prospectively longitudinal in the sense of collecting information across at least two time points, and preferably three. The more desirable studies were based on a representative sample with an attrition rate that did not threaten their longitudinal quality. Such studies also met the criterion of a rich information base, involving multiple measures across more than one domain of behavior. Lastly, the study had to be active or in the process of becoming active. The initial survey reviewed over 300 studies from across the globe, and reduced this number to 109.

During preparation of this inventory, sharp reductions in federal support for social science research prompted serious questions on how to use available resources most effectively. The small private foundations were besieged by requests to make up the difference. Would it be possible to select longitudinal studies that are unusually deserving of financial support? Is it possible to determine highly meritorious studies without regard for particular questions? A deserving study from one angle might not be deserving from another. By any standard the selection problems are substantial.

After decades in which life-history questions did not have appropriate data for empirical tests, we now faced decisions regarding the value of longitudinal archives which ignored questions and contexts. With a particular question in mind, one might discover that the only relevant life history study was placed on the inactive list because it did not measure up to certain standards. Yet such a study could be invaluable for a specific research question. In another scenario, the analyst finds that a combination of two studies, each limited in various respects, provides an exceptional perspective on a puzzling outcome. The studies might be rejected on their own as unworthy of financial support, though in combination they could produce analysis with impressive yield.

These two examples underscore the very real danger of evaluative standards that are applied to life history studies and archives without regard for their uniqueness and combined potential. This potential is always dependent on the questions at hand.

#### Questions and Data at the Institute of Human Development

Consider the Oakland Growth and Berkeley Guidance Studies at the Institute of Human Development, Berkeley. Among all known longitudinal archives in the United States, the archival data of these studies are unique in providing essential data for life-history research on the Depression experience in lives. They also gain value through their combined use in a comparative framework. Comparative analyses of the Depression experience in both cohorts, Berkeley and Oakland, underscored the life stage principle and the value of such designs. In the younger Berkeley cohort, hardship markedly impaired the development and psychological functioning of boys only, unlike the Oakland findings. Moreover, the disadvantage of males from deprived homes persisted up to the middle years of adulthood. The Berkeley girls, it seems, were spared the tensions and abuse associated with hard times through the affection and support of mother.

### Beyond Archival Limitations

The unparalleled richness of the Oakland/Berkeley archives should be viewed with their limitations in mind. In particular, the two local samples are relatively small and the various measurements reflect the age in which they were developed. Even so, this is the data archive that made Lives Through Time (Block, 1971) possible--the single most impressive empirical study of personality development over the first half of the life course of women and men. By any measure, the archives have contributed in a major way to our understanding of child development and its implications for the adult years.

For those who find historical change a compelling dimension of study in women's lives, data requirements typically extend across multiple archives. Information concerning one birth cohort should be supplemented, ultimately, with data on an adjacent cohort, thereby enabling an assessment of change effects. Nesselrode and Baltes (1979) refer to this design as a cohort-sequential model. Quite apart from these data needs, very few archives on birth cohorts of women before the 1960s are sufficient in detail and comprehensive coverage to stand by themselves. As a rule, they need to be supplemented.

Consider three fictitious studies of women who were born in the same city during the 1930s. One study might be limited to detailed information on event histories (marriage, work, etc.), another might be restricted to the life-span development of the women, with the third centered on family experiences in childhood. Each study then provides part of a woman's life history. Data libraries could assist this type of research by classifying studies according to the birth years of the participants.

Three other limitations in data archives support the wisdom of using multiple data sets to address particular life-history questions. First, the new life span orientation generates questions that connect activities at opposite ends of the life course, but data sets rarely span the life course. For example, is family formation an element in the decision to retire, as in the contrast between women who marry relatively early versus those who marry relatively late? Until recently, such questions lacked options for empirical test since life history studies of the retired or old seldom obtained information on the early life course.

A second limitation appears in studies that fail to represent the interdependence of trajectories or career lines. Data might be collected on the socioeconomic career of the family, on the marital relation, or on the childbearing and child-rearing career, but not on all three. During the early 1970s, Lee Rainwater (in Young and Wilmott, 1973:xiv) observed that studies of family and socioeconomic careers have tended "to proceed along their separate narrow ways barely acknowledging the existence of each other." With multiple trajectories, women's scheduling of events and obligations represents a basic task in the management of resources and pressures. Scheduling involves the timing, spacing, and arrangement of events, both within and across life paths, the life stage in which to marry, for example, and its temporal distance and order relative to other events. Data sets that span all of these life lines are typically products of the new wave of interest in life history analysis.

The third deficiency in life-history archives or data sets involves a longstanding separation of life history and intergenerational research. One of the clearest examples of this divorce comes from the booming field of three generation studies. Forms of association and exchange from child to

parent and grandparent are typically viewed at a point in time (Bengtson and Troll, 1978). Intergenerational relations are not studied over time, and thus it is not possible to assess the implications of development or aging on family bonds. Moreover, intergenerational studies rarely obtain age-event information on individuals. From the perspective of life-history research, the framework seldom extends beyond two generations even though longevity has markedly enlarged the number of surviving generations.

Up to this point, the match between a life-history archive and a life-course question may seem to be achieved by merely a search of available data sets or archives. In this scenario, the analyst surveys archival lists and codebooks in an effort to find an appropriate data set to investigate a specific question. To facilitate this effort, data libraries generally mail archival guides and actual codebooks to researchers at cost. A good many studies emerge from initial steps of this sort. These steps may only provide a map of archival prospects and indicate a more fundamental need to restructure the archive through the re-coding of primary materials, such as field observations and qualitative interviews. The option of developing and applying new codes usually hinges on the availability of such primary materials. In the next section, I discuss this operation as an archival challenge to life history research.

#### The Archival Challenge to Studying Women's Lives

A good many questions regarding historical change in lives take us back to the oldest longitudinal studies which were launched before the Second World War. These studies and their archives typically share the advantage of a rich, diverse range of data over many years, and the disadvantage of a relatively small number of cases that lack representativeness in the larger population. This list of prominent studies includes the Lewis Terman study of "gifted children," born in California between 1905 and 1920, who have been followed up to the present through interviews and questionnaires; the Fels Institute study that was launched in the 1930s and provided data for the Kagan and Moss book, Birth to Maturity (1962); and the three longitudinal studies at the Institute of Human Development (IHD), Berkeley--the Oakland Growth (birth year, 1920-21), the Berkeley Guidance (birth year, 1928-29), and the Berkeley Growth (birth year, 1928-29).

The data archives of these studies extend well beyond structured questionnaires or interviews to field and home observations, the open-ended interview, and reports from multiple respondents. The end result is an archive that offers a wide range of possibilities. The secret is to perceive one or more options in terms of data to address a particular question. Past experience suggests that insights of this sort come mainly through substantial immersion in the archive itself. The "start" costs in learning the data archive are sufficiently demanding that they frequently discourage all but the most committed. Getting past this stage of immersion to the formulation of a plan of action is by far the most critical archival challenge the investigator will encounter. Initial plans are typically modified in the course of learning an archive.

To provide some concrete examples of these points, I shall draw upon my apprenticeship experience with the Oakland Growth Study, and then turn briefly to the preparatory work that went into the Berkeley Guidance archive.

## Coming to Terms with Life Course Dynamics

My first exposure to the Oakland Growth Study occurred in the Fall of 1962, the initial months of an appointment at the University of California, Berkeley, and at the Institute of Human Development on the campus. This longitudinal project began over a half century ago through the pioneering leadership of Harold E. Jones and Herbert R. Stolz, then research director and director of the Institute (called the Institute of Child Welfare). Just prior to the worst years of the Great Depression, they launched a longitudinal study of growth and development with a sample of eleven-year-old children from the northeastern sector of Oakland. By the time I arrived on the scene at the Institute, as an assistant research sociologist, the study had been extended up to the middle years.

I soon discovered that a large part of the archival data remained uncoded. This included an important interview with the Oakland mothers in the 1930s as well as interviews with the adult Ss from the 1958-60 follow-up. Codification thus became my number one priority under the direction of John Clausen, along with the substantive goal of studying careers in the Oakland cohort. The scope of this coding task was challenging, to put it mildly, especially since I had no background of archival experience with life record data.

The Oakland Growth Study was made up of 250 data sets on the Study children and their families. However, these data were not wholly satisfactory in telling something about a person's life. If I wanted to know about the life trajectories of girls from the middle and working class, from childhood to adulthood, it was not easy to find answers in the Oakland archive that confronted me in the early 1960s. One reason for this barrier involved the way the data had been stored, and the kind of uncoded data.

All of the machine-readable data were organized according to age and/or grade by particular inventory. Most analyses up to that point had correlated items from inventories at different time points. The intervening span was largely uncharted. Life records can be made from age-graded inventories with file merge operations, and thus the more serious limitation involved the lack of coded life histories. No data set had information on the socio-economic career of families or on the timetable of adult events in the lives of the Oakland subjects. We could not identify the men who served in the Armed Forces or describe their military service. Work and marital histories had to be assembled and prepared for analysis. The work-family careers of the Oakland women were largely a matter of speculation, though such data were available in the adult interviews.

The essential information for such histories was present to a large extent, but it was not organized or coded in ways appropriate to the life course. Some ten years later, Lives Through Time (Block, 1971) emerged as the first major effort to identify personality trajectories from childhood to middle age in the Oakland archive. This was followed by Children of the Great Depression (Elder, 1974) which investigated the social trajectories of the Oakland men and women, their antecedents in Depression hard times and psychological consequences.

My experience with the Oakland archive was shaped by observations that reinforced a more temporal approach to families and lives. The most dramatic observation had to do with the everchanging circumstances of families in the Great Depression. I quickly realized that the static notion of a family's social position would not be useful in the midst of such change. This is when I began to think of family adaptations to income loss as a process by



which families constructed their own life course (Moen, Kain, and Elder, 1983). One set of adaptations entailed a shift in the family economy from capital to labor-intensive activity. More goods and services were produced by family members. Many of the Oakland girls and boys were involved in an expanding range of household operations and responsibilities. Families also responded to economic losses through role changes in which mother became a more central figure in authority and affection.

The second observation concerned the problem of how to think about the lives of individuals. How are lives socially patterned? The literature on careers offered ideas about single careers mainly in the field of work. More useful were the social meanings of age in expectations, divisions or categories, and sanctions. Such meanings provided a perspective on the social patterning of events and activities. I refer in particular to the social timing of events, such as marriage or work, and the age-graded pattern of life trajectories. My efforts to work with the Oakland archive proved to be a developmental experience in life course thinking. Eventually, this new learning was expressed in coding forms that brought process, context, and time to an empirical representation of the Oakland life course, its trajectories and transitions.

I divided the life course into pre-adult and adult phases for coding purposes. The pre-adult phase focused extensively on the social and economic career of families; the adult phase included major events, roles, and achievements in marriage, parenthood, worklife, and community. From a detailed chronology of adult worklife, it was possible to construct measures that were truly temporal. A good example is a measure of worklife fluctuation -- the up and down status cycles within an occupational career. A fluctuating trajectory undermines social ties and integration (Wilensky, 1961). Another example is a worklife typology for women which delineates different pathways according to the temporal order and continuity of gainful employment. An illustration is the woman who worked up to the birth of her children, left the workplace for family, and then returned to employment after the youngest child entered school.

The state of the Oakland archive during the early 1960s had to be modified to become suitable for career studies and this modification required a total of three years. Why, one might ask, do some analysts perceive the feasibility and rewards of archive modification, while other potential users turn away and search for a more appropriate data set? An explanation for productive matches between research questions and data archives is surely elusive.

The Oakland project broke new ground for me in the sense that I could not fall back upon tried and true approaches. The archival work represented an apprenticeship in the design of a life history study, especially in producing a match between life course questions and data. By the time I launched the Berkeley Guidance Project as a comparative cohort (the early 1970s), I had a reasonably clear sense of how to carry out a study of such complexity. Without such direction, the project might never have been initiated let alone completed.

The Guidance archive itself was larger than that of the Oakland Growth Study, in large part because more generations were included. Data were collected on the Berkeley parents from young adulthood to old age, and on the Study children, their postwar children, and grandparents. By comparison, the Oakland data were primarily limited to the subjects. When I began the Berkeley Project in September 1972, I had less than a year to complete all of the essential life-history coding. A year later the work was done. The

basic phases of this project are worth noting for their relevance to other coding operations in life history research.

### The Berkeley Archive and Life Histories

Archival work in the Guidance Study was structured by the requirements of a comparative design, the comparison of hardship influences on lives in the Oakland and Berkeley cohorts. From the standpoint of an observer, the archive seemed well-suited for such analysis, although the extent of the match and the coding requirements could only be determined through an on-site inventory of coded and uncoded data. Interviews, home observations, and letters provided much of the uncoded data. The inventory established a map of the archival territory in relation to objectives and thus enabled project refinement and more effective use of resources.

The second step entailed construction of life records, a chronology of events and activities in different areas (marriage, work, etc.). The life record provided a means of assembling widely-scattered data on families and lives according to specific trajectories and transitions. The records were then subjected to systematic coding, the third and final step. This procedure generated both qualitative and quantitative data, and consequently the opportunity to include both modes of analysis in the same study (Diesing, 1971). Each step is described below.

#### 1- An Inventory of the Data Archive

The Guidance Study did not have a complete record of all coded and uncoded data, but even with such a record a thorough inventory of the archive can save time and costly mistakes. We needed to know what materials of relevance to our questions were still uncoded, what data were coded but not prepared for data analysis, and what coded data were acceptable for our purposes. In the course of completing the inventory, we achieved a closer fit between research questions and the archival data as potential and fact.

Empirical realities in the archive shaped questions and formed new options or lines of inquiry. Two examples on wholly unexpected dimensions of the archive illustrate this development. First, the very first interview conducted with the Berkeley parents during the study child's infancy included recollections and contemporaneous reports of their own mothers and fathers. These reports were structured by measurement categories used on the parents, and thus could be used to explore intergenerational continuities and change.

However, data on the GI generation had never been prepared for quantitative analysis. Indeed some of the data had actually been dropped from the archive's list of data sets or materials.

These life history data on the grandparents enable us to study the lives of women and men across four generations from the late 19th century to the late 20th century. A second dimension has to do with kinship information on the Berkeley families across the 1930s and early 1940s. Through its emphasis on the family environment of children, the Berkeley Guidance Study generated an unusual body of information on kinship ties, associations, and exchanges.

From such data, we have been able to study three generation households over time, and especially the mother-daughter relationship in the same household.

After several months of intensive work, we had a relatively firm grasp of the lines of inquiry that could be pursued, with and without new codings. As in the Oakland archive, the inventory produced very little social data that were coded and structured in life-record form. We could easily obtain

characterizations of family units and individuals at different points in time, but not a temporal view of their careers. For example, all families were coded on the socioeconomic status in 1929 and again in 1945-46, but the intervening years of hard times and war were largely uncharted. The appropriate data were available, but they had simply not been viewed as an essential part of the picture of lives and families.

The same blindspot was found in the adult years, from the Ss departure from high school around 1945-46 to 1970. The archive contained records of the Ss marital, educational, and occupational status, but these data were coded at only one or two points in their life course. The concept of trajectory or life history was not operationalized in a complete way. These examples provide some indication of the pre-coding task. Before coding could begin, we had to arrange the data in chronological form, to construct life records.

## 2- Construction of Life Records

There are three principal types of life records: 1) the life record (or chronology) which is prepared by the actor from his or her perspective; 2) the life record produced from the perspective of an informant or knowledgeable other, such as a spouse, confidant, best friend; and 3) the life record which is constructed by a clinician or researcher, using a wide array of materials--written and oral reports by the actor and others, letters, vital records, observational materials, public documents from social agencies. By synthesizing a single account from diverse materials, the third approach represents an effort to obtain an understanding of the actual life record for a person or family. Disparate reports are resolved with the objective of achieving the most accurate account. By drawing upon all relevant sources of information in constructing life histories, the analyst can build a set of quality controls into the coding process.

For a number of reasons, the Berkeley archive proved to be ideally suited to the synthetic approach in constructing life records. The intensively studied families were contacted many times each year by a field worker and his field notes became part of the data archive. In addition, the women (G2) in this sample were interviewed each year along with the study children (G3) after entry into school. Other sources of data include teachers and letters from and to various agencies. Well-trained associates in the life course project were instructed to read the case assembly of a family (and its members) first and then to proceed to flesh out life records in eight specialized areas, mainly from 1929 through 1945: socioeconomic career of family, worklife of male head, worklife of wife-mother, composition of the household over time, marital relations over time, parent-child relations, and subjective interpretations of the family trajectory. The study children in adulthood provided life history information during follow-ups in 1960 and 1970 which were used to develop life records of their work, marital, educational, and parental experience up to middle age.

- 1- Socioeconomic career of family. Annual data on total family income, earnings of household head, earnings of wife, contributions by relatives, relief payments.
- 2- Worklife of male head. Annual data on occupation and work status (unemployed, over-time, underemployed) by year from 1929 through 1945. Record also includes job and employer changes.
- 3- Worklife of wife. Work history before marriage, after marriage, after first child, and up to the 1960s; occupational status of work

- before marriage and in the 1930s - 1940s, postwar years; full- or part-time status.
- 4- Composition of household. The number and status of household members by year from 1929 through 1945. Birth dates of children. Four status categories are represented among household members: nuclear unit, kin, boarders and lodgers and live-in servants.
  - 5- Marital relations over time. Marital dimensions include authority, sentiment, interactional dynamics, and marital breaks across four time periods: 1929-31, 1932-35, 1936-39, 1940-45.
  - 6- Parent-child relations over time. Authority, affection, and involvement by four time periods.
  - 7- Subjective interpretations of the life course. A record of parent perceptions of life transitions, situations by year from 1929 through 1945.
  - 8- Adult life course of Study children. Histories of marital, parental, educational, and worklife events from 1946 through 1970.

The life records were developed so as to provide codable, longitudinal information on the parental family unit, on the mothers and fathers, and on the Study children, male and female. In preparing these records, we encountered a number of problematic issues in conceptualization and measurement through feedback from the richly detailed and varied sources. This feedback proved to be especially valuable in sensitizing us to the social psychology of respondents as actors in data collection situations. Time and again we were forced to question and critically evaluate the received information.

### 3- Coding the Life Records

The construction of life records represents an initial step in the holistic analysis of individual cases. With these histories, one can identify configurations and consequences of events over time for family units and individuals. We applied this qualitative approach to selected problems and cases in the project, but the heart of the work required a quantitative comparison of life trajectories among families, men and women. By structuring each life record in terms of common data categories for coding, we still retained the option of moving back and forth between quantitative analyses and case studies.

The full life records serve a critical function in life history research when the latter relies upon archives that were developed for other purposes. Such archives invariably present the user with problems of missing data. By drawing upon the full record, one is able to achieve more stable or reliable codings than would be possible through simply a quantitative approach to index construction. For example, a woman's life record of erratic employment gains a measure of credibility when we view it in relation to other records, as on marriage and parenting. Segments of the work record that are less detailed may be fleshed out by viewing the entire record in relation to marriage and childbearing.

Data sets for the pre-adult and adult years of the study children were generated from the records. Following immersion in the case assemblies of some 25 families, I prepared a rough draft of the codebooks for the proposed data sets. Each codebook was informed by knowledge of the archival materials, by conceptual issues and priorities, and by exchange with the project staff. The codebooks were reviewed in staff meetings and then applied by at least two coders to the appropriate records on a small number

of cases. An evaluative conference was held after the completion of the first trial, using information on coder agreement and staff impressions on the adequacy of the codes. This conference generally led to revisions in which some codes were modified, others deleted, and still others added, and then to a second wave of coding.

Life history analysts encounter many archival challenges, but few are more demanding than the redesign of data sets or a study archive in order to achieve a better fit between question and data, a task that becomes more common as we move back in historical time. Data sets that seem appropriate frequently need more investment in file design than was anticipated, a discovery that can emerge from the "inventory" phase of archival use. In other cases, a longitudinal archive may represent the last hope among generally undesirable choices for investigating a specific life history question.

The Oakland Growth and Berkeley Guidance archives posed a challenge to me because neither represented a complete life history framework when I first encountered them. Nevertheless both studies had the informational potential for life records and quantitative data on the life course. Understandably, this potential is much easier for me to see now than at the very beginning. Indeed, I have often wondered what I would have done if I could have imagined the full scope of preparatory work that lay ahead. Limited vision can be merciful!

The procedural steps outlined in the two projects center heavily on the data archives themselves, though always in relation to specific goals and conceptual models. Theory, questions, and data represent an ever-changing system. The observational facts stored up in the files often gave rise to new ideas and questions, infusing new life in the archival data. I turn now to some research questions that have led us in fruitful directions.

#### Research Questions and Analytic Strategies

The life course perspective that has guided my work over the past decade (Elder, 1975, 1977, 1984) is expressed in three noteworthy questions on the study of women's lives. Each question identifies a promising direction for future work. The first has to do with the timing of lives and events, or more specifically the timing of first marriage, its determinants and consequences (Elder, 1972; Elder & Rockwell, 1976). Some women come to marriage relatively early, whereas others make the decision at a late age or not at all. Each of these options has long-term consequences (Sørensen, 1983). The second question relates individual development and family relations, a problem of central significance across twenty years of my life history research. In this case, we investigate the process by which unstable personalities and unstable family relations are reproduced from one generation to the next in the lives of women (Elder, Caspi, & Downey, 1985). The third question involves the relation between early events and subsequent life outcomes. What is the mechanism by which an early event makes a difference in the course of aging? Why do some early experiences persist while other equally severe experiences have no apparent long-term implications? Our empirical example focuses on Depression hardship in women's lives (Elder & Liker, 1982).

## Marital Timing in Women's Lives

Why do some women marry relatively early, late, or on time relative to other women? What are the consequences of such variations for the subsequent life course? This temporal view of marriage reflects the intimate bond between age and time in life course analysis. Age variations index temporal variations across the life course.

One consequence of variations in marital timing is suggested by the marriage market and mating options. From the early marriers to the late brides, women's conjugal decisions are made in an ever-shrinking marriage market. The field of age-eligible men becomes more restricted. Coupled with this change is the educational gain of women who marry late. From these observations, one might expect late brides to marry younger men who have less education, in contrast to women who marry relatively early. The latter would be more apt to marry older men who are better educated than they are. Empirical support for these patterns was obtained among the Oakland women (Elder, 1972) and also to some extent in a nation-wide sample of American women (Elder and Rockwell, 1976) who were born during the late 1920s.

The differential timing of events introduces the problem of career synchronization. Early marriage is typically marked by an economic squeeze, owing in part to the young age of the husband and his lack of work skills, whereas late marriage generally brings an economic advantage. Using a nation-wide cohort of 1925-29 (Elder & Rockwell, 1976), we found that early marriage (before the age of 19) anticipated a life course of relative deprivation for women--limited formal education, marriage into the lower strata, a heavy child-care burden, and inadequate material resources. The young brides were more likely than other women to combine family and employment (a double-track). Even if similar on levels of education, the late marriers were more likely to expand their range of social opportunities and contacts through marriage to successful men. Compared to other women, the older brides occupied a position of economic advantage at time of marriage and in 1970. Whether high or low in education, these women most often followed a conventional pattern in which they remained employed only up to marriage or their first birth.

In view of these contrasts, it is not surprising that event timing is a matter of concern to American women. From the perspective of middle age, women from the nation-wide sample were likely to endorse a timing schedule which seemed neither too late nor too early (Elder & Rockwell, 1976). The young marriers voted overwhelmingly for a later marriage in the lives of daughters; and for a childbearing pattern that is on time. "In the minds of all women in the cohort, there is clearly an optimal time for marriage and children, a time which frequently differs from the life schedule they followed" (Elder & Rockwell, 1976:51). Temporal variations in the case of marriage differentiate the process of family formation in ways that suggest important implications for mate selection, marriage mobility, and marital careers.

By stretching this focus on marital timing, we come up with age-old questions that highlight the breadth of the life course as a field of analysis. One question links the timing of family formation with retirement outcomes among women who have a career. Historically, family size has been linked with the needs of old age, specifically the need for social and material support. Angela O'Rand (1982) has investigated this connection with data from the Retirement History Study. She found that women's delayed and interrupted work patterns, resulting in part from family obligations,

generally delayed the retirement of working women, depressed their retirement income levels, and limited their options for retirement income. Among unmarried women in the later years, childbearing delayed retirement, even with adjustments for work history, pension status, and health characteristics.

One of the most important issues on family timing concerns the age difference between women and their children. The later the first birth, the larger the age gap between mother and child; a gap of increasing significance as larger numbers of women postpone the first birth. One of the most intriguing aspects of the age difference is that it most likely entails different meaning and implications over the life course. That is, an age difference of 40 years between mother and infant might have positive value through the maturity of the mother and yet become a source of inter-generational estrangement in 20 or 30 years (Rossi, 1980). The timing of marriage and childbearing has additional implications for the number of surviving generations in a woman's life. At a time of increasing longevity, a succession of late marriages across the generations could reduce the generational plurality to parent and child. Family timing and age differences represent a fertile domain for life history studies of women.

#### Unstable Behavior and Unstable Families: From Generation to Generation

Life history archives are generally thought of as a data base on individuals, but individual lives are embedded in a matrix of generational ties. With each generation bound to fateful events along the pathways of other generations, life course analysis entails sensitivity to this interdependence. Such interdependence is most vividly expressed in the influence process; the process by which children learn the behavior patterns of their parents and then presumably influence their own children accordingly years later. Two aspects of this process are ordinarily studied in isolation. Multi-generation studies typically focus on the behavioral transmission process from parent to child, whereas life-span studies follow behavior patterns in childhood up to the adult years. Both lines of analysis are complementary and we have brought them together in a study of the proposition that unstable personalities (explosive, volatile) and unstable family relations (marital, parent-child) are mutually reinforcing dynamics across the life course (Elder, Caspi, & Downey, 1985). They persist from one generation to the next through a process of individual continuity and intergenerational transmission.

The four generations come from the Berkeley Guidance archive: grandparents (G1), parents (G2), study children (G3), and great grandchildren (G4). All of the data on the grandparents were reported by the parents in 1929-30. The parents in this analysis were linked to their own parents (G1) and to their children (G3) during the Great Depression. The study children were followed from childhood to their own parental years, and then to their own children. Overall, the intergenerational continuity of unstable, problem behavior was most pronounced among females, and unstable family relationships played an important role in this persistence. Within all generations, the causal influence flowed from unstable personalities to unstable family relations. Relations of hostility and discord linked unstable personalities in one generation with such personalities in the next generation. Some specific details are listed below with emphasis on females.

- 1- Aversive patterns in the grandparent generation (G1). Using the recollections of grandparents by mothers and fathers in 1929-30, we

found a pattern of irritable, unstable behavior among grandmothers and grandfathers that covaried with high levels of marital discord and unhappiness. These grandparents were also likely to be seen as hostile by the parent generation.

- 2- Aversive patterns reproduced, from G1 to G2. Irritable, emotionally unstable grandmothers were most likely to have irritable, unstable daughters, especially if their marriages were characterized by tension and conflicts. The causal sequence runs from unstable personalities to unstable family relations in the G1 generation, and then to unstable dispositions in the next generation.
- 3- Aversive parents and their aversive children, G3, in the 1930s. Aversive girls and boys in the G3 generation scored high on temper outbursts and difficult behavior (irritable, quarrelsome) during the first and second half of the 1930s. These behaviors among daughters and sons were highly related to the arbitrary and extreme discipline of parents. Such discipline was especially common among unstable mothers and fathers, those who ranked high on irritability and emotional instability before the Depression crisis. Aversive children, daughters and sons, were also most likely to elicit aversive behavior from parents.
- 4- Aversive child behavior as a precursor of problematic parenting. Mothers in the G3 generation who were ill-tempered in childhood were most likely to be seen by their own adolescents (as of 1970) as out-of-control in discipline situations. This continuity was less pronounced among fathers, as reported by adolescents in 1970.

Though problem behavior elicits aversive social responses that reinforce such behavior, there are turning points and breaks in the cycle. Not all ill-tempered daughters became mothers who readily lost control in discipline situations. Intergenerational transmission and life-span development may reflect the "shadows we cast upon each other's lives," to borrow from David Plach's (1980) account, but they also reflect love and caring. An understanding of both competent and problem behavior requires more than knowledge of the personal histories of individuals. It requires a synthetic framework that links family members and their life histories.

Our understanding of women's lives is bound to be enriched by applying both life-span and multi-generational analyses to their life histories. Promising targets are the problems of interdependence that stem from collective family needs, on the one hand, and individual achievement, on the other (see Elder, Downey, & Cross, 1986). Family relations both enhance and curtail the life chances of women by influencing their opportunities for achievement through education, occupation, and marriage. Individual achievement, in turn, can strengthen or weaken family bonds. This social dynamic has characterized women's scheduling of family events and individual achievement at least since the 19th century.

#### Hard Times and Women's Functioning in Later Life

Life course analysis is challenged by early events which influence subsequent development, aging, and health. This challenge stems in part from the search for explanations of diverse adjustments in old age. Lieberman (1975:136) observes that "we can always point to some individuals who seem to grow as a result of the crisis, other individuals who appear to handle the situation without showing any marked effects, and still others who wither--



who cannot cope, who experience severe psychological distress or become somatically impaired." Can we identify life experiences that provide clues to this adaptational variation many years later?

Time and again we have found subgroups and individuals that differ markedly in how they manifest initial life changes. One of the clearest examples of the adaptational contrast comes from a comparison of the influence of Depression hardship (1929-39) on the health of elderly women from the middle and working classes of the 1920s (member of the Guidance Study, parent-generation). In each stratum, some women were deprived by income losses of more than 34 percent, whereas others were relatively nondeprived, especially with the large decline in cost of living. For lower-status women of the 1900 generation (Elder & Liker, 1982), exposure to hard times generally increased passivity, low self-esteem, and feelings of helplessness (assessed in 1970). By comparison, economic hardship generally enhanced the adaptive resilience of higher status women. A stress and resource interpretation seems to fit this class difference: economic stress was more prolonged in the working class, and middle-class women entered the 1930s with more adaptive resources than their lower-status counterparts. As such, they were better equipped to surmount the hardships of the decade.

Missing from this account is a theory that explains how economic stress in the 1930s could make a difference in health some 30 or 40 years later. One theory suggested by research to date is based on the premise that life changes entail some loss of control over the situation and also affect the situation's meaning or interpretation (such as to cause). A promising way to test and elaborate this hypothesis emerged from an exchange with Martin Seligman and his pioneering research on learned helplessness (1975). Following a series of experimental studies, Seligman and associates (1979) arrived at a general conclusion that has profound implications for how early effects persist: a depressive attributional tendency (events seen as caused by self, as global, and as permanent in effect) puts the person at high risk for later depressive symptoms, but only when a similar bad event occurs. Causal inferences about one's deprivational experiences in the 30s thus have implications for old age when such losses are encountered once again. The health disadvantage of income loss during the 1930s might appear in old age only when a depressive outlook fashioned by Depression hardship interacts with negative events to produce feelings of helplessness, despair, and ill health.

Two research issues emerged from this interaction. The first concerns the role of life changes in the formation and modification of attributional tendencies. Are severe and prolonged deprivational experiences a factor in whether people misconstrue their life situation or environment? The second issue centers on the mediational function of attributional tendencies in relations between life change and health. This function is based on the assumption that such dispositions are relatively stable. A third issue has to do with measurement. Can we measure attributional tendencies by coding cause-effect statements that are drawn from interviews? Seligman and his research team have managed to do so in a number of projects. The major requirement is that the statements be first-hand reports in interviews; they can not be filtered through the interpretations of another person.

We could not meet this requirement with archival data on the Berkeley women from the 1900 generation. Their only verbatim interview was completed in 1970. As an alternative, we found that we could explore attributional processes in the adult lives of these older women's children. These children were interviewed on several occasions during childhood and adult interviews

were conducted at ages 30, 40, and 50. Little can be said about this analysis since it is still underway.

### Summing Up

Three prominent and fruitful lines of empirical research are represented by the timing of lives through marital age, by the dependence of individual behavior and family ties, and by the relation between early and late experience. They are prominent in the research we have done over the years, and they represent areas of great potential in the larger field of life course studies. Much attention to date has focused on the timing of events in the transition to adulthood. Very little research, by comparison, has traced out the effects of differential timing of such events for subsequent transitions, achievements, and relationships. Variations in family timing (of marriage, births) have largely unexplored implications for age differences along generational and marital lines.

The dependence of individual behavior and family relations offers a fresh view of the life course in some respects, especially among women, but in other respects it marks a well-established domain of study, that of socialization. An increasing proportion of American women are enmeshed in kin systems with three to five surviving generations. Having more surviving generations in our lives (Hagestad, 1982), it is important that we collect life histories that capture these facts. The intergenerational relations that occur at a point in time mirror a long span of interlocking lives.

The increasing longevity of women and men has given increased significance to the quest for knowledge concerning the threads that link early and much later experience. Why do loss experiences early in life seem to have such powerful implications for the old age experiences of men and women? To explain adequately connections across the life span, we may have to work with a number of archives that have special strengths. Judicious pairing of longitudinal life history archives may and can produce an analytic design of unusual power for the question at hand.

### Overview

My twenty years of research in the longitudinal vineyards are marked by countless trials and errors, cul de sacs, and a uniquely developmental experience. I began the journey with the good fortune of rich archives at the Institute of Human Development, and soon discovered that they did not include life records or histories. There is a lesson in this discovery; good matches between question and archive can and often have to be achieved. The right data set is not always available; it may have to be redesigned.

There are many things that could be said about the use of longitudinal life history archives in the study of lives. These include a review of relative strengths and weaknesses of prospective and retrospective life history designs; methods for linking levels of analysis; and statistical models for the analysis of life record data. More important, however, is the general approach to life course analysis and data sets.

In view of the cost of longitudinal studies, there is understandable pressure to establish some guidelines for the investment of research funds. However, data sets and archives have particular meaning when they are viewed from the perspective of a particular question or framework. Powerful designs can be developed by combining data sets or study archives that individually fall short of acceptable standards.

For many decades the eclectic data-collection regime of the Oakland Growth and Berkeley Guidance studies at the University of California have been a target of criticism. This breadth that seemed undisciplined to many now represents a virtue. The archives are valuable today in large part because their depth and breadth provide an unsurpassed resource for the study of social change and lives. They were not designed for the uses I had in mind. As in many instances of archival use, the challenge is to make the best of what we have in addressing important research questions (Hyman, 1972).

One way to make the best is to rework the archive through new codings and data files. I have briefly recounted my efforts along this line, first with the Oakland Growth archive and then with the Berkeley Guidance data. Life history data sets were prepared for both archives and the planned analyses. The option for recasting an archive depends on the availability of qualitative materials, such as transcribed interviews and observations. Highly structured interviews in panel surveys do not allow this option.

Three problem foci in our research identify promising areas of study relative to women's lives: the timing of lives, as in one's age at marriage; the relation between individual behavior and family relations, a problematic relation for women in particular; and the causal linkages between early and late experiences, as in the connection between young adulthood and old age. Research questions in these and other areas emerge in part from ongoing studies and from archival use.

My efforts to develop a perspective on the life course owe much to archival work and analyses, such as those reported in Children of the Great Depression. Observations of archival facts and especially new facts frequently led to the posing of reformulated questions. To paraphrase Schopenhauer's reflections on creativity (quoted by Mayr, 1982:30), effective use of life history archives often entails "thinking something that nobody has thought yet, while looking at something that everybody sees."

## Notes

1. One of the most important markers of this development was published in 1972 as Aging and Society, (Eds.), Matilda W. Riley, Marilyn Johnson, and Anne Foner. The first volume of the Annual Review of Sociology published an overview of theory and research on age and the life course (Elder, 1975). In the general field of life-span studies, David Featherman (1983) prepared a state-of-the-art essay as the 1980s arrived, with emphasis on intellectual development, status attainment, and the life course of families and individuals (see also Sørensen, Weinert, and Sherrod, 1985). Hannan and Tuma (1979) report substantial progress in the refinement of statistical models for the analysis of social dynamics. See also Nesselroade and Baltes (1979) for analytic developments in the study of life-span processes. The growth of longitudinal studies is suggested by Schulsinger, Knop, and Mednick (1981); Mednick and Baert (1981); and by Elder (1985).

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