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American Sociological Review, Vol. 52, No. 1 (Feb., 1987), 1-14.

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ON THE SIGNIFICANCE OF AGE IN SOCIOLOGY*
American Sociological Association, 1986 Presidential Address

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A sociology of age provides an analytical framework for understanding the interplay between human lives and changing social structures. Its mission is to examine the interdependence between (1) aging over the life course as a social process and (2) societies and groups as stratified by age, with the succession of cohorts as the link connecting the two. This special field of age draws on sociology as a whole and contributes to it through reformulation of traditional emphases on process and change, on the multiple interdependent levels of the system, and on the multidimensionality of sociological concerns as they touch on related aspects of other disciplines.

My hope for this eighty-first Annual Meeting of the American Sociological Association and for my talk as President is to focus on the integration and cumulation of sociological work and so, perhaps, to enlarge upon the intellectual power and influence of sociology. In pondering over so ambitious a hope, I propose to link sociology to the recent development of one sociological field, the sociology of age. As I look back over my own experience, I become more and more aware of special ways in which the sociology of age not only draws on sociology as a whole but also contributes to it. As with other special fields, I believe that an understanding of age can clarify and specify time-honored sociological propositions, raise new research questions, demand new (as well as the old) methodological approaches, and even enhance the integrative power of our discipline (a power eroded in recent years through pluralism and disputes).

In speaking of sociology,[1] I speak from my own experience—from my continuing struggles in doing research or in interpreting the work of others; from a most unorthodox formal education; from participation as a woman in diverse family, business, academic, and government roles; and from mere survival throughout my 75 years in the twentieth century.

In speaking of age, I speak for many of us[2] who have been working in this area (Riley, Johnson, and Foner 1972; Riley, Foner, and Waring forthcoming) and shall focus on two topics: aging over the life course and age as a structural feature of any changing society or group. My theme is that these two topics, though clearly distinct, are interdependent in significant ways. There is a continuing interplay between aging and social change, with each one influencing the other. Neither can be fully understood without the other (Riley 1978). To us this is an exciting theme because it leads to new avenues of sociological understanding. My discussion of the theme is organized around three emphases that drive the sociology of age and link it to sociology as a whole: the dynamic emphasis, the emphasis on multiple interdependent levels of the society or group, and the emphasis on the multidimensionality of sociological concerns as they touch on related aspects of other disciplines.

CONGRUENCE OF THEORY AND METHOD

First, a word about the basic dilemma, generic to all sociological fields, of fitting together theory and method. We immediately encountered this dilemma when a number of us, quite by chance, embarked upon the study of age. In the 1960s, Russell Sage Foundation offered funding to continue our Rutgers research on intergenerational relationships *provided* that we would pause to summarize existing social science knowledge about the middle and later years of life—a simple task, they thought, for a couple of research assistants. In fact it took seven of us five years to sort out and codify the available data (published in the first volume of *Aging and Society*—Riley, Foner, Moore, Hess, and Roth [1968]). We unearthed a plethora of presumed empirical findings but, to our dismay, many had to be discarded as scientifically invalid. Some used faulty methods; others,

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I am indebted for comments on earlier drafts to Kathleen Bond, Randall Collins, Dale Dannefer, Anne Foner, Dean Gerstein, Beth Hess, David Kertzer, Robert Merton, Bernice Neugarten, Marcia Ory, John Riley, Harris Schrank, Neil Smelser, and Joan Waring.

[1] Bibliographical references are purely illustrative.

[2] Not mentioned by name in the text, though many are listed in the works cited.

lacking an adequate conceptual framework, misinterpreted the data. There were some scattered empirical generalizations: for example, that childhood experience leaves an indelible imprint (but see Brim and Kagan [1980]); that modernization lowers the status of the elderly (Burgess 1960); or that, in anticipation of impending death, there is a mutual and satisfactory process of disengagement from social relationships on the part of both the older person and society (Cumming and Henry 1961). But such generalizations had not been carefully examined in light of the evidence, nor their specifying conditions articulated in detail. With age such a pervasive element in society, we wondered why no full-fledged sociology of age had yet developed. We certainly could not have foreseen the 1986 treatments of the theme of these American Sociological Association meetings: Social Structures and Human Lives. Back in the 1960s, it was the overwhelming weight of the empirical findings on age that prompted our early efforts toward a new conceptual framework for interpreting them.

Our first task was to identify sources of misinterpretation, and to define types of fallacies in research on age (Riley 1973). The most common error (generically recognized yet often committed) was to interpret age differences in cross-sectional studies as if they were *caused* by the process of aging. As an obvious example, the fact that, in cross section, old people had less education than young people would certainly *not* lead one to infer that a person's educational level declined because of aging. Surprisingly, many such "life-course fallacies" persist even today, as when medical textbooks continue to use cross-section data to demonstrate putatively inevitable physiological deterioration with aging. Such fallacies persist even where age is known to be a spurious factor—with the correlation traceable instead to age-associated diseases or events, or to cohort differences in life-course experiences. When these fallacious assumptions of universal decline due to growing old are accepted unthinkingly in the sociological as well as the popular literature, they create stereotypes that operate destructively as self-fulfilling prophecies.

We also encountered fallacies of "cohort-centrism" in which members of all cohorts (for "the past five or ten thousand years," as Daniel Levinson and his colleagues claim [1978, pp. 41, 322]) were erroneously assumed to age in the same fashion as members of the particular cohort under study. This fallacy is especially prevalent in conjectures about "inevitable" life-course stages that are often based on data about a single cohort, typically of white males. Yet it is well known, of course, that the young of today will age differently from those already old, who have lived through two world wars, the Great Depression, and drastic changes in family relationships and norms.

Moreover, when we began our studies, few of the underlying concepts—such as aging, the succession of cohorts, age structures—had been fully formulated (despite the important early work of Eisenstadt [1956], Cain [1964] and Ryder [1965]), nor had their complex interrelationships been specified. Even the terminology managed to be confusing: thus the noun "age" refers to all ages, but the verb "to age" had only the narrower connotation of growing *old,* not the more useful connotation of growing *older*. To achieve a degree of clarification, we had to settle on an arbitrary nomenclature, such as "aging" to include the lifelong process from birth to death, and "cohort" for a set of people born at the same time (reserving "generation" for the kinship context).

Our efforts here to align theory and method, as I now view them, reflected the theme of much of my own earlier work and the focus of my textbook, *Sociological Research* (Riley 1963), written a quarter century ago—the work of which, in retrospect, I am most proud.[3] My goal then was to show that sociology can avoid the pitfalls of theoretical parochialism and inappropriate methodology. Our similar attempt in the sociology of age to integrate theory and method with the aid of a new analytical framework is firmly grounded in the three emphases linking the sociology of age to sociology at large.

THE DYNAMIC EMPHASIS

The first of these links derives from the dynamic emphasis. In studying age, we not only bring people (women as well as men [cf. Homans 1964]) back into society, but recognize that *both* people and society undergo process and change. The aim is to understand each of the two dynamisms[4]: (1) the *aging of people* in successive cohorts who grow up, grow old, die, and are replaced by other people; and (2) the *changes in society* as people of different ages pass through the social institutions that are organized by age. The key to this understanding lies in the *interdependence* of aging and social change, as each transforms the other.

[3] Robert Merton, as editor, dictated many pages of comment—his son had just given him his first tape recorder and transcription often caused difficulty for the typist, as when Parsons's "pattern variables" came through as "pet invariables."

[4] The term *dynamism* denotes both process and change (or stability).

In Sociology

This emphasis on the social dynamics of age reflects a concern of sociology as I first knew it. Back in the 1920s, when I was an undergraduate at Radcliffe, there were no formal courses in sociology there. I studied history and was deeply concerned with political, economic, religious, and intellectual change. Soon after, when I married Jack and he entered the newly formed Harvard Department of Sociology, we felt the high excitement of discovering a convergence between his studies with Pitirim Sorokin of social change and its meanings, and my studies with Irving Babbitt of the universals in human thought that persist across time and across societies. Sorokin was analyzing the great historical swings between the polar types of adaptation he then called "Epicurean" and "Stoic." Babbitt illustrated through the lives of writers and characters in literature the contrast between a "humanist" moral order and a "naturalistic" excess (as in Romantic spontaneity or Utilitarian materialism).

However, when I sought a job to help support my husband's graduate studies, my pursuit of dynamic analysis had to be temporarily interrupted. The professor of history who wanted to appoint me for the only available teaching assistantship was turned down because his dean said, "As a woman she will not continue a career." The Harvard Department of Sociology, which did take me on as its first research assistant, provided cross-cultural (if not cross-temporal) experience in analyzing all the European Le Play studies of family budgets. I also remember calculating by hand literally hundreds of square roots to aid Sorokin in the monumental task of classifying and counting (according to his categories of meaning) many thousand works of art, wars, revolutions, economic conditions, scientific and technological developments, and *all* the historical figures in the *Encyclopedia Britannica*. (Of course, Sorokin was working without benefit of modern sampling or computers [cf. Riley and Moore 1963].)

Thus, as I first became part of the American sociology of the early 1930s, there was a major focus on social and cultural dynamics. These dynamics were seen as embodiments of long-term fluctuations in the values and meanings that shape human lives. Two decades later, the dynamic emphasis was often submerged in a preoccupation with social structure. Yet, it was never fully lost. In my own subsequent analysis of the situation at mid-century (summarized in Riley and Nelson [1971]), it was clear that not only those theorists (such as Simmel) who emphasized social processes like conflict or adjustment but also others (such as Parsons) who used structure as a practical starting place could both be seen as entering at different points into the same continuing dynamic of social interactions. Among those with theories widely criticized as static, Parsons and Shils (1951, p. 233) stated that "organization" and "dynamic process" are "the two aspects of the same phenomenon"; and Barber (1956) showed that "there is nothing static" in the concept of social structure "except in the sense that all process is assumed to have an analyzable structure at any moment in a time series." Nor was the midcentury empirical absorption in the development of cross-section surveys, also often maligned as static (e.g., Coleman 1986), entirely devoid of dynamic concerns—witness the panel studies of voting behavior introduced by Lazarsfeld and his colleagues (1944).

In the Sociology of Age

Today in sociology the dynamic emphasis has been recaptured through the special field of historical sociology, longitudinal studies of many phenomena, and analyses of conflicts and social movements producing social change. In studies of age, this emphasis is pervasive. Karl Mannheim's ([1928] 1952) early work, "The Problem of Generations," written in the Germany of the 1920s (but not widely available in English until the 1950s), has a more recent counterpart in Norman Ryder's (1965) use of the "cohort as a concept in social change." So, too, William Ogburn's (1936) early concept of "cultural lag," as changes in social institutions and popular philosophy fell behind technological and economic advances, has a recent counterpart in the concept of "structural lag" (Riley, Foner, and Waring forthcoming), as outmoded social institutions fail to provide opportunity for the unprecedented twentieth-century increases in numbers and political and economic power of people in the oldest age strata.

Yet, if sociology at large has been concerned with *separate* analyses of societal changes and individual life-course processes (such as socialization or status attainment), in the sociology of age we face the complexity of examining these two dynamisms together, as interrelated. In order to clarify and specify the nature of these dynamisms and their interrelationships, a number of principles have been generated which abstract from this complexity. I shall outline three of these principles, using a schematic representation of an "age stratification system" that relates the two dynamisms to one another (for details, cf. Riley, Johnson, and Foner 1972; Riley, Foner, and Waring forthcoming).

You can imagine a social space bounded on its vertical axis by years of age (from 0 to 100 or

more) and on its horizontal axis by dates (say, from 1900 to 2000) that index the course of history. To represent the dynamism of aging, imagine in this space a series of diagonal bars. Each bar represents a cohort of people, born at the same time, who are aging—that is, moving across time and upward through the social structure. As they age, they develop biologically, psychologically, and socially: they move through the stages of family life, school grades, career trajectories, into retirement and ultimate death. They are continually being reallocated to new sets of roles and resocialized to perform them. This movement with aging occurs partly by individual choice, but it is also channeled by the rules, linkages, and mechanisms governing role sequences within the social structure.

But it is the whole succession of diagonal bars—the flow of cohorts—that draws attention to the significant fact here: because each cohort is born at a particular date, it lives through a unique segment of historical time and confronts its own particular sequence of social and environmental events and changes. Thus it is cohort comparison that brings us inexorably to the first principle (early formulated by Ryder [1965]), namely: because society changes, people in different cohorts age in different ways. The aging process is altered by social change. We call this the "principle of cohort differences in aging."

To illustrate this principle, one familiar example concerns retirement among males. Long-term social changes (in occupations, pension plans, etc.), combined with increases in longevity, have markedly altered the aging process by extending the years spent in retirement. Cohort differences in retirement mean that a twenty-year-old man in 1900 could scarcely have looked ahead to retirement at all; today such a man can expect to spend nearly one quarter of his adult lifetime in retirement. These added retirement years have important consequences for income, social involvement, leisure, health, and indeed nearly all aspects of the process of aging.

Now consider the other dynamism, social change. Imagine within this same social space a vertical line that represents a society or group at a given moment of time (such as today). More realistically, since society is moving through historical time, imagine a succession of vertical lines (as from 1900 to 1986 and on beyond 2000). Now note: each vertical line is a cross-section slice through all the diagonal lines—that is, a slice through all the coexisting cohorts. This means that it is members of different cohorts who form the "age strata" of people in the society—the familiar broad social divisions by age (as among children, adolescents, middle-aged adults, and old people). People in the several age strata differ, then, not only in age but also in the historical experiences to which their cohorts have been exposed. And they are further differentiated by age criteria (customs, laws, or bureaucratic rules) for occupying and performing social roles.[5]

This recognition of layers of cohorts as strata within society leads to the reciprocal second principle: because members of successive cohorts age in new ways, they contribute to changes in the social structure. This is the "principle of cohort influence on social change." As society moves through time, the age strata of people and roles are altered. The people in particular age strata are no longer the *same* people: they have been replaced by younger entrants from more recent cohorts, with more recent life experiences. As Rose Coser has shown (unpublished manuscript), the "world of our mothers" is unlike our world of today. Consider once again the example of retirement: as fewer and fewer older people in each successive cohort remain in the workforce, it is not only the kinds of people in the oldest age strata who are altered. Many roles, institutions, and norms are also affected in all the strata: changes emerge in norms of achievement, the nature of leisure, the appropriate age for Social Security, or the tax burden on younger people still in the labor force.

Bringing these two principles together offers an analytical view of a continuing interplay—energized by cohort flow—between individual aging and social change. In the retirement example, this interplay is illustrated in the sequential alterations in work lives, the consequent restructuring of work in the society, followed by still further modifications of the aging process. An outline of the interplay (Riley 1978) looks as follows. In response to social change, millions of individuals in a cohort begin to develop new age-typical patterns and regularities of behavior (changes in aging); these behavior patterns then become defined as age-appropriate norms and rules, are reinforced by "authorities," and thereby become institutionalized in the structure of society (social change); in turn, these changes in age norms and social structures redirect age-related behaviors (further changes in aging). Through such a dialectical sequence, the members of each cohort, responsive to social change, exert a collective force for further change as they move through the age-stratified society: they press for adjustments in social roles and social values, influence other people throughout the age strata,

[5] The concept of age norms as social controls was developed early by Bernice Neugarten (see Neugarten, Moore, and Lowe 1965).

contribute to continuing alterations in both aging and social structure (see, e.g., Foner and Kertzer 1978).[6]

The third principle emphasizes a quite different and often-overlooked fact: the two dynamisms, aging and social change, though they are interdependent, are not synchronized with one another—the "principle of asynchrony." Each dynamism has its own tempo. Within each cohort, people moving along the axis of the life course are born and die according to a rhythm set by the approximate current length of the human lifetime. In contrast, social change moves—with no comparable rhythm or periodicity (cf. Sorokin 1941, pp. 505ff.)—along its own axis of historical time; it is influenced by imbalances, strains, and conflicts within the age stratification system, as well as by external social and environmental events or evolutionary changes in the organism (cf. Featherman and Lerner 1985). People who were young earlier in this century learned the age norms and patterns of behavior prevalent in that period; most learned from their parents that only a few years of schooling suffice for most jobs; and from their grandparents that old age can be bleak. But now that these people have themselves grown old, they have outdistanced the world for which they were initially prepared. Similarly, cohorts of people who are young today are perceiving the entire occupational ladder as it is now—before it has had time to be further transformed by fast-breaking technological innovations and accompanying changes in the age structure of the future. These young people will not be old in the same society in which they began. In short, while individuals within a particular cohort are aging, the society is changing around them.

To summarize the dynamic emphasis in the sociology of age: society is composed of successive cohorts of individuals who are themselves aging in new ways and are continually forcing their predecessors into and out of the roles in the social structure. This flow of cohorts forms the channel that connects the two dynamisms of aging and social change: it ties them both to the forces of history, creates the asynchrony between them, and presses for still further alterations.

However, macrolevel changes in society and microlevel changes in individuals are only the polar extremes. To examine how they influence each other we have to probe more deeply into the complex intervening structures and mechanisms that underlie the abstract principles I have outlined.

[6] This interdependence of complex processes rules out any simple notions of a unidirectional causal chain (cf. Boudon 1983).

MULTILEVEL EMPHASIS

Here we turn to the second link between the sociology of age and its intellectual parent: the multilevel emphasis. In studying age, we attempt to retain the dynamic emphasis—not just at one level (either macro or micro) but at several interrelated levels: the larger society, institutions, groups, networks, strata, and individual actors.

Sociology

These incipient efforts are again reminiscent of my own youthful experiences in sociology, which led quite naturally to a multilevel approach. (By good fortune I was taught early that, in solving practical problems, one can often contribute to basic sociological theory and method [cf. Smelser 1985].) As if in preparation for the effective midcentury convergence in sociology between social system theories and survey methodology, I had worked in market research in the 1930s (when, incidentally, I was joined by Paul Lazarsfeld on his first visit to this country; he then found market research in some respects more advanced than academic research). In market research, we developed many new techniques in conducting studies on everyday matters: like methods of washing clothes, popular tastes in music, or contraceptive practices. (Nearly 50 years ago Jack and I published in the newly established *American Sociological Review* the first national survey of contraceptive use.) Rather than simply aggregating atomized individual opinions and attitudes (as in much of the political sociology or mass communication research of that time), market studies focused on household groups composed of individual decision makers, or on interactive systems composed of wholesalers, retailers, and consumers.

These early developments in market research sparked much of the empirical work in the sociology of the 1940s and 1950s, and they laid foundations for sociological theories of multilevel systems that are central to the sociology of age today. Merton and Alice Kitt (now Rossi [1950]), in explaining findings about aggregated individual attitudes of American soldiers in World War II, elucidated a theory of reference groups. Jack and I (Riley and Riley 1959), in interpreting the diverse findings from mass communications research, outlined an interactive system model in which individual members of the audience, and the communicators themselves, are each surrounded by influential primary groups and personal networks. I remember working with Parsons, as he interpreted the findings from many studies of voting (Parsons 1958) to describe the polity of the United States as an "integrated system" (his

term) in which millions of individual voters are influenced by their memberships in diverse solidary groups, and these groups are in turn meaningfully related to central political issues and aligned with one of the two national parties. By 1969, Inkeles had examined the influences on individual attitudes of both the macrolevel forces at work in modernization of countries and of the related microstructural developments in schools, factories, and the mass media.

In retracing such sociological roots of the work on age, I am struck anew by the midcentury struggles (including my own) to include the *subjective* aspects—meanings, values, ideologies, norms, orientations—as well as the objectively observable aspects of multiple-level systems. When involving individual actors as the smallest units, some studies focused on "structures of interpersonal orientation" (Riley, Cohn, Toby, and Riley 1954) that took into account subjective definitions, feelings, and evaluations underlying the overt interactions. The principle that attitudes and feelings can be structured among—as well as within—individuals, was readily adopted by theorists (following Weber [1922] 1957 or Mead 1934); but it was less evident in the methodologies of that time. Most of the remarkable contributions to measurement and analysis (as in the work of Guttman, Lazarsfeld, and Stouffer) referred less to multilevel systems than to individuals, aggregates, or groups as entities (cf. Riley and Nelson 1971). For example, in our own attempts to measure group status (Riley, Riley, and Toby 1954; Riley 1963, p. 453), it came as a considerable surprise to uncover a latent "division of labor" in which a person achieves highest status only if he or she is regarded as an associate by certain group members, chosen as a friend by an entirely different set of members, and followed as a leader by still others. (Lazarsfeld once confessed privately that he had spent one long night attempting to derive our social system findings through random combinations of *individual* attitudes.)

Similar difficulties in relating system levels appeared in the study of friendship process (Lazarsfeld and Merton 1954) in which Lazarsfeld's scheme for panel analysis could not handle Merton's detailed account of the "patterned sequences of interactions." The Lazarsfeld scheme (his well-known 16-fold table), designed to study individuals but here transferred to friendship groups, could show only how many members liked or agreed with others, but not which members. The effect was to reify the group by obscuring any internal "division of labor" whereby individual-level changes in affect or attitude might affect the group-level formation or dissolution of friendships (Riley 1963, pp. 562, 728 ff.).

Although the lessons for subsequent work on age were then farthest from our thoughts, similar procedural difficulties confronted our own efforts at empirical research on interpersonal relationships that are differentiated and multilevel. In a study of social control networks (Riley and Cohn 1958) that followed the traditions of George Herbert Mead (1934), Cottrell (1933), and Moreno ([1934]1953), high status in the adolescent peer group was found to depend upon both approval from friends and disapproval from enemies. To follow this analysis across levels from individual, to dyad, to network, to total group, we were forced to contrive new techniques (Riley 1963, p. 727)—challenges that still obtain in multilevel studies today (e.g., Coleman 1986).[7]

Though many of the multilevel studies at midcentury were purely static or descriptive of ongoing processes, others emphasized change. For example, the study by Coleman, Katz, and Menzel (1957) of diffusion of an innovation (adoption of a new drug) showed how, over a period of months, some doctors were influenced through chains of professional relationships to adopt the drug early; others were influenced through friendship relationships with fellow doctors to adopt somewhat later; while the last adopters, less subject to the mediation of social influences, appeared to respond directly to the macrolevel persuasions of advertising and promotion.

Leading directly to our much later work on age is the suggestive early finding, from Merton's (1948–49) comparisons of "locals" and "cosmopolitans" who differed in the nature of ties to their community, that it was the locals who arrived at positions of influence at relatively later ages—it took them longer to "make good." (As we now put it, individuals within a cohort grow older in different ways and at different rates depending on their location in the social structure [cf. Dannefer 1984]; but across cohorts, aging patterns become still more sharply differentiated as social structure itself changes.)

Sociology of Age

Thus, as the sociology of age began to take shape and substance, it could build on developing sociological understandings of multilevel systems and could learn from earlier successes and difficulties in empirical multilevel analyses (just as we continue to learn from such models

[7] We even made mathematical attempts to develop latent matrices for explaining anomalies in the interpersonal relationships actually observed (Riley, Cohn, Toby and Riley 1954, pp. 720ff.).

of the complex macro-microlevel linkages as those developed by Burt [1982], Coleman [1986], and Alexander, Giesen, Muench, and Smelser [forthcoming]). Today we can begin to examine how individual aging and social change operate through the intricate layers of the social system to influence each other. We can begin to clarify the nature of the interdependence between the two dynamisms, and the implications of their lack of synchrony. That is, we can begin to specify the three principles I have outlined—as a few examples from varied settings and at different system levels will suggest.

A. Influence on aging. First, how is the influence of societal change on the aging process mediated through diverse structures and processes within the social system? Here I refer to the principle of cohort differences in aging (to repeat: because society changes, people in different cohorts age in different ways).

Among the major changes altering the aging process from one cohort to the next are the unprecedented twentieth-century declines in mortality (associated with social changes in standard of living, education, childbearing, and public health and medical practices).A century ago in the United States one-third of those born in each cohort had died before reaching adulthood (Uhlenberg 1969; Jacobson 1964); today over three quarters of the cohort members survive to at least age 65, and increasing proportions to age 85—with women, as is well known, outliving men. This remarkable extension of longevity has untold consequences for the shape of the life course and the ways life is experienced in a range of intermediate social structures (Parsons 1963; Preston 1976; Riley and Riley 1986). For one, longevity allows education to be prolonged (cf. Parsons and Platt 1972): in colonial times, children rarely went beyond grammar school; by the first part of our century, 38 percent of young adults had graduated from high school, a figure that rose to over 70 percent in the 1970s and 1980s. So, too, retirement, as I have noted, which was rare and short-lived early in the century, now typically occupies one-fourth of the adult life course. Role relationships in the family have been extended: among couples marrying a century ago, one or both partners were likely to have died before the children were grown; today (if not divorced) they can anticipate surviving together for an average of 40 or 50 years (Uhlenberg 1969, 1980). Today, parents and children live a larger share of their lives as age-status equals than as adult–dependent-child (Hess and Waring 1978; Menken 1985). Prolonged roles mean the accumulation of varied experiences, a "socially expected duration" (Merton 1984) that allows ordering life in new ways. They also mean extended opportunities either to build or to dissolve commitments and solidary relationships (Turner 1970; Hagestad 1981). As dying has been postponed, it now occurs more often in sterile medical settings than in family groups; thus the process of dying itself has been transformed and the meaning of death redefined (J. Riley 1983).

In addition to increases in longevity, many other cohort differences in the aging process are also mediated through changes in social conditions prevailing in various parts of the system. Thus cohort declines in the age of menarche seem related to improved nutrition in particular societies or families. The role of retiree may disappear for cohorts under the demands of war mobilization, or arrive in life's prime for members of cohorts experiencing economic retrenchment. Perceptions of "reading readiness" are affected by pedagogical ideologies to which different cohorts of children are exposed: the practice of sending three- and four-year-olds to school, favored in this country earlier in the nineteenth century and again today, was reviled at the end of the century when "precocity" was viewed as a disease (Foner 1978, p. 358). In seventeenth- and eighteenth-century America, the status and care of elderly ministers deteriorated because of long-term declines in economic prosperity and spiritual ardor in the society as a whole (Vinovskis 1982).

Studies are showing *how* primary groups mediate the impact of particular societal events and changes on the aging process. Thus the character of the family and the degree of its economic deprivation influenced the life-long consequences of the Great Depression for children from different cohorts—affecting their feelings of security, their sense of family responsibility, and many other aspects of their lives (Elder and Liker 1982). In another instance, successive cohorts of children were found to differ, depending on their race, in forms of adaptation to the societal break-up of traditional two-parent families (Hofferth 1985).

Such research has demonstrated that cohort membership, though often treated merely as a contextual characteristic of individuals, actually channels people into particular social locations. Nor does cohort membership mark individuals at birth alone; it affects them at every age, through the groups to which they belong, the others with whom they interact, and the social and cultural conditions to which they are exposed. Some studies are pinpointing particular conditions that could accumulate over time to create cohort differences in aging. Thus experimental interventions demonstrate how specific modifications can improve the functioning of cohort members already old (Riley and Bond 1983): intellectual performance is markedly improved if opportunities for learning and

practicing new strategies are introduced (cf. Kohn and Schooler 1978); slowed reaction time can be improved if social situations provide training, consistent feedback, and encouragement; even in nursing homes, helpless and unhappy residents often improve if staff attitudes become more supportive, training in self-care is provided, and daily regimens are modified to encourage interaction and independence.

In a broader sociotemporal frame, increased instability in family, work, and political ties has led some modern sociologists (Kohli and Meyer 1986) to point once again (following Durkheim) to the collapse of structures that mediate between the individual and society. In their place, the argument goes, the life course itself has become institutionalized (Meyer 1986); that is, social structures are reorganized around the stages of life and, as self-development becomes a dominant value, the aging process is transformed. (If the intermediate structures are indeed deteriorating, the deterioration would constrict the opportunity for "integration" of individual voting decisions through membership in traditionally partisan groups, as Parsons and I discussed it long ago.)

B. Influence on age structure. All such work concerns the consequences of changing social structures for cohort differences in aging. A complementary set of studies asks the reciprocal question: how do age structures arise and change because of differences among cohorts? As one example, the long-term changes in the structure of the family (cf. Imhof 1986), which now commonly consists of no less than four relatively intact generations, are traceable to the increasing longevity of the successive cohorts (e.g., in 1900 more than half of middle-aged couples had no surviving elderly parents, while today half have two or more parents still alive [Uhlenberg 1980]). There have also been cohort increases in divorce and remarriage which, combined with longevity, convert the current kinship structure into a complex matrix of latent relationships among dispersed kin and step-kin, within which solidary ties must be achieved, rather than ascribed (Riley 1983). A new system of kinship is in the making.[8]

Especially significant among twentieth-century social changes has been the "aging" of the population, as successive cohorts have lived longer but (save for the baby boom) produced fewer children. Some contend (cf. Preston 1984) that, in this country, one concomitant of this massive shift in societal age composition is the inequitable allocation of resources between old people and children. In contrast to the "child-centered" society of the mid-twentieth century (Davis and Combs 1950), American society and its institutions today are said to favor the old to the detriment of the young. But the sociology of age shows how this so-called issue of intergenerational equity can be oversimplified and misunderstood. A cohort analysis clarifies what has actually been happening (Duncan, Hill, and Rodgers 1986). When the age strata in society are viewed in cross section, there has indeed been remarkable improvement from the 1960s to the 1980s in the comparative economic position of the old relative to the very young (though both strata fall far below the rest of the population). However, when this structural change is traced back through the lives of the component cohort members, a contrasting picture emerges: as they aged, the children actually gained in economic well-being, while with retirement the status of elderly persons actually deteriorated. The only reason that the elderly improved their relative economic position over time is that new cohorts (benefitting from more advantageous employment histories) are entering old age in a far better financial position than the previous cohorts. That is, the changes in structure can only be understood as the composite of differing life histories of coexisting cohorts.

In the future, of course, many current trends may be reversed. As Sorokin kept telling us back in those ancient days: there is no unilinear progress (cf. Sorokin 1941; Spengler [1918–22] 1926–28). When past histories of cohort members now alive are used as clues in forecasting possible future change (cf. Reiss 1986, p. 48), several of the predicted tendencies do indeed point to possible reversals in long-standing cross-sectional advantages of the middle-aged over the elderly strata. During the past three decades in this country, the later cohorts usually started their lives at higher levels of advantage than their predecessors; but in certain respects the new cohorts are now starting at comparatively lower levels of advantage. In income the median inflation-adjusted wage for a thirty-year-old male head of household has dropped; in family life, the percentage of infants born out of wedlock and of children living in female-headed households has risen; in educational attainment, cohorts reaching old age by the turn of the century will no longer be significantly inferior to younger people; in performance on achievement tests, cohorts of high school students in the United States have shown declines. If such reversals in cohort differences persist through the remaining lives of the cohort members, they

[8] At the extreme, the current Chinese goal of one child to a family would yield a kinship structure without siblings, uncles, aunts, or cousins (David Kertzer, personal communication). In addition, it would constrain kinship ties to increasingly distant ancestral layers, as Dean Gerstein points out (personal communication).

can erode the traditional superiority of the middle-aged over the older strata (cf. Kohli 1985). Moreover, by distorting the expected economic and occupational differentials among age strata, such reversals can produce new sources of age-based tension and conflict (as suggested by Randall Collins, personal communication; cf. Collins 1979).

In all such attempts to understand changes in social structure by tracing the lives of coexisting cohort members, I am only illustrating our principle of cohort influence on social change: when many individuals in the same cohort are affected by social change in similar ways, the change in their collective lives can produce changes in social structure. That is, new patterns of aging are not only caused by social change at all system levels, they also contribute to it. Here we invoke the Weberian tenet ([1904–5] 1930) that understanding social structure requires understanding the "psychological" processes of individual members within the structure. The tenet is sometimes interpreted to assume that the millions of changes in individual lives that converge to influence societal structures and norms are simply aggregated (cf. Boudon 1983, p. 155). However, such aggregation overlooks the multilevel processes through which individual actions and attitudes are patterned (cf. Dannefer 1984).[9] Individuals within each cohort are exposed to social and cultural changes in the multiple groups and networks to which they belong. Similarly, their collective attitudes and behaviors are differentiated, mediated, and expressed through continuing interactions at many system levels: for example, their Protestant ethos, through the preachers and congregations of Calvinist churches; their political attitudes, through mass media messages, discussions with peers, alignment with political parties; their negative attitudes toward growing old, through the messages from the powerful medical profession and the reinforcements from family and friends. At every system level, both social structures and the process of aging are mutable: they influence each other sequentially over time.

C. Asynchrony. At particular times, however, the two dynamisms are not operating in sequential interplay—they are operating simultaneously. Hence they are often poorly synchronized (the principle of asynchrony). The year 1986, for example, marks a point in the lifetime of a person that has little congruence with the point marked by the same year in the history of a society or group. This lack of synchrony imposes strains on both individuals and society; and these strains can ramify through all levels of the system.

The strains of asynchrony are often overlooked—as in an exclusively individual-level focus on life-course transitions. In our own work we have occasionally lapsed into this psychologistic reductionism (Riley and Waring 1976), overemphasizing the disruptions often caused by becoming a mother, or retiring, or losing a spouse. Only later, when the cumulative findings from several studies showed the effects of retirement or bereavement to be far less devastating or enduring than expected, did the conceptual model remind us of the asynchrony: while a person is aging, the society is also changing. More salient for many people undergoing a transition may be the changes that occur, not *in* their personal lives, but *around* them in the environing social structures.

Periods of rapid social change forcibly bring the asynchrony to attention. When familiar structures of family, work, and community are altered, individuals must continually adapt their lives to new norms and new expectations. Such strains were dramatized early in the century by Thomas and Znaniecki (1918) through the lives and families of peasant émigrés from Poland under the impact of industrialization. Just recently in the popular press, 1961 graduates from a women's college described themselves at their twenty-fifth reunion as the "swing class" between predecessors contemplating marriage and children and successors dedicated to careers; in the words of one member, "now in midlife, when children are leaving . . . for some, like me, marriage itself is ending—a 1950s style relationship pulled apart by 1980s reasons" (*New York Times* 13 July 1986). In a similar vein, Russell Baker (*New York Times* 12 July 1986) comments (apropos of mores of sexual conduct) that "if you live to be old, having unlearned in middle age everything you learned in youth, you now have to realize it was a mistake to unlearn all that youthful knowledge, because what you learned in youth has again become correct."

Not only individual lives but also social structures can be disrupted by the asynchrony of the two dynamisms, as the numbers and kinds of people fail to fit the age-related roles available, or as mechanisms of allocation and socialization inadequately articulate people and roles. Nowadays a major current source of structural strain is the long-term failure of our institutions to accommodate the steady rise in the proportion of people who are old. Large strata of older people have been added at the top of the traditional age pyramid, but no comparable activities have been prescribed for them either in the work force or the family; and no adjustments have been made

[9] To treat group processes as the mere aggregates of individual processes is to risk a sociologistic fallacy, as described in Riley (1963, p. 704).

for repercussions in all the other strata. The age structure of roles has lagged behind the unprecedented changes in the age structure of people. This "structural lag" (Riley and Riley 1986) means (apart from individual dislocations) that human resources in the oldest—and also the youngest—strata are underutilized, and excess burdens of care are imposed upon strata in the middle years. (Little did I appreciate the significance of the "roleless role" of older people, when Ernest Burgess spoke of it to me many years ago.)

Such structural strains create their own pressures for change, as in the instance of disordered cohort flow (Waring 1976). Scattered attempts at role changes are currently underway or have been recommended: retraining older adults or preparing them for new careers; providing educational leaves, part-time work, job sharing, or extended vacations; spreading education, work, and leisure more evenly over the life course (Davis and Combs 1950; Riley and Riley 1986). It has been suggested that roles be redefined for older people to build on their competence as "stabilizers of desirable change" (Parsons 1962); or that it is older people, because they have already achieved and have little to risk, who can spark the significant innovations—under certain conditions, it is the old who are "the Turks" and the young who are "the fogeys" (cf. Schrank and Waring 1983). The presence of increasing numbers of people living in a society that offers them few meaningful roles seems bound to bring about changes: capable people and empty role structures cannot long coexist.

In sum, the principles derived from our conceptual model of an age stratification system operate throughout the configurations of groups and institutions in society. The sociology of age, like sociology as a whole, is concerned with complex systems that are both multilevel and dynamic (cf. Burt 1982; Coleman 1986). The field is gradually clarifying the mechanisms linking aging to social structure and social change. It is also reemphasizing Sorokin's principle of immanent change (cf. recent discussions by Smelser [1985] and Collins [1986, p. 1349]). Age dynamisms frequently work at cross-purposes to one another, producing societal imbalances between people and roles. And age structures often contain their own seeds of disturbance and conflict (Foner and Kertzer 1978), producing age-based inequalities, segregation, or malintegration of values (cf. Foner 1974). In contrast with a model of an integrated social system (where sources of disintegration are to be explained), the age stratification model assumes a system with inherent tendencies toward disintegration (where sources of integration are to be explained). A Durkheimian issue of integration is reformulated in a new framework.

THE MULTIDIMENSIONAL EMPHASIS

However, if disintegrative forces are intrinsic to age stratification as a system, as an intellectual enterprise the sociology of age is integrative. Embracing many facets of both people and groups, it is multidimensional—my third and final link between sociology as a whole and this emerging field. Inspired by Parsons's treatment of social systems as related to cultural, personality, and behavioral systems (Parsons 1978; cf. Sciulli and Gerstein 1985), it reaches both toward neighboring disciplines and across other special fields within sociology; and it has significant implications for practice. In our early efforts to develop principles and examine their applicability, we soon recognized the multidimensionality of age. In preparing the second and third volumes of *Aging and Society* (Riley, Riley, and Johnson 1969; Riley, Johnson, and Foner 1972), we worked closely with policymakers, professionals, and scholars from other disciplines, as well as with sociologists (including John Clausen on the life course, Talcott Parsons on education, and Robert Merton and Harriet Zuckerman on science).

The sociology of age involves substantive integration *across* many disciplines (cf. Riley 1986). While recognizing that aging is in certain aspects the proper subject matter of both biology and psychology, it denies frequent imperialist claims of these disciplines (as that enhancing the quality of life for older people depends solely on medical research, or that the origins of human action lie solely in intrapsychic development). Yet, in demonstrating the fallacies of both a biologistic and a psychologistic reductionism (Riley and Bond 1983; Dannefer 1984; Kohli and Meyer 1986; Collins 1986, p. 1348), the sociology of age also avoids a sociologistic reductionism. Sociologically, as we have seen, aging refers to a person's social interactions and relationships; but aging also involves an interplay of social processes with genetic predispositions; changes in immune, endocrine, neural, and other physiological systems; and changes in perceptual, cognitive, emotional, and other psychological processes. Cohort flow is linked to history: for example, the recent powerful convergence of sociology and history was fueled by studies (among others) of historical concomitants of cohort differences at various turning points in the life course (Demos and Boocock 1978). The understanding of dynamic age structures is buttressed by alliances of sociology with economics, political science (e.g., Mayer and Mueller 1986), and anthropology (Kertzer and Keith 1984). Thus in studying age,

sociology builds bridges across its own boundaries. It does not simply divide up the variables by discipline, to be fitted together ad hoc as packages in some total model for which no single discipline takes responsibility. Rather, it reinterprets within a single model those areas where sociology intersects with the age-relevant domains of other disciplines—in the traditions of Sorokin or Parsons (cf. Sciulli and Gerstein 1985), if not of Comte. It presses for an appropriate degree of interdisciplinary integration.

Similarly, the sociology of age leads to substantive integration of diverse specialities *within* the discipline. It offers one perspective on many branches of sociology, including those that emphasize psychological, biological, historical, political, economic, or cultural aspects; and those concerned with other systems of stratification and mobility—social class, gender, race, and ethnicity—all of which cross-cut one another. Thus the generic analysis of stratification systems, their commonalities and divergences, enriches understanding of each discrete type of system, contributing to sociology as a whole (Foner 1979).

It is my belief that this multidimensional character of age goes to the heart of sociology's greatest strength: its integrative power. In recent decades this power has frequently been obscured—in pluralism, parochialism, destructive polemics, extremes of individualistic versus sociologistic explanations, criticisms from within and from without. Such disturbances have sometimes been salutary. Yet, the emergent integrations within the specialized area of age fortify my conviction—that the integrity of the discipline as a whole can be reaffirmed.[10] I have sketched the potential of this specialty for bringing together in one analytical scheme individual aging and social change; for relating these dynamisms to multiple levels—individuals, networks, organized groups, strata, and the larger society; for consolidating intradisciplinary and interdisciplinary concerns; for establishing a core around which new knowledge can become increasingly cumulative (cf. Collins 1986). I believe we can anticipate an era of reintegration, both in sociology as a whole and in the sociology of age as one part of our common enterprise

In conclusion, sociology as I have experienced it over the century has a unique vision of how society operates and changes; how it is constructed through interactions and orientations of its members; and how it in turn guides individual thought, feeling, and action. In retrospect, I see the emergent field of age as reflecting the sociological vision and as illustrating how a single sociological specialty can contribute to its realization. Like other special fields, the sociology of age can reemphasize, clarify, and specify sociological axioms. It can add new facets and formulate new questions while discarding useless ones. It can revitalize dormant areas of sociology and speed the work in rapidly developing areas. It can help dramatize the sociological perspective and stimulate its utilization. But the task is only beginning.

[10] Neil Smelser reports similar integrative impulses in other subareas of sociology, noting important convergences in recent conferences between formerly extreme exponents of macro- versus microlevel approaches, for example, or Marxist versus non-Marxist positions. He cites Alexander et al. (forthcoming) as the product of one of these conferences.

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