

AMERICAN HANDBOOK OF PSYCHIATRY

OLD AGE

ROBERT N. BUTLER

OLD AGE

Robert N. Butler

e-Book 2015 International Psychotherapy Institute

From *American Handbook of Psychiatry: Volume 1* edited by Silvano Arietti

Copyright © 1974 by Basic Books

All Rights Reserved

Created in the United States of America

Table of Contents

[Some General Social and Economic Characteristics of the Elderly](#)

[Psychology of Later Life](#)

[Middle Age as Transition](#)

[Changes with Age](#)

[Bibliography](#)

OLD AGE

Robert N. Butler

For some, old age becomes a consummation of one's life; for others it is an occasion for grief, guilt, and despair; and for many it is complicated by severe socioeconomic circumstances—poverty, inadequate housing, insufficient medical services. In this chapter we shall deal with the nature of old age, its normal conditions, and its potentiality for psychopathology. Definitive pathological conditions are dealt with in another volume of the *Handbook*.

“Many a man goes fishing all his life without realizing it is not the fish he is after,” said Thoreau. In examining the nature of old age it is as perilous to avoid the philosophic as it is the social, psychological, economic, biological, and other perspectives. Philosophic and religious considerations that are helpful in delineating the culmination of the life cycle range from the poetic insights of Ecclesiastes to the emphases upon self-awareness, absurdity, and despair in modern existentialism. These many perspectives bear upon our endeavors to provide therapeutic help as well as upon our understanding of old age.

Old age is one part of a continuing process of the life cycle and cannot be understood in a vacuum. The perspectives of both the life cycle and history are useful. The individual life cycle comprises successive stages and processes

as well as altering modes of being, responsibilities, and tasks. The complex interplay of individual life cycles with socioeconomic, cultural, and historical conditions circumscribes a growing body of knowledge. Knowledge of life cycle features, such as characteristics of various stages, provides the psychotherapist and society with broad guidelines for appropriate support and participation of the elderly.

The importance of history to understanding old age has two aspects. First, there is variation over time in the status and roles of old people. Second, there is the impact of the history of one's own times. The student of aging and the therapist should have an empathic understanding of the historic circumstances of an individual older person. To gain some insight into the impact of historic experience upon older people in the third quarter of the twentieth century, one should read such pertinent works as Barbara Tuchman's *The Proud Tower* and Frederick Lewis Allen's *The Big Change*.

Old people and children have become increasingly socially visible since the seventeenth century. The increased chances of survival, joined with certain socioeconomic conditions, has "unfolded" the life cycle, making its stages or phases prominent. Aristotle, Cicero, Shakespeare, Rousseau, and other philosophers and writers have considered the life cycle as a concept and have proposed various divisions and stages. The Swedish sociologist Ellen Key wrote of the twentieth century as the "century of the child." The

French demographic and cultural historian Philippe Aries, in his *Centuries of Childhood*, emphasized the social and historical evolution of the child in the last two centuries. Victor Hugo, among others, observed the conspicuousness of old people in number and social significance from the turn of the nineteenth century. In the United States, in particular, social psychologists, sociologists, and psychologists have shown some interest in the nature of the life cycle. William James, Mead, Buhler, Havighurst, Benedek, Erikson, Pressey and Kuhlen, and Neugarten are among recent writers who have given attention to the nature of the life cycle with some particular emphasis upon old age and the transitional middle-age period. In 1922 G. Stanley Hall published the first major American study of the psychology of old age. Rothschild, Grotjahn, Goldfarb, Weinberg, Linden, Busse, and Simon are a few American psychiatrists whose work has stimulated research into the psychodynamics of aging as well as into developing treatment approaches.

Nonetheless, the social and psychological sciences and the professions have not succeeded in keeping pace with demographic changes. As Gordon has pointed out, sociology remains primarily concerned with class phenomena. Psychology has demonstrated great interest in child development in this century; the majority of psychological studies do not go beyond early adulthood. In most universities, courses in human development really mean child development, not the development of man throughout the course of life. The mass media have been somewhat more conscious of the

significance of age-grading in human affairs, of stages of life, and of inter-generational conflict. Much has been made of the “generation gap,” for example. However, studies of the so-called generation gap and comparative simultaneous studies of different age groups (such as of youth, the middle-aged, and old people) necessitate the recognition of three generic classes of variables, historical, generational, and life stage. First are historic changes accounting for any differences that are found, for example, different amounts of education. The second class concerns the parent-child relationship, the resolution of the oedipal conflict, the development of independence, and related matters. The third class of variables pertains to differences between one age group and another and to the processes or stages of life. For example, the roles, responsibilities, and preoccupations of a person in middle age must be compared to those of the adolescent or the old person.

How people live their lives, how they change in the course of time, and how they die describes a vast subject. Nonetheless, a comprehensive psychology ultimately requires a theory (and description) of the nature of the life cycle (or life cycles). There may be a number of different channels of human development rather than one. Special problems include the study of the subjective experience of the life cycle, including aging, changes of the body and the self-concept, and approaching death. Because of the intensive, long-term nature of psychoanalytic relationships, psychoanalysts could potentially provide special insights about the nature of the middle years, the experience

of aging and disability, the denouement of character, and the crises of the creative personality moving through time from youth into the middle and later years. However, psychoanalysis and other forms of intensive therapy have rarely been employed with older patients.

Old age cannot be seen as a static, fixed, unitary period, but must be seen as the resultant of a range of forces. In that sense the study of old age has particular value. It is only the elderly who can teach us about the nature of the life cycle as a whole, who can provide us with insights into the ultimate evolution of health—that is, characteristics of survival— as well as of disorders. The elderly enable us to understand the nature of adaptation and survival in the wake of the many assaults made upon man as he moves through time. They can give us special, if poignant, insights into the nature of grief, despair, and depression. If we understood these various subjects better—from our studies of the elderly— our understanding would have general applicability to other age groups. Our educational theories would be influenced by our better understanding of the old. Our treatment of grief and the possibility of suicide in the young would be helped by our understanding of these in the old. In the United States it is the elderly who account for one-fourth of all suicides.

Some General Social and Economic Characteristics of the Elderly

In 1900, 4 per cent of the population was 65 years and older, and the average life expectancy at birth, combining both sexes, was 47 years of age. Life expectancy, of course, is influenced by high infant mortality. With improvements in general public health measures, including sanitation as well as reduced infant mortality, life expectancy has increased to an average of 71 years. The elderly now constitute nearly 10 per cent of the population. The aged group is growing at a faster rate than the general population.

In social terms old age is defined as 65 years and above. The choice of 65 derives from social legislation inaugurated by Chancellor Otto von Bismarck in 1883 in Germany. In terms of biology, aging begins with conception.

Of the 20 million Americans over 65, half are over 73. Gerontologists now think in terms of early and of advanced old age, 65 to 74 and 75 and above. Indeed, the age 65 is an obsolete cutoff point in terms of health, ability, and social status. Life expectancy at 65 is 15 years; for men it is 13 years, for women 16. More than 11 million of the elderly are women; more than eight million are men. More than 13,000 are over 100. Many old people do not think of themselves as old, some because of denial, others because of their excellent status. In 1970, for every 100 older persons over 65, 57 were women and 43 men. There were 135 older women to every 100 older men. The ratio increases from 120 at age 65 to 69 to more than 160 at age 85 and

over. Throughout the world, wherever there are decent living conditions, low maternal mortality, and reasonably accurate statistics, women outlive men.

Most older men are married, most older women are widowed. There are almost four times as many widows as widowers. Marital status is extremely important to understanding the psychology and social situation of the elderly. The elderly woman, usually a widow, is often in a most precarious situation. Three times as many older women live alone or with nonrelatives as do older men. Once again we see the extent to which the older woman is especially isolated. Some 16,000 older women marry each year; some 35,000 older men do.

Seven of every ten older persons live in families. Nearly one-quarter live alone or with nonrelatives. Contrary to the general impression, only one in 20 older people live in an institution. Approximately 5 per cent live in old age homes, nursing homes, and a variety of other types of facilities. Put more positively, approximately 95 per cent of older people live in the community.

White persons make up less than 90 per cent of the total population, but they make up 92 per cent of the older population. This is because of the difference in life expectancy between the white and nonwhite populations. Although the black population dies at a greater rate throughout the course of life, once a black has survived to old age, he has a greater survival rate.

Educational attainment is another important parameter in describing the general characteristics of old age. Since “being educated” in the best sense is not equivalent to the amount of formal education, the meaning of the statistics is suspect. Half of the older population has had only elementary schooling or less, while half of those under 65 have had at least a high school education. Of every 100 older people, eight men and eight women 65 years and older had no schooling or less than five years and are therefore functionally illiterate. These educational disadvantages are pertinent to unemployment in old age and possibly to the utilization of one’s internal resources in adapting to the solitude of old age. Approximately 6 per cent of old people are college graduates.

If one utilizes the highly stringent and conservative poverty index, one out of every four older people live below the poverty line. Thus, in 1969 4.8 million persons 65 and over lived in poverty. Although 10 per cent of the population, they constitute 20 per cent of America’s poor. Eighty-five per cent of the aged poor are white. Between 1968 and 1969 the poor, 65 and over actually increased by 200,000. Many of the old who are poor became poor after becoming old. If poverty is defined more realistically, as many as seven million of our 20 million elderly Americans live in poverty and severe deprivation. For instance, as of January 1971 ten million, that is, one-half of the elderly population of the United States, lived on less than \$75 per week or some \$10 per day. Twice as many aged blacks live in poverty as aged whites.

Social Security and Medicare have not met the income maintenance and medical needs of older people. The average Social Security earnings of older Americans in early 1971 was \$118 per month. Medicare only covers approximately 45 per cent of all health needs and the older person has to make up the rest. Since the life expectancy for black men is 60.1, they often do not reap the benefits of either Social Security or Medicare.

Twenty-nine per cent of the income of the elderly still derives from their own earnings. Three of ten men and one of ten women over 65 are in the work force. This fact must be weighed against age discrimination in employment and the Social Security ceiling on earnings. These conspire to make participation in the labor market painfully difficult. Furthermore, educational level and technological and educational obsolescence contribute to reducing the potentiality of earnings. In 1900 about two-thirds of men over 65 years of age were in the labor market, but by 1970 only one-fourth were. On the other hand, the rate of employment of elderly females increased from about 8 per cent in 1900 to about 10 per cent in 1970. The aggregate income of the elderly is nearly \$60 billion a year. Twenty-nine per cent is earned, 52 per cent comes from retirement, Social Security, and welfare programs, and the remainder comes from investments and contributions.

Older people, black and white, tend to live in central cities and in rural areas. There are particular concentrations of older people in the Midwest

(where the young have left the farm), in New England, and in Florida (to which older people migrate). The majority of aged blacks reside in the South (60.8 per cent). States that have populations of older people greater than the national average include Florida (13.2 per cent), Iowa, Kansas, Maine, Massachusetts, Minnesota, Nebraska, New Hampshire, South Dakota, and Vermont. New York State has nearly two million older people. California, Illinois, and Pennsylvania also have over one million older people. New York City alone has approximately one million old people. Arizona, Nevada, Florida, Hawaii, and New Mexico showed the greatest percentage growth between 1960 and 1965.

The elderly are becoming an important political force. Nearly 90 per cent of all older people are registered to vote, and nearly two-thirds of older people routinely do vote. These are much higher percentages of participation than many other age groups have. The bulk of American voters are in their forties. This is important from the psychological point of view because of the sense of powerlessness that older people feel. They have been displaced from the usual forms of participation in society, and there has been a growing restlessness and “militancy” for “senior power.” With a sense of influence and power comes self-respect, important to any age group or category of individuals. However, at present the elderly have not organized themselves into an effective political force commensurate with their numbers and vote.

Psychology of Later Life

“Man as a work of art” and the search for “life-enhancing” situations, goals, people, and activities were lifelong concerns of the scholar and art critic Bernard Berenson. But he also wrote, “from our conception, everything in existence is out to destroy us.” His diaries written in his eighties and nineties delineate these feelings as one moves through the trajectory of the life cycle. On the one hand, there is growth and development and, on the other hand, involution and death, both occurring simultaneously. These seemingly contradictory processes can only be emotionally and intellectually reconciled (if they can be reconciled at all) by an understanding of one’s relationships to one’s immediate milieu, one’s family, one’s historic era, one’s posterity, and to the generations that follow and the world left behind.

In old age, but beginning in middle age, there is an increasing interest in one’s legacy. This is found in all socioeconomic strata of society. The poor are concerned with what happens to their children in their immediate world, the famous with their immortality. We see the sense of sponsorship of the young, we observe the desire to leave a mark, expressing a deepening personal and social interest. In various forms we may see philanthropy. This inner sensibility, of course, is not observed with equal intensity or frequency in all people as they move through the postmeridian period of life. Some grow increasingly eccentric, bitter, angry, and interior in their preoccupations. It is

difficult to interpret these disparate psychological manifestations because of the variety of forces operating. For example, if one has two-flight dyspnea or lives on \$54 a month or is wracked with pain from a lingering malignancy or chronic arthritis, one may be hypochondriacal, egocentric, cantankerous, indeed. Therefore, one may see exhibited the common stereotypes of old age that are really due to the inimical forces at work—or one may see interest in others and the outside world when circumstances are propitious.

Old people may fulfill the cultural “definition” of the elderly as dependent, resourceless, garrulous, forgetful, fretful, irritable. Some may be coercive, endeavoring to impose values, demand time. Many “characteristics” of old age, then, may be understood as reactions to participation in our society, the facts of disease and poor care, and the impact of poverty. Old age, of course, is also the congeries of outcomes of personalities that may have been shaped in a variety of ways, from early indulgence to acculturated self-reliance in childhood. Variations in personality depend upon both past and present conditions and can be misread. The scientist and the psychiatric practitioner must very carefully evaluate both the historical and contemporary circumstances of the older person in order to make an appropriate appraisal. Both the generalities of old age and the particularities of the individual older person must be evaluated.

We can see manifested in old age constructive, regenerative, and

creative forces.- The sense of legacy or continuity may be seen in many forms, including arrangements for succession, willing of property, donation of the body, its organs or parts, counseling, teaching and sponsoring, and the autobiographical process. The interest in reviewing one's life at times leads to the creation of memoirs of considerable significance. We also observe the resolution of the problem of time (with the end of time panics and boredom) with the development of an appropriate valuation of time. With serenity or tranquility there may develop a sense of historic perspective, the capacity to summarize and comment upon one's times and work as well as upon one's life.

It is common for students of psychology and personality to set up polarities. For instance, in his identification of the issues of middle life, Erikson has contributed the idea of generativity, on the one hand, and stagnation, on the *other*. With respect to later life he has proposed the alternatives of ego integrity and despair. These polarities, while useful, are oversimplifications of extremely complex human experiences. Increasingly students of the middle and later years have a growing respect for the multidisciplinary approach. The Eriksonian description—with only two reference points beyond early adulthood—has not been satisfactorily demonstrated among various socioeconomic and cultural groups.

Cumming's and Henry's' theory of disengagement has become very

popular in recent years. The disengagement theory, however, has been severely criticized and reevaluated by many. The process of giving up objects and taking on new ones is characteristic of the flow of life as a whole, if one takes the life cycle perspective. Young people, for example, must give up their parental attachments and seek new ones. However much difficulty the young may have in finding new object relations, this is certainly a problem of poignant dimensions for the elderly at times.

The disengagement theory of aging has justly been criticized because of the extent to which disengagement may be explained as a consequence of older people fulfilling our culture's role expectations of the aged, as a result of medical and psychiatric disease, and as a consequence of social adversities or socially induced withdrawal, for example, compulsory retirement. If disengagement is an inherent process peculiar to old age, as hypothesized by its authors, it remains to be definitively determined. Findings of the National Institute of Mental Health studies of human aging contrasted with many of the common stereotypes of old age, such as rigidity and disengagement. Tobin and Neugarten and Maddox have presented data that challenge the theory, and Kleemeier has summarized the issues lucidly. That disengagement is conducive to mental health is contrary to the hard data and the impressions of many sophisticated observers. Social valuation, roles, and interaction appear correlated with mental health.

In populations such as the elderly, where changes are frequent, profound, and affect so many systems, bodily as well as social, the advantage of the multidisciplinary approach is undeniable in both the building and testing of theories. There is evidence of many patterns of behavior in old age and great diversity rather than uniformity.

The problems of loss and of associated grief comprise one of the essential issues of old age. The resolution of grief and efforts at restitution are crucial. A complex of factors influence the subjective experience, behavior, and adaptive level of older people. For purposes of convenience, these factors fall into two broad categories: extrinsic and intrinsic. Among the extrinsic factors are personal losses, or sometimes gains, of the marital partner, of children, or other loved and significant persons. Losses can cause isolation and extreme loneliness, and it may be extremely difficult to find substitutes. Anger and extreme rage in addition to grief and despair may be present.

Social losses of status and prestige occur in the absence of roles—the so-called rolelessness of which many writers have written. Socioeconomic adversities resulting from either a lowered income associated with retirement or the inflationary spiral related to the economic conditions of the country profoundly affect the older person. Many older people do not wish retirement, but it is increasingly universal and arbitrary and it occurs earlier than it did formerly. Altogether there may be a crushing sense of uselessness

and a feeling of nonparticipation within the mainstream of society.

The intrinsic factors include those related to an individual's life history, personality, abilities, techniques for adjustment, and qualities for survival. Moreover, one's physical health is a critical determinant of one's well-being. Certain specific physical disabilities, including various diseases, such as cardiovascular and locomotor afflictions, markedly deplete the older person's energies. Particularly disabling are diseases of the integrative systems of the body—endocrine, vascular, and central nervous systems. Perceptual impairments, most especially hearing loss, may lead to depression and marked suspiciousness. Losses in sexual desire and capacity may be especially keenly felt. Organic brain disease that may be minimal or mild may, nonetheless, reduce one's adaptiveness. One may be affected by baffling “little strokes.”

The largely obscure, mysterious, and inexorable processes of aging *per se* may also be classified among the intrinsic factors. Very few phenomena have as yet been definitively established as functions of aging. Among these are losses in the speed of processes and of responses. For example, reaction time is slowed although it is also affected by disease states, depression, and blood pressure.

An especially important intrinsic contribution to the psychology of

aging is the subjective experiences of aging. There is the subjective awareness of the increasingly rapid passage of time. There is the approach of death to which some respond with fear, some with denial, and most with equanimity.' A few wish to die, and many increasingly welcome it, especially in terminal illness. There is a sense of release. I have had patients calmly put themselves to bed falsely thinking they are about to die. Some people consciously or unconsciously panic.

A 75-year-old man of a long-lived family who had been a major figure in American academic life and the author of a number of important books became quite depressed and fearful that he would run out of income before he died. He feared he would be unable to maintain the home of which he was so fond and properly take care of himself and his wife. After Professor J. had come for a number of visits he became more comfortable and revealed that he had almost a million dollars of available funds. In this case, he unconsciously desired to run out of money because of his fear of death. He wished to outsurvive his income.

Reactions to death depend upon one's sense of contribution to others and to those that follow as well as to the resolution of one's life experience. They also depend upon the openness and quality of one's immediate relationships. There is now an extensive literature on dying, including Eissler, Glaser and Strauss, and Kubler-Ross, yet perhaps no one has delineated the problem of personal death so profoundly as Tolstoy. The importance of honesty and the avoidance of isolation have been amply demonstrated. Modern-day secularization makes the process of mourning more difficult; this is one aspect of the more general absence of rites of passage in our society.

The role of death as a disruptive force in social organization has been reviewed by Blauner. The right to die remains a controversial subject.

The autobiographical process manifests itself in many ways throughout the life cycle, at times reflecting predominantly self-analytic or introspective qualities, at other times suggesting a need for self-documentation. A daily journal or diary is distinctly different from the retrospective memoir. In old age comes the salient process that I have called the life review, prompted by the realization of approaching death and characterized by the progressive return to consciousness of past experiences and particularly the resurgence of unresolved conflicts that can be surveyed and integrated. If they are successfully reintegrated, the life review can give new and significant meaning to one's life and help prepare one for death, mitigating one's fears. This naturally occurring process has been found to correlate with adaptation.

A tentative hypothesis linking fragility with aging has been suggested as a result of the National Institute of Mental Health (NIMH) studies. Yarrow observed that with each succeeding set of measurements over time, there was an increasing interdependence of the different variables. Thus, at a particular point, as one and perhaps only one variable began to fail, the whole "house of cards" might shatter. This is a variation of the threshold theory previously held by the multidisciplinary NIMH group: a number of factors operate within the older person; if any one of them or if a number of them collectively attain

a certain intensity, there will be effects upon adaptation and survival.

People throughout life may be so preoccupied with questions that they don't realize how many answers they already have. Through their accumulated experience the elderly have a kind of knowledge and wisdom that may be overlooked both by themselves and by others. The creation of new, important, valued social roles for the elderly along with a sense of pleasure and celebration in life would provide important ingredients to adjustment to old age. Work and retirement patterns are important to mental health.'

Only a limited number of roles are presently available. There are modest programs to help the low-income elderly such as Foster Grandparents, Green Thumb, and Senior Aides as well as the SCORE (Service Corps of Retired Executives). Professional and scientific personnel are "shelved" despite tested ability and the desire to work. Our society has chosen the lazy way out through arbitrary retirement rather than through the individualized approach.

It is particularly important to recognize that the nature of aging and the nature of the elderly are under constant change. Increasingly the elderly are younger, healthier, and better educated. The average age of admission into institutions has increased now to roughly 80 years old. Retirement, whose

length now averages about 14 years, may average 25 years by the year 2000. It is apparent that educational and cognitive obsolescence is induced by our social and technological advances in the absence of continuing education. The scholar of human nature and the psychiatrist must have a vision of the changing characteristics of different age groups over time as a result of transforming social and technological conditions. They must be aware of varying patterns of health care and life expectancy. Newborn infants are not likely to be too different from historic era to historic era, depending, of course, upon basic health and sanitation. But those who have lived through a life of change may be quite surprisingly different from one historic period to another. Moreover, old people are a variegated group and not a homogeneous one. In fact, the standard deviations of various physiological measurements are greater in the elderly than in other age groups. Similarly there is greater variation in the character of old people. There are certain great “levelers,” particularly massive brain disease, illiteracy, and poverty. But when those variables are held constant, the variation and uniqueness of human personality is obvious.

The significance of religion in the lives of old people may be seen in its social function and in the deeper sense of a need to acquire meanings about the nature of human existence and one’s life and death. Older people are not doctrinaire in their religious convictions. One finds beliefs in reunion, reincarnation, and ghosts, as well as in other personal, idiosyncratic religious

ideas. These notions are found in our “advanced culture” as well as among so-called primitive societies.

The old often need to make reparations for the past. They may undertake a variety of expiatory behaviors in order to resolve their profound sense of guilt regarding acts of omission as well as commission. The struggle for atonement demands respect and must not be treated by facile reassurance. Old people generally act as if they had free will and self-responsibility and not as if their behavior were determined by the historic conditions of their childhood. American old people in the third quarter of the century rely heavily upon their beliefs in self-reliance, independence, and pride. This helps account for their difficulty in seeking public assistance even when it is justified by poverty that occurred beyond their control. Old people resist seeking help although they have paid personal and property taxes over the years that would more than cover their cumulative welfare payments.

Suicide reaches its peak in men in their eighties. This partly reflects marginal social status or anomie. Some kill themselves to spare their families economic devastation when they have a lingering fatal illness. Others assert their right to die and request euthanasia. Old people, unlike young people, seem, on the whole, less fearful of death.

A liberation of the traditional patterns of the life cycle, in which

education, work, and retirement are presently compartmentalized in that order, as well as increasing the flexibility of one's sense of identity and of roles, would be likely to shape more creative patterns in old age. Older people harbor urgent desires to change identity—sometimes to the point of wishing to disappear—to move, or to find very different activities. These anti-identity forces are to be respected and should not be seen as pathological. Indeed, we see the dangers of excess identity vividly portrayed in Arthur Miller's *Death of a Salesman*.^o

One of the most striking, important, and adaptive qualities of old age is the continuing presence of curiosity and surprise. This relatively rare type of enthusiasm reflects the successes of the individual in protecting himself from the more usual deformation of his essential human character.

The sense of consummation or of fulfillment in life is more common than recognized but not as common as possible. Both personal and social factors make sustained growth extremely difficult. Obstacles stand in the way of faith in one's self and in one's relationships to others.

Pertinent to our considerations is the problem of our contemporary psychiatric nosology. By strict adherence to the presumed predictive significance of psychopathology, it would be assumed that obsessive-compulsive and schizoid personalities, for example, are impairing at any age

of life. However, in old age both of these may prove to be adaptive. This changing adaptive value of personality and psychopathology may be seen in a number of forms. Because of the insulating aspect of his character, the schizoid individual may be protected from some of the painfulness of old age. The compulsive person may find his ritualistic and fastidious behavior useful in filling the void of retirement. Perlin observed that dependent people may adjust better than independent persons in institutional settings. These three examples show how important it is to utilize psychiatric and personality concepts, not in a vacuum, but in the contemporary context that itself must be evaluated.

Some people hold grudges for a lifetime: hates may outlast love. Nonetheless, reconciliation of long-estranged relatives may occur when the old person confronts the prospect of death.

Much humor concerns changing sexuality in old age. As the result of various disease states, from senile vaginitis to prostatic disease, desire and activity may be affected. Changing aspects of marital relationships from alienation to boredom are influential. Under favorable circumstances of good health, and in good relationships, sexuality proceeds late into life. Once again chronological age per se, while important, may not have such overriding significance as it is often thought.

Older people tend to exploit or deny aging changes and to undertake counterphobic efforts to reassure themselves against aging and disability. Rigidity in old age may be a function of anxiety, as Atkin pointed out in 1941. Weinberg has pointed out that old people may protectively exclude stimuli. This is seen in the older person who hears what he wishes to hear. Old people may not only exploit their disabilities in aging, however. Out of pride they may also refuse to acknowledge vulnerability and dependency. (Young invalids, too, may exploit their disabilities, especially if they fear their needs will not be met.) The dependent needs of the elderly, the reality of their reduced resources, has been stressed by Goldfarb, who, in fact, thinks of age in terms of dependency rather than in terms of chronological passage of time.

In addition to health and social circumstances, personality—the enduring psychological features of an individual—ultimately and profoundly influence an older person’s subjective experience, overt behavior, and level of adaptation. Given equal personal, social and bodily losses, one person may thrive while another fails. The most effective form of adaptation is that achieved through insight; the capacity to modify one’s behavior in accordance with changing realistic circumstances and the willingness and ability to substitute available satisfactions for losses incurred. Another important feature is the development of an inner sense of the life cycle, definable as the sensation of the rhythm, variability, timing, and inevitability of changes. This is a profound awareness of process, maturation, obsolescence, and death. It is

not morbid, but rather is a nonmorbid realization of the precious and limited quantity of life and how it changes. As counterpart of Hartman's concept of the average expectable environment, I have suggested the concepts of the average expectable life cycle as well as that of the *sense of the life cycle*.

Not all older people display the various characteristics and qualities that have been observed in this chapter, but a sufficient number of older people do so, thus revealing the healthy normal trends related to the closing chapter of life.

Middle Age as Transition

Any understanding of old age requires consideration of the transitional period. In her studies of women Benedek described parenthood and the climacterium as developmental phases. There are no biopsychological definitions of the later stages of the life cycle as there are for early childhood and adolescence. We rely primarily upon conventions, usually employing chronological age as the defining variable.

While in old age the autobiographical process manifests itself as the life review, in middle age it has the apparent purpose of stocktaking. It provides an opportunity to consider new possibilities and alternatives in order to reorganize commitments. Alternative possibilities range from fixed rigid closure and fatalism, on the one hand, to varieties of overexpansiveness, on

the other. Another critical element in the middle years concerns the testing of one's personal, professional, and other commitments. This problem of fidelity underlies and includes the narrower question of marital fidelity. One's fidelity to one's neighbor and one's society is also a fundamental issue.

Still another important factor in the middle years—pointed out by Bernice L. Neugarten—is that one begins to count backward from death rather than forward from birth. There may be rehearsal for widowhood. Growing awareness of the realities of aging and death also lead to body monitoring— another phrase of Neugarten's. A man may begin to envy his son's increasing sexuality. A middle-aged woman or man may make obscene or frenetic efforts to be youthful. Hostility toward or envy of the young may come to a head. Fantasies of rejuvenation may be frequent.

Middle age is often viewed as “the prime of life,” but it is the period in which the sense of success or failure may deeply plague and frighten people of both sexes. The man is particularly preoccupied by his occupational and social status and the woman by her status as a parent and loved one. The so-called empty nest phenomenon may affect both the middle-aged man and woman as they see their children leave home and significant responsibilities change. If women continue to gain greater freedom over their lives (from the availability of day-care centers to changes in social, economic, and marital status), it will be interesting to see the effects in the middle years.

The menopause is commonly blamed for the development of psychiatric states in women. Old wives' tales particularly terrify women in this regard. Psychiatric disorders are "explained" by the menopause without deeply questioning why most women do not develop hospitalizable "involutional melancholia." There have been studies among women of various ages of the signs and symptoms regarded as menopausal. So-called menopausal symptoms have been found in adolescence.

It is often said that in Western culture, particularly in the United States, childhood (and youth) is the central emphasis. There is much evidence to suggest, however, that it is the middle-aged who are the "command generation," both controlling and controlled by their pivotal position in the life cycle. Nearly 50 per cent of the U.S. population is under 25 and ten per cent over 65, leaving 40 per cent to bear the social, economic, and personal responsibilities for the two groups who are most vulnerable economically and in other respects to life's vicissitudes. Kluckhohn appraises a culture's values in terms of future orientation, youth orientation, and instrumentality. America, being especially pragmatic, leaves little room for the conceptual and contemplative, and yet these are values that the older person might potentially offer (if their whole life had not been otherwise prescribed). If the older person is valued by his culture and is supported in his opportunities to recollect, reminisce, counsel, and comment upon his experience, the final chapter of life may in the future offer the sense of dignity and self-respect that

optimistic commentators hope for.

Changes with Age

There have been a variety of studies of changes in cognitive and psychomotor functions with age, generally indicating decline. Less frequently have there been studies of personality development and change in the adult years. Little has been specified about the continuity of personality over long time intervals. The elusive concepts of wisdom, experience, and judgment have been difficult for psychologists and psychiatrists to tackle. Longterm longitudinal studies of continuing samples are extremely difficult to obtain for various reasons. What few studies there are of cognitive abilities show the preservation and even the increase in intellectual functioning over the years. This is true of Owens's studies of college alumni. Study of Terman's group of gifted children followed into their late forties indicated that, with few exceptions, the superior child remained superior in adulthood.

When comparisons are made between one age group and another, decline is generally found but there are many methodological issues: survivor bias, historical change, educational level, health, and other differences. In the XIMH studies comparing healthy young controls and healthy old people, the old people did not show the declines of cerebral oxygen consumption, blood flow, and intellectual functioning that had been expected. The long-term

studies of community elderly by Busse" and his group are available. Aging and health in populations was the focus of one international symposium.

Individual differences are remarkable. There are also marked discrepancies between the psychological, physiological, social, and chronological aspects of aging.

Psychoanalytic theory has had a tremendous influence upon our understanding of man, but it has given little attention to personality change after adolescence. Personality is regarded as having been fixed early and the immutability of character is assumed. Practicing psychoanalysts and psychotherapists are often pessimistic about change after middle life. Freud, himself very pessimistic about change after middle life, made most of his great contributions after he was 40 years of age.

On the other hand, psychoanalytic constructs have been extrapolated forward in time and there is question about their application. Heinz Hartmann wrote of the "genetic fallacy." For instance, castration anxiety has been used to explain fear of death in older people, leaving out basic human concern with death per se in old age, which is also reinforced by specific, realistic, personal concerns about the effects of one's death upon other people. Another overused and misused construct has been regression. Among lay people the comparable overused and misused term is "second childhood."

Psychoanalytic theory, particularly ego psychology, is ripe for reappraisal in the light of investigations of the course of the life cycle. Ego functioning may be studied by using elements that deplete the ego such as drugs and organic brain damage. Schuster has reported on one 106-year-old man.

Kelly studied 300 engaged couples first examined in the 1930's and retested in 1955 when they were in their forties. After correcting the correlations for attenuation, Kelly found that individual consistency was highest in the areas of vocational interest and values and was lowest in self-ratings. He observed considerable individual variation and concluded "our findings indicate that significant changes in the human personality may continue to occur during the years of adulthood."

Erikson's work, like Jung's, suggests a kind of passive acceptance of the inevitable. For example, in Erikson's view the last stage manifests ego integrity at best; that is, inevitably "the acceptance of one's one and only life cycle, and of the people who have become significant in it, significant to it, is something that had to be; and that, by necessity, permitted of no substitutions. . . Buhler, on the other hand, sees development in the life course more in terms of attainment of goals through growth. Krapf has described atrophy of the ability to project oneself into the future as a feature of old age.

One major source for understanding the nature of old age is the writings of articulate, perceptive old people. Tolstoy's and Berenson's last diaries are remarkable. The description by the author Eric Hodgins of his "stroke" and the care he received (and didn't receive) should be read by all physicians.

Studies of individuals, especially creative people and people in political life, are important. Politicians and judges are relatively immune from retirement. Psychopathology, aging, and political behavior make for exciting study.

The black aged experience a multiple jeopardy. They are disadvantaged by poverty, suffering twice as much poverty as the white aged. Seventy-five per cent of aged blacks live in deteriorated housing. They are subject to greater incidence of cerebrovascular disease. Ironically, having been subject to prejudice, they may be better prepared for the prejudices operative against the elderly. Much more must be learned about the black elderly. The American Indians, Chicanos, Chinese-Americans, and Japanese-Americans also have yet to be studied in sufficient detail.

The family structure and relations of old people have been the subject of valuable research. The subject of styles of grand- parentage has been relatively rarely studied. Neugarten has differentiated types: the formal grandparent, the fun-seeker, the surrogate parent, the reservoir of family

wisdom, and the distant figure. Grandparentage is sometimes disdained by older people. They may feel exploited as baby-sitters by their children. Negative and conflictual relationships with their children may be revealed in their attitudes toward their grandchildren. On the other hand, grandparents and grandchildren may have very close relationships and enter into covert and secret struggles with the middle generation. Even outside of formal consanguineous relationships, the elderly and youth surprisingly often share values not appreciated by the middle generation.

Personal possessions, including one's home, one's pets, and familiar objects, are particularly significant to the elderly; heirlooms, keepsakes, photograph albums, old letters help support the older person in his environment, preserve his sense of continuity, aid his memory, and provide comfort. Fear of loss of possessions is not uncommon. In some there is excessive possessiveness, at times to the point of hoarding. The situation may create an understandable fear of change. What is to happen to one's belongings upon death is a frequent preoccupation.

The sense of elementality, of an appreciation for underlying perceptions of geometry, of color, and of place, is a particular feature of old age. It may relate to the yearning in the middle-aged, usually not fulfilled, for simplification in one's life.

Uprooting especially affects older people. Reactions to hospitalization, relocation, cataract operations, or transfer from one institution to another may create morbid changes, problems in adaptation, and mortality. Separation and depression are particularly critical in late life. Means of adapting to change include effective use of insight, denial and counterphobic maneuvers (to demonstrate one's capacity to overcome aging), compensatory activities, and acceptance.

Gutmann has written, "psychological differences between age groups may reflect generational discontinuities—such as contrasting modes of early socialization between the generations—and may have nothing to do with intrinsic developmental 'programs.'" Thus, the developmental hypothesis of personality change is most strikingly tested by comparisons of different cultures. Gutmann's study of Mayan aging based on the Thematic Apperception Test (TAT) is a good illustration of the kind of data that can be gained by transcultural comparisons. Such cross-sectional and cross-cultural studies can be useful in determining the universal features of aging in all cultures as well as in suggesting useful social, economic, and cultural arrangements that might be of value in providing more adequate support for the aged in different cultures.

Creativity may continue late into life; it does not invariably decline with age.--" Sophocles, Michelangelo, Titian, Cervantes, Hals, Voltaire, Goethe,

Humboldt, Franck, Hugo, Verdi, Tolstoy, Shaw, and Freud are but a few famous examples. Had Freud died before he was 40, we would hardly know him. He was 44 when his magnum opus, *The Interpretation of Dreams*, was published. He was 67 when *The Ego and the Id* appeared, containing his structural hypothesis with the concepts of id, ego, and superego. Factors that facilitate or impede the creative life must be studied. The autodidact or self-teacher exemplifies one creative process.

Grief and widowhood the nature of time and leisure, late life alcoholism, social isolation, housing arrangements, problems in retirement, the need for guardianship and protective services while maximizing the preservation of decision making, nursing homes, psychological correlates with impending death, prejudice against the elderly, and a myriad of other specific subjects must be further explored in order to achieve a comprehensive picture of old age and of the potential vulnerabilities for emotional and mental disorders. Old people are subjected to infantilization, patronization, blunt hostility, and disparagement. They are called crocks, biddies, old fogies, witches, and crones among other epithets. With increasing life expectancy likely through the control of major diseases such as cardiovascular disease (that is, arteriosclerosis) and malignancy, the so-called problems, but also the opportunities, of old age will be increasing. The human sciences and the therapeutic professions will be increasingly called upon to understand the basic nature, possibilities, and problems associated with early and advanced

old age. Public policies will have to change.

Bibliography

Albrecht, R., "Social Roles in the Prevention of Senility," *J. Gerontol.*, 6:380, 1951.

Aldrich, K., and Mendkoff, E., "Relocation of the Aged and Disabled: A Mortality Study," *J. Am. Geriatric Soc.*, 11: 185-194, 1963.

Alvarez, W. C., "Cerebral Arteriosclerosis with Small Commonly Recognized Apoplexies," *Geriatrics*, 1:189-216, 1952.

Aries, P., *Centuries of Childhood: A Social History of Family Life*, Knopf, New York, 1962.

Bahn, A. K., *Outpatient Population of Psychiatric Clinics, Maryland 1958-59*, Public Health Monograph No. 65, 1965.

Bartko, J. J., Patterson, R. D., and Butler, R. N., "Biomedical and Behavioral Predictors of Survival: A Multivariate Analysis," in Palmore, E. (Ed.), *Prediction of Life Span*, Heath, Lexington, Mass., 1971.

Beard, B. B., *Social Competency of Centenarians*, University of Georgia Printing Department, Athens, 1967.

Benedek, T., "Climacterium: A Developmental Phase," *Psychoanal. Quart.*, 19:1- 27, 1950.

_____, "Parenthood as a Developmental Phase: A Contribution to Libido-Theory," *J. Am. Psychol. A.*, 7:389-417, 1959.

Berenson, B., *Sunset and Twilight: Diaries of 1947-58*, Harcourt, Brace & World, New York, 1963.

Berezin, M. A., "Some Intrapsychic Aspects of Aging," in Zinberg, N. E., and Kaufman, I. (Eds.), *Normal Psychology of the Aging Process*, International Universities Press, New York, 1963.

Birren, J. E., *Handbook of Aging and the Individual*, University of Chicago Press, Chicago, 1959.

_____, Butler, R. N., Greenhouse, S. W., Sokoloff, L., and Yarrow, M. R., *Human Aging: A Biological and Behavioral Study*, U.S. Public Health Service Monograph Publication No. 986, Washington, D.C., 1963, Paperback reprint, 1971.

_____, _____, _____, _____, and _____, "Reflections," in Granick, S., and Patterson, R. D. (Eds.), *Human Aging II: An Eleven Year Biomedical and Behavioral Study*, U.S. Public Health Service Monograph, Washington, D.C., 1971.

Blauner, R., "Death of the Social Structure," *Psychiatry*, 29:378-394, 1966.

Blenkner, M., "Environmental Changes and the Aging Individual," *The Gerontologist*, 7:2, 1967.

Brotman, H. B., *Facts and Figures on Older Americans*, U.S. Department of Health, Education and Welfare, Washington, D.C., March 1971.

_____, *Who Are the Aged: A Demographic View*, Institute of Gerontology, University of Michigan-Wayne State University, Ann Arbor, 1968.

Buhler, C., "The Curve of Life as Studied in Biographies," *J. Appl. Psychol.*, 19:405- 409, 1935.

Busse, E. W., *Therapeutic Implications of Basic Research with the Aged*, Institute of Pennsylvania Hospital, Strecker Monograph, Series No. 4, 1967.

Butler, R. N., "Ageism: Another Form of Bigotry," *The Gerontologist*, 9:243-246, 1969.

_____, "The Destiny of Creativity in Later Life," in Levin, S., and Kaharna, R. (Eds.), *Geriatric Psychiatry: Creativity, Reminiscing and Dying*, International Universities Press, New York, 1967.

_____, Hearings, Part 1, Subcommittee on Retirement and the Individual, Special Committee on Aging, U.S. Senate, U. S. Government Printing Office, Washington, D.C., 1967.

_____, "The Life Review: An Interpretation of Reminiscence in the Aged," *Psychiatry*, 26:65-76, 1963.

- ____, and Lewis, M. I., *Aging and Mental Health: Positive Psychosocial Approaches*, The C. V. Mosby Co., St. Louis, 1973.
- Butler, R. N., "Toward a Psychiatry of the Life Cycle: Implications of Socio-psychologic Studies of the Aging Process for the Psychotherapeutic Situation," in Simon, A., and Epstein, L. J. (Eds.), *Aging in Modern Society*, Chap. 20, American Psychiatric Association, 1968.
- ____, Dastur, D., and Perlin, S., "Relationships of Senile Manifestations and Chronic Brain Syndrome to Cerebral Circulation and Metabolism," *J. Psychiat. Res.*, 3:229-238, 1965.
- ____, and Sulliman, L. G., "Psychiatric Contact with the Community-Resident, Emotionally-Disturbed Elderly," *J. Nerv. & Ment. Dis.*, 137:180-186, 1963.
- Carp, F. M., *A Future for the Aged: Victoria Plaza and Its Residents*, University of Texas Press, Austin, 1966.
- ____, *The Retirement Process*, Public Health Service Publication No. 1778, U.S. Government Printing Office, Washington, D.C., 1968.
- Clark, M., and Anderson, B. G., *Culture and Aging: An Anthropological Study of Older Americans*, Charles C Thomas, Springfield, Ill., 1967.
- Comfort, A., *The Process of Aging*, New American Library, New York, 1961.
- Cumming, E., and Henry, W. E., *Growing Old: The Process of Disengagement*, Basic Books, New York, 1961.
- DeGrazia, S., *Of Time, Work and Leisure*, Twentieth Century Fund, New York, 1962.
- Donahue, W., and Tibbitts, C. (Eds.), *Politics of Age*, University of Michigan Press, Ann Arbor, 1962.
- Eissler, K., *The Psychiatrist and the Dying Patient*, International Universities Press, New York, 1955.
- Erikson, E. H., *Childhood and Society*, 2nd ed., Norton, New York, 1954.

- Friedman, E. A., and Havighurst, R. J., *The Meaning of Work and Retirement*, University of Chicago Press, Chicago, 1954.
- Gitelson, M., "The Emotional Problems of Elderly People," *Geriatrics*, 3:135, 1948.
- Glaser, B. G., and Strauss, A. L., *Awareness of Dying*, Aldine, Chicago, 1965.
- Goldfarb, A. I., "Patient-Doctor Relationship in Treatment of Aged Persons," *Geriatrics*, 19:18-23, 1964.
- _____, "Prevalence of Psychiatric Disorders in Metropolitan Old Age and Nursing Homes," *J. Am. Geriatrics Soc.*, 10:77-84, 1952.
- Gordon, M. M., "Social Class in American Sociology," *Am. J. Sociol.*, 55:262-268, 1949-
- Gorer, G., *Death, Grief and Mourning in Contemporary Britain*, Grosset Press, London, 1965.
- Greenleigh, L., "Timelessness and Restitution in Relation to Creativity and the Aging Process," *J. Amer. Geriatrics Soc.*, 8-353-358, 1960.
- Group for the Advancement of Psychiatry, *Toward a Public Policy on Mental Health Care of the Elderly*, Report No. 79, 1970.
- Gutmann, D., "Mayan Aging: A Comparative TAT Study," *Psychiatry*, 29:246-259, 1956.
- Hall, G. S., *Senescence, the Last Half of Life*, Appleton, New York, 1922.
- Havichurst, R. J., Kuhlen, R. G., and McGuire, C., "Personality Development," *Rev. Educ. Res.*, 17:333-344, 1947.
- Hodgins, E., *Episode: Report on the Accident inside My Skull*, Atheneum, New York, 1964.
- Jackson, H., *Double Jeopardy—The Older Negro in America Today*, National Urban League, 1964.
- Jackson, J. J., "Social Gerontology and the Negro: A Review," *The Gerontologist*, 7: 169-178, 1967.

- Kelly, E. L., "Consistency of the Adult Personality," *Am. Psychol.*, 10:659-681, 1955.
- Kleemeier, R. W., "Leisure and Disengagement in Retirement," *The Gerontologist*, 4:180-184, 1964.
- Krapf, E. E., "On Aging," *Proc. Roy. Soc. Med.*, 46:957-964, 1953.
- Kubler-Ross, E., *On Death and Dying*, Macmillan, New York, 1969.
- Kutner, B., Fanshel, D., Toc.e, A. M., and Langner, T. E., *Five Hundred over Sixty: A Community Survey of Aging*, Russell Sage Foundation, New York, 1956.
- Lawton, M. P., "Gerontology in Clinical Psychology and Vice-Versa," *Aging & Human Dev.*, 1:147-159, 1970.
- _____, Liebowitz, B., and Charen, H., "Physical Structure and the Behavior of Senile Patients Following Ward Remodeling," *Aging & Human Devel.*, 1:231-239, 1970.
- Lehman, H. C., *Age and Achievement*, Princeton University Press, Princeton, 1953.
- Lehmann, V., and Mathiason, G., *Guardianship and Protective Services for Older People*, National Council on Aging Press, New York, 1963.
- Lieberman, M. A., "Psychological Correlates of Impending Death: Some Preliminary Observations," *J. Gerontol.*, 20:181-190, 1965.
- Linden, M. E., "The Older Person in the Family: Studies in Gerontologic Human Relations, VII," *Soc. Casework*, 37:75, 1956-
- Lowenthal, M. F., "The Relationship between Social Factors and Mental Health in the Aged," in Simon, A., and Epstein, L. J. (Eds.), *Aging in Modern Society*, American Psychiatric Association, 1968.
- _____, and Zilli, A., *Interdisciplinary Topics in Gerontology: Colloquium on Health and Aging of the Population*, Vol. 5, S. Karger, New York, 1969.

- Maddox, G. L., "Disengagement Theory: A Critical Evaluation," *The Gerontologist*, 4: 80-82, 103, 1964.
- Marris, P., *Widows and Their Families*, Routledge and Kegan Paul, London, 1958.
- Miller, A., *Death of a Salesman*, Viking, New York, 1949.
- Moorehead, H. H., "Study of Alcoholism with Onset Forty-Five Years or Older," *Bull. N. Y. Acad. Med.*, 34:99-106, 1958.
- Neugarten, B. L., "'Menopausal Symptoms' in Women of Various Ages," *Psychosom. Med.*, 27:266-273, 1965-
- _____, (Ed.), *Middle Age and Aging: A Reader in Social Psychology*, University of Chicago Press, Chicago, 1968.
- _____, *Personality in Middle and Later Life*, Atherton Press, New York, 1964.
- _____, and Weinstein, K. K., "The Changing American Grandparent," *J. Marriage & Fam.*, 26:199-204, 1964.
- Oriol, W. E., "Social Policy Priorities: Age vs. Youth; The Federal Government," *The Gerontologist*, 10:207-219, 1970.
- Owens, W. A., Jr., "Age and Mental Abilities: A Longitudinal Study," *Genet. Psychol. Monog.*, 48:3-54, 1953.
- Patterson, B. D., Freeman, L. C., and Butler, B. N., in Granick, S., and Patterson, B. D. (Eds.), *Human Aging II: An Eleven Year Biomedical and Behavioral Study*, U.S. Public Health Service Monograph, U.S. Government Printing Office, Washington, D.C., 1971.
- Perlin, S., "Psychiatric Screening in a Home for the Aged. I. A Followup Study," *Geriatrics.*, 13:747-751, 1958.
- Pressey, S. L., and Kuhlen, R. G., *Psychological Development through the Life Span*, Harper & Row, New York, 1957.

- Reichard, S., Livsen, F., and Paterson, P. G., *Aging and Personality*, Wiley, New York, 1962.
- Rogow, A. A., *James Forrestal: A Study of Personality, Politics and Policy*, Macmillan, New York, 1964.
- Rosow, I., "Retirement Housing and Social Integration," in Tibbitts, C., and Donahue, W. (Eds.), *Social and Psychological Aspects of Aging*, pp. 327-340, Columbia University Press, New York, 1962.
- Sands, S. E., and Rothschild, D., "Sociopsychiatric Foundations for Theory of Reactions to Aging," *J. Nerv. & Ment. Dis.*, 116:233, 1952.
- Saveth, E. N., *Utilization of Older Scientific and Professional Personnel*, National Council on Aging, New York, 1961.
- Schuster, D., "A Psychological Study of a 106-Year-Old Man," *Am. J. Psychiat.*, 109: 112, 1952.
- Shanas, E., and Streib, G. F., *Social Structure and the Family: Generational Relations*, Prentice-Hall, Englewood Cliffs, N.J., 1965.
- Simmons, L. W., *The Role of the Aged in Primitive Societies*, Yale University Press, New Haven, 1945.
- Strehler, B., "Long-Range Programs and Research Needs in Aging and Related Fields," Testimony, Hearings, Special Committee on Aging, U.S. Senate, 90th Congress, December 5 and 6, 1967, Part I, Pp. 1397-1414, U.S. Government Printing Office, Washington, D.C., 1965.
- Task Force, Special Committee on Aging, U. S. Senate, *Economics of Aging: Toward a Full Share in Abundance*, U.S. Government Printing Office, Washington, D.C., 1969.
- Terman, L. M., and Oden, M. H., *The Gifted Group at Middle Life*, Stanford University Press, Stanford, 1959.
- Thompson, P. W., "The Church and Its Role in the Promotion of Health in Older Persons," in *The Aging and the United Presbyterian Church*, United Presbyterian Church, Chicago,

1964.

Tobin, S. S., and Neugarten, B. L., "Life Satisfaction and Social Interaction with Aging," *J. Gerontol*, 16:244-246, 1961.

Tolstoy, L. (1886), *The Death of Ivan Ilych*, Signet Classics, New York, 1960.

_____, *Last Diaries* (Ed. by Stilman, L.), G. P. Putnam, New York, 1960.

Van Gennep, A., *The Rites of Passage*, University of Chicago Press, Chicago, 1960.

Weinberg, J., "Personal and Social Adjustment," in Anderson, J. E. (Ed.), *Psychological Aspects in Aging*, American Psychological Association, Washington, D.C., 1956.

Yarrow, M., Blank, P., Quinn, O. W., Youmans, E., and Stein, J., "Social Psychological Characteristics of Old Age," in *Human Aging: A Biological and Behavioral Study*, Chap. 14, Public Health Service Publication No. 986, 1953, Paperback reprint, 1971.