Summary Article: Gerontology
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Although research into human aging has been conducted sporadically for many years, it is only in the past several decades that it has gained enough momentum in the social sciences to become an established program of formal academic study under the title “gerontology.” Gerontology is the study of the processes of aging. The term comes from the Greek γερόντος, an old man and λόγος, word, science, or study. A closely related term is geriatrics, the medical care of the elderly, coined by Ignatius Leo Nascher in 1909 from the Greek γερόντος and γιατρός, to cure.

Historical Perspective

The care of aging and injured individuals has a long record in the (pre) history of humankind. Some of the earliest evidence for such care comes from Neanderthal remains in Europe and the Middle East: for example the La Chappelle-aux-Saints fossils in France and those from Shanidar Cave in Iraq. In the case of the individual (“the Old Man”) from La Chappelle-aux-Saints (the type specimen of Homo neandertalensis), the bones indicate an individual who suffered from arthritis of the jaws, spine, and legs. It is unlikely that such an individual would have been capable of food procurement in a Paleolithic society of the type supposed for Neanderthals. The only way such an individual could survive to a relatively advanced age was through the care of others.

Ralph Solecki excavated the remains of an individual at Shanidar Cave in Iraq who appears to have survived the amputation of his right arm. He had been injured and possibly blinded in the left eye. He also showed a healed injury to the right parietal bone. Although he survived these injuries, he was eventually killed by a slab of falling limestone, while he stood upright. It is not unreasonable, therefore, to assume that there was some sort of care for such older (by Neanderthal standards) individuals who most likely would have been unable to forage for themselves.

In a brief history of gerontology, Joseph Freeman delineates nine periods in the “scientific” study of old age in the past 5,000 years; that is, since the dawn of recorded history. These periods include the Archaic period, which extended from the emergence of writing to the development of early civilizations. His second period lasted from the efflorescence of Mesopotamian, Biblical, and Egyptian cultures to the advent of Minoan and Greek civilizations and includes descriptions of the aged and codes of behavior toward them. The third period, the Greco-Roman, included Hippocrates and Aristotle among the Greeks and Galen and Cicero in Rome. During this period these individuals began to assemble a body of literature pertaining to the treatment of ailments that attend aging. The general belief was that “innate heat” from the heart began to diminish over time, and that this “cooling” led to aging.

During Freeman’s Judeo-Arabic period, Moses Maimonides, Arnoldus de Villa Nova, and Avicenna described the differences between young and old and recommended regimens for older people, including less frequent blood-letting only once per year for septuagenarians.

The period of European Emergence brought with it the first book specifically devoted to geriatrics:

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Gabrielle Zerbi's Gerontocemia, published in 1489. Roger Bacon argued reasonably in De retardantssenectutis accedentibus, et de sensibus conservandis, printed in Oxford in 1590 (300 years after Bacon's death) that if people were as zealous in their efforts to conserve health as to restore it, they would lead longer lives free of disease. Bacon recommended the use of magnifying glasses for older people with poor vision shortly before the appearance, in Italy, of vision-correcting eyeglasses.

A Renaissance publication in 1534, The Castel of Healthe, by Sir Thomas Elyot, advised the elderly to follow a prudent diet consisting of a number of small meals per day rather than a few large ones. Sir John Floyer wrote in Medicina Gerocomica that old age is the result of an imbalance of bodily humors, with a preponderance of cold and dry.

During the seventh period, Benjamin Franklin published translations of earlier works on senescence and expressed interest in the variety of ways with which to increase health and stave off old age. Shortly after Franklin's death, Christoph Wilhelm Hufeland published The Art of Prolonging the Life of Man in which he prescribed a Makrobiotik approach.

In 1804, Sir John Sinclair translated classical works, reviewed statistics, and summarized much of the previous work on aging. Later, Sir Anthony Carlisle published Essay on the Disorders of Old Age and advised young people to take care of themselves early in life if they wished to secure longevity. Carl Canstatt wrote on general theories of aging in 1839 and hypothesized that the death of cells led to irreplaceable tissue death. In Paris, Jean-Martin Charcot lectured that the diseases that accompany aging have a latency period, which, it appears, some such as cancers do. The primary concern still was to look upon senescence as pathology, rather than as a normal continuance of the lifelong aging process, but by the 1890s C. A. Stephens opened a laboratory in Maine for the study of old age and began a magazine called Long Life.

Although quite a bit of data on biological and environmental factors in longevity were generated during the 1940s, advances in gerontology have accelerated since 1950 because of advances in medicine, emphasizing physical and mental health in later years. Demographic and economic studies have been concerned with the effects changes in the age structure would have on the social and financial sectors. For example, what changes would occur in taxation structures should the mandatory retirement age change from 65 to 70 or to 60 years?

**Recent Theories and Research**

A major impetus to aging studies was disengagement theory introduced by Elaine Cumming and W. E. Henry in Growing Old: The Process of Disengagement, based upon the Kansas City Study of Adult Life. Previously, much of the literature on aging was material gathered from research on other topics, or it was concerned with cataloging characteristics of the aged. Cumming and Henry proposed that elderly people around the world perform mutual disengagement from their societies. Disengagement was supposed to be an inevitable developmental event in the life cycle, although its start and pattern might vary from culture to culture. This was thought to lead to (or at least correlate with) passivity in later life.

However, David L. Gutmann's study of the highland Druze demonstrated that disengagement is not inevitable, and passivity does not necessarily accompany it. Gutmann felt that in traditional folk societies with strong religious orientations, older people's passivity may be a central and necessary component of their new engagement with social roles and traditions associated with their new status. What is taken for passivity in modern societies is a move toward religious engagementmastery of the
supernatural realm in traditional societies. According to Gutmann, what Cumming and Henry found in American society is not universal, but is an “artifact of secular society” that rejects a normative order dependent upon older persons’ traditional, moral roles after passing the “parental and productive life periods.” Gutmann argues that this shift to Passive and Magical Mastery does not necessarily lead to disengagement and death, but to social rebirth through the religious role that turns destructive passivity in older persons into vehicles of social power.

Activity theory is an alternative to disengagement based upon the observation that some people not only do not choose to disengage, but also that they do not disengage. Activity theory, or “reengagement,” like disengagement theory, is concerned with the relationship between levels of activity and psychological health in the last trimester of life. Activity theory proposes that there may be a natural tendency for older people to associate with other persons and to be active in community affairs. Contemporary retirement practices block this natural inclination and may lead to poor adjustment. By allowing continued engagement in community activities, or by prompting reengagement in society, older persons may maintain (or regain) psychological health. Robert Havighurst noted that for the three dimensions of aging studied by the Kansas City group, activity, satisfaction, and personality, it is personality that is the key factor in patterns of aging and life satisfaction. He concluded that both activity and disengagement theories are unsatisfactory, as they do not deal with personality differences within the older population.

Continuity theorists, such as Robert Atchley, feel that a simple relationship between activity levels and psychological health is insufficient to explain social aging. Continuity theorists propose that one’s levels of engagement and psychological well-being are the results of lifelong patterns of activity or inactivity and psychological health or ill health. Linda George argues that continuity theory has value not only for historical interest, but because it accounts for individual differences something that previous theories did not. George tested the impact of personality and social status variables upon levels of activity and psychological well-being in 380 white males and females aged 50 to 75 years to determine if one may predict continuity across life stages. She found that, contrary to disengagement and activity theories, there was only a weak correlation between activity levels and psychological well-being; that is to say, different variables predict the two phenomena. Personality factors were better predictors of psychological well-being than were social status factors, and social status factors better predicted activity.

Thus, one may conclude that neither disengagement nor activity and psychological well-being are outgrowths of the aging process. Rather, they are the products of long-term personality or social processes that are effective on an individual basis. To put it more simply, some older people have high or low activity levels because they always have had high or low activity levels; the same may be said for psychological well-being.

After the Second World War, modernization theorists and age stratification theorists began to view societies developmentally with regard to urbanization and industrialization. People lived longer in more developed cultures, which resulted in more older people surviving. This resulted in competition for jobs, forced retirement, and/or disengagement, as technological advances caused the need for relocation and the loss of their status as older people became more common and were no longer something “special.” One possible result of this is a collapse of traditional family structures, according to Donald Cowgill and Lowell Holmes.

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Matilda White Riley's theory of age stratification from the 1970s looked at the relationship between social structure and age across the life course. Those individuals who are born in the same age cohort (roughly similar to age sets in many traditional societies) will have many experiences in common. These experiences will be different for each generation even when the experiences have been generated by the same events, for example when a population has experienced a war or natural disaster: Children are impacted differently than are adults; older adults are impacted differently than are younger adults. This theory allows us to view the different ways in which age cohorts may react to life events, and how such life events affect the structure of the society.

By the 1990s aging research had shifted to family gerontology, according to Katherine R. Allen, Rosemary Blieszner, and Karen A. Roberto. Allen and her colleagues examined 908 articles and 30 books on family gerontology published in the 1990s and discovered a shift in the field of aging individuals with regard to family social relations. By far the largest focus of the articles was on caregiving (32.6%); the next largest category was social support and social networks at only 13.7%, followed by parent-adult child relations at 10.1%, and marital status transitions at 9.5%. Further, they found that the students of later life are developing an appreciation for pluralism and resilience strengthened by the incorporation of feminist and life course approaches. Likewise, there has been greater sophistication in the use of longitudinal data, especially as the focus has shifted from exclusively studying the aging individual to the individual within the familial matrix. This, they say, forces a chronological variable into the research, especially as there is no agreed-upon chronological definition of middle age (e.g., becoming a parent or grandparent) and major life events no longer can be predicted even by gender). Indeed, the family within which one ages may be a chosen family rather than a biological one, through adoption or choosing a favorite niece or nephew to become analogous to a daughter or son. The feminist approach began to focus on female intergenerational dyads (mother-daughter ties); daughters are three times more likely to give care to aging parents than are sons, even if the sons live closer. Ironically, daughters-in-law are more likely to be the caregivers than are sons, as demonstrated by Kathleen Lynch's and Eithne McLaughlin's observations on caring labor and love labor in modern Ireland.

For Allen and colleagues, the life course perspective is the major theoretical advance in gerontology during the 1990s. Life course studies focusing on historical and social processes and their impacts upon individuals answer two important considerations: how individuals change over time and how their changes are linked to other members of their families. Longitudinal approaches increasingly are employing narrative methods to discover subjective meanings that individuals use to construct their lives. Through the narrative interplay of historical events and self-perception we can create our "selves" as we need them to be.

See also
Dying and Death, Longevity, Malthus, Thomas

- Allen, K. R., Blieszner, R., & Roberto, K. A. (2000). Families in the middle and later years: A review and
critique of research in the 1990s. Journal of Marriage and the Family, 62, 911-926.

Simonton, Michael J.

APA

Chicago

Harvard

MLA


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