

## Baltes, Paul B (1939–2006)

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### Abstract

Developmental psychologist Paul B. Baltes (1939–2006) was born in Saarlouis, Germany. After studying in Germany he moved to the United States, where he continued the conceptual and methodological quest of his doctoral dissertation to transform developmental psychology into a science that seeks to describe, explain, and modify individual differences in behavioral development across the entire life span. His work was pivotal in establishing life span psychology as a comprehensive and distinct theoretical orientation within contemporary developmental psychology. Paul Baltes' career was characterized by internationality, interdisciplinarity, generativity, societal concern, and institutional prudence and sagacity. One of his central research interests was to explore age-graded changes in the range of plasticity in individual development, with the goal to identify and promote personal and societal conditions that favor successful aging. At the same time, he was not negligent of the negative sides of very old age, and spoke of old age and aging as 'hope with a mourning band.'

### Life

Paul B. Baltes was born in 1939 in Saarlouis, Germany. Between 1959 and 1963, he studied psychology at the University of Saarland in Saarbrücken with Ernst E. Boesch, who was a student of Swiss psychologist Jean Piaget, and Günther Reinert, who would remain his academic mentor for many years. As Baltes himself noted, "Piagetian developmental cognitive structuralism and Boeschian cultural-psychological theory thus were two of the cornerstones in my study of psychology. The third, provided by the guidance of Günther Reinert, was psychometrics and the developmental study of intelligence" (Baltes, 2000: 11).

During that time he met Margret M. Labouvie who later became his wife and close collaborator. After obtaining his master's degree in psychology on the differentiation hypothesis of intelligence in childhood (Reinert et al., 1965), he and his newlywed wife Margret spent a year at the University of Nebraska. As a young graduate exchange student Paul Baltes collaborated with the eminent developmental psychologist and gerontologist K. Warner Schaie. Back in Saarbrücken, he continued his work on the basic methodological problem of disentangling age from cohort and period effects when studying development, and completed his dissertation on this topic in 1967 (Baltes, 1968; now a 'citation classic'). He then accepted K. Warner Schaie's offer of an assistant professorship at the University of West Virginia.

The first West Virginia conference on life span development (Goulet and Baltes, 1970) marks the emergence of life span psychology as a meta-theoretical framework within modern psychology (cf. Tetens, 1777; Thomae, 1959). It formed the basis of what later became the classic series, "Lifespan Development and Behavior," edited by Paul Baltes in collaboration with social psychologist Orville Gilbert Brim Jr., and later with sociologist David Featherman and developmental psychologist Richard M. Lerner. In this series, a continually growing group of scholars radically criticized the dominant interpretation of developmental psychology as a science primarily oriented toward childhood and biology-based growth processes.

According to this critique, development includes the whole life span from conception into old age (Baltes and Goulet, 1970) and comprises losses as well as gains, maturation as well as senescence, and biological as well as cultural influences. Paul Baltes was one of the pioneers of this theoretical orientation in modern developmental psychology, as first described in the article on the life span perspective on human development that was published in 1980 in the *Annual Review of Psychology* (Baltes et al., 1980).

At the age of 33 years Paul Baltes was appointed head of the Division of Individual and Family Studies at the College of Human Development of Pennsylvania State University, where he set up an interdisciplinary graduate program on research questions of lifelong development – together with colleagues such as John R. Nesselroade and Richard M. Lerner. In 1980, the Max Planck Society recruited Paul Baltes back to Germany as Director at the Max Planck Institute for Human Development in Berlin. A quarter of a century later, when he reached emeritus status, life span thinking had become integrated into developmental psychology in both North America and Germany. In the late 1990s he took up the challenge of coediting the first edition of the *International Encyclopedia of the Social and Behavioral Sciences* together with Neil J. Smelser. Its forerunner was the *International Encyclopedia of Social Sciences* edited by David Sills in 1968. As coeditor-in-chief, Paul Baltes ensured that fields such as behavioral and cognitive neuroscience, genetics, evolutionary sciences, law, psychiatry, and, of course, developmental psychology were represented in the 26-volume work that was published in 2001 (Smelser and Baltes, 2001).

In 1999, Margret Baltes, his longtime collaborator, companion, and mother of their two children, died suddenly. Christine Windbichler, Professor of Law at Humboldt-Universität zu Berlin, later became his second wife.

Taking on the title of Director Emeritus in 2004 was only a transition to new challenges for Paul Baltes. He was appointed Distinguished Professor at the University of Virginia and Director of the Max Planck International Research Network on Aging (MaxnetAging), the first virtual Max Planck Institute that was geared toward the multidisciplinary investigation of

human aging. Furthermore, until the very end of his life, he was the Chair of the International Max Planck Research School on the Life Course (LIFE) and a board member of the working group 'Opportunities and Problems of an Aging Society: The World of Working and Lifelong Learning' launched by the German National Academy of Sciences Leopoldina and the German National Academy of Science and Engineering (acatech). Sadly, his own life was cut short by cancer and he died in Berlin aged 67 in 2006.

## Honors

Paul Baltes left an oeuvre of more than 300 publications including 27 books, and the 26 volumes of the *International Encyclopedia of the Social and Behavioral Sciences*. His scientific recognition is also reflected in the honorary degrees that he received as well as countless memberships in national and international academies. For his scientific work, he received 12 prestigious prizes and awards from national and international professional societies. He was a foreign member of the American Academy of Arts and Sciences and the Royal Swedish Academy of Sciences. Honorary doctorates were bestowed on Paul Baltes by the Universities of Jyväskylä, Stockholm, Geneva, and Humboldt-Universität zu Berlin. His international awards included the American Psychological Association's Award for Distinguished Contributions to the International Advancement of Psychology, the Robert W. Kleemeier Award in Recognition of Outstanding Research from the Gerontological Society of America, and the Novartis Prize for Gerontological Research awarded by the International Association of Gerontology. Paul Baltes also received highest recognition beyond the scientific community. He was the only psychologist to be awarded membership in the German Order 'Pour le Mérite' for the Arts and Sciences, and received the Federal Republic of Germany's Great Cross of Merit with Star.

## Profile as Scientist and Scholar

Beyond scientific productivity and professional as well as public honors, Paul Baltes as a person and his role in science and society may be best characterized by five qualities: internationality, interdisciplinarity, generativity, societal concern, and institutional prudence and sagacity (see also [Staudinger, 2007](#)).

### Internationality

Throughout his career, Paul Baltes built bridges and developed international networks. He firmly believed that international exchange increases the quality of scientific work and promotes scientific insights. Only very few German scientists have reached equally high recognition in the USA. Good examples of such networks are the network of life span researchers as captured in the Lifespan series, MaxnetAging, and the international doctoral program LIFE, which continues to flourish to the present day.

### Interdisciplinarity

As spiritus rector of life span psychology, Paul Baltes was committed to the interdisciplinary study of human development. During his time as department head at Penn State, he

shepherded an interdisciplinary faculty composed of psychologists and sociologists. His work for the Social Science Research Council and the European Research Foundation also provided rich experiences in interdisciplinary exchange. He initiated the Berlin Aging Study (BASE), connecting biomedical and psychological with sociological and economic perspectives on aging. BASE also became a success because Paul Baltes managed to lead the various disciplinary directions to an equal dialogue ([Baltes and Mayer, 1999](#)). During his later years, he took great pleasure and pride in developing discourses that transcended disciplinary horizons in the context of the academies of which he was a member, particularly in the Order 'Pour le Mérite' for the Arts and Sciences. He linked his striving for the Renaissance ideal of a comprehensively informed scholar with a wakeful eye for the necessities and opportunities of modern societies.

### Generativity

Early on and throughout his career, Paul Baltes's work was characterized by generativity. According to Erik Erikson, caring for the following generations, passing on insights and experiences, is the central developmental challenge of the middle and later years. Paul Baltes took on this challenge much ahead of time. He mentored his doctoral students and postdoctoral fellows with a great deal of personal investment in many areas of life. In the 1980s, soon after his return to Germany, Paul Baltes and other developmental psychologists launched the first graduate fellowship program in Germany funded by the Volkswagen Foundation, which later became a model for graduate programs in Germany funded by the German Research Foundation (DFG). Among the cherished projects of his later years were the foundation of the International Max Planck Research School LIFE (see <http://www.imprs-life.mpg.de>) and the establishment of an academy of sciences for young academics. The latter project, the 'Junge Akademie,' was implemented as a collaboration project between the Berlin-Brandenburg Academy of Sciences and Humanities and the German National Academy of Sciences Leopoldina (of which Paul Baltes was vice-president). The 'Junge Akademie' has since become a role model and example for similar initiatives in many other countries.

### Societal Interest

Paul Baltes displayed concern for societal issues. He firmly believed that psychology has something to say and even more strongly, that it can contribute to the solution of challenges that modern societies are facing. Going public as a scientist is an art that requires great care and investment. Paul Baltes excelled in this regard as well. He advanced and influenced societal discussions about lifelong learning, demographic aging, the chances and hardships of old and very old age, and the question of self-determined death.

### Institutional Initiative and Prudence

Science takes place within institutions and is influenced by institutional characteristics and their logic. Paul Baltes thought and acted in the interest of the institution and thereby contributed to the flourishing of the Max Planck Institute for Human Development in Berlin. Over the years,

he also took on many responsibilities to promote the standing of the behavioral and social sciences within the Max Planck Society, and took a leading role in numerous networks promoting the study of adult development and aging from a life span perspective.

### Contributions to the Behavioral and Social Sciences

Paul Baltes' doctoral dissertation on cohort effects marked the starting point for a comprehensive methodological and conceptual oeuvre (e.g., Baltes, 1968; see also Schaie, 1965). Paul Baltes formulated the scientific tenets and rationale of life span psychology (Baltes et al., 1977; Baltes, 1987; Baltes et al., 2006a). His conceptual and methodological writings have become milestones in the scientific study of behavioral development.

Quite early, Paul Baltes developed interest in the malleability of cognitive functioning in adulthood and old age. His work on cognitive training demonstrated the continued existence of learning potential in adulthood, and foreshadowed much of the recent interest in this topic. Together with Reinhold Kliegl, he introduced the testing-the-limits paradigm to delineate age differences in memory performance after instruction and training in mnemonic skill (Baltes and Kliegl, 1992). Later his interest in cognitive plasticity expanded to include personality functioning and to link the notion of plasticity with traditional conceptions of resilience across the life span (Staudinger et al., 1995). Together with Ursula Staudinger and Jacqui Smith, he succeeded in establishing a measurement model of wisdom, defined as high levels of expertise about the fundamental pragmatics of life, and identified the constellation of personal attributes and social opportunities that are germane to its emergence (Baltes and Staudinger, 2000). Together with Ellen Skinner, he refined the study of control beliefs in childhood by introducing the tripartite conceptualization of control, agency, and means–ends beliefs (Skinner et al., 1988), in line with his emphasis on goal-directed action as a central concept in developmental theory.

In the late 1980s, Paul Baltes initiated and launched the Berlin Aging Study (Baltes and Mayer, 1999), a multidisciplinary, longitudinal study on old age and aging. The coprincipal investigators were Hanfried Helmchen, a psychiatrist, Karl Ulrich Mayer, a life-course sociologist and codirector at the MPI for Human Development, and Elisabeth Steinhagen-Thiessen, a geriatrician. Among the key features of the Berlin Aging Study are a truly multidisciplinary approach, expressing Paul Baltes's conviction that progress in science requires a dialogue among equals in which no discipline dominates the other; a focus on very old age (Gerstorff et al., 2013); and a strong interest in methodological issues such as sample selectivity (Lindenberger et al., 2002).

Besides the continued potential for growth, Paul Baltes was also interested in the reasons for decline in adulthood and old age. He showed that hearing, seeing, and walking require increasing cognitive resources with advancing adult age (Lindenberger and Baltes, 1994). Later, he advocated linking research on behavioral development to research on neural mechanisms. In this context, he promoted the notion of 'bio-cultural co-constructivism' and warned against regarding

behavior as the dependent variable of the brain (Baltes et al., 2006b).

Together with his first wife Margret, Paul Baltes was interested in the orchestration of psychological mechanisms promoting successful human development. Together they introduced the selection, optimization, compensation (SOC) model of developmental regulation, which posits the three mechanisms as regulatory mechanisms of human development (Baltes and Baltes, 1990; Freund and Baltes, 1998). The SOC model has been integrated into systems theory (Boker, 2013), and successfully applied to the study of specific developmental tasks, such as the resolution of work–family conflict (e.g., B. Baltes and Heydens-Gahir, 2003).

Paul Baltes has left a rich legacy. His work continues to inspire research in developmental psychology and gerontology. After his first wife's death in 1999, Paul Baltes established the Margret M. Baltes Foundation to promote their common goal of advancing life span developmental and gerontological research. Upon his own death in 2006, it was renamed the Margret M. and Paul B. Baltes Foundation. According to its website, "The Margret M. and Paul B. Baltes Foundation aims to advance research in developmental psychology and gerontology and to underline its relevance in science and society. It encourages researchers to dedicate projects and careers to these fields and to widen the empirical and theoretical understanding of humans and society in adulthood and old age. It aims to highlight societal initiatives that point to the relevance of such research."

Paul Baltes was a master at forging links – in the academic, science management, societal, and personal world. Therefore, his activities, his knowledge, and worldwide recognition were not restricted to his home discipline, developmental psychology; they drew wide circles into the humanities and natural sciences. He put questions into the open and made them the starting point of a new research idea, a new institution, or a new collaboration. Paul Baltes was able to establish developmental psychology as an equal partner among disciplines. In accordance with his theory of the permanent incompleteness of human nature (Baltes, 1997), his scientific work was not finished and will never be finished.

*See also:* Adulthood: Dependency and Autonomy; Aging, Theories of; Cognitive Aging; Cognitive Psychology: History; Erikson, Erik Homburger (1902–94); Lifespan Development, Theory of; Piaget, Jean (1896–1980).

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