

Introduction: What Kind of Science Is Developmental Psychology?

Sheldon H. White and David B. Pillemer

What is the mission of developmental psychology? What is its role in history and society? Traditional philosophical models asserted the doctrine of the unity of science, with the natural sciences providing the model for all scientific endeavors. In this view, conceptual definitions, procedures, and methodologies of the "less mature" human sciences ought to be patterned after those of experimental physics, as a "mature" science. In the Age of Theory, Sigmund Koch's (1964) term for the period of theoretical behaviorism spanning the 1930s and 1940s, a vision of psychology as an "immature physics" was set forth.

Today, psychology continues to use many concepts, procedures, and definitions of "good science" borrowed from the natural sciences, although many aspects of developmental research are unlike those of experimental physics. The full range of children's thought and behavior is not captured easily by simple laws, numerical equations, or mathematical models. What, then, holds the natural-science model of developmental psychology in place? One factor is a set of institutional structures built up during the great growth period immediately after World War II, in the 1940s and the 1950s. During this era, much of the cooperative architecture of contemporary science was established – granting agencies, journals, norms and values of graduate education, definitions of appropriate methodology, and so forth. This institutional architecture implicitly enforces a traditional view of what science is and ought to be.

The architecture was designed primarily to fit the needs of the natural sciences and medicine, and it succeeds, to a degree, for developmental psychology. Unquestioningly, interesting and significant knowledge about human development is being produced under its support. However, we struggle to deal with patterns of phenomena that stretch the boundaries of traditional



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physical science models:

- We rarely deal with universal laws or phenomena that are invariant across time and place. Patterns of human development differ across historical epochs, cultures, and social strata of a large and complex world society.
- The path of development is determined in part by active human design: options, choices, schedules, and tradeoffs created by members of society.
- The environment in which a child grows up is largely a human creation. There is human intelligence, human contrivance, and human intentionality buried in that environment. As a child develops, he or she must deal not only with the traditional invariant Kantian modalities space, time, causation, number but with the changeable vicissitudes of social influence.
- The developing child's continuing life task is not only to adapt to his
 or her environment, but also to construct it, manage it, build it, and
 rebuild it. Consider, for example, the famous question of whether
 children's play is or is not serious business. We posit that through
 play children are learning how to invent and manage environments.
- Developmental psychologists do not deal with a naïve or ignorant laity. People outside of academic psychology have important practical knowledge about human behavior and development and have significant responsibilities for predicting and managing it.
- There exists a strong demand for practical knowledge among developmental psychology's audience, and a corresponding profusion of "offshore knowledge" to meet this demand. Any commercial bookstore contains one or more floor-to-ceiling bookshelves on child psychology. The sometimes disparaging view within universities is that this body of writing represents only "popular psychology," watereddown and sometimes opportunistic translations of basic research. Yet, offshore books on childhood represent a variety of practical concerns of utmost importance to parents and educators, and these concerns demand our attention and respect.
- Developmental psychology departs from traditional views of basic scientific discovery because it deals explicitly with values. We have the peculiar spectacle of a supposedly "value-free" discipline addressing qualities of "good" or "bad" parenting, good or bad schooling, good or bad child-care arrangements, good or bad media influences, and good or bad social programs. Distinguished commentators,



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including Dewey, Kohlberg, and Habermas, have argued that values are a necessary and important part of the mission of disciplines like developmental psychology. If one looks carefully at evaluations of government programs for children, it is not hard to discern a thinly concealed process through which social scientists help to define program goals and values.

From the Past toward the Future: Historical Analysis of Developmental Psychology

Philosophers of science in the 1930s discussed the practices and goals of psychology by aligning it with the history of experimental physics. Although developmental psychology is not physics-like, an historical approach to the field is a fundamental and perhaps essential way to think about its nature. How is developmental psychology an expression of the societies in which it exists? What does it do for such societies? How has it changed over time? What should its rightful goals and values be? What are the possible dangers, or side effects, associated with the practical application of developmental research? We look to the past to identify trends, processes, influences, or constraints. The early adventures of the discipline are, in effect, a series of transformational experiments that reveal important aspects of its construction. Historical perspective broadens our view of what possibilities exist for developmental psychology in the future.

Historical analysis illuminates the flow of questions, ideas, and practices back and forth between developmental psychology and the society surrounding it. Chapters in this volume explore connections between developmental psychology (and its philosophical ancestors) and child care and welfare (Phillips & McCartney; Huston; Haskins), nursery-school education (Beatty), design and management of educational systems and programs (Rogoff, Correa-Chávez, & Cotuc; Strauss), intelligence testing (Kozulin), healthcare for children (Buka; Lipsitt), and adolescent behavior problems (Edelstein). With an immediacy that transcends academic departments and research laboratories, developmental psychology participates in the life of the society surrounding it. In the beginning, not quite by coincidence, the rise of developmental psychology was associated with liberal, progressive forces in American politics. But now liberals and conservatives alike use the data of developmental psychology to build programs and strengthen their positions (Haskins).

In its earliest years, developmental psychology tended to dwell on the primitive in human nature, inspired in part by Darwin's evolutionary theory.



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Developmental studies centered on questions of how the growing child's mind departs from the animal mind. The theorizing of those early years often pictured human infants as primitive, savage, amoral, egocentric, narcissistic, and living in a world of formless experience.

At the turn of the 20th century, G. Stanley Hall struggled to link Darwinian views of developmental psychology to the problems of children, parents, and professionals living in the institutional web of a modern society. Generations of developmental researchers have made the struggle after him and gradually the substance and modalities of their science have changed. A network of "applied" researchers now connects the university to communities of practitioners, professionals, and policymakers. Some romantic images projected by 19th century evolutionism have been set aside. Humans do not develop in a world of "nature red in fang and claw." From the very beginning, they grow up in an environment impregnated with human intelligence, in the midst of objects and activity patterns designed by humans for human purposes. As everyday environments change, patterns of human growth change, and developmental psychologists participate actively in the design processes of a changing, experimenting society. Ever more closely approaching the forefront of scientific inquiry is a cultural-historical perspective on both human development and the scientific work of developmental psychology.

Enlarging Developmental Psychology's Perspective: Some Modest Proposals

How can developmental psychology construct an identity that fully encompasses its historical, applied, and research faces? Some modest changes in undergraduate and graduate education, and in the programs and priorities of universities and funding agencies, would provide a good start. We propose the following changes:

- Graduate students in developmental psychology take a required course on the scholarly and social history of their discipline. The scholarly history will trace the emergence of ideas and methods used by contemporary developmental psychologists out of scientific and philosophical traditions of the 18th, 19th, and early 20th centuries. At the same time, the course will trace the increasing scholarly interest in child study alongside the emergence of modern societies and welfare states in the late 19th and early 20th centuries.
- Undergraduate and graduate students in developmental psychology have available to them a course on the organization of professions,



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social services, and institutions dealing with families and children, and the role played by psychologists in their formation.

- Universities recognize that developmental psychology is a pluralistic field, which requires a variety of approaches and levels of inquiry.
 The pluralistic perspective will extend across faculties, disciplines, professions, and field sites.
- Universities and funding agencies recognize and give high priority
 to developmental psychology's agency as a science of design as
 a cooperative human endeavor that has enduring ties and particular
 relevance to the problems and needs of contemporary society.

We believe that the chapters in this volume will contribute to a framework for achieving these goals.

Organization of This Book

Authors were invited to contribute to this book because they have done significant work in developmental psychology, and their work crosses traditional boundaries of research, historical scholarship, and policy analysis. For their chosen topics, we asked authors to address the intersection of at least two of these three domains: research, history, and policy. All of the chapters fulfill this request, and several advance developmental science in all three domains.

The chapters all challenge the idea of a sharp or meaningful distinction between "basic" and "applied" research. Applications to everyday social problems have not evolved secondarily, as add-ons to extended programs of theoretically driven "pure" research. Rather, developmental psychology has been connected to practical concerns from the outset. Nevertheless, the relationship between research and policy has been uneasy, with cooperation appearing to be much stronger in some domains than in others.

One prominent focus of developmental psychology since its inception is the betterment of children and families. Barbara Beatty shows how the rise of American nursery schools was tied directly to research movements in colleges, universities, and training institutes. Practical issues driving research included the question of whether nursery-school education could support women's career pursuits without impairing their children's healthy development, and if in fact early schooling could enhance successful socialization. In contrast, Deborah Phillips and Kathleen McCartney identify a general "disconnect" between research and policy on child care, compared to a much closer connection for Head Start enrichment programs. The authors pinpoint a number of reasons why child-care research and policy have largely developed



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side-by-side rather than hand-in-hand. Ron Haskins also discusses the long and complex history of developmental science's relationship to child-care programs, but from the perspective of a policy analyst and Washington insider. Aletha Huston shows not only how research examining the effects of poverty on child development may inform public policy, but also how issues raised by the politics of welfare reform have enriched developmental science.

Education has long been a prominent point of intersection between research and practice. Barbara Rogoff, Maricela Correa-Chávez, and Maria Navichoc Cotuc chart the emergence of compulsory schooling in the United States and Guatemala. They show how some "naturalized" conceptions of child development, such as the linking of chronological age with standards of test performance, originally grew out of practical concerns. Even the developmental psychologist's essential independent variable – age – became an organizing principle for research on intelligence and achievement in large part because of its utility in solving bureaucratic problems relating to social sorting and educational placement. Alex Kozulin describes how the assessment of children's cognitive capacities, whether by IQ testing or other procedures, was tied "from the very beginning" to applied issues – predicting learning ability and school performance. Michael Cole and Jaan Valsiner illustrate the intimate connection between basic and applied agendas with their creative application of Vygotsky's theoretical construct "zone of proximal development" to children's failures to learn to read. Similarly, Sidney Strauss's original theoretical work on teaching as a "natural cognitive ability" carries with it important implications for the classroom and for teacher education.

In the domain of health policy, Steven Buka's sophisticated model of "developmental epidemiology" and Lewis Lipsitt's critical examination of research on the problem of crib death both illustrate how developmental research can make an invaluable contribution to effective policymaking. Buka presents stunning examples of how early life events may have a profound and lasting impact on health and well being. Lipsitt's analysis underscores the potential losses for society if critical research is overlooked or if "acceptable" research paradigms are defined too narrowly.

Several chapters capitalize on "natural experiments" in social design. Wolfgang Edelstein explores developmental explanations for a surge of neo-Nazi activity among East German adolescents following the collapse of the Berlin Wall and German reunification. He examines why these ideas are especially appealing to young people, and why adolescents are particularly vulnerable to their destructive influence. Michelle Leichtman and Qi Wang compellingly show how culture influences the ways that children and adults talk, write, and, ultimately, think about the personal past. They demonstrate



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that governmental policies dictating family structure in China (the one-child policy) and governmental solicitation of certain types of autobiographical writing in China and the Soviet Union are reflected in the personal memory styles of individual citizens. Although Westerners accept compulsory schooling as a long-standing and unquestioned governmental policy, Rogoff and colleagues focus on its historical emergence in the United States and in Guatemala. When introduced, this dramatic social change had a profound impact on family life and the child's place in society.

Psychologists not only analyze the effects of societal change on children's development, but also effect change by linking their research insights to policy initiatives. Historical shifts in welfare policy (Huston), child care policy (Phillips & McCartney; Haskins), and healthcare policy (Buka; Lipsitt) also offer natural experiments in social design that are prime targets for psychological analysis and policy recommendations. But psychologists may help to shape the future even in areas that are a step removed from pressing policy considerations. Edelstein's perceptive analysis of the social consequences of the collapse of the Berlin Wall for East German society may suggest interventions directed to problem adolescents. Rogoff and colleagues' cultural-historical perspective portrays compulsory education not as a given, but as a changing societal characteristic, with good and bad qualities. This frees us to think creatively about the role of compulsory schooling in contemporary society, and what its role could and should be in the future.

Two chapters in particular help to set the tone for the entire volume. Charles Super presents a far-reaching, interpretive historical account of cross-cultural studies within developmental psychology, and he identifies a slow but important trend to "globalize" the field of human development. William Runyan offers a personal analysis and appreciation of Shep White's central role in establishing the history of developmental psychology as a prominent field of inquiry. Runyan's account of his own encounters with White, face-to-face and in print, provides a unique assessment of the value of an historical approach to human development.

To borrow a term from Runyan, we hope that this volume will contribute to a better and more adequate "story" of human development in its full historical, cultural, and political context.

Reference

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PART ONE

The Developing Child

Global and Historical Perspectives



1 The Globalization of Developmental Psychology

Charles M. Super

Near the end of the first millennium of the Common Era, it is said, Khaldi, a goat herd living in the Horn of Africa, noticed that his animals were particularly frisky after consuming the red berries of a particular bush. The first hot beverage of "kahva" (meaning 'against sleep') was devised shortly thereafter either by monks, who learned of the beans from Khaldi, or by a Muslim dervish who, banished and starving, tried to soften the berries in water upon instructions from God (Starbucks, 2004; Anonymous, 2004). Soon Yemeni traders were exporting coffee beans from the port of Al-Mukha (hence: mocha), under a carefully protected monopoly.

(Tchibo, nd)

In 1875 in Leipzig, Germany, Wilhelm Wundt established a laboratory for using the experimental method of physics to isolate and measure what were presumed to be the elements of sensation, perception, and ultimately the functioning of the psyche. His goal was to "mark out a new domain of science" (Wundt, 1874, cited in Schultz, 1975, p. 53). In this historical moment, it is said, lies the origin of modern psychology – scientific, empirical psychology, beyond the mere logic of the philosopher (Boring, 1950). In 1879, Leipzig University incorporated Wundt's laboratory, and in recognition of that event 100 years later, the American Psychological Association (APA) declared the centenary of the field itself. The APA was actually formed in 1892, with G. Stanley Hall presiding over a membership of 42 persons who were engaged in the advancement of psychology as a science (American Psychological Association, 2003).

Frans Boas, the founder of American anthropology, studied briefly in Wundt's experimental laboratory, but he eventually concluded that "even 'elementary' sensations were conditioned by their contexts of occurrence" (Laboratory of Comparative Human Cognition, 1983, p. 297). Thus he set out for North America to see more of humanity's contexts. Boas's lifetime



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of field work among the Kwakiutl and other native American groups, and the intellectual line that descended from this project, defined a new, systematic ethnography focused on how cultural features shape human experience (Harris, 1968). The work of this tradition became housed in departments of anthropology, and the American Anthropological Association (AAA) was founded in 1902, with an initial membership of 175 (American Anthropological Association, 2000).

Sociology – a term originated in 1838 by the French philosopher Auguste Comte to encompass the cultural, political, and economic evolution of Western society (Scharff, 1995) – had firmer disciplinary roots in Europe than did either psychology or cultural anthropology, but a distinctly American version was evident by the time the American Sociological Association (ASA) was formed in 1905. The founders noted both that several European nations already had established associations devoted to the scientific study of society and its improvements, and that it was highly desirable to create a new American group "separate and independent" from existing organizations (e.g., the American Economics Society), as otherwise it would have a "subordinate position, and, what is worse, would seem to indicate that sociology is a branch of either history, political science, economics, or anthropology" (F. W. Blackmar, cited in Rhoades, 1981, p. 3). At the first Annual Meeting, in Providence, Rhode Island, members of the society numbered 115, including those with both theoretical and "practical" interests (Rhoades, 1981).

During the reign of Süleyman the Magnificent (1520–1566), coffee was introduced to the Ottoman empire either by two Syrian traders, Hükm and Shems, or, according to another story, by the Ethiopian governor Özdemir Pasha. Although initially opposed by the empire's clerics as evil and narcotic, coffee quickly became popular and 600 coffeehouses had been established in Istanbul alone within a generation. The coffeehouses served there, as they have everywhere else since, as places of refreshment, news, and debate; by 1683 they had become central to the cultural and social functioning of the Ottoman empire. The Dutch by this time had successfully transplanted the coffee plant to their colonies in Java. (Kocaturk, nd; Vienna CC, 1998)

Thus psychology, anthropology, and sociology, like siblings separated in infancy, grew in their own directions. Their central energy was devoted to developing their own institutional architecture. Academic degrees and departments were established to carry the disciplinary names as early as 1878 (the Ph.D. in "Philosophy and Psychology" at Harvard). Disciplinary journals were adopted to communicate new findings and to reflect on the nature