3 Toward a Better Story of Psychology

Sheldon White's Contributions to the History of Psychology, A Personal Perspective

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Introduction

Entering Harvard as an undergraduate in 1946, Sheldon (Shep) White intended to study psychology. With strong prior interests in both literature and politics, scientific psychology seemed a reasonable extension of those interests, perhaps a way of being rigorously scientific about human behavior and experience. However, he was dropped into the middle of the fray of debate about what constitutes a properly scientific psychology (White, 2001).

It felt like being in a broken home, with White shuttling back and forth between two parents. On one side were the experimental psychologists in the basement of Memorial Hall, Edwin G. Boring, S. S. Stevens, and by 1948, B. F. Skinner. He took Psychology 1 with Boring, focusing on experimental studies of sensation, perception, and reaction time. "It was scientifically virtuous but dull as dishwater" (White, 2001, p. 2). On the other side was the newly formed Department of Social Relations, with personality and social psychologists, sociologists, and cultural anthropologists (Allport, Murray, Parsons, Kluckhohn), with the personality and social psychologists still located in Emerson Hall. He took Social Relations 1a with Allport, which had some colorful readings and lectures, but wondered "what did it all mean programmatically or scientifically?" (White, 2001, p. 2). Neither group seemed to have an adequate account of what it and the other group of psychologists were doing.

White attended graduate school at Iowa, a leading department of experimental psychology dominated by Hull–Spence theory. He experienced this as an improvement and had a "marvelous time" there. "One of the things I found most satisfying was that Iowa had a story – of who we psychologists are, how we got here, what we are trying to do" (p. 3). He was impressed that theoretical behaviorists like Kenneth Spence acknowledged that current

experimental research may be limited and dull, but that science needed to start simply; yet over time, with theory building and "composition laws," one would be able to address more complex and interesting human behavior. "This wasn't a great story but it was a story" (p. 3).

Sheldon White's work in the history of psychology can be seen as breaking out of this world view, and moving toward a better story of psychology. Many of his generation shifted from behaviorism to cognitive psychology and cognitive neuroscience, but he also shifted from an internalist story of psychology to a story of psychology in its social and cultural contexts, and to a more pluralistic conception of what constitutes scientific psychology.

One traditional question is, How does one understand psychology as a natural science? White introduces and works with a number of additional questions: How does one understand psychology as an ethical enterprise? How does one understand psychology as a moral science? Is developmental psychology best understood as a natural science, a moral enterprise, or as a set of projects intertwined with social reconstruction? Is developmental psychology perhaps a science of personal and societal design?

These are unusual questions that look odd from a natural scientific perspective. Hadn't he learned that science is supposed to be a value-free inquiry into the mysteries of the natural world? Or, did he first learn that, then learn more about the social and historical embeddedness of psychology, and come to a different understanding of the value-saturated human science traditions?

In the spring semester of 1985–86, while writing and editing a book on the uses of psychology in historical interpetation (Runyan, 1988) and on sabbatical at Kohlberg's Center for Moral Development at Harvard, I visited the first session of Sheldon White's History of Psychology course to see how he was covering the field. There were readings from many familiar sources, but it soon became clear that something different was going on. This wasn't like any story about the history of psychology I'd heard before.

There was no textbook, but readings from primary sources in Helmholtz, Wundt, William James, John Dewey, J. M. Cattell, John Dewey, Morton Prince, Breuer and Freud, Wolfgang Kohler, B. F. Skinner, S. S. Stevens, Edward Tolman, George Miller, Karl Lashley, Gordon Allport, Robert Sears, Daniel Schacter, and other well-known figures. However, the pieces weren't falling into their familiar places. The balls weren't rolling into their accustomed slots. The conceptual framework was difficult to assimilate. However, it felt obviously right in many ways and seemed like it might be a better story of psychology.

Wundt was appearing not in his standard place as founder of experimental psychology, but instead with his cultural-historical work as a contributor to

early social psychology. The individual chapters of William James's *Principles of Psychology* were presented and analyzed. G. Stanley Hall and genetic-developmental psychology had an unusually prominent place. Francis Bacon was used to suggest that epistemology in philosophy often stems from a concern with social reform. Inquiry in developmental psychology was seen as often flowing from changes in social organizations, institutions, and programs for children and disadvantaged populations. There is not a rising tide of applause as the discipline gets more experimental. A different story of psychology was being developed here, one supported by more detailed knowledge of the intellectual and social organization of the discipline.

This was NOT a story of psychology becoming increasingly successful as a natural science, as it moved from Titchenerian introspection, to behaviorism and learning theories, to cognitive neuroscience. Rather, White kept talking about "cooperative empiricisms" employed by different groups of psychologists, often with different visions of the field. This included the early experimentalists, who appeared in a changed role, as not THE founders of psychology, but as one contending group among many. The story also includes the Child Study group at Clark University under G. Stanley Hall, clinical case analysis by Freud, neurologists, early social psychologists, learning theorists, cognitive psychologists, and a competing plurality of views about human nature that have affected social policy.

How to conceptualize psychology, and how to organize this pluralistic set of activities into a discipline? How did these "cooperative empiricisms" relate to the changing social organization of society? I was in trouble. How much did I know about 19th- and 20th-century social history, and how it was related to the rise and fall of different traditions in psychology? And what would I need to learn to be able to think critically about these kinds of arguments?

I thought I knew something about the philosophy of science, particularly about the rise and fall of logical positivism, with its loose connection to various behaviorisms (Smith, 1986), the later impact of Kuhn's cognitive and social-historical views, and the more radical sociological and Foucauldian approaches to scientific knowledge. However, that rug was also pulled out from under me, as White started analyzing philosophy of science not with Carnap, Hempel, or Nagel; not with Kuhn; not with Popper and falsificationism; not with James, Dewey, and pragmatism; not with rationalists versus empiricists or a Kantian synthesis; but with Francis Bacon. Francis Bacon (1561–1626)! Bacon was discussed in relation to his *Great Instauration* (1620), an effort to reformulate the sciences and their relation to society.

Bacon may be best known as an early philosopher of science, advocating induction, and as an early utopian, the author of *New Atlantis* (1627). What

was he doing in a history of psychology course? Let me quote from notes on Bacon that White used in his History of Psychology course in the spring of 2000.

> Looking back at the past through a disciplinary telescope, the early psychologists saw a long lineage of ancestral philosophers of knowledge. But these "philosophers" – Thomas Hobbes, John Locke, David Hume, John Stuart Mill, Herbert Spencer – were not interested in epistemology for its own sake. They were men interested in political and religious reform, who addressed the problem of knowledge as foundational for a larger set of issues. What constitutes a sound notion? On what notion can good government be built? These writers were intellectuals, philosophes, members of the intelligentsia, "philosophers" in an older use of that word in English. They were leaders of Enlightenment efforts to create governments based on secular, rational, scientific social design.

In psychology, Bacon is sometimes mentioned as an early philosopher of science, but in White's view, "Bacon was a politician who led the active, chancy life of someone prominent in English public life. His advocacy of the inductive method was the first step in a larger project of a Great Instauration, a vision of a program of social reform that would inspire Descartes and Hobbes in the 17th century and come to fruition in the 19th century" (e.g., Comte, Mill, Spencer, Marx, and Engels).

Is this all true? I didn't then know enough to be able to judge, and I am still learning more about this field of issues. It is a large problem space, trying to relate theory and research in different traditions to social, institutional, and cultural history. At the time though, in the spring of 1986, I had the sense that this was a more detailed, better contextualized, and more complex story about the history of psychology than I was familiar with. It felt deeper, more socially relevant, and more intellectually adequate. In short, it seemed like a better story, one which conceptually left Boring's *History of Experimental Psychology* (1929/1950) in the dust. In later years, it provided a stimulating intellectual complement to Hilgard's *Psychology in America* (1987).

It was a story that I wanted to learn more about. On subsequent sabbaticals and years as a visiting scholar, I had a chance to again audit parts of his courses on the history of psychology and the history of developmental psychology, and talk with him about the problems raised. These were probably the most intellectually rewarding discussions I've had with anyone about psychology, continually raising new perspectives about what psychology is and how it fits into the world. It was a challenge to relate his perspective on psychology in

its social contexts to my own primary interest in the study of lives. I used to feel that the most interesting conversations I'd ever had about psychology were with Henry Murray from 1970 to 1986, but over the last fifteen years, I've learned more from Shep White than anyone else, in person or in print, about the social and human meanings of psychology, and about the lives and careers of psychologists in different traditions. Getting together for a "quick sandwich" at the William James cafeteria often lasted three to four hours, or an afternoon chat would interfere with dinner plans. This chapter provides a welcome opportunity to think more carefully about the alternative views of the history of psychology that he was developing.

Debates about the need for a human science psychology to complement experimental natural science psychology have been kicking around for over a hundred years. Shep White's vision of developmental psychology as a human enterprise is, in my view, a major contribution to the human sciences and a way of understanding the details of work in different traditions in psychology related to wider social and cultural contexts.

He may have a better story of psychology, although not a perfect one. From my perspective, the social and cultural contexts of developmental psychology are illuminating, yet I also want to learn about the life histories of the people involved. The publications, with the exception of his work on G. Stanley Hall (White, 1992), often don't say a lot about this; but in conversation, White has empathic, critical, and insightful things to say about the lives and careers, about the "life plans and broken dreams" of many of those making a life in psychology.

With Emily Cahan, Shep White has traced the story of these human science traditions in psychology from Auguste Comte, John Stuart Mill, and Wilhelm Wundt, to Hugo Munsterberg and Gordon Allport (Cahan & White, 1992). Each called, in different ways, for a "human science psychology" or a "second psychology" to complement natural science laboratory-based experimental psychology. The tensions between these two visions came to life yet again in the split between experimental psychology and social relations at Harvard from 1946 to 1972, and though less visible, may not yet be resolved.

Cognitive neuroscience has an appealing story about itself in relation to psychology that has attracted many, and it seems likely to be more successful than earlier natural science visions such as Titchener's experimental psychology, or the behavioral and learning theory formulations that dominated from the 1930s through the 1950s. However, all three natural science programs, including cognitive neuroscience, have trouble dealing adequately with social-political contexts, cultural history, and the life histories of individuals. White has developed a vision of psychology in its social and cultural contexts

that provides resources for reconstructing our understanding of the human science traditions in psychology. Rather than being dismissed as inadequately scientific, their methods and contributions need to be brought into clearer conceptual focus. It may turn out that social-cultural-historical approaches to psychology are indispensable complements to cognitive neuroscience and are even required resources for understanding the history of both "hard" and "soft" traditions in psychology in their social, cultural, and personal contexts.

This chapter discusses several of Shep White's contributions to the history of psychology, interwoven with a little about the contexts of his life and career. In particular, I'll draw on material from his publications "The Learning Theory Tradition and Child Psychology" (1970); "Psychology in All Sorts of Places" (1980) (a difficult-to-find chapter, which is perhaps my favorite); "Proposals for a Second Psychology" (Cahan & White, 1992) in the *American Psychologist*; and most recently, his Heinz Werner lectures at Clark University in May 2001 published as *Developmental Psychology as a Human Enterpise* (2001). These are supplemented by having audited his courses, the History of Psychology and the History of Developmental Psychology, and by having had talks and e-mail exchanges with him about these issues since the spring of 1986.

This is not a comprehensive review of all his contributions to the history of psychology; rather, as is inevitably the case, it is a personal perspective on how his work is perceived in light of my particular experience and interests. I have long been interested in the study of lives, and more recently in how the study of lives is related to the history of psychology (Runyan, 1982, 1988, 2003). I expect that others with backgrounds in developmental psychology, social policy, or the history and philosophy of science might well interpret his work differently.

Steps Toward a Better Story of Psychology

The Learning Theory Tradition and Child Psychology (1970)

As an associate editor of *Carmichael's Manual of Child Psychology* (Mussen, 1970), Shep White wrote the chapter on learning theory. This was not a raving endorsement of learning theory. The spell of Hull–Spence learning theory from graduate school at Iowa had been broken.

He granted that the stimulus-response tradition still remains an identifiable tradition, but "among child psychologists, as among psychologists in general, it is a waning tradition" (p. 657). Drawing on an analogy from Hebb

(1960), he said that in psychology, we are in the second American revolution. "The first American revolution overthrew introspection, the Psychology of Consciousness, and Titchenerian structuralism; it established stimulus-response analysis, the Psychology of Behavior, and the learning theories" (p. 657). Although often dated from Watson's 1913 paper, "Psychology as a Behaviorist Views It," the switch to behaviorism may have taken several decades to establish itself. The second ongoing revolution in 1970 was cognitive functionalism, with Piaget, Werner, Chomsky, ethology, and Russian psychologists (e.g., Luria) and an alignment with neurophysiology.

One surprising thing about the behavioral revolution was that although it had been central in theoretical work in academic psychology in the 1930s and 1940s, it did not become prominent in child psychology until the 1950s. Child psychologists may have been more influenced by a genetic point of view, as advocated earlier by G. Stanley Hall and later by Heinz Werner.

In a key paragraph near the end of the chapter, White says "We have all become a little tired of methodology, of scientific prospecti, of those seductive analogies between psychology and physics-seen-at-a-distance (White, 1970, p. 687)." As a result of this heresy, White says he was "excommunicated" from the learning theory community, and for a long time, Charles Spiker, his dissertation chair at Iowa, would not speak to him.

What led to the move away from behavioral learning theory? After White received his Ph.D. from Iowa in 1957, he started teaching at the University of Chicago in 1957, and said that people there, like Eckard Hess, just didn't find the Hull–Spence story credible. He published a number of experimental studies on learning and perception until the mid-1960s, but was troubled by the question: Is this a worthwhile way for a man to spend his life? By 1963–64, he was a fellow at the Center for Cognitive Psychology at Harvard. After moving to the Harvard Graduate School of Education in 1965, he started consulting on a number of social programs for children like Head Start, Follow Through, and Sesame Street. By 1973, he was lead author of a three-volume report, *Federal Programs for Young Children: Review and Recommendations*. White was ready for a different approach to psychology, both experimental and applied, and his relations with it. By the time of the 1978 Houston Symposium (White, 1980) discussed in the next section, he had a different way to conceive the stories that psychologists tell themselves about their discipline.

Psychology in All Sorts of Places (1980)

Psychologists are formed into an identifiable group through historical processes, including the creation of myths and factual historical accounts about

their origin. White draws on the ideas of Mircea Eliade, historian of religion, about the function of tribal myths for initiating neophytes into the tribal traditions. In learning about the "Dream Time," or what happened at the beginning, the initiate also learns how to be "oriented" in this world, and what he or she must do to participate in it. White acknowledges that it is a huge leap, but suggests that the narrative histories of psychology, with stories about ancestors, also set forth a dream time, in which meaningful relations are created and orientation for the present is provided.

One significant difference is that narrative histories of psychology are debatable and corrigible. These histories can be tested against empirical evidence, and perhaps become "stories with footnotes" (White, 1980, p. 108). White says that when students are first exposed to a history of the discipline, such as Boring (1950) or Murphy and Kovach (1972), they often experience a "feeling of relaxation, of understanding of organization. '*Now* I see how the pieces fit together. . . . ' '*Now* it all makes a little sense.'" (p. 110). Empirical historical research can lead to doubts about the received story and to construction of revised or new histories.

When things are going smoothly for the discipline, psychologists may not feel the need for a lot of specialized knowledge about its history, but can do their research, writing, and teaching and function effectively within the community with extant stories. One story goes as follows: "We view psychology as a kind of continuation of traditional philosophical inquiry, armchair philosophy become scientific" (p. 110). If we squint, and look in just the right direction, we can see a story that looks like that. "Our dream time being, roughly, at about the time of Sir Francis Bacon, the Novum Organum, and the rise of the spirit of science. A rising tide of scientific inquiry begat, on the one side, Hobbes and Locke, patriarch of the house of Skinner, and, on the other Descartes, patriarch of the house of Piaget" (White, 1980, p. 110).

Philosophical inquiry proceeds with an empiricist tradition (Berkeley, Hume, the Mills) and a rationalist tradition (Descartes, Spinoza, Leibniz). "In 1879 there begins, in Wundt's laboratory the scientific and experimental pursuit of psychology, philosophy pursued by other means. The laboratory of psychology grows, at first expressed in introspectionism, then in functionalism and behaviorism, finally emerging at present in information-processing and genetic epistemology" (p. 110). (If we continue the story to the present day, add cognitive neuroscience.) It seems that philosophical ideas about thinking are now being investigated with science and experimental methods, "and we realize the special value of our house, which is progress, scientific movement" (p. 111).

White suggests an alternative perspective from which to view the history of psychology. Psychologists often views the past as epistemological philosophy becoming epistemological psychology. However, White finds that "these epistemological movements are part of a larger picture, a broad effort to reconstruct knowledge in the interest of creating reformed government" (p. 111).

Francis Bacon was an advocate of induction, which we now see as limited. However, his work did not begin and end in ideas, but his project was to reconstruct methods of science, then reconstruct biological and social sciences, and finally, to reconstruct government.

"This program of comprehensive reconstruction caught the imagination of Thomas Hobbes and Rene Descartes." Two centuries later, "something like a fulfillment of Bacon's project of a Great Instauration – philosophical, scientific, and governmental truths all inter-rationalized to offer a social directive – emerges in the middle part of the nineteenth century" (p. 112). From the right, there is Herbert Spencer with the 10 volumes of his *Synthetic Philosophy*, arguing for laissez-faire economics, and called by his critics "Social Darwinism." From the left, there are Marx and Engels, developing the ideology of Communism. Both groups felt that Darwin's theory of evolution provided scientific support for their social-political views.

In relation to the history of psychology, around the beginning of the 20th century, there are visions of "scientific management," measuring people and their capacities, and their institutions, "factories, schools, governmental agencies, homes – bettered by rational analysis and calculated planning" (p. 112).

Human service agencies began to be professionalized, with government programs for the young, the old, the handicapped, the unemployed, and the poor, with a wave in the New Deal of the 1930s, and another wave with the War on Poverty in the 1960s. (One strand I would add to this is that the formation of personality psychology, beginning with Allport's *Personality: A Psychological Interpretation* (1937), can be traced back to Allport's dissertation in 1922 on "An Experimental Study of Traits with Special Reference to Social Diagnosis," which was done both in psychology and in social ethics, drawing partly on the ideas of Richard Clarke Cabot about differential diagnosis in medicine and the use of case histories. It also drew on Allport's exposure to "human science" traditions through the ideas of Stern and "personalism" that Allport learned more about in his postdoctoral year in Germany in 1922–23.)

The growth of psychology, particularly "applied psychology" and some of the "second psychologies" are "tied to, and formed by, contemporary concern to build a rational basis for education, social work, psychiatry, the courts" (p. 112). Applied psychology does not come after basic psychology, but they

emerge together. The growth of psychology is part of a broader movement toward "rationalized social practice" (p. 112).

This says it more clearly than I understood when first hearing White's course. If psychology comes not just out of laboratory experimentation, but is also interwoven with the growth of social institutions and efforts to rationalize them, this is a different story than the one about epistemic issues in philosophy being tested in experimental psychology laboratories.

Proposals for a Second Psychology (Cahan and White, 1992)

Hugo Munsterberg (1863–1916) was invited to Harvard by William James in 1892 to run the Harvard Psychology Laboratory. Munsterberg had received his Ph.D. in psychology under Wundt, and then an M.D. He had criticized Wundt's work in a way that pleased James, he was intelligent and hard working, and it seemed he could be a valuable addition to the Harvard Psychology department. What is less known is that Munsterberg also had some exposure to the "human science" tradition in Germany, meeting with Rickert, one of the founders of human science in a discussion group that met at Max Weber's house.

Munsterberg's textbook *Psychology: General and Applied* (1915) argued that there were two branches of psychology, a natural science "causal" psychology, and a human science "purposive" psychology. In Munsterberg's view, the two psychologies "do not exclude each other, they supplement each other, they support each other, they demand each other" (Cahan & White, 1992, p. 224). Munsterberg, however, argued that psychology should be kept separate from history. In his autobiography, Gordon Allport (1967) reports listening to Munsterberg's lectures as an undergraduate and wondering if causal and purposive psychology could be reconciled or fused. For the rest of his career, Allport attempted to mediate relations between natural science and human science visions of psychology, in order to effectively study "individuality."

Cahan and White (1992) traced the story of these human science traditions in psychology from Auguste Comte, John Stuart Mill, and Wilhelm Wundt, to Hugo Munsterberg and Gordon Allport (Cahan & White, 1992). Each called, in different ways, for a "human science psychology" or a "second psychology" to complement natural science laboratory-based experimental psychology. The tensions between these two visions came to life again in the split between experimental psychology and Social Relations at Harvard from 1946 to 1972, and though less visible, are not yet resolved. Shep White's contributions to the social history of developmental psychology provide resources

for rethinking the relations between natural science and human science visions of psychology and between cognitive neuroscience and social-cultural-historical psychology, which will be discussed later in this chapter.

Developmental Psychology As a Human Enterprise (2001)

In May 2001, Shep White gave the Heinz Werner lectures at Clark University, which resulted in the book *Developmental Psychology As a Human Enterprise* (2001). The lectures were given in two parts, the first "Child Study: Exploring New Contexts and Possibilities," and the second "Developmental Psychology as a Science of Personal and Societal Design."

The first lecture addresses the question, "What is the value of developmental psychology as a cooperative human enterprise?" He responds to three criticisms of developmental psychology, that it studies the obvious, that it is beset by pluralisms, and that its scientific status is questionable. The second lecture analyzes the programs of collaborative empiricism which emerged in developmental psychology. There was not just the single program of experimental research from Wundt's Leipzig laboratory, but a variety of research programs from the beginning, identified as early as Dewey (1887) or James (1890).

White argues that there were three relatively independent establishments of developmental psychology: G. Stanley Hall's Child Study movement at Clark University until World War I; the child development movement with child development centers and institutes, from roughly the 1920s to 1950; and the rise of theoretically based developmental psychology with Piaget, Werner, Vygotsky, and others beginning in the 1960s.

In the chapter discussed earlier, "The Learning Theory Tradition and Child Psychology" (1970), White indicated his disillusion with the Hull–Spence tradition that he'd learned as a graduate student at Iowa. By the 1960s, that tradition had begun to lose credibility with him and many other psychologists. This is often described as a paradigm shift within experimental psychology from behaviorism to the "Cognitive Revolution." White suggests it was something broader than that. It wasn't just a paradigm shift within experimental psychology, but a shift in conceptions of the relative place of experimentation and other methods within psychology.

Boring's *History of Experimental Psychology* (1929) had celebrated the opening of Wundt's Leipzig laboratory in 1879 as foundational in experimental psychology. This "birthdate" of psychology was reinforced in 1979 when the American Psychological Association celebrated the 100th anniversary of the event. However, it became clear by the 1960s that

"clinical psychology, personality psychology, social psychology, and developmental psychology did not grow out of the brass-instruments laboratory at Leipzig" (pp. 4–5). Rather, the nonexperimental traditions had theories and research methods of their own, and needed histories of their own research traditions.

Working as a psychologist consulting on poverty programs for children, White began to "catch glimpses of a very different history of developmental psychology" (p. 5). In chapter 2 of vol. 1 of the three-volume report *Federal Programs for Young Children: Review and Recommendations* (1973), he reviewed a history of government programs for disadvantaged children and their major public purposes. "It was immediately evident to me that the history of public activities for children ran right into the history of developmental psychology, and it was at that point that I began to believe that the history of developmental psychology could only be fully understood by taking into account the "externalist" social and political forces impinging on the field" (p. 6).

"Part of the impetus for the establishment of developmental psychology came because American society formed a new system for the care, protection, and education of children in the later half of the 19th century" (p. 12). Some old roles, such as parent or teacher, were modified, while a number of new social roles were created, such as pediatrician, social worker, kindergarten teacher, or juvenile-court judge. New institutional structures were created for children, along with needs for new ways of conceptualizing children and human development. "While developmental psychology can reasonably be called a science, it cannot be what some have spoken about as a value-free science. Developmental psychology has served as a moral science, offering values and ideals to those concerned with the upbringing and education of American children" (p. 46).

He suggests that contemporary graduate training in developmental psychology should include more than training in how to do well-designed research. In addition, "students need an understanding of the larger purposes and meaning of their field" (p. 46). More work is needed on the social and political history of developmental psychology, and on the "diffusion of people, ideas, and methods back and forth between developmental psychology and the places and spaces of the "real world" (p. 46). (To me, it seems that Shep White's own work in analyzing the social institutional sources and uses of developmental psychology illustrates the power and value of a "second science" tradition in psychology.)

When Shep White entered Harvard in 1946, he found that the psychology department had broken in two, between experimental psychologists and the

personality and social psychologists in Social Relations. In 1970, sociology withdrew from Social Relations, and in 1972, the cultural anthropologists returned to anthropology, and the experimental, social, personality, and developmental psychologists were combined in a Department of Psychology and Social Relations. In the spring of 1986, almost 40 years after his arrival as a freshman, as Chair of the Department of Psychology and Social Relations, his duty was to move, at a meeting of the Faculty of Arts and Sciences, that the name be changed back to a single unified "Department of Psychology." "It was a rare experience. How many children of a broken home are ever given the chance to repair the break?" (p. 47).

Cooperative Empiricisms in the Human Sciences: Nomothetic, Historical, and Experiential

The Harvard psychology department is now back in one unified department that is divided into four areas: Cognition, Brain, and Behavior; Developmental Psychology; Experimental Psychopathology and the Clinical Group; and Social Psychology. Experimental interests have evolved over the years from experimental psychophysics, to behaviorism, to cognitive psychology, and now to Cognition, Brain, and Behavior. There are a number of labs studying varying aspects of cognitive neuroscience, and the personality and clinical areas have been replaced by Experimental Psychopathology, with a Clinical Group added to it in recent years.

What, though, has happened with the "human science" traditions, designed to complement laboratory-based psychology? What happened with the social and cultural levels of analysis in the Social Relations Department? What happened with the study of individual lives? Are aspects of these human science traditions included in the four subject areas? Or is there a need to supplement them, and to complement cognitive neuroscience with greater attention to social-political contexts, cultural history, and life histories?

One of the problems with the "second psychologies" is that experimental psychology may be turning out more empirical research papers, while second psychologies are more often writing programmatic papers about "the need to broaden concepts of what science should be and do" (Cahan & White, 1992, p. 229). That may be in part because there is not yet an adequate conceptual framework, and/or an adequate institutional context, in which practitioners of second psychology can effectively pursue their research, publishing, and teaching. This may be one of the conditions which can motivate attention to philosophical issues, or to historical research and reinterpretation.

A phrase that Shep White frequently uses is that of "cooperative empiricisms," as practiced by experimental psychologists or by different generations of developmental psychologists. It may be that just such "cooperative empiricisms" are needed for the human science traditions. Dilthey (1887/1988) conceived his work on the human sciences as part of a larger "critique of historical reason." I would argue that processes involved in historical inquiry such as contextualizing, particularizing, and interpreting are central in case study interpretation, in analyzing cultural history, and in studying the social contexts of developmental psychology.

These historical-interpretive methods may be central to many of the second psychology or human science traditions discussed in Cahan and White (1992). Historical-interpretive methods may be as central to the human sciences as experimental methods are to natural science psychology.

One additional human science method can be conceived as "cooperative experientialism," or the processes through which a group of people make individual and collaborative efforts to better understand their own personal subjective experiences and that of others. This was pursued in the psychoanalytic and humanistic traditions, and efforts to better understand personal experience and meanings have been a significant part of the human sciences more broadly.

To summarize, there are at least three kinds of collaborative empiricisms: (1) nomothetic empiricism, which may be correlational or experimental; (2) historical empiricism, concerned with contextualizing, particularizing, and interpreting; and (3) personal, experiential empiricism, concerned with learning about the subjective experiences of self and others. While natural science visions draw on nomothetic empiricisms, testing general theories with quantitative and experimental methods; human science traditions concentrate more on interpreting particulars, drawing on historical-interpretive and personal-experiential empiricisms.

Lee Cronbach wrote about the "two disciplines of scientific psychology" (1957), experimental and correlational psychology; then, in "Beyond the Two Disciplines of Scientific Psychology" (1975), he referred to person X situation interactions, or the interaction of individual differences with situational-experimental conditions. Toward the end of his career, he talked about the value of historical accounts, and not only randomized experiments, in evaluation research (Cronbach, 1982). To extend Cronbach's language, there are not just "two disciplines of scientific psychology," but at least a "third discipline of scientific psychology," namely historical-interpretive psychology (Runyan, 2003, in press).

In psychology textbooks, there is often a hierarchical or "pecking order" discussion of research methods, starting with case studies used to formulate hypotheses, then correlational methods to explore quantitative relationships, and finally, experimental methods to more rigorously analyze causal relationships. This is true, but it is only part of the story. It is one way of thinking about the relationships between these three methods, organized around a search for general causal relationships. If one's purpose is to better understand an individual case, then relations between the methods change. Correlational and experimental studies become resources that can be employed to form interpretive hypotheses about the individual case, which then need to be rigorously examined with idiographic historical-interpretive methods (Runyan, 1982, 1997).

The relations between "natural science" methods and "historical science" methods are formulated in a useful way in Harvard's Core Curriculum. Historical science methods are concerned with explaining complex sequences of historically contingent events and processes. For example, in evolutionary biology, how to understand the evolution of particular species, or why dinosaurs became extinct 65 million years ago. In historical geology, how to understand the formation and history of the earth, or how to understand continental drift. In the spring of 1986, while auditing Shep White's course on the history of psychology, I was also auditing Stephen Jay Gould's course on "History of the Earth and of Life," with his making a case for "historical science" in both evolutionary biology and historical geology (cf. Gould, 1986, 1989, 2002).

In Harvard's Core Curriculum for undergraduate electives launched in 1978, there was debate about what science courses should be required. Undergraduates were required to take electives in both Science A and Science B. Science A courses "are intended to introduce students to areas of science dealing primarily with deductive and quantitative aspects and to increase the student's understanding of the physical world." For example, Science A-16 is "Modern Physics: Concepts and Development," and Science A-25 is "Chemistry of the 20th Century."

Science B courses are "intended to provide a general understanding of science as a way of looking at man and the world by introducing students to complex natural systems with a substantial historical or evolutionary component." For example, Science B-15 is "Evolutionary Biology" taught by E. O. Wilson, while Science B-16, "History of the Earth and of Life" was taught by Stephen Jay Gould, who had done much to argue for the importance of "historical science" as a way of scientific knowing. Historical science methods may be employed in biological, physical, or social sciences.

In auditing Gould's course and having occasional discussions with him, I was repeatedly struck with the relevance of these issues for the study of lives, and for the "human science" traditions in psychology. Historical science methods in psychology include processes such as contextualizing (relating psychology to external social, cultural, and historical contexts as well as to internal biological structures and processes), particularizing, forming and testing interpretive hypotheses, historicizing, and working toward more adequate narrative and interpretive accounts. Historical science methods may be as central to the "human science" or "second psychology" traditions as quantitative and experimental methods have been for the nomothetic "natural science" traditions in psychology.

Accounts of relations between life, work, and social-cultural contexts are examples of "historical science" inquiry of interest to psychologists trying to understand their discipline. Autobiographical accounts have been written not only by psychoanalysts but also by experimental psychologists. While working on his *History of Experimental Psychology* (1929), Edwin G. Boring set up the book series *A History of Psychology in Autobiography* (Murchison, 1930), inviting eminent psychologists to write intellectual autobiographies. The first volume was published in 1930, while Boring contributed a chapter of his own to vol. 4 in 1952, and a longer one in *Psychologist at Large* (1961). Skinner contributed a chapter to vol. 5 in 1967, and went on to publish a three-volume autobiography. The series has gone through eight volumes, broadening its focus when Gardner Lindzey became co-editor for vol. 5 in 1967, with the most recent, vol. 8, in 1989. Currently, Lindzey and I are organizing vol. 9 in the series.

The course of autobiographical and biographical inquiry sometimes leads to progress in understanding (Runyan, 1997). Consider, for example, the history of Freud interpretation, from Freud's own partially autobiographical writings, through the early critiques by Wittels in 1923, to Ernest Jones's three-volume biography (Jones, 1953, 1955, 1957), to Henri Ellenberger's massively informed *Discovery of the Unconscious* (1970), through Paul Roazen's research on the personal side of *Freud and His Followers* (1975), to critiques by Sulloway (1979) and many others, to Peter Gay's (1988) defense. This dialectic of advocacy and critique may have reached a more satisfactory synthesis in Louis Breger's *Freud: Darkness in the Midst of Vision* (2000). This is an account attempting to reveal both Freud's powerful intellectual insights, and how they're interwoven with dogmatism, error, and dictatorial treatment of his followers. The history of Freud biography illustrates both the potentials and limitations of the historical and interpretive processes utilized in the human sciences.

The success of human science inquiry in advancing our understanding of relations between work and life is also being demonstrated in the course of Darwin biography, from his own autobiography, to the letters edited by his son (1887), to the 12 published and annotated volumes of his correspondence recently completed, through the two volumes of Janet Brown's recent biography (1995, 2002). Another example of success in cumulative, progressively more adequate human science understanding of the relations between life and work is illustrated in the course of scholarship on William James, from his son's editing of William James's letters (1920), to Ralph Barton Perry's two-volume *The Thought and Character of William James* (1935), through Gay Wilson Allen's biography (1961), to *The Jameses: A Family Narrative* (1991) by R. W. B. Lewis, to recent biographies by Linda Simon (1998) and others. This biographical work is supplemented by the Harvard University Press's carefully annotated *The Works of William James* in 19 volumes, and the 11 (out of a projected 12) annotated volumes of the *Correspondence of William James* by the University Press of Virginia. This may be put down as mere "armchair" psychology, but may involve an amount of cumulative intellectual work which compares favorably with that in most quantitative analyses or laboratory experiments.

The objection may arise, "But how does this count as psychology? Isn't it part of humanistic scholarship?" YES! The human science side of psychology overlaps, and legitimately overlaps, with biography and history; just as the natural science side of psychology overlaps, and legitimately overlaps, with biology as in neuroscience, genetics, and evolutionary psychology.

If we start paring away the overlap of psychology with allied disciplines such as biology (on the natural science side), or biography and history (on the human science side), psychology will become a scrawny, emaciated reminder of what it might have been. In order not to become lopsided, psychology needs to be developed not only on its biological natural science side, but also on its historical human science side. The issue is repeatedly advocated by two centuries of those working on the human science or "second psychology" side of psychology (Cahan & White, 1992).

What is needed to move "toward a better story of psychology"? If Shep White is right, philosophical programs, back to Francis Bacon and on through the empiricists and rationalists, as well as scientific programs of "cooperative empiricism" in psychology were often related to programs for social-political reform. From my perspective, these intellectual and social-political programs can also be usefully understood in relation to the personal and life historical processes of the individuals involved. With Francis Bacon, as White argues, his concern with induction and philosophy of science were related to his

interests in social-political reform. However, Bacon's intellectual ambitions and social-political aspirations may both need to be understood in relation to his personal history. His father died when Bacon was 18 in 1579, and as the fifth and youngest child of his father's second wife, Bacon died before he received an adequate inheritance, and thus Bacon was forced to try to make his fortune navigating the treacherous waters of court politics, when he would have preferred to spend his time on intellectual projects (Jardine & Stewart, 1998). Only after Bacon was impeached for bribery in 1621, did he have the last five years of his life to work with fewer interruptions on his major intellectual projects. "In later years, Bacon was careful to separate his life into a "before" period of intellectual intrigue, treacherous behavior of friends, and social climbing, and an "after" of austere scientific inquiry in a country retreat" (Jardine & Stewart, 1998, p. 19). Posterity was left with "two clearly incompatible versions of Francis Bacon. All subsequent biography has struggled to resolve them" (p. 19). In understanding the history of psychology, we too are left with questions about how to understand the varied relations between scientific inquiry, social-political interests, and the conduct of individual lives.

White convincingly argues that intellectual projects in philosophy and in psychology are often related to social, political concerns. I would add that both intellectual programs and social-political aspirations can often be illuminated by understanding their place in the life histories of particular individuals in their social, cultural, and historical contexts. Rather than seeing psychology through a solely intellectual lens as the empirical testing of philosophical speculations, perhaps psychology can be seen as part of a triangle of scientific-intellectual, social-political, and personal worlds co-constructing each other over the course of time.

Conclusion

Let's give the last word, or rather, the next to last word, to William James. One of his last published papers is "A Great French Philosopher at Harvard" in the *Nation*, on March 31, 1910. In reporting enthusiastically about the lectures of Emile Boutroux (1845–1921), James summarized some of his own late views about natural science versus human science approaches to psychology. "Carried away by the triumphs of chemistry, physics, and mathematics, these men imagined that the frame of things was eternally and literally mechanical, and that truth was reached by abstracting from it everything connected with personality . . . Boutroux took the diametrically opposite view. It is the element we wholly live in, it is what Plutarch's and Shakespeare's pages give us, it

is the superabounding, growing, every-varying, and novelty-discovering. Its real shape is biography and history" (James, 1910/1978, pp. 169, 171).

James said lots of things, which can be used to support many different positions. The position I'll use him for here is to suggest the limitations of a natural science only view of the psychological world, and the need also for the varying, growing, and novelty-discovering disciplines of biography and history. These topics have been pursued for many years within the "human sciences" and various "second psychologies" (Cahan & White, 1992).

At Harvard, a concern for the study of lives and for psychology in relation to social and cultural contexts was one factor leading to a split between experimental psychology and a newly formed Social Relations Department in 1946, which was the situation faced by Shep White as an undergraduate from 1946 to 1951. As a graduate student at the University of Iowa, he was drawn to the experimental learning theory of Kenneth Spence and began work as an experimental child psychologist. By the time of his 1970 handbook chapter on "The learning theory tradition and child psychology," he had become disillusioned with that vision of scientific psychology and more interested in cognitive psychology. By the late 1960s he had become involved in consulting on social programs and policies for children (White et al., 1973). This work on social policy led him to see that the history of developmental psychology could be understood only in relation to "externalist" social, political, and organizational processes. Thus began a process of reconceptualizing the history of psychology, as well as reconceptualizing developmental psychology itself and its place in a world of designed institutions. One recent statement of this alternative vision is that developmental psychology "came into existence when people began to live in society composed of myriad designed institutions, when people needed to think about human motives and abilities and needs in order to create the institutions, and when individuals living in these new and slowly changing societies confronted historically new responsibilities for designing their own and their children's development" (White, 2003, p. 204).

When, as Chair of the Department of Psychology and Social Relations, White moved in 1986 that the name of the department be shortened to "Department of Psychology," this may have been associated with more harmonious relations between different groups of psychologists, now organized into the four areas of Cognition, Brain and Behavior; Developmental Psychology; Experimental Psychopathology and the Clinical Group; and Social Psychology.

What, though, has happened with the "second psychology," or "human science" traditions, and with the interdisciplinary perspectives of Social Relations? Cognitive neuroscience seems to have become increasingly

influential as an integrative tradition, directing attention to underlying neurological structures and processes related to topics in each of the four areas of the department. What about social and cultural contexts of psychology? The relations of psychology with sociology and anthropology? Or the study of individual lives? Are parts of the earlier Social Relations projects worth retaining or developing?

With increasing attention given to biological levels of analysis, what do we do about the relations of psychology to social, cultural, life historical, and historical levels of analysis? Sheldon White's work linking developmental psychology to social policy and institutions and his research in the social history of developmental psychology are original and illuminating examples of interdisciplinary psychosocial inquiry. They provide much for us to build on in developing adequately pluralistic conceptions of scientific psychology, and in developing better stories of psychology, both retrospectively and prospectively.

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