

JOHN B. WATSON'S BEHAVIORIST MANIFESTO AT 100

EL MANIFIESTO CONDUCTISTA DE JOHN B. WATSON A SUS 100 AÑOS

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Abstract

In this introduction to the special issue of the *Mexican Journal of Behavior Analysis* on Behaviorism at 100: The Legacies of Watson's Behaviorist Manifesto, we consider Watson's seminal 1913 *Psychological Review* article "Psychology as the behaviorist views it" as a contribution in its own time, and reflect on the significance of the article in both contemporary psychology and contemporary behaviorism. Despite its lukewarm reception at the time of its publication and the mixed reviews of its impact even today, it remains one of the touchstone articles in psychology and an undeniably important text in understanding the evolution of 20th century American psychology. The different contributors to the special issue consider Watson's article in the context of a number of subdisciplines of psychology.

Keywords: introduction, special issue, John B. Watson, Behaviorism at 100, subdisciplines of psychology

Resumen

En esta introducción al número especial de la Revista Mexicana de Análisis de la Conducta sobre el conductismo a los 100 años: Los legados del Manifiesto conductista de Watson, consideramos el artículo seminal de Watson "La psicología desde el punto de vista del conductista" publicado en 1913 en *Psychological Review* como

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una contribución en su propio tiempo, y reflexionamos sobre el significado del artículo tanto en la psicología contemporánea como en el conductismo contemporáneo. A pesar de la tibia acogida al momento de su publicación y de las revisiones mixtas sobre su impacto incluso en estos días, el artículo permanece como uno de los referentes en psicología y como un texto innegablemente importante para entender la evolución de la psicología americana del siglo XX. Los diferentes autores que contribuyeron al número especial analizan el artículo de Watson en el contexto de varias subdisciplinas de la psicología.

Palabras clave: introducción, número especial, John B. Watson, conductismo a los 100 años, subdisciplinas de la psicología

John B. Watson's Behaviorist Manifesto at 100

Watson's behaviorist manifesto emerged in the era retrospectively characterized as "modernist" (see e.g., Everdell, 1997). Indeed, Watsonian behaviorism has itself been fruitfully considered as a form of psychological modernism (see Bakan, 1966; Buckley, 1989). The early years of the 20th century saw the beginnings of new art styles built on the work of Cezanne and Kandinsky; the still-revolutionary 12-tone — based musical compositions of Arnold Schoenberg; the new wave of physical theory following the destruction of the aether by Michaelson and Morley; the construction of several Frank Lloyd Wright-designed structures (including, in 1913, the Robie house in Chicago); and the rise of two alternative views of Psychological Man: psychoanalysis and behaviorism. All were breaks from tradition. By 1913, Freud was 14 years beyond *The Interpretation of Dreams* and busy expanding psychoanalysis to issues of culture in *Totem and Taboo*. In 1913, John B. Watson gave a lecture at Columbia University in which he forcefully distinguished behaviorism from the older structuralist and functionalist schools, effectively announcing the arrival of what he considered a truly modern psychology.

The Modernist Era has been replaced by other historical movements in the hundred years since the manifesto's publication, and the social, political, and intellectual contexts in which Watson's ideas arose and took hold have changed. Through all of these changes, however, Watson's 1913 assessment of what psychology was and what it could be remains a touchstone in the history of psychology. Other forms of behaviorism and other forms of psychology have been compared to the behaviorism that Watson built, and a history of psychology textbook would be incomplete without a review of Watson's manifesto. As Mills (1998) put it, "Historians agree that behaviorism was the dominant force in the creation of modern American psychology" (p. 1).

Watson's View of What Psychology Should Be

Several broad themes characterize the manifesto: a concern with psychology being a proper natural science grounded in empiricism, a rejection of introspection as a

primary means of data collection, a call to study behavior rather than consciousness, a rejection of mentalism, a focus on adjustment to change (what Watson called “habit”) as the central focus for psychological study, and a pragmatic focus on using psychological research to solve real-world problems. As others have noted, these themes were not unique to Watson, but he did much in the years following publication of the manifesto to keep them before both professional psychologists and the general public. A fair question is “What has become of Watson’s view of what psychology should be in the contemporary psychological sciences?”

Although today there is little argument that psychology should be, and is, a natural science grounded in empiricism, there is considerable disagreement among psychologists as to how exactly to define “science” and what the limits of empiricism might be (see, for example, Clegg [2013] and Watson & Tharp [1972] for reassessments of self-observation in psychology). Psychology continues to drift in and out of consciousness, again, depending on how it is defined (see Hineline’s article in this issue for a discussion of the contemporary status of consciousness in and outside behavior analysis). Much of today’s psychology still adheres, if not in word then in actions, to the older methodological behaviorism by studying behavior as an index of events occurring in other universes of discourse. Behavior thus remains in these venues, in Malone’s (1982) catchy phrase, the “ambassador of the mind.” Mentalism, or at least dualism, has been rejected in name, but beneath the Russian surface, the mentalistic Tartar still lurks in many corners of the psychological sciences.

The study of Watson’s “habit” — learning — reached its apogee in the 40-year period between about 1930 and 1970, when psychological chatter was filled with ideas emanating from the likes of Tolman, Hull, Spence, and Skinner. Learning broadly considered as adjustment to change continues to be a major focus of psychological study, incorporating everything from post-traumatic stress disorder to habituation to habit-forming drugs. The problems are not always identified or labeled as problems of habits, but there they are. The applications of psychology likewise continue to be psychology’s bread and butter, thus giving credence to Watson’s broad view of making psychology relevant.

Beyond making psychology relevant, however, Watson also had a utopian vision (Morawski, 1982). In this vision, behaviorism could actually make a better world. In his utopianism, he was later joined by B. F. Skinner, whose utopian vision became better known than Watson’s and certainly more controversial (see Dinsmoor, 1992; Altus & Morris, 2004; Rutherford, 2000, 2009). One might well ask whether contemporary psychology has any utopians on the order of a Watson or a Skinner.

Was the Manifesto Distinct?

The actual distinctiveness of Watson’s position has been challenged by some scholars who, with the hindsight of history, have presented behaviorism not so much as a break from the past, but as an emerging synthesis of pragmatism, comparative

psychology, experimental psychology, and mixes of various other philosophical and psychological points of view (Mills, 1998; O'Donnell, 1985; Samelson, 1981, 1985). As Garcia-Penagos and Malone note in this issue, there was even a pinch of Freud in Watson. Four years before Watson's seminal publication, Yerkes and Morgulis (1909) introduced the English-speaking world to the work of Pavlov, work that would become central in Watson's developing views of behaviorism (Watson, 1916). There is no doubt that Watson was drawing upon a rich set of intellectual forebears what he declared that what psychologists "need to do is to start work on psychology, making behavior, not consciousness, the objective point of our attack" (Watson, 1913, pp. 175-176). Nonetheless, as Reese (this issue) notes, speculation about whether behaviorism would have developed in the absence of Watson and his manifesto are moot, for their existence *is* inexorably tied to the history of behaviorism and psychology. Regardless of whether Watson's ideas were completely new or revolutionary, behaviorism could certainly have found no better evangelist than the former Southern Baptist-turned-scientist. As Buckley (1989) has noted, although Watson rejected the religious fervor of his upbringing, he channeled his considerable capacity for zeal into the movement he felt *could* change the world.

Cool Reception, Steamy Aftermath

Several of the authors herein and elsewhere (e.g. Samelson, 1981) have commented on the rather ho-hum reception that the manifesto received in the early years following its publication. A few prominent psychologists of the time formally commented on it, notably Calkins, Titchener, and Thorndike. The latter two reviews were generally positive, but Calkins was more reserved in her comments, expressing her concern about jettisoning consciousness and introspection entirely, which she likened it to throwing the baby out with the bathwater (Calkins, 1913). Whatever its reception, Watson had sufficient general visibility among psychologists to be elected President of the American Psychological Association two years after publishing the manifesto. That article was only the first of Watson's many salvos, launched not only on psychology but on American life, often generating controversy. These latter salvos were such that by the time of his death, his *New York Times* obituary observed (disparagingly) that Watson "condemned religious influence as 'ballyhoo' that had transformed the American youngster into 'nothing but layers of obsolete social, religious and political bandages' wrapped around the semblance of life." Beginning with the manifesto and continuing through many of his other writings, Watson's behaviorism was, and is, a lightning rod for controversy. So much so that Marr (this issue) and others (e.g., Logue, 1994) have concluded that on balance the manifesto may have done more harm than good. Although Skinner developed a very different kind of behaviorism than Watson, Skinner kept the controversies surrounding behaviorism alive with the publication of such works as *Walden Two* in 1948 and *Beyond Freedom and Dignity* in 1971, concluding at the end of his life that cognitive science was the creationism of contemporary psy-

chology (Skinner, 1990). As historians have amply demonstrated, Skinner's radical behaviorism has been both friend and foe of many of the entrenched values of 20th century American life (Bjork, 1993; Rutherford, 2003; Smith, 1996). One thing behaviorists cannot be criticized for is their reluctance to provoke controversy.

The old adage that it is better to be criticized than ignored holds true between behaviorists and their adversaries, who contribute to making one another relevant. By this standard, the criticisms directed at behaviorism suggest that it remains a force to be reckoned with in psychology. Behaviorism, however badly misunderstood or misrepresented, as Penagos and Malone (this issue) note, has been the foil for nonbehaviorists of all flavors — psychoanalysts, humanistic psychologists, cognitive psychologists, psycholinguists — all have taken behaviorism (and behaviorists) at one time or another as their whipping boy. The fairness and accuracy of some of these criticisms of behaviorism have been questioned in some of the present articles and elsewhere (see, e.g., MacCorquodale, 1969; Todd & Morris, 1992; Morris, 2009). Of course, behaviorists, including (and perhaps beginning with) Watson, have been correspondingly critical of their critics, returning with equal force, and probably accuracy, what they have received from those representing other points of view. Such creative tension and controversy have important upsides. They suggest that the criticized point of view is potentially viable and therefore worthy of a critical analysis by those not holding the point of view. Constructive criticisms furthermore point out the valid concerns and conceptual weaknesses that any discipline needs to address to remain viable. They also provide fuel for further discussion and positive change. It is through the interlocking contingencies and feedback functions of such dialogue that scientific systems, including behaviorism, grow and change.

The Legacy of the Manifesto at 100

This special issue was created to examine the legacy of Watson's first publication related to behaviorism for contemporary psychology. If not a watershed moment, 1913 at least marked a gradual turning point that eventually led to the instantiation of behaviorist theory as the dominant (although never hegemonic) theoretical approach in American departments of psychology for much of the mid-20th century. As Samelson has noted of Watson, "Having staked his claim on the high grounds of hard science, utopian ideology, and practical usefulness, and having then gained a good deal of publicity for it, he could not be ignored for long" (1985, p. 38). Academic psychologists were not the only ones who could not ignore Watson. After his dismissal from Johns Hopkins University in 1920, he forged a successful career in advertising and did not give up his behaviorist crusade. Working on Madison Avenue by day, by night he exploited the cultural authority of his scientific training to write articles and books for the popular press, often with his wife Rosalie Rayner Watson, on marriage, parenting, and relations between the sexes (e.g., Watson, 1927; Watson, 1929; Watson & Watson, 1928).

What residue has Watson's behaviorist manifesto left on psychology as it labors into the 21st century? Was it the product of a particular intellectual-cultural-historical moment that has come and gone? Or, despite changes in context, are there lasting vestiges of Watsonian behaviorism that deserve our attention? Some of the authors of the articles in this issue consider these questions as they bear directly on behavior analysis (Garcia-Penagos & Malone; Himeline; Marr; Morris), the most visible current manifestation of the broad field subsumed under the rubric of behaviorism. Watson's manifesto was a review read and reacted to around the world (e.g., Cirino et al., this issue), giving it considerable cachet over its first century of existence. The manifesto was, of course, just the beginning of Watson's offensive. Having outlined the direction for psychology as a whole in the manifesto, as already noted, Watson went on to teach, research, and write about how his views of behaviorism impacted many areas of psychology during and after his stint in academe. Other authors in this issue examine how the ideas in the manifesto found their way into comparative psychology (Dewsbury), human development and developmental psychology (Reese), education (Cirino et al.), the treatment of behavior disorders (Morris), the understanding of consciousness (Himeline), and social issues (Rakos).

A more general legacy of the manifesto has been to generate controversy, for better and for worse. As already noted, not all of the observers agree that Watson's manifesto positively affected the future of behaviorism (e.g., Marr, this issue; Logue, 1994), but all agree that as time passed since its publication it became a focal point for controversy stoked by historians, critics, and behaviorists alike.

A Century of Growth and Change

Watson's manifesto marks for many the beginning of the growth and change of behaviorism, activities that persist to the present. Behaviorism's growth has transpired in a century that has seen psychology grow from a small discipline of a few hundred souls at the beginning of the modern era to one with well over 130,000 members of the American Psychological Association, the world's largest association of psychologists. The growth of diverse points of view about the nature and scope of psychology has been commensurate with its population growth. Thus, behaviorism has co-evolved with many other points of view that have both competed with it and fueled its growth (e.g., Rogers, 1964; Skinner, 1963). Psychoanalysis, humanistic psychology, cognitive science and its various offshoots, and behavioral neuroscience (e.g., Schaal, 2003) all have impacted today's behaviorism(s).

Whether or not Watson's manifesto actually launched a behavioral revolution in psychology, it did create an oligarchy that persisted in conceptually loose form until the so-called cognitive revolution of the 1970s. This is not the appropriate place for a protracted discussion of the accuracy of the term "revolution" in either the general or Kuhnian sense (e.g., Segal & Lachman, 1972; see also Cohen, 1985). The important point is that the idea of behaviorism in the manifesto evolved and changed through

positions that incorporated some but not all of Watson's ideas (cf. Verplanck, 1954), ending the 20th century with a mature behavior analysis evolved from Skinner's earlier ideas (e.g., Delprato & Midgely, 1992) and an associationistic variety of behaviorism that drew from the work of Pavlov, Hull, and Tolman and that is becoming increasingly aligned with behavioral and cognitive neuroscience. As behaviorism moves into the 21st century, other iterations of both the general behaviorist agenda (e.g., Uttal, 1998) and Skinner's behavior analysis (e.g., Baum, 1989; Rachlin, 1992; Staddon, 2001) have appeared. Skinner's behavior analysis nonetheless continues to dominate mainstream behaviorism in both theory and practice. In whatever contemporary form, 21st century behaviorism resembles Watson's original characterization in only a most general way.

Quo Vadis?

In 1913, the start of World War I was a year away, Andrew Carnegie was five years into his new corporate headquarters in Pittsburgh, and Henry Ford's Model T was ushering in the beginnings of what would a century later become global warming. The women's suffrage movement in the U.S. was underway and Jim Crow ruled the American South. Lightner Witmer had opened his psychological clinic at the University of Pennsylvania only a few years before. Industry, education, mental health, the military, social justice and social movements all became proving grounds for American psychology. A modern psychology was required. To John B. Watson that psychology had to be behaviorism. Watson was among the first and perhaps most polemical of his generation to push to reform psychology to his own image of what it should be. And the manifesto was the first step in that push. What followed is history, and where psychology and behaviorism will be in another one hundred years must await the passage of that time. Wherever the two end up a hundred years hence, Watson's work will have to be factored into the complex equation that results in 22nd century contemporary psychological science.

References

- Altus, D. E. & Morris, E. K. (2004). B. F. Skinner's utopian vision: Behind and beyond *Walden Two*. *Contemporary Justice Review*, 7, 267-286.
- Altus, D. E. & Morris, E. K. (2004). B. F. Skinner's utopian vision: Behind and beyond *Walden two*. *Contemporary Justice Review*, 7, 267-286.
- Bakan, D. (1966). Behaviorism and American urbanization. *Journal of the History of the Behavioral Sciences*, 2, 5-28.
- Baum, W. M. (1989). Quantitative prediction and molar description of the environment. *The Behavior Analyst*, 12, 167-176.
- Bjork, D. W. (1993). *B. F. Skinner: A life*. New York: Basic Books.
- Buckley, K. W. (1989). *Mechanical man: John Broadus Watson and the beginnings of behaviorism*. New York, NY: Guilford Press.

- Calkins, M. W. (1913). Psychology and the behaviorist. *Psychological Bulletin*, *10*, 288-291.
- Clegg, J. (Ed.) (2013). *Self-observation in the social sciences*. New Brunswick, NJ: Transaction Publishers.
- Cohen, I. B. (1985). *Revolution in science*. Cambridge, MA: Harvard University Press.
- Delprato, D. J., & Midgeley, B. D. Some fundamentals of B. F. Skinner's behaviorism. *American Psychologist*, *47*, 1507-1520.
- Dinsmoor, J. A. (1992). Setting the record straight: The social views of B. F. Skinner. *American Psychologist*, *47*, 1454-1463.
- Everdell, W. R. *The first moderns*. Chicago: University of Chicago Press.
- Leahey, T.H. (1992). The mythical revolutions of American psychology. *American Psychologist*, *47*, 308-318.
- Logue, A.W. (1994). Watson's behaviorist manifesto: Past positive and current negative consequences. In J. T. Todd & E. K. Morris, (Eds.), *Modern perspectives on John B. Watson and classical behaviorism* (pp. 109-124). Westport, CT: Greenwood Press.
- MacCorquodale, K. (1969). B. F. Skinner's *Verbal Behavior*: A retrospective appreciation. *Journal of the Experimental Analysis of Behavior*, *12*, 831-841.
- Malone, J. C. (1982). The second offspring of General Process Learning Theory: Overt behavior as the ambassador of the mind. *Journal of the Experimental Analysis of Behavior*, *38*, 205-209.
- Mills, J. A. (1998). *Control: A history of behavioral psychology*. New York: New York University Press.
- Morawski, J. (1982). Assessing psychology's moral heritage through our neglected utopias. *American Psychologist*, *37*, 1082-1095.
- Morris, E. K. (2009). A case history in the misrepresentation of applied behavior analysis in autism: The Gernsbacher lectures. *The Behavior Analyst*, *32*, 205-240.
- O'Donnell, J. M. (1985). *The origins of behaviorism: American psychology, 1870-1920*. New York: New York University Press.
- Rachlin, H. (1992). Teleological behaviorism. *American Psychologist*, *47*, 1371-1382.
- Rogers, C. R. (1964). Toward a science of the person. In T. W. Wann (Ed.), *Behaviorism and phenomenology: Contrasting bases for modern psychology* (pp. 109-133). Chicago, IL: University of Chicago Press.
- Rose, N. & Abi-Rached, J. M. (2013). *Neuro: The new brain sciences and the management of the mind*. Princeton: Princeton University Press.
- Rutherford, A. (2000). Radical behaviorism and psychology's public: B.F. Skinner in the popular press, 1934-1990. *History of Psychology*, *3*, 371-395.
- Rutherford, A. (2003). B. F. Skinner's technology of behavior in American life: From consumer culture to counterculture. *Journal of the History of the Behavioral Sciences*, *39*, 1-23.
- Rutherford, A. (2009). *Beyond the box: B. F. Skinner's technology of behavior from laboratory to life, 1950s-1970s*. Toronto: University of Toronto Press.

- Samelson, F. (1981). Struggle for scientific authority: The reception of Watson's behaviorism, 1913-1920. *Journal of the History of the Behavioral Sciences, 17*, 399-425.
- Samelson, F. (1985). Organizing for the kingdom of behavior: Academic battles and organizational policies in the twenties. *Journal of the History of the Behavioral Sciences, 21*, 33-47.
- Schaal, D. W. (2003). Explanatory reductionism in behavior analysis. In Lattal, K.A., & Chase, P.N. (Eds.), *Behavior Theory and Philosophy* (pp. 83-102). New York: Kluwer Academic/Plenum.
- Segal, E. M., & Lachman, R. (1972). Complex behavior or higher mental process: Is there a paradigm shift? *American Psychologist, 27*, 46-55.
- Skinner, B. F. (1963). Behaviorism at fifty. *Science, 140*, 951-958.
- Skinner, B. F. (1990). Can psychology be a science of mind? *American Psychologist, 45*, 1206-1210.
- Smith, L. D. (1996). Situating B. F. Skinner and behaviorism in American culture. In L. D. Smith & W. R. Woodward (Eds.), *B. F. Skinner and behaviorism in American culture* (pp. 294-315). Cranbury, NJ: Associated University Presses.
- Staddon, J. E. R. (2001). *The new behaviorism: Mind, mechanism, and society*. New York: Psychology Press.
- Todd, J. T., & Morris, E. K. (1992). Case histories in the great power of steady misrepresentation. *American Psychologist, 47*, 1441-1453.
- Uttal, W. R. (1998). *Toward a new behaviorism: The case against perceptual reductionism*. Mahwah, NJ: Erlbaum.
- Verplanck, W. S. (1954). *Modern learning theory*. New York: Appleton-Century-Crofts.
- Vidal, F. (2009). Brainhood: The anthropological figure of modernity. *History of the Human Sciences, 22*, 5-36.
- Watson, D. L., & Tharp, R. G. (1972). *Self-directed behavior: Self-modification for personal adjustment*. Monterey, CA: Brooks/Cole.
- Watson, J. B. (1913). Psychology as the behaviorist views it. *Psychological Review, 20*, 158-177.
- Watson, J. B. (1916). The place of the conditioned reflex in psychology. *Psychological Review, 23*, 89-116.
- Watson, J. B. (1927). The weakness of women, *Nation, 125*, 9-10.
- Watson, J. B. (1929). Should a child have more than one mother? *Liberty Magazine*, pp. 31-35.
- Watson, J. B. & Watson, R. R. (1928). *Psychological care of infant and child*. New York: Norton.
- Yerkes, R. M., & Morgulis, S. (1909). The method of Pawlow in animal psychology. *Psychological Review, 6*, 257-273.