Many critics of John B. Watson have seen him as a sycophant of the industrial-military-political power complex, or even an evil would-be dictator. Actually, however, his recommendations regarding the uses of psychology--perhaps especially in the area of behavioral development--were well-intentioned, reasonable, and socially sound. He sought to better the human condition by implementing empirical facts and theoretical speculations in such specific areas as child rearing and penology and he pointed to society's having the genetic inheritance, for example, social-class rights and racial inferiority and superiority. His stand on these specific issues is described and evaluated in this paper.

My aim in this paper is to correct some misinterpretations of John B. Watson's behaviorism and social recommendations, which dealt mostly with behavioral development. Watson had strong opinions on implications of behaviorism for social practices, but relatively little research evidence was available when he was writing and therefore his recommendations were based more on his social philosophy and theoretical speculation than on the scientific aspect of behaviorism. Many of the recommendations were controversial at the time and remained controversial (Horowitz, 1992). However, contrary to the critics, Watson's social philosophy was attractive in many ways. His social philosophy and some of the recommendations it led to are discussed in the next four sections, followed by discussion of the extent to which he was a social activist.

Watson's Social Philosophy

Many of Watson's critics have seen him as an evil would-be dictator or, more often, a sycophant of the capitalist industrial-military-political power complex. In support of the latter allegation, some critics have said that Watson abandoned behaviorism for business. For example, Matson (1964) said that Watson saw the purpose of behaviorism as manipulating and controlling persons for the benefit of the business system. Matson added parenthetically, "Significantly, Watson himself retired from academic life a few years after founding his movement, in order to embark upon a highly successful career as an advertising executive" (p. 56). McConnell (1985) echoed the latter point, saying that Watson "deserted psychology for advertising" (p. 684). The truth is that Watson did not leave academic life in order to enter advertising and did not desert psychology, he had to bring psychology into advertising, which he entered because he could not get a full-time job in academia after he was forced to resign from Johns Hopkins University in 1920, as a consequence of his love affair with his graduate student, Rosalie Rayner.

Another example comes from Cohen, who said "one of the least attractive arguments" in Watson's Psychology from the Standpoint of a Behaviorist was that "society and business could make use of psychology to become more efficient and to control people more effectively" (Cohen, 1979, p. 169). Cohen did not cite a page, however page eight in the 1919 edition is relevant. There, Watson implied that scientific psychology could help people in business, the military, politics, and religion "understand and control" other people's behavior, but he also said that behaviorism could help keep people "honest and sane," "out of crime," and "on a high and well-regulated plane" of "social and ethical life." Watson made the same points in a longer discussion in the revised editions (Watson, 1924, 1929, pp. 3-9). For example, he said that one application of psychology should be to bring up children so they "can live, move and have their being in society, and not have their own individuality swamped and flattened out by society". (p. 3)

Actually, neither Watson nor any other psychologist at that time had enough research evidence to provide much scientific help for the efforts of society, business, and so on, to become more efficient or to control people more effectively. Watson admitted the scarcity of research evidence available when he wrote his most applied book Psychological Care of Infant and Child (Watson, 1928b, e.g., pp. 4, 12) and his more scholarly book Behaviorism (Watson, 1924-1925, 1925a, 1930, passim; see also Watson, 1936). In light of this scarcity, his specific recommendations seem to have been based largely on his social philosophy, yet the recommendations were well intentioned, reasonable, and socially sound. His social philosophy included opposition to beliefs in the genetic inheritance of social-class rights, racial inferiority and superiority, and so on, and it also included a desire to improve the human condition by means of improvements in such areas as child-rearing and penology (e.g., Watson, 1928b, e.g., pp. 9-10, 63; 1930, chap. 5, pp. 185-186). His views in these specific areas are discussed in the next three sections.

Watson's Views on Environment and Heredity

Extreme Environmentalism

Behaviorism was, from the beginning, an optimistic and humane position, attributing psychological development primarily to environmental forces rather than hereditary potentials. Relevant to this point, Watson said:
Give me a dozen healthy infants, well-formed, and my own specified world to bring them up in and I’ll guarantee to take anyone at random and train him to become any type of specialist I might select—into a doctor, lawyer, artist, merchant-chief and, yes, even into beggar-man and thief, regardless of his talents, penchants, tendencies, abilities, vocations and race of his ancestors. (1924-1925, p. 76)

This is one of his best-known statements, as Logue (1994, p. 118) mentioned, and it has often been quoted (Heidbreder, 1933/1961, p. 248; Schoenfeld, 1983/1999, p. 193); in fact, Watson himself often repeated it, with minor variations (1925a, p. 82; 1925b, p. 302; 1926, p. 10; 1930, p. 104).

In another paper, I characterized the statement as "gloriously optimistic" because it held hope for everyone regardless of genetic inheritance (Reese, 1986, p. 164). In this respect, it was more humane than the opposite view, which attributes disordered development entirely to heredity. However, some critics have called it "infamous" (Developmental Psychology," 1999; Morris, Todd, & Midgley, 1993, p. 114; Rosales-Ruiz & Baer, 1996, p. 160), "notorious" (Hirsch, 1992, p. 42), a "hyperbole" (Jones, 1975, p. 184), and a "crowning example" of Watson's "frequent, outrageous, and controversial interpretations of behaviorism" (Logue, 1994, p. 118).

Even if these epithets were somehow justified, the statement was evidently not a "careless remark," as Skinner (1974, p. 221) called it, unless Watson was monumentally careless. In his autobiography, Watson (1936) criticized the book he made the statement in, but he criticized the book because he wrote it hastily and because insufficient scientific evidence was available. He did not see any flaw in the extreme environmentalism. Also, he evidently did not include the "dozen infants" statement in this self-criticism, given that he often repeated it and given the following paraphrase he gave (Watson, 1928c):

"The cry of the behaviorist is, "Give me the baby and my world to bring it up in and I'll make it crawl and walk; I'll make it climb and use its hands in constructing buildings of stone or wood, I'll make it a thief, a gunman, or a dope fiend. The possibility of shaping in any direction is almost endless." (pp. 35-36)

Watson also made the point in popular works (e.g., Watson, 1927a, 1927b, 1928b) and elsewhere (Watson & Watson, 1921). What he was saying is that people do not inherit much anything, and they do not need to because of the powerful influence of learning.

Not Extreme Enough?

In the 1920s, Kuo Zing-Yang criticized Watson for not being more of an environmentalist. Kuo said, "There are only one and a half true behaviorists in this world; Watson is the half. I am the only true behaviorist" (quoted in Chin & Chin, 1969, p. 8). His objection was that Watson gave heredity a role. Kuo (1921) gave it none at all, but he eventually rejected both sides of the nature-nurture dichotomy (1967/1976, p. 108, chap. 5) and gave heredity a role in determining what he called "behavioral potentials" (Kuo, 1967/1976, p. 125).

Kuo's objection about Watson was exaggerated because although Watson did give heredity a role, he did not give it enough of a role to make him a hereditarian. For example, in Psychology from the Standpoint of a Behaviorist, he gave heredity a role only for people "whose heredity is questionable" (1919, p. 7). For people with presumably "unquestionable" heredity, the smallness of the role is indicated by, for example, Watson's limiting instincts to relatively simple reflexes, or conditioned responses (e.g., Watson, 1925a & 1930, chap. 5; 1927a, 1927b), his saying that the human infant "is born a squirming mass without instincts, without patterned behavior... We are environmental products" (Watson, 1928a, p. 967), his "dozen infants" statement, and his "cry of the behaviorist."

Nevertheless, Watson usually did not attribute omnipotence to the environment, as implied in his "dozen infants" statement when he specified that the infants must be healthy and well-formed and in his "cry of the behaviorist," when he said they can be shaped in almost endless directions. He implied the same point elsewhere, in saying that almost nothing is given genetically and that practically all of development reflects the environment (Watson, 1927a), but elsewhere he did not limit the shaping to almost any direction (1927b, 1928b, p. 15).

Conclusion

In another paper, I called Watson's position "overly optimistic" because heredity has more influence than he recognized (Reese, 1986, p. 164). However, although genetic effects of various kinds have been conclusively demonstrated, hereditarian research has not produced conclusive demonstrations of genetic inheritance of complex behaviors such as language or complex mental phenomena such as reasoning and problem solving. The claims of hereditarians are exaggerated because the theoretical equations they use to estimate heritability coefficients are based on some assumptions that are known to be false for human populations (e.g., Hirsch, 1997; Joseph, 2000). For example, humans are assumed to mate at random, even though random mating would yield incestuous and homosexual couplings, as well as more productive couplings. Another example is that error of measurement is assumed to be negligible and equal across generations, the sexes, age groups, racial groups, twins versus nontwins, and so forth; this assumption is known to be false. The behaviorists' approach therefore should be--and generally is--to accept a genetic basis only if research designed to identify effects of social or other environmental variables does not reveal any effects (e.g., Stemmer, 1990).

Watson's Views of Child-Rearing

Watson's basic view of child-rearing was consistent with the view of later behavior analysts such as Risley and Baer (1973), who said that develop is an active rather than passive verb. In other words, parents, teachers, and others must actively shape the child's behaviors rather than wait and see what develops from within (Watson, 1927b). Despite the reasonableness of this basic premise, some of Watson's child-rearing...
recommendations seemed outrageous to many parents and critics at the time (Cohen, 1979, p. 213; see Watson, 1928b, pp. 69–70), and they are still outrageous—or, better, outré—according to modern Western norms and normatives (respectively the is and ought rules). For example, Watson theorized that if parents are effusive in their affectionate behavior on their children they will be "spoiled." (e.g., 1927a, p. 44; 1928b, chap. 3). A recommendation that followed from this position was that when children come in for breakfast, their parents might shake hands with them but must not kiss or hug them. Also, parents should not allow their children to learn to use crying as a controlling mechanism. They should not respond to the late-night crying of even young infants, because responding will only teach an infant to expect the late-night feeding. They should not respond to their infant's apparently unmotivated crying at other times, but if they want to make sure that the infant is not in physical danger such as being bitten by a pet or a rat, they should use a periscope to peek around the door to reassure themselves.

These recommendations, and Watson's less controversial ones, followed from the lack of research evidence available at the time, from theoretical principles in his behaviorism, and, very importantly, from his social philosophy. These sources were not outrageous. First, evidence is evidence, and although moralists and politicians often find some of it outrageous, no scientist should consider it outrageous. Second, his theory was evidently not outrageous, given that the basic principles are still accepted in modern behaviorism and even in cognitive psychology. Finally, his social philosophy was based on an optimistic view of the potential of the environment to improve human nature, personality, and abilities, and, despite the unattractiveness of some of his recommendations, his underlying philosophy was attractive. Even when disordered development has a biogenetic origin, an optimal environment can produce full development up to any biogenetically determined limit (Baer, 1970).

Watson's Views on Penology

Joravsky (1989) said that Watson "preached manipulative values to justify society's winners, and corrective labor institutions and 'etherization' to certify the criminal and hopelessly insane 'loser'" (p. 149). He also said that Watson advocated "etherization" for the 'hopelessly insane' and...forced labor for other defectives" (pp. 494-495). Joravsky exaggerated the case. Watson indeed made some recommendations that were extreme by standards in his own era as well as modern standards, but he made other recommendations that were quite reasonable then and now. Examples are given in the following paragraphs.

On the positive side, Watson recommended eliminating from child-rearing and "criminology" the use of punishment, "in the old biblical sense" of beating, retaliation, and expiation (Watson, 1928b, p. 63). He also believed that criminal behavior results from bad child-rearing—criminals are either mentally sick or socially untrained—and he recommended that these two types of criminals be treated differently. The goals for mentally sick criminals should be:

Seeing that the insane or psychopathic individuals are made well if possible, and if not, placed in well run (non-political) institutions where no harm can come to them and where they can do no harm to other members of the group. In other words, the fate of those individuals should be in medical (psychiatric) hands. (1925a, p. 146; 1930, p. 185; footnote index omitted).

On the negative side, he added that the only reasons "hopelessly insane" people should not be "etherized" are "exaggerated sentiment and medieval religious mandates."

Again on the positive side, he recommended that the goal for socially untrained criminals should be to provide the needed training, which should be "kept in the hands of the behaviorists" (1925a, p. 147; 1930, p. 186). The goal, based on his environmentalism, was:

Seeing that the socially untrained individuals, not insane or psychopathtological, are placed where they can be trained, sent to school, made to learn, regardless of their age, a trade, made to put on culture (i.e., learn culture), and made to become social. Furthermore, during this period they should be placed where they cannot harm other members of the group. Such education and training may take ten to fifteen years or even longer. (1925a, p. 146; 1930, p. 185).

On the negative side, his recommendation for cases, where the education and training were unsuccessful, was immoral by modern standards. He said:

Failing to put on the training necessary to fit them to enter society again, they should be restrained always, and made to earn their daily bread, in vast manufacturing and agricultural institutions, from which escape is impossible.

One problem with this recommendation is that Watson did not specify how many years the education and training should continue before the attempt was given up and the criminal was consigned to permanent institutionalization and forced labor. Another problem is that he recommended hard labor: He initially said that the forced labor should consist of "strenuous work sixteen hours per day" (1924-1925, p. 137) and although he later said "strenuous work twelve hours per day" (1925a, p. 146; 1930, p. 186), even 12 hours a day was excessive at that time. According to the Labor Research Department (1928), the normal work day for United States labor in 1924-1926 was about 8.3 hours long (my computation from p. 68), 6 days a week (p. 72). On the positive side, though, Watson said:

Naturally, so human beings—criminal or otherwise—should be deprived of air, sunshine, food, exercise and other physiological factors necessary to optimum living conditions. (1925a, p. 146; 1930, p. 186)

Watson said that the alternative to these recommendations is continuation of "the present retaliation or punishment theory (a religious theory) of handling the deviant" (1924-1925, p. 137; 1925a, p. 147; 1930, p. 186). The modern theory of penology includes schooling and training, but not the rest of
Watson's social philosophy, and in principle it rejects the retaliation and punishment theories—although media reports indicate that retaliation and punishment are widely used in penal practice and that their use is widely approved in the Western world. And of course, capital punishment is a version of evisceration. Even so, capital punishment is in effect retaliative or punitive and therefore is not consistent with Watson's recommendation, which was practical. Also, Watson recommended evisceration only for the hopelessly insane; but in the modern principle, the hopelessly insane are excluded from capital punishment.

**Watson's Social Activism**

Two kinds of people are called "activists"—those who fight at the barricades and those who only recommend this action. In the realm of social reform, Watson was the second kind of activist, but he is rumored to have been an activist of the first kind on a small, personal scale. Two of the rumors—about child-rearing and free love—are discussed herein.

**Rumors about Child-Rearing**

The authors of both book-length biographies of Watson (Buckley, 1989; Cohen, 1979) mentioned rumors that he and his second wife, Rosalie Rayner, implemented some of his recommendations in raising their own children.

Watson (1930, pp. 226-230) indeed described an unsuccessful attempt to use conditioning principles to teach language to Billy, who was the first-born child of his second marriage, but he reported more observational data about Billy and the second-born child, Jimmie—than about interventions (pp. 189-193, 226-230).

Some of the rumors included sexual innuendoes, but no hard evidence exists because, according to rumor, Watson burned all of the correspondence, notes, and manuscripts in his possession when he was about 80-years-old (Buckley, p. 182; Cohen did not mention this rumor). However, Watson (1930) himself dropped a hint regarding Billy and Jimmie. He said that Billy "had always been allowed to be present and even welcomed into the family love-making," but, at about two years of age, he began to exhibit jealous behavior whenever he saw Watson and Rayner smooch (p. 189). After a month-long separation from his parents at three years of age, Billy exhibited no jealousy when Watson and Rayner "made love in front of him," even though "this test was repeated for four days" (p. 190). Watson said that when Jimmie was 11-months-old, he also exhibited no jealousy when he saw Watson and Rayner embracing or making love, even though the latter test was repeated "again and again" (pp. 190-191).

**Rumors about Free Love**

Watson has been rumored to have been an activist of the first kind in implementing his views on free love. His adulterous affair with Rosalie Rayner directly supports this rumor, and it is less directly supported by rumors that he rather dispassionately made physiological recordings during sex acts with her, that he attended "fairly wild" parties with his friend Sheperd Franz, and that he engaged in sexual misconduct at the New School for Social Research, where he taught part-time for a while after his forced resignation from Johns Hopkins University.

**Views on free love.** The truth about Watson's views on free love is that he explicitly rejected not only "free love" but also, as he said, "free anything" (Watson, 1930, p. 305).

**Physiological recordings.** The truth about the alleged physiological recordings is that although Watson did have an adulterous affair with Rosalie Rayner, no evidence exists to support the rumor about physiological sex recordings involving her or anybody else. McConnell (1985) discussed the alleged recordings, based on "my own quite fallible memory of what Deke Coleman [a former friend and colleague of Watson's in the advertising business] had told me" in 1958 (p. 686). McConnell's comments contain some evidence that his memory was indeed quite fallible. One example mentioned earlier is his saying that Watson "deserted psychology for advertising" (p. 684). McConnell said that Coleman's story was supported by a report (Magoun, 1981) about some of the instruments that Watson allegedly used; however, the chain of evidence connecting Watson to the instruments was haphazard and had too many missing links to be taken seriously. Furthermore, the claim that the instruments were intended for use in sex research seems to be a guess; in any case, the claim is not clearly supported by a photograph of the instruments that Magoun published (1981, Fig. 1, p. 372). Finally, even if the instruments were Watson's and were intended for use in sex research, no evidence exists that he actually used them that way.

**Wild parties.** McConnell (1985) attributed the story about wild parties to a letter written by Boring to Broadhurst in 1962, but McConnell did not specify what actually happened at these parties. McConnell said:

According to Boring, Franz and Watson were friends and used to have parties together, some of them apparently of a fairly wild nature. Boring writes that, "Franz was doing his work on localization of tactual sensations on undraped artist's models at this time, and there was the story of an outdoor picnic at which undraped artist's models were present and scattered through the woods. Just what the models were doing in the woods Boring does not specify, but he does comment that the party...sounds like something I once read in Quo Vadis." (McConnell, pp. 686-687)

Note that, in spite of the reference to Quo Vadis, Boring did not actually say that any sexual activity occurred at the picnic and he did not even say that Watson was at the picnic.

**Sexual misconduct at the New School.** Coon (1994, p. 62) said that Watson taught part-time at The New School for Social Research until "he was dismissed for sexual mis-
conduct” in 1926. For documentation, she cited Buckley (1989, pp. 154-160), who said:

Although the circumstances remain a mystery, Charles Beard’s daughter recounted that in 1926 Watson’s appointment was terminated at The New School because of “sexual misconduct.” The charges were never specified or made public, but they were sufficiently serious to make Watson the first faculty member to be terminated since the founding of the New School. (Buckley, p. 160)

Comments by Charles Beard’s daughter were presumably considered to be relevant because Charles Beard was a co-founder of The New School in 1917 (Buckley, p. 154) or 1918 (Kraus, 1999).

As documentation, Buckley cited the following statement by Rutkoff and Scott (1986):

In 1926 the school terminated the appointment of psychologist John Watson for what Beard’s daughter later described as “sexual misconduct.” Watson seems to have left with few regrets, and the charge of misconduct was never specified or made public. (p. 23)

For documentation, Rutkoff and Scott (p. 260) cited a 1978 interview with Beard’s daughter, Meriam Beard Vagts. She was 77-years-old at the time of the interview, which casts some doubt on her memory for an event alleged to have happened more than 50 years earlier.

SUMMARY

Watson strongly advocated social reform but was not a hands-on activist in any reform movement. The principles he advocated were based largely on his social philosophy, which was admirable in many ways, and on his behavioral theory, which was coherent and reasonable. Also, the principles were supported by the scant amount of relevant research evidence that was available at the time. Thus, his views were neither absurd nor evil, even though some of his recommendations were extreme by then-current as well as modern standards. Genetic variables undoubtedly have a greater influence on many behaviors than Watson believed; but nevertheless, environmental interventions can modify or even block the expression of a genotype, whether the phenotype that would be expressed without the intervention is socially desirable or undesirable.

REFERENCES


Watson, J. B. (1929b). What the nursery has to say about instincts. Pedagogical Seminary, 32, 293-327.


Author's Note
An earlier version of this paper was presented at the Special International Congress on Behaviorism and the Sciences of Behavior, Taipei, Taiwan, December 2000. Address reprint requests to the author at bayareese@aol.com or 4516 French Lake Dr., Fort Worth, TX 76133-6908, U.S.A.


