

# Moral Cognition, Behaviorism, and Social Learning Theory

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## INTRODUCTION

Dennis Krebs, a social psychologist, and Thomas Wren, a moral philosopher, have provided critiques of the social learning theory (SLT) approach to morality.<sup>1</sup> Krebs's perspective derives from cognitive-developmental theory (CDT) which he views as the main alternative to SLT, whereas Wren's is "somewhat more psychodynamic than Harré's and yet more socially interactive than Freud's." Krebs and Wren make numerous specific criticisms (Krebs of particulars of my own earlier article on altruism;<sup>2</sup> Wren of the different SLT approaches), and both offer alternative suggestions for future directions (Krebs of the importance of intentional reasoning preparatory to behaving; Wren of a hierarchical system in which an executive agency mediates affective structures).

There is much in what they have written that I agree with. I wish space allowed for a discussion of all of the very interesting points that they raise. Their central focus—on a conscious, executive ego that reasons with itself about which of the many conflicting operating rules and/or affective states it will engage to enact behavior—is intuitively appealing. It is also becoming increasingly congruent with developments in cognitive science. Ultimately a full exposition of such a hierarchically organized processing system may be required for a complete theory of morality. Many research programs, including that of SLT, are currently working to provide an account of this that will be empirically verifiable.<sup>3</sup>

One issue that arose is whether morality is primarily about intention (Krebs, Wren), or about behavior (Rushton). Krebs in particular was critical of a focus on behavior, suggesting that "defined externally, behavior is ambiguous." He provided an example of how a behavioral perspective might lead to erroneous attributions of altruism, as in the case of the person who fired a weapon at an enemy but, in the process, shot out a malignant tumor. Krebs's suggested solution to such ambiguities is to

1. D. L. Krebs, "Psychological Approaches to Altruism: An Evaluation," in this issue; T. E. Wren, "Social Learning Theory, Self-Regulation, and Morality," in this issue.

2. J. P. Rushton, "Altruism and Society: A Social Learning Perspective," in this issue.

3. A. Bandura, "The Self and Mechanisms of Agency," in *Social Psychological Perspectives on the Self*, ed. J. Suls (Hillsdale, N.J.: Lawrence Erlbaum Associates, in press).

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define altruism in terms of intent. One can, however, point to several difficulties with the argument presented by Krebs.

In the first place, judgments about altruism (or anything else) are unlikely to be reliable when based on single exemplars and limited information (as in his example). Reliable judgments usually occur when there is a sampling of a number of behavioral events. There is always a fair amount of uncertainty in any unit of information. By combining and averaging over units the uncertainty is averaged out, leaving a clearer view. These expectations are made explicit in scientific measurement in which the more data points are averaged, the higher the reliability is.<sup>4</sup> The implication of this is that if we want to know whether any one behavior, isolated from context, is an act of altruism or not, we may have to live with ambiguity. This would occur whether the focus was on intention or on behavior.

A second difficulty with the analysis presented by Krebs is that focusing on intent often magnifies ambiguities rather than diminishes them. If objectively observable behavior is ambiguous in interpretation, how much more so must intangible inferences of intent be? Numerous examples of this can be found in the court situation when there is agreement as to whether the defendant actually carried out an act but disagreement as to whether there was *mens rea*. Psychologists and psychiatrists can often be found arguing on both sides of the issue (to the detriment of the reputation of their sciences). The reality is that sometimes there is no way of estimating the defendant's intentions and it would be more honest to simply say so. Further, requiring some form of conscious intent to be part of the definition can be problematic. Are people who help others out of habit or impulse not behaving altruistically? Are severely mentally retarded persons who are not capable of cognitive reflection also incapable of aiding others?

Finally, from a behavioral perspective, the argument presented by Krebs begs the question. By defining altruism in terms of intent, the question of the determinants of altruistic behavior is answered by fiat (i.e., the intention to be altruistic). To elaborate on Krebs's example: if an alien arrived from outer space, and if on every occasion that it fired a ray gun at a human that human benefited (e.g., by having a tumor removed), could we not reasonably describe the alien's behavior as altruistic—even if we had no access to the contents of the alien's "consciousness"? (The alien might even be a robot with no consciousness at all.) Intentions, like motivations, or needs, or stages of development, or attitudes, or beliefs, or moral principles, or any other intangible hypothetical construct, are themselves inferred from *regularities in behavior*. I should quickly add, however, that when Krebs suggests that intent be taken into account in order to "supply a better basis for predicting subsequent behavior than

4. J. P. Rushton, D. N. Jackson, and S. V. Paunonen, "Personality: Nomothetic or Idiographic? A Response to Kenrick and Stringfield," *Psychological Review* 88 (1981): 582-89.

the act itself' he and I are in complete agreement. This raises intent to the level of an explanatory, hypothetical construct whose adequacy can then be gauged by its predictive utility. This is quite different, however, from requiring definitions of behavioral phenomena to incorporate a favored explanatory concept. Thus behavior should remain the primary focus.

In order to put this issue into greater perspective, and because space permits only the briefest consideration of the major issues confronting both SLT and its critics, I will focus on two issues that may underlie many other considerations. These are (1) the role of empirical science in accounting for moral functioning, and (2) the role of moral cognition in SLT.

## BEHAVIORISM AND THE SCIENCE OF PSYCHOLOGY

In reading Krebs and Wren I got the distinct feeling that a metatheoretical aspect colored much of the discussion. This is the role of empirical science in understanding the nature of morality and moral development. As I mentioned in my earlier article, one of the essential characteristics of SLT is its commitment to understanding human nature through experimentation and scientific method. This strong commitment does not seem to emerge to the same degree in the writings of Krebs and Wren. Krebs, for example, refers to the "narrow and exclusively empiricistic epistemology" on which SLT is based. He denigrates the idea that definitions (e.g., of altruism) should be practical, and points out, instead, that the meaning of altruism changes in conjunction with "a number of qualitative transformations throughout the life span." In regard to whether there is "an altruistic personality" he objects to my approach of empirically assessing the magnitude of intercorrelations of behavior across situations and prefers to advocate a series of specific personality types. Earlier he had decried even that, stating: "References to personality traits like altruism are over-used and misleading at best and, at worst, mythical."<sup>5</sup> This whole question, however, should be more a matter for empirical investigation than fluctuating conceptual analyses.

Wren refers to SLT as "mechanistic" (a favorite word for those disliking scientific determinism—often more a polemical device for dismissing the need to examine the empirical predictive power of the theory than a conceptual argument) and as lacking the "self-evident prescriptive properties operating in the theories of most moral philosophers." Hardheaded scientists are unlikely to find convincing his critique that their theories must be wrong because they do not fit "our primitive self-conceptions of what *we* mean, of 'what it is like' to be a moral person."<sup>6</sup> In short, Krebs's and Wren's positions appear to be at odds with SLT, not just in particulars, but also in the whole approach to coming to an understanding of

5. D. L. Krebs, "A Cognitive-Developmental Approach to Altruism," in *Altruism, Sympathy, and Helping: Psychological and Sociological Principles*, ed. L. Wispé (New York: Academic Press, 1978), p. 142.

6. Wren, this issue, n. 5.

moral functioning. Given that this is so, a brief elaboration on the epistemological status of the SLT research program might be useful.

Modern SLT approaches derive, fairly directly, from the Behavioral Revolution of 1913.<sup>7</sup> At that time, it will be remembered, Watson changed the direction of psychology from the study of the contents of consciousness to the study of behavior. It will be well to remind ourselves of why he was able to do so. There was a general revulsion among scientifically minded psychologists that the unresolvable controversies of the day over such issues as whether it was possible to have a thought without having an image (the famous imageless-thought controversy) were not even controversies about facts. There were no "facts" involved. The data were all subjective. This desire for the primary data of psychology to be "objective" (i.e., susceptible to being measured by more than one person at a time) led to the suggestion that *behavior* be the primary data of psychology, not consciousness. By focusing on behavior, the discipline of psychology could truly become a natural science. Indeed, by altering direction, psychology could also tie in directly to the larger biological background (e.g., physiology, the theory of evolution) and could extend its area of investigation to include animal behavior as well as that of human.

Donald Broadbent, one of the founders of cognitive psychology,<sup>8</sup> has written at length on the role of behaviorism in shaping modern cognitive science.<sup>9</sup> He argues that, in effect, much of cognitive science owes its existence to Watson. He points out that although today almost nobody accepts the particulars of Watson's own theories, these are denied by using Watson's own most central belief: an emphasis on objective methods. This was a partisan battle cry in Watson's day although it is now a generally accepted doctrine, at least by the more scientifically minded psychologists including, perhaps most notably, cognitive psychologists and SLTers. (Some aspects of psychology, including large chunks of clinical, developmental, and social psychology, might well do with a healthy dose of operationalistic behaviorism; these areas were "protected" partly via their stronger association with the nonbehavioristic and less scientific Freudian and phenomenological approaches.)

Of course most cognitive scientists today would not call themselves behaviorists—nor would many of those working in SLT. Nonetheless, the fundamental *attitude* of behaviorism is apparent. Cognitive scientists such as Broadbent study what he calls "the science of input and output" rather than the science of stimulus and response. The behaviorist attitude is apparent in the requirement to take into account the operations by which any particular observation is made, and rejecting statements not

7. J. B. Watson, "Psychology as the Behaviorist Views It," *Psychological Review* 20 (1913): 158-77.

8. D. E. Broadbent, *Perception and Communication* (New York: Pergamon Press, 1958).

9. D. E. Broadbent, *Behaviour* (New York: Basic Books, 1961).

given unambiguous meaning. The difficulty then becomes how to deal with events inside the brain. It is almost universally thought, now, that even the behavior of rats requires us to think of mechanisms operating purely inside their brains and revealing themselves only indirectly in action. The question is, how should we speak to these internal responses? Because we can only talk about them by inference from observables (not through introspection) it is necessary to be exceedingly cautious. This difficulty provides a rational basis for Skinner's well-articulated reluctance to abandon the Puritan "straight and narrow" path to a science of behavior.<sup>10</sup> Some theorists, such as Broadbent and Neisser, build on computer science and engineering for their constructs.<sup>11</sup> Modern memory researchers have built on a series of usually spatial metaphors for theirs.<sup>12</sup> And behavioral scientists from a learning tradition have tried a variety from the "fractional antedating goal responses" of Clark Hull to the highly variegated self-systems of Albert Bandura.<sup>13</sup>

The basic issue, then, is, What are the hypothetical constructs to be used to account for moral behavior? And what are the criteria by which we will decide whether one set of constructs is "better" than another set? This leads directly to the second issue to be discussed—the role of moral cognition in SLT.

#### MORAL COGNITION AND SOCIAL LEARNING THEORY

I suggested in my earlier article that much of the research literature and terminology concerned with the motivations to behave in a prosocial manner can be usefully subsumed under one of the two hypothetical constructs of empathy and personal rules. Let us consider more fully the motivational system of personal rules, for this will enable us to examine the role of moral cognition in SLT.

As defined earlier, a personal rule is a standard by which events are judged and on that basis approved or disapproved. Rules vary in the degree to which they are internalized. Those held strongly enough to be considered "oughts" are called "moral principles." Those held more abstractly often are referred to as "values," while those held tentatively and found arbitrary may be called "social conventions." These have in common the fact that they all are internal standards against which events are judged. If one's behavior does not match up, one censures oneself to the degree to which the rule has been internalized.

10. B. F. Skinner, "The Steep and Thorny Way to a Science of Behavior," *American Psychologist* 30 (1975): 42-49.

11. Broadbent, *Perception and Communication*; U. Neisser, *Cognitive Psychology* (New York: Appleton-Century-Crofts, Inc., 1967).

12. H. L. Roediger III, "Memory Metaphors in Cognitive Psychology," *Memory and Cognition* 8 (1980): 231-46.

13. C. L. Hull, "The Mechanisms of the Assembly of Behavior Segments in Novel Combinations Suitable for Problem Solution," *Psychological Review* 42 (1935): 219-45; Bandura.

Postulating the hypothetical construct of personal rules allows for the organization of much disparate data. The danger of such constructs, though, is that they end up being postdictive rather than predictive, thus rendering only pseudoexplanations; that is, an instance of, say, helping behavior occurs, and then we "explain" it by saying that a "rule to help" must have been in operation. We can break the circle, however, and solve some of these problems in two ways. First, we can specify the conditions under which the rules can be acquired and modified (see almost the entire second half of my earlier article). Second, we must recognize that rules are properties of individuals; some people will have learned higher moral standards than will others. Clear predictions are derivable from this statement. For example, compared with people who have low personal standards, persons who have high moral standards should (a) be more likely to endorse rules based on those standards, (b) behave more in accord with those rules, (c) make moral judgments based on those rules, and (d) apply sanctions to individuals who violate the rules.

Perhaps the most direct test of the hypothetical construct of personal rules is to see whether observed differences in behavior are predicted from paper-and-pencil measures of a person's knowledge of, and agreement with, moral norms. A wide range of studies have demonstrated this to be the case. Numerous studies, reviewed elsewhere,<sup>14</sup> have shown that paper-and-pencil measures of social responsibility, other-oriented values, and having equality and helpfulness as personal values, predict individual differences in altruistic behavior. For example, among university students, high scorers on a questionnaire measuring social responsibility behaved more altruistically than low scorers did.<sup>15</sup> The questionnaire measuring social responsibility was composed of such items as "I am the kind of person people can count on." The measure of altruism consisted of the number of cardboard boxes made for another person who was allegedly dependent on the subject for his or her help. Another study used a similar scale for children and found it predicted both donating money to a charity on an immediate test and donating candies on a subsequent test.<sup>16</sup> In yet another study, whereas 80 percent of those high on social responsibility made an altruistic donation, only 43 percent of those low on social responsibility did so.<sup>17</sup> Finally, in a recent study of my own, social responsibility scores allowed a greater than chance prediction of whether respondents report, on a Self-Report Altruism Scale, having engaged in such behaviors as making change for a stranger, donating goods to a charity, and allowing someone to go first at a supermarket checkout

14. J. P. Rushton, *Altruism, Socialization, and Society* (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1980).

15. L. Berkowitz and L. R. Daniels, "Responsibility and Dependency," *Journal of Abnormal and Social Psychology* 66 (1963): 429-36.

16. E. Midlarsky and J. H. Bryan, "Affect Expression and Children's Imitative Altruism," *Journal of Experimental Research in Personality* 6 (1972): 195-203.

17. J. A. Willis and G. R. Goethals, "Social Responsibility and Threat to Behavioral Freedom as Determinants of Altruistic Behavior," *Journal of Personality* 41 (1973): 376-84.

counter.<sup>18</sup> Clearly those individuals who score highly on traditional questionnaires of social responsibility are the ones who also engage in traditionally moral behavior.

Of particular interest might be the studies that have found a positive relation between people's "scores" on the typical moral judgment dilemmas presented by Kohlberg and Piaget and their behavior on situational tests of their altruism. It is unclear whether CDT actually expects this relationship to occur. If one reads Kohlberg in 1969, for example, it would appear as though scores given for responses to moral dilemmas are "content free."<sup>19</sup> Thus, in solving the moral dilemma of whether Heinz should steal a drug in order to save somebody's life, moral reasoning at each of the six stages can support either that Heinz should or that he should not steal the drug. So it would appear as though a particular stage of moral judgment should not be predictive of any particular behavior. However, in a later paper cleverly entitled "How to Commit the Naturalistic Fallacy and Get Away with It" Kohlberg writes that there is a positive relationship between how "high" a person reasons and how "highly" he or she will behave.<sup>20</sup>

Later still, however, writing from the CDT perspective, Krebs describes the positive relationship that has been demonstrated between "stage" of reasoning and moral behavior as "problematic for cognitive-developmental theory."<sup>21</sup> In discussing two of my own studies that were among the first to demonstrate this empirical relationship, Krebs wrote, ". . . the results force us to ask how a study that employs a questionable measure of moral judgment can support a hypothesis that cognitive-developmental theory does not make with methods that it does not endorse from a theoretical framework with which it is inconsistent."<sup>22</sup> Krebs went on to suggest that my results must have been due to the ubiquitous "experimental confounds" that critics like to invoke at these times. There was no evidence presented for this, however.

In his article in this symposium, Krebs reiterated his views on the relationship between moral judgments and situational behavior:

Rushton supports his contention that there is a positive correlation between moral development and prosocial behavior by citing a study published by Alli Rosenwald and me in 1977. . . . As indicated earlier, there is reason to believe that the positive relationship between moral development and the prosocial behaviors that typically

18. J. P. Rushton, R. D. Chrisjohn, and G. C. Fekken, "The Altruistic Personality and the Self-Report Altruism Scale," *Personality and Individual Differences* 2 (1981): 293-302.

19. L. Kohlberg, "Stage and Sequence: The Cognitive-Developmental Approach to Socialization," in *Handbook of Socialization Theory and Research*, ed. D. Goslin (Chicago: Rand McNally & Co., 1969).

20. L. Kohlberg, "How to Commit the Naturalistic Fallacy and Get Away with It," in *Cognitive Development and Epistemology*, ed. T. Mischel (New York: Academic Press, 1971).

21. Krebs, "A Cognitive Developmental Approach to Altruism," p. 158

22. *Ibid.*, p. 159.

are investigated by psychologists should be strongest at Kohlberg's stage 3 (because morality tends to be viewed in terms of altruism at this stage). The thrust of the Krebs and Rosenwald study was to demonstrate how different structures of moral reasoning may produce different interpretations of a particular situation, and how these constructions may give rise to different behaviors. Significantly, Rosenwald and I did not characterize the behavior we assessed as "altruistic." The meaning of the behavior—returning questionnaires for which people had been prepaid—may well have varied across subjects in accordance with their level of moral development.<sup>23</sup>

While thoughtful, and at a phenomenological level possibly even correct, the quote above unfortunately demonstrates the opaqueness of CDT in generating unambiguous prediction. It does not even fit the data from Krebs's own study in which 90 percent of those at Kohlberg's stages 4 and 5 helped a person in need while only 40 percent of those at stages 2 and 3 did so.<sup>24</sup> Neither does it help to understand the increasing research evidence. Consider, just briefly, a sampling of the range of studies that have found a positive relationship between indices of moral judgment and measures of altruistic behavior. The studies differed considerably from each other in age range tested, indices of moral judgment, and assessments of altruism.

In my own two early studies (the two that Krebs took exception to) the moral judgments were based on stories from Piaget concerned with sharing, while the measure of prosocial behavior was concerned with donating to a charity.<sup>25</sup> The participants in the study were 200 seven- to thirteen-year-olds and the assessments were taken, in one case, two months apart. Krebs suggested the results must have been due to confounds associated with the experimental measures. However, as was demonstrated in a study carried out at Berkeley by Paul Mussen and his colleagues, the relation between moral judgment and altruism holds up when the measures of prosocial disposition are assessed by peer ratings.<sup>26</sup> In this study, thirty-three ten- and eleven-year-old boys were given the Kohlberg test of moral judgment, and this was found to predict their reputation among their peers for being concerned with the welfare of others (as well as with a situational test of resisting a temptation).

Similar relationships have been found in studies with adults. Ervin Staub, another major researcher in the field of prosocial behavior, found that level of moral judgment as measured on Kohlbergian tests correlated

23. Krebs, this issue.

24. D. L. Krebs and A. Rosenwald, "Moral Reasoning and Moral Behavior in Conventional Adults," *Merrill-Palmer Quarterly of Behavior and Development* 23 (1977): 77-87.

25. N. P. Emler and J. P. Rushton, "Cognitive-Developmental Factors in Children's Generosity," *British Journal of Social and Clinical Psychology* 13 (1974): 277-81; J. P. Rushton, "Generosity in Children: Immediate and Long Term Effects of Modeling, Preaching, and Moral Judgment," *Journal of Personality and Social Psychology* 31 (1975): 439-66.

26. S. Harris, P. Mussen, and E. Rutherford, "Some Cognitive, Behavioral and Personality Correlates of Maturity of Moral Judgment," *Journal of Genetic Psychology* 128 (1976): 123-35.



with the more traditional questionnaires of moral attitude as well as with measures of prosocial behavior—in this case going to the aid of somebody apparently in distress.<sup>27</sup> In my own most recent study, I too found moral judgment level, this time measured by Rest's Defining Issues Test,<sup>28</sup> to correlate with traditional measures of moral attitude, such as social responsibility, as well as with indices of altruism.<sup>29</sup>

In short, there is now substantial evidence that level of moral judgment predicts the amount of prosocial behavior.<sup>30</sup> From a SLT perspective, the most parsimonious way to order these diverse data is to invoke the hypothetical construct of an internalized, personal norm, rule, or standard mediating them all. According to this account, a response to a moral judgment dilemma is similar to an item on a personality test or questionnaire, or situational test of behavior. It is a sample of behavior and a manifestation of an underlying rule governing that behavior. On a rule to "be altruistic," altruists score higher than nonaltruists on numerous indices. Thus, from the social learning perspective being presented here, judgments reflect cognitive rules that have been learned via the same processes as other behaviors (i.e., through the laws of learning).

## SUMMARY AND CONCLUSION

The behaviorist traditions of modern cognitive social learning theory have been traced back to the desire to make the discipline of psychology a truly natural science. It is argued that this has been achieved through the current emphasis on an objective methodology and concern with empirical prediction. These are characteristics of the SLT approach to the nature of morality and moral development. This is exemplified in the SLT approach to moral cognition where the notion of internalized personal standards has been seen to order diverse data and make clear predictions. In this regard it is demonstrably superior to any other currently available research program.

Several years ago now, Albert Bandura, perhaps the leading exponent of social learning theory, wrote, "The worth of a psychological theory must be judged not only by how well it explains laboratory findings, but also by the efficacy of the behavioral modification procedures that it produces."<sup>31</sup> Even its critics seem to agree that, of all the paradigms in the behavioral sciences, at the very least, social learning is of practical utility. This befits a valid conceptual model of human behavior.

27. E. Staub, "Helping a Distressed Person: Social, Personality, and Stimulus Determinants," in *Advances in Experimental Social Psychology*, ed. L. Berkowitz (New York: Academic Press, 1974), vol. 7.

28. J. R. Rest, *Development in Judging Moral Issues* (Minneapolis: University of Minnesota Press, 1979).

29. Rushton et al., "The Altruistic Personality."

30. A. Blasi, "Bridging Moral Cognition and Moral Action: A Critical Review of the Literature," *Psychological Bulletin* 88 (1980): 1-45.

31. A. Bandura, *Principles of Behavior Modification* (New York: Holt, Rinehart & Winston, 1969).