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Cognitive Social Psychology

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Abstract. Social psychology is presently dominated by cognitive theories that emphasize the importance of personal beliefs and intellective processes as the immediate determinants of behavior. The present paper explores two areas of research within this tradition: (1) beliefs about the external world, and (2) beliefs about the self. The paper concludes with a brief critique of the cognitive approach to social psychology.

Social psychology, along with many other areas of behavioral research, is presently dominated by the cognitive point of view. In preparing to write this paper it was therefore difficult to determine what aspects of social psychology could legitimately be regarded as "noncognitive," and hence irrelevant to the topic under consideration. I have therefore taken the liberty of covering the field somewhat selectively, so that I might have the opportunity to discuss some continuing themes that strike me as particularly interesting and noteworthy.

For the social psychologist, the cognitive approach normally implies an emphasis on personal beliefs and hypotheses as the immediate determinants of behavior. Cognitive social psychologists thus focus on what Lewin called the perceived world, including the inferences and illusions that derive from cognitive activity, as opposed to the unembellished objective reality of the physical and social environment. The dominant tone emphasizes man's rational, intellective processes and downgrades the importance of irrational and self-serving motives, mindless conformity, and mechanistic learning principles. Thus, a number of investigators have recently focussed attention on the number and the quality of the arguments that support a given position, as important determinants of attitude change (Burnstein & Vinokur, 1977; Eagly, 1974; Greenwald, 1968). On the other hand, man's cognitive capacities are finite, and these limits should perhaps be more explicitly recognized by social psychologists (Dawes, 1975). For example, Nisbett and Wilson (1977) have shown that people have a limited capacity to report on their own cognitive processes, and as we shall see below, people's intuitive judgments are often unaffected by information that should (logically) be influential.

Before getting into the main body of our discussion, we should note that the social psychologist's expression of the cognitive viewpoint is frequently rather different from the cognitive models that have been proposed in experimental psychology. For one thing, the cognitive social psychologist has often been concerned with the substantive inferences and generalizations we derive from our past and present experiences, generalizations that can be expressed in simple verbal terms (e.g., if Bob and Bill like the same things, they will probably like each other). In contrast, the experimental psychologist has been more concerned with characterizing the cognitive system (or process), by abstractly describing the different stages and types of information-processing that he deems important. For the experimentalist, moreover, the cognitive approach normally implies a computer-inspired conception of mental functioning,

while the social psychologist has usually been more traditional, preferring to borrow his models from "bubbe-psychology," or from the implicit psychology of the man-in-the-street (for those like Kelly, G.A. and Kelley, H.H., whose ethnic origins preclude the existence of an inspirational "bubbe").

A final characteristic of the cognitive approach to social psychology is the assumption that our beliefs and attitudes are organized (at least loosely) into a structured system of some sort. This is normally taken to imply that certain "configurations" will commonly be encountered, while others will not (i.e., our beliefs should be sensibly related to one another). The configural assumption leads to the prediction that cognitive changes in one part of the system should normally lead to "filter down" effects in other parts (McGuire, 1968). For example, upon learning (to my surprise) that Bill is angry at Bob, I may change my feelings about one or both of them.

The material that follows is divided into two main sections. In the first section we will review a number of investigations that explore people's belief systems with primary emphasis on the external world. The second section concerns the perceived self as an object of cognitive appraisal and as a determinant of action. These two foci, the external world and the self, appear to be natural (inevitable?) topics of interest for cognitive theories that emphasize the phenomenology of the man-in-the-street. For if cognitive activity is to be useful in the guidance of action, we must appraise both the external world (physical and social) and our selves (capacities, preferences, etc.), so that we can choose courses of action that are realistic and suitable to our needs.

Beliefs about the World: Logic and Social Cognition

The past two decades of social psychological research have included several attempts to demonstrate that man is (or is not) a natural logician in thinking about the social world. This literature has, however, changed somewhat over the years. The earlier studies tended to use verbal logic as a normative baseline, while more recent investigations have been concerned with people's intuitive adherence to statistical models, with particular emphasis on Bayes' theorem and the analysis of variance. There has also been an increasing tendency to account for logical shortcomings by pointing to the fact that man's cognitive capacities are limited and often biased; hence errors in judgment need not derive from "deep" emotional sources (Dawes, 1975).

The Socratic Effect

McGuire's work on cognitive structure (1960, 1968) provides us with an early illustration of research comparing human performance to a normative model of social cognition. These studies were based on the notion that human thought is organized, at least in part, in a syllogistic fashion, in which logically-linked premises are loosely related to their proper conclusions. For example, a person who believes (a) there is a good chance that any city which could be easily reached by air from the European continent would be destroyed in an atomic attack if there was another world war; and who also believes (b) that his own city could easily be reached by airplanes based in Europe, should logically accept the idea (c) that his own city was very likely to be destroyed through bombing in the event of a world war. McGuire found that responses to an item like (c), the conclusion of the syllogism, were predictable from the respondent's beliefs regarding (a) and (b), the premises. He also reported

evidence of a Socratic effect, in which the simple arousal of these related beliefs (when the questionnaire was initially administered) led to a spontaneous gain in logical consistency when the respondents were retested a week later. In addition to these data, which suggested the existence of a loosely linked logical system, McGuire's results also included substantial evidence of wish fulfillment, for his respondents tended to believe most fervently in conclusions that depicted desirable rather than undesirable situations, even though this tendency impaired the internal consistency of their beliefs.

This line of work was further developed by Wyer (1974; Rosen and Wyer, 1972), who used the test-retest (Socratic) methodology to assess several well-known models of cognitive functioning. Wyer's results were consistent with the idea that beliefs and attitudes were organized into an implicit system, and he concluded that for the average respondent, this system was in general conformity with the laws of mathematical probability. In particular, he repeatedly found that his respondents' beliefs concerning related issues conformed to the equation:

$$P_B = P_A P_{B/A} + P_{A'} P_{B/A'}$$

In this formulation, P_A and P_B are the probabilities that events A and B will occur; $P_{B/A}$ is the probability of B given the occurrence of A. $P_{A'}$ ($=1-P_A$) is the probability that A will not occur, and $P_{B/A'}$ is the conditional probability of B, given that A does not occur. Wyer's results here may be regarded as supportive of McGuire's work, since the probability formulation is very similar (logically) to the syllogistic model that motivated McGuire's research. Wyer's conclusions are also consistent with the views of Peterson and Beach (1967) who suggested that "...the normative [statistical] model provides a good first approximation for a psychological theory of inference. Inferences made by subjects are influenced by appropriate variables and in appropriate directions. But there are systematic discrepancies between normative and intuitive inferences...[for the subject's] sensitivity is often less than optimal."

Intuitive Judgments May be Statistically Naive

A number of writers have challenged the view that intuitive thinking is congruent with the postulates of probability theory (Slovic & Lichtenstein, 1971; Fischoff, 1975). For one thing, people seem unaware of the fact that a large sample of observations will normally yield more stable results than a small one (Tversky & Kahneman, 1971; 1974). A phenomenon that has attracted even more scientific attention is the fact that people are relatively insensitive to "base-rate" information when making predictions or other judgments about particular events; instead, they focus almost exclusively on information derived from the target case with which they are faced. This approach is, however, inconsistent with Bayes' theorem, which tells us that in judging the likelihood of a particular event (e.g., the likelihood that Mr. Smith is a chemist), we should attend not only to his individual characteristics, but should also take account of the base rate for that event (the percentage of chemists in the population as a whole). To demonstrate their point, Kahneman and Tversky asked a large number of respondents to indicate the probability that a particular individual, who was described in a brief unrevealing characterization, was an engineer versus a lawyer. Some people were told that the individual in question was a member of a

country club that included 70% lawyers and 30% engineers; others were told that only 30% of the club members were lawyers, while the remaining 70% were engineers. Application of Bayes' theorem suggests that these contrasting base rates should have exerted a substantial influence on the respondents' judgments. The base rate information was largely ignored, however.

More recent work in this area challenges the generality of Kahneman and Tversky's initial findings, and suggests that base rate information may be effectively utilized if it seems causally related to the target case in question (Ajzen, 1977; Tversky & Kahneman, in press). For example, if we learn that 70% (versus 30%) of the students in a class have failed a particular exam, this base rate data is likely to affect our judgment when we are asked to estimate Johnny Jones' chances of passing. In a case like this, the reported failure rate provides us with information regarding a causal factor in the situation (the difficulty of the exam) that might affect anyone's chances of success; and people seem quite responsive to causal data when making predictions, perhaps because of our overwhelming familiarity with cause-and-effect sequences or "scripts" (Abelson, 1977). It seems reasonable to expect, moreover, that base-rate information that engaged other familiar scripts or schemas might also be readily applied, although this has yet to be demonstrated. This seems like a potentially fruitful area for further research.

The salience of base-rate data. Base-rate information may often be disregarded because it seems dull and remote. Thus, in many situations we may be faced with the task of making some type of prediction about a particular person whose interesting individual traits and abilities exert a disproportionate claim on our limited attention span, crowding out considerations of base-rates and the like. This type of attentional problem may sometimes be exacerbated by experimental settings which suggest that the respondent's ability to produce an accurate prediction is reflective of his social sensitivity and his responsiveness to subtle individuating cues. Under these circumstances the respondent might feel he was evading the spirit of the experiment ("cheating") if he based his predictions on merely statistical (base-rate) considerations, as opposed to the richer, more individuating information associated with the target case.

This analysis suggests that while there may be many situations in which base-rate is underutilized (if it is used at all), our incapacity in this regard may depend on the salience of the available information. Perceptual salience has also been emphasized as an important variable in studies of the attribution process (see below). To test the idea that base-rate information might be effectively utilized if it was presented in interesting, concrete terms, Manis and Dovalina (1977) used a case-by-case presentation method. Respondents were shown a large number of yearbook photographs, one at a time, and were told that certain people had plans for graduate school, while others did not. In this way, one group was led to believe that 70% of the graduating class had further educational plans; another group was led to believe that only 30% had post-graduate educational plans. Following this induction series all respondents were presented with several of the pictures that had previously been shown, plus some "new" pictures. The respondents had two tasks: (a) first, they were to indicate whether each picture was "new" or "old;" (b) next, they were to indicate their best estimate as to

each person's plans concerning graduate school, and were instructed to guess if they had not previously been given explicit information about a particular individual. In this situation the base-rates were readily utilized. For example, when the induction series suggested that many (70%) of the seniors were planning to go on to graduate school, the respondents assumed that in cases where they had not been given direct information about someone's future plans, these individuals were also likely to go on for further schooling about 70% of the time.

Attribution Theory

Attribution theory, as expressed in Kelley's cube model (1967), represents another expression of the idea that spontaneous thought often follows a systematic course that is roughly congruent with a well-known formal model---the ANOVA model. Kelley contends that in searching for the cause(s) of some observed action, the naive observer operates much like the idealized scientist; that is, he coolly attempts to identify the antecedents that covary with the effect (the act in question) that he wishes to explain. Kelley's model thus assumes that normal processes of social inference are quite rational, and are in fact closely modelled on the scheme that J. S. Mills outlined in his method of differences. This formulation was empirically tested in MacArthur's well known dissertation (1973) with promising results.

Most recently, however, Kelley's theory, with its central assumption of human rationality and sensitivity to the covariation of causes and effects, has been challenged by several investigators who contend that in searching for the causes of behavior, the average respondent is sometimes less than logical. In particular, these critics have argued, we are often quite resistant to the idea that a given action can be effectively explained by considering the actor's circumstances; instead, we normally prefer to account for human actions by focusing on internal (personal) determinants, such as the actor's traits, preferences, and motives. Several lines of research support this general conclusion.

Discounting social pressures. Several studies have shown that even when clearcut information is provided regarding the importance of situational factors in a given behavioral episode, observers may nonetheless continue to believe that the act in question was at least partly reflective of some personal characteristic of the actor (e.g., his attitude or ability). For example, Jones and Harris (1967) had a group of respondents rate an essay that favored (or opposed) Castro's Cuba; their task was to estimate the writer's private views on this topic. The results indicated that a person who had presented a particular viewpoint was generally assumed to favor that stand, even by respondents who had been explicitly informed that the writer was simply following instructions, e.g., to produce a pro-Castro essay, and was not necessarily expressing his personal beliefs. Some investigators believe that these results derive from the fact that behavior normally "engulfs the field" because of its capacity to command our attention. A recent study by Yandell and Insko (1977) suggests, however, that this effect is not completely due to the perceptual salience of behavior, but may instead derive from the implicit belief that our own views are widely shared by others. According to this account, upon reading a persuasive essay that expresses a particular viewpoint (as requested by the experimenter), the listener may be partly persuaded by the arguments that are adduced, and may consequently assume that like "most others," the writer's views are probably reasonably similar to his own. Ross, Greene, and House

(1977) have provided further information testifying to the widespread belief that others usually act and feel the same way we do (the "false consensus effect").

The vicissitudes of "consensus" information. Kelley's attribution model implies that an action which is taken by "most people" will not normally be regarded as an expression of internal traits or predispositions, but will instead, seem to derive from external (situational) determinants. On the other hand, several experimenters have reported that naive explanations for a given act are often insensitive to variations in consensus (the number of individuals who act or feel the same way as the target case, whose behavior is to-be-explained). A recent study by Nisbett and Borgida (1975) provides a good example. In one part of this experiment the subjects read about a study by Darley and Latané (1968) that was concerned with people's readiness to help someone who appeared to be having an epileptic seizure. One group of respondents was provided with information about the experimental procedures plus the surprising results of the original study, which showed that the most common response to the confederate's "distress" was to do nothing at all! Other respondents learned about the experimental procedures, but were not given information as to the original results. Both groups of respondents were subsequently asked to explain the behavior of a particular target case, Greg R., a freshman who had not helped in the "emergency" situation. Respondents who had been told the results of the Darley-Latané experiment should have avoided explanations that focused on Greg's individual qualities or dispositions (since he had acted as many others did), and should instead have emphasized situational factors. The results did not, however, support this line of reasoning. Moreover, when asked to predict the behavior of specific others who were said to have participated in the original experiment there was no evidence that the respondents had been influenced by the behavioral base-rates they had received, i.e., by the frequency of different responses to the "emergency."

How can we explain these surprising results? Nisbett and Borgida suggest that their data are related to Kahneman and Tversky's observation that we are often insensitive to base-rate information, and they contend that these results may be primarily due to attentional factors, since both base-rates and consensus data are commonly presented in pallid, abstract terms. An alternative explanation for these results focuses on the possibility that the respondents' beliefs concerning what "most others" will do (or would have done) in any given situation may not be effectively controlled by simply telling them what a particular sample of respondents has done in the past. The behavior that is reported for a sample may, for example, depart substantially from what the respondent would normally have anticipated. In such a case, many people may assume that the sample was probably unusual in some way; hence they might reason that the behavior of the sample should not be taken as an indication of what people in a representative sample would do. Nor need the near-unanimity of behavior shown by an "unusual" sample imply that powerful situational forces have been operative.

To assess this line of analysis, Wells and Harvey (1977) repeated the essentials of the Nisbett-Borgida experiment, but took considerable pains to inform their respondents that the sample whose behavior they had learned about was selected through a random process, and was consequently representative and typical of the population from which they were

drawn. When special attention was in this way directed to the typicality of the respondents in the study being described, there was some evidence that the subjects were more sensitive to variations in the behavioral reports they had received. For example, subjects who had been given assurances concerning the typicality of the sample were more likely to follow Kelley's (1967) model, by interpreting the behavior of an individual who conformed to the sample norm as reflecting the influence of situational forces.

Despite this demonstration that base-rate data can sometimes be influential, it is important to note that even in the Wells and Harvey experiment there was clear evidence that the base-rate information was underutilized. For one thing, when asked to estimate how quickly they themselves would have helped the "epileptic," had they been included in the original study, the subjects' responses were unaffected by the base-rate (consensus) information that had been provided, suggesting once again that people underestimate the power of situational influences. Moreover, as Borgida and Nisbett suggest (1977), there are two standards (criteria) that may be used in evaluating experiments of this type. One criterion focuses on conventional statistics, to determine if contrasting base-rates have led to any discernible shift in response (significantly different from zero). The other criterion which may be used when a precise normative model (such as Bayes' theorem) is available, involves a comparison of the subjects' observed pattern of responses (e.g., predictions), with the pattern that is implied by the formal model. Thus, in Experiment II of the Wells and Harvey paper, it seems reasonably clear that while the respondents were systematically affected by base-rate data when predicting the behavior of individual others (i.e., significant results were obtained), they did not make optimal use of this information.

Salience and Attribution. Some recent papers indicate that apart from matters of logic, attributional processes may be importantly affected by superficial manipulations that affect the perceptual salience of information. For example, Ruble and Feldman (1976) showed that consensus data was utilized most effectively when it was presented last in the sequence of "background material" associated with a given action. They suggest that earlier investigators (MacArthur, 1972; Orvis et al, 1975) may have underestimated the role of consensus by routinely presenting consensus data at the beginning of the informational sequence (i.e., before informing the respondents as to the distinctiveness and consistency of the behavior which was to-be-explained). Other researchers have provided further evidence concerning the effects of perceptual salience on the attribution process (Storms, 1973; Pryor & Kriss, 1976). Taken together, these studies suggest that Kelley's model may be incomplete in its unrelenting attention to the logical implications of various data matrices. Instead of searching for the underlying informational pattern in a given situation, the naive attributer seems impulsively sensitive to extraneous (non-logical) factors that influence the perceptual salience of potential causal agents.

The Self

Contemporary social psychologists have shown a remarkable convergence of interest in the perceived self (or self-concept) that may not yet have received full recognition. In any event, when I started on this paper I had not realized the substantial regularity with which the concept of self has been emphasized by diverse investigators, most of whom share a cognitive orientation. The cognitive approach to social

psychology thus appears to involve not only an increased emphasis on intellective and inferential processes, but a burgeoning interest in the self and its properties. What follows is a brief outline, indicating some of the many research areas in which the self-concept has been invoked as an explanatory concept, or has been studied as an end in itself by cognitive social psychologists.

Cognitive Dissonance.

Investigators who were concerned with post-decisional phenomena were among the first to emphasize the importance of the self-concept in the context of dissonance theory (Malewski, 1962; Gerard, Blevans & Malcom, 1964). These researchers have shown that post-decisional effects may primarily occur among respondents who have high self-esteem. Individuals of this type normally regard themselves as good decision-makers. Hence they may feel particularly distressed when they realize that a freely chosen course of action conflicts with their favorable self-image, by requiring that they accept one or more negative aspects associated with their chosen alternative, while foregoing the positive feature(s) of an option that they have rejected. According to this view, following a choice between conflicting alternatives, a person with high self-esteem may be motivated to "justify" his decision, thus derogating the rejected option(s) and exaggerating the virtue(s) of the chosen alternative. By contrast, a person with low self-esteem may be relatively unaffected by post-decision dissonance, since in this case there would not be much discrepancy between his negative self-evaluation and the knowledge that he has (again) chosen a course or action that involves one or more undesirable elements.

At a more general level, the definition of cognitive dissonance has undergone several changes since its initial formulation (Festinger, 1957). One evolution has involved the introduction of such concepts as perceived freedom and choice (both implying self-initiated behavior), which are now thought to be of critical importance in the generation of an effective dissonant state. The main notion here is that dissonance arousal may require a situation in which the individual believes that there is an inconsistency between two cognitive elements, at least one of which was freely chosen (by the self). For example, an important study by Linder, Cooper and Jones (1967) showed that dissonance effects depended upon the respondents' perceived freedom. When the subjects felt they had a clear choice before writing a counter-attitudinal essay, a dissonance effect was obtained, for opinion change was inversely related to the incentives that were available (high vs. low justification for the act in question). Under these conditions, dissonance was presumably aroused because of the inconsistency between the respondent's private views and the counter-attitudinal message that he "freely" chose to write. On the other hand, when the respondents felt that their prior behavior had been constrained, opinion change was directly related to incentive levels.

Aronson (1968) has drawn additional attention to the self, contending that dissonance theory makes its clearest predictions in cases that involve the disconfirmation of firm expectancies. Since we normally have fairly certain expectancies regarding our own behavior (based on our self-image), this implies that dissonance predictions are most likely to be relevant if we can surreptitiously elicit a pattern of action (e.g., doing a foolish thing) that is incompatible with the respondent's view of himself (e.g., as a reasonable, thoughtful person). By contrast, Aronson argues, dissonance predictions may be less relevant in cases involving the be-

havior of others, where our expectations are often quite tentative.

Attribution theory.

Attribution theorists have consistently emphasized the self, by asserting that the man in the street is spontaneously motivated to discover the causes that underlie human behavior, and by assuming that in this quest two types of attributions are prominent: attributions to the individual (i.e., self-initiated behavior), and attributions to external circumstances (Heider, 1958; Jones & Davis, 1965; Kelley, 1967; Bem, 1967). While most attribution models emphasize the rational aspects of the attribution process, recent research by Hansen and Donoghue (1977) focuses on the disproportionate emphasis that we normally give to our own actions when predicting or assessing the behavior of others. In these studies, people seemed to think that their own behavior was predictive of what most others were likely to do in a given situation; by contrast, reports concerning the actions that had been taken by other individuals did not have much effect on their predictions. Similarly, in estimating the extent to which someone else's behavior appeared to derive from personal vs. situational causes, most respondents were very sensitive to the discrepancy (if any) between their own actions and those taken by the target case; people who behaved differently from themselves were generally thought to be acting deviantly, and reflecting the influence of internal (personal) forces. Discrepancies between the actions of the target case and the actions of others were less important in determining the causal explanations (attributions) that seemed reasonable. These results appear to reflect an implicit assumption that our own actions are somehow more informative than the acts of others, i.e., in estimating the typicality of various behaviors and attempting to determine their causal origins, we normally believe that our own actions provide a valuable basis for judgment (perhaps they are especially salient), but we do not appear to recognize that the behavior of another individual is as likely as our own to be indicative of general population trends.

A cognitive (attributional) approach to achievement phenomena. Weiner's recent work (1974) relating cognitive activity to achievement motivation and achievement behavior provides a more complex example of the emphasis that attribution theorists give to the self. In this research, an effort is made to comprehend the beliefs that people hold as to the causes of their successes and failures. Weiner and his associates have repeatedly shown that these causal explanations are systematically related to the individual's need for achievement. For example, people who have strong achievement motives assume that the degree of effort expended in a given task has a strong impact on the outcome, while those who are low in achievement needs do not perceive much covariation between effort and outcome. These contrasting cognitions may be an important determinant of the fact that people who are high in n Ach tend to work more intensely than their peers (if effort yields success, it is only reasonalbe to work hard). Achievement motivation is also related to perceived ability, for those with strong achievement needs normally see themselves as being relatively able, while people who are low in n Ach do not.

Weiner and his associates have shown that these attributional differences can plausibly be related to previous research in the achievement domain. For example, people who are high in n Ach are more likely than others to initiate achievement activities. Since these people generally ascribe their past successes to internal factors (their own ability and effort), they are led to experience greater satisfaction with the succes-

ses that they have achieved in the past; this in turn is presumed to make subsequent achievement goals more attractive. By contrast, those low in n Ach are not as likely to explain their previous successes in terms of internal factors; hence they experience previous successes as less gratifying, and are not so keenly attracted to new achievement-related activities.

Attributional explanations also seem pertinent to the problem of behavioral persistence. People who are high in n Ach normally explain past failures as resulting from insufficient effort; this may enhance subsequent persistence at the task, since such a belief implies that a previous lack of success might well be reversed by "trying harder." The person who is low in achievement motivation, on the other hand, is more likely to see his failure as resulting from insufficient ability, a limitation that cannot readily be changed. Such people are likely to give up relatively quickly when faced with a difficult task.

The self concept and its relation to behavior change.

Contemporary social psychologists often explain behavior change by contending that the individual in question may have experienced a change in self-image, leading to an overt behavioral adjustment. Explanations of this type have also been popular among our clinical brethren, particularly with those who have been influenced by Roger's self-theory (1951). A recent paper by Miller, Brickman, and Bolen (1975) provides us with an excellent example of this paradigm, for these investigators were able to produce significant behavioral changes among grade school children by changing their self-concepts. In one study, a group of fifth graders was repeatedly told that they were neat and tidy; this led to a decline in classroom littering. In a second experiment, second grade children were repeatedly told either that they had good mathematical ability, or that they were highly motivated in mathematics. Both of these attributions led to increased self-esteem and to a significant gain in mathematical performance, relative to a control group.

The foot in the door phenomenon. A study by Freedman and Fraser (1966) established what is now known as the foot-in-the-door phenomenon. In these experiments the respondent is induced to perform some small act in behalf of someone else. Subsequently, this same respondent is asked to perform a more demanding "favor." The results indicate that people who have performed the initial (undemanding) act are more likely to comply with the second (more demanding) favor than those in a control group, where no attempt has been made to establish an initial "foot-in-the-door." This type of effect appears to be quite robust, for it has been observed even if the two requests are in unrelated domains and are presented by different confederates, at different times. The foot-in-the-door effect is commonly explained by positing some change in self-concept following the initial (undemanding) act. The respondent who has performed a minor favor for a stranger may thus regard himself as a more altruistic individual than before, and may therefore act more altruistically than those assigned to a control condition (who have not been provided with an easy opportunity to demonstrate their goodwill and social-mindedness).

Learned helplessness. Noxious experiences that unavoidably continue despite the sufferer's repeated attempts to escape from the situation sometimes interfere with subsequent efforts to cope effectively with solvable problems. For example, a dog that is subjected to severe unavoidable shock may be unable to respond adaptively in a later shock-avoidance set-

up that can be readily mastered by control animals (Seligman, 1975). Similar work has been conducted with humans, where it has been suggested that the uncontrollable noxious experience may have lead to the development of a helpless attitude, based on the belief that one's efforts are likely to be ineffective in dealing with such situations. A self-image of this sort presumably mediates against the active striving that often proves successful in dealing with the problems of life. Once again, then, we have our familiar explanatory paradigm in which some antecedent event (the presentation of an inescapable noxious stimulus) produces a characteristic self-image (of relative helplessness), which in turn generates a systematic pattern of behavior (ineffectual performance in a noxious but solvable situation).

Self efficacy as a determinant of behavior. Bandura, who is often regarded as an advocate of the behavioral point of view, has also come to emphasize the self as an important element in the control of behavior. In a recent paper (Bandura, 1977) he argues for the view that the therapeutic changes induced by different techniques may all derive from a common cognitive mechanism that involves an enhanced feeling of self-efficacy. For example, expectations of self-efficacy are thought to determine such things as whether the individual will attempt to cope with a difficult situation, the amount of effort that will be expended, and how long coping efforts will be continued despite obstacles and aversive experiences. In this model, estimates of personal efficacy are derived from past performance accomplishments, vicarious experiences (observational learning), verbal persuasion (as in treatments involving interpretation), and physiological states (people expect effective performance when they are free from aversive arousal). To assess this theory, Bandura and his associates conducted an experiment involving different methods for the treatment of chronic snake phobias. Following treatment, individual reports of self-efficacy were accurate predictors of performance (behavior), regardless of the technique that was used to enhance the respondent's feelings of efficacy (Bandura, Adams & Beyer, 1977).

Overjustification and the forbidden toy experiments. Researchers who are concerned with overjustification effects and those who have studied the forbidden toy paradigm have also explained their results in self-concept terms, emphasizing the idea that experimentally-induced changes in the self-concept may lead to systematic changes in behavior. This explanation for behavior change seems widely acceptable to psychologists with diverse interests; it offers an explanatory "formula" that many cognitive social psychologists find as appealing and broadly applicable as the contention (to Skinnerians) that changes in behavior frequently derive from changes in reinforcement contingencies. The boundary conditions that limit the applicability of this "formula" have not been adequately explored, however.

In contrast to the notion that private beliefs about the self may influence overt behavior, a number of investigators have succeeded in producing behavioral change, despite the fact that these changes were not accompanied by the mediating cognitive states that they had presumed operative (Bem, 1972, and Nisbett & Wilson, 1977, provide good reviews of this literature). In one study, for example, (Valins & Ray, 1967), through a false feedback procedure, snake-phobic subjects were induced to believe that their heart-rates were not affected by slide pictures of snakes. These subjects were subsequently more willing to approach and handle a boa constrictor than were people in a control condition, for whom the feedback stimuli were

described as "extraneous sounds," rather than "heartbeats." Surprisingly, however, the two groups of respondents did not differ when asked how frightened they were of snakes.

The widely assumed relationship between self-concept and overt behavior is also challenged by evidence which suggests that there is often a weak and unstable correlation between self-reported personality traits and behavior (Mischel, 1968), or between self-described attitudes and behavior (Wicker, 1969). These embarrassments may be less critical than they seem, however, when we recognize that "negative" results here may often be due to unreliable, single-act criterion measures (see Fishbein & Azjen, 1974, McGowan & Gormley, 1976 and Schuman & Johnson, 1976 for more encouraging news on these issues).

The saliency of different self-attitudes.

A provocative thesis by Markus (1977) emphasizes the idea that the self may fruitfully be regarded as a collection of cognitive generalizations (self-schemata) that organize and guide the processing of self-related information. In this research, students with self-schemata that involved dependence vs. independence were contrasted with those for whom this aspect of the self was not salient; these latter respondents were termed aschematics, under the assumption that for them, the dependence-independence schema was essentially inoperative. Subjects for whom dependence-independence was a salient schema were more efficient than aschematic subjects in processing information that related to the dependence-independence dimension. For example, they showed faster response latencies when deciding whether a schema-related trait (e.g., individualistic) was self-descriptive or not, and were more successful in retrieving specific behavioral episodes that showed why a given trait (e.g., ambitious) might appropriately be used to characterize them. This research is especially interesting in its concern with the sorts of concepts and empirical methods that have recently occupied the attention of experimental psychologists. It also extends earlier work by Bem and Allen (1974), which showed that for certain individuals (termed aschematics in Markus' study) a particular dimension might be unrelated to overt behavior, despite its applicability for others.

Situational determinants of the spontaneous self-concept. While Markus' research (above) focuses on certain stable aspects of the self that are involved in the organization and processing of relevant information, McGuire and Padawer-Singer (1976), have explored the idea that one's spontaneous self-image may be labile, and may depend in part on those aspects of the self that are distinctive at any given time. The guiding notion here is that when called upon to consider who we are, we are drawn to those aspects of ourselves that distinguish us within our social milieu. As one concrete example, this conception suggests that since most people are right-handed, lefties are more likely to include information regarding handedness in their self-image than are righties. Similarly, the spontaneous self-concept that affects the student in a classroom is more likely to include an explicit reference to the physical attributes on which he (or she) is unusual, as opposed to those attributes that do not distinguish him (her) from the other members of the class.

Despite their differing methods and goals, Markus' work, together with that of McGuire and Padawar-Singer, and Bem and Allen, all converge on the idea that a given aspect (or dimension) of the self may be vitally important for some respondents, and virtually nonexistent for others. Rather than assuming that individual differences in the self-image are

primarily manifested in the subject's self-placement with respect to various factors of general significance, these investigators suggest that it may be fruitful to recognize that when viewed from the individual's spontaneous perspective, some of these "general" factors may seem trivial or inoperative.

Some Misgivings about Cognitive Social Psychology

Despite the unquestioned success of the cognitive approach in stimulating systematic, theoretically-oriented research, some haunting questions remain as to the adequacy of this conception; even at its best, the cognitive approach to social interaction seems far from complete. Purely cognitive approaches to social psychology are, for example, challenged by the claims of the socio-biologists and ethologists, who contend that social life is importantly affected by biological and genetic factors (factors that are unlikely to be directly reflected in our rational cognitive processes).

Similarly, motivational variables are given scant consideration by many cognitive theorists. This is doubtless a healthy corrective from an earlier tradition in which unconscious motives, fantasies, and unbridled emotional reactions were too-freely invoked to account for social phenomena. On the other hand, the recent popularity of "cool" cognitive formulations like attribution theory should not blind us to the important role of motivation and emotion in social phenomena. There is, for example, reasonably good support for the idea that the experimental manipulations associated with cognitive dissonance normally produce an elevation in arousal level, as proposed in Festinger's original conception (1957). A recent review by Kiesler and Pallak (1976) outlines several lines of evidence that support this conclusion, including some studies that involved a direct monitoring of physiological functioning, and others that inferred arousal levels from the respondent's performance in learning tasks based on the Hull-Spence (HxD) formulation. Zanna and Cooper (1976) present additional support for the idea that counter-attitudinal behavior may indeed produce a state of emotional arousal and go on to show that this arousal is systematically related to attitude change.

Some final questions are particularly addressed to attribution theory, which is presently the most influential of the cognitive approaches to social psychology.

1. Are people in fact spontaneously interested in the causes that underlie behavior? Or (as seems more reasonable) does their interest in matters of this sort surface only sporadically, depending upon situational factors and individual proclivities?

2. What is the relationship between attribution and behavior? Bem (1972) has argued that attribution models as they are presently formulated are "mute" when applied to phenomena in which noncognitive response classes constitute the behaviors which are to-be-explained (i.e., the dependent variable). Unless more explicit attention is given to this problem, however, the applications of attribution theory may be severely limited, for it will be restricted to responses that are primarily intracranial, without much implication for social behavior. Given the present popularity of purely attributional approaches, a skeptic might infer that social psychologists have largely given up their earlier interest in elucidating the factors that influence social action, and are now much more concerned with the variables that seem intuitively effective to the man-in-the-street, regardless of their actual causal significance. On the other hand, we should recognize that an effective analysis of the vari-

ables that control privately-held beliefs would be no small accomplishment, even if these beliefs often proved ineffective as determinants of overt behavior. We have already commented on the need for further work detailing the relationship between the self-concept and overt action. A parallel suggestion seems appropriate when we consider the reasonable proposition that our reactions to others may be importantly affected by the attributions that we assign to their behavior, rather than by the sheer topography of their actions, "uncontaminated" by its apparent causal background. The willful destructiveness of a schoolchild may be punished, for example, while similar acts that derive from uncontrollable physical incapacities will normally evoke a rather different response. On the other hand, the available literature includes some surprises. McGuire (1969) reviewed a number of attitude-change studies to determine the impact of the respondent's suspiciousness as to the intent underlying the message that he or she received. He found little support for the assumption that suspiciousness regarding the persuasive intent of the message sender will normally reduce the opinion change that is observed. Findings like this provide a stern challenge to the assumption that social behavior can be readily predicted, once we are aware of the intentions that the actor attributes to others.

Despite the concerns that are voiced above, the cognitive approach to social psychology seems likely to retain its dominance in the coming years because of its inherent virtues, its compatibility with the cultural zeitgeist, and its well-developed theoretical and experimental paradigms that enable ambitious investigators to complete systematic research programs within a manageable budget of time and money. These considerations (including the last-mentioned, matters of convenience) are important in any scientific movement, and it seems clear that they are, at present, quite favorable for further developments in the cognitive approach to social psychology.

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Footnote

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