TESTING THE SELF-PERCEPTION EXPLANATION OF DISSONANCE PHENOMENA:

ON THE SALIENCE OF PREMANIPULATION ATTITUDES 1

DARYL J. BEM 2 AND H. KEITH McCONNELL

Carnegie-Mellon University

A controversy has arisen over the "interpersonal simulations" used by Bem to support his contention that his self-perception theory accounts for cognitive dissonance phenomena. Specifically, the critics challenge the implication of his analysis that the premanipulation attitudes of subjects in dissonance experiments are not salient in their postmanipulation phenomenology. The present investigation answers this challenge by demonstrating that subjects in a typical forced-compliance experiment are not only unable to recall their premanipulation attitudes correctly, but they actually perceive their postmanipulation attitudes to be identical to their premanipulation attitudes. Accordingly, they do not perceive any attitude "change." The epistemological aspects of the interpersonal simulation methodology are also discussed.

Individuals come to "know" their own attitudes and other internal states partially by inferring them from observations of their own overt behavior and the circumstances in which it occurs. Thus, to the extent that information from internal cues is weak, ambiguous, or uninterpretable, the individual is functionally in the same position as an outside observer of his behavior, an observer who, necessarily, must rely upon those same external cues to infer the individual's inner states.

These two propositions comprise the heart of Bem's (1965) "interpersonal" theory of self-perception, a theory which has received direct support from a number of experiments designed specifically to reveal the existence of the proposed inferential process. For example, an individual's observation of his own behavior has been shown to be the partial basis for his recall of previous events (Bem, 1966), for his feelings of shock-produced discomfort (Bandler, Madaras, & Bem, 1968), as well as for his beliefs and attitudes (Bem, 1965; Kiesler, Nisbett, & Zanna, 1969).

In 1967, Bem proposed that his selfperception theory could provide an alternative explanation for the major phenomena of cognitive dissonance theory (Bem, 1967b). The basic argument can be illustrated with the paradigmatic case of the forced-compliance experiment in which individuals write counterattitudinal essays for varying amounts of compensation. The "classical" finding of such studies is that individuals who write such essays for little or no compensation express postmanipulation attitudes which reflect agreement with the position taken in the essays, whereas the final attitudes of individuals who write the essays for large compensations are not significantly different from those expressed by control subjects who do not write essays.

The self-perception theory approaches these results by considering the viewpoint of an outside observer who sees an individual volunteering to write such an essay. If the observer sees an individual writing an essay for little or no compensation, he can rule out financial incentive as a motivating factor and infer something about the individual's attitudes. He can use an implicit self-selection rule and ask: "What must this man's attitude be if he is willing to behave in this fashion in this situation?" Accordingly, he can conclude that the individual holds an attitude consistent with the view that is expressed in the essay. On the other hand, if an observer sees an individual writing an essay for a large compensation, he can infer little or nothing about the actual attitude of that individual because such an incentive appears sufficient to evoke the

¹ This research was supported by National Science Foundation Grant 1452 awarded to the senior author for the study of self-awareness and self-control.

² Requests for reprints should be sent to Daryl J. Bem, Department of Psychology, Carnegie-McIlon University, Pittsburgh, Pennsylvania 15213.

behavior regardless of the individual's private views. The observer's best guess, then, is to suppose that the individual's attitude is similar to that which would be expressed by anybody who was selected at random and asked for his opinion—the attitude of a control subject, in other words.

The self-perception theory asserts that subjects in dissonance experiments are themselves behaving just like these hypothetical observers. They survey their own behavior of writing the essay and then ask themselves: "What must my attitude be if I am willing to behave in this fashion in this situation?" Accordingly, they produce the same pattern of results as the outside observers: low-compensation subjects infer that they must agree with the arguments in their essays, whereas high-compensation subjects discard their behavior as a relevant guide to their "actual" attitudes and express the same attitudes as the control subjects. This same kind of reasoning predicts the differential effects of other variables in cognitive dissonance experiments (e.g., justification and freedom of choice manipulations),

This analysis has been tested several times with an experimental methodology now known as the "interpersonal simulation" (Bem, 1965, 1967a, 1967b, 1968). In these studies, an observer-subject is actually given a description of one of the conditions of a dissonance experiment and asked to estimate the attitude of the subject whose behavior is either described or actually overheard. As the self-perception theory predicts, the attitude estimates of observer-subjects in such simulations do, in fact, reproduce the original dissonance findings (Bem, 1965, 1967b).

A controversy has now developed over this analysis and its supporting simulations, a controversy centering around the information that the observer-subject ought or ought not to be given concerning the original situation (Bem, 1967a, 1968; Elms, 1967; Jones, Linder, Kiesler, Zanna, & Brehm, 1968; Mills, 1967; Piliavin, Piliavin, Loewenton, McCauley, & Hammond, 1969). Most of the critics have objected specifically to the fact that Bem's observer-subjects are not told the original subject's premanipulation attitude. Because much of this criticism has been based upon a

misunderstanding of the simulation methodology, it is relevant here to restate some of the epistemological aspects of this methodology (cf. Bem, 1968).

Self-perception theory asserts that an individual's attitude statements and an observer's judgments about the individual's attitudes are "output statements" from the same internal "program," Both the individual and observer are assumed to use a self-selection rule: "What must my [this man's] attitude be if I am [he is] willing to behave in this fashion in this situation?" To test this isomorphism, we run a simulation of a self-judgment situation, the dissonance experiment, but instead of writing our own program, we plug in an interpersonal judgment program that the culture has written for us. This program is embodied in our interpersonal observer, who "stands in" for the original subject.

But before we can actually run such a simulation, we must first abstract the relevant "input statements" from the situation being simulated; we must decide how to describe the situation to the observer. This requires some theoretically guided assumptions. For example, if the dissonance experiment subject actually arrives at his final attitude by using the self-selection rule, as the theory implies, then it follows that any conflicting initial attitude he may have had prior to the experiment must no longer be very salient for him. That is, the self-perception analysis implies that the data of his incoming behavior "update" his information on his attitude, replacing any prior information to the contrary. Insofar as the individual himself is concerned, his postmanipulation attitude is, in fact, the same attitude which motivated him to comply in the first place; phenomenologically, there is no attitude "change" as such. If an interpersonal simulation is to comprise a valid test of the isomorphism between the subject and an observer, then the theory dictates that a conflicting "initial" attitude of the original subject must not be part of the "input" description for the observer any more than it is for the subject himself. The observer, too, is postulated to be using the selfselection rule to infer the original subject's postmanipulation attitude.

It should be noted that this set of assumptions about what input information an observer-subject in the simulations should receive is self-correcting. If the wrong input statements are selected, then the simulation will not succeed in producing output statements which match the output of the original experiment. Thus, Jones et al. (1968) reconfirmed that the simulations produce the "dissonance effect" outputs when the inputs dictated by the self-perception model are employed, but they found that the simulations fail when a conflicting "initial" attitude is introduced into the description given to the observer-subject. After an intensive analysis of observer-subject's inferential processes under several variations of the simulations, Piliavin et al. (1969) reported that when the "Bem" inputs are utilized, observer-subjects do, in fact, utilize the self-selection rule and replicate his results. But when additional information, including a reference to the subject's initial attitude, is introduced into the description, the observer-subjects become amateur psychologists and revert to hypotheses about attitude change. They are no longer stand-ins for the original subjects and, accordingly, they fail to reproduce the dissonance effects.3

In spite of these findings, however, both Jones et al. (1968) and Piliavin et al. (1969) can and do maintain that their sets of inputs more faithfully reproduce the phenomenologies of the original subjects for the observer-subjects than do the descriptions of the original situation employed by Bem. Thus Jones et al. still believe that it is "untenable to hold that a subject is bereft of knowledge of his own [initial] attitude . . . [p. 266]." In support of their belief, Jones et al. cited the fact that control subjects in dissonance experiments often give the same attitude ratings on the final measurement that they

³ But, as Bem has noted elsewhere (1968) observersubjects apparently can reproduce dissonance effects when given the initial attitude of the subject, if they are also permitted to actually hear the subject engaging in the counterattitudinal behavior as well (Jones, 1966). Such a procedure would seem to come closest to actually reproducing the original situation for the observer-subject. Neither the simulations of Jones et al. (1968) nor the more claborate ones by Piliavin et al. (1969) do this. give on the initial measurement. But since no counterattitudinal behavior has intervened for control subjects, the present authors would argue that this observation is not relevant for deciding upon the phenomenology of an experimental subject, a subject whose attitudinal information has been "updated" by a new experience.

It is clear, however, that the issue cannot be resolved by continuing the verbal argument or by simply running more variations of the simulations. As Bem (1968) stated it in his reply to Jones et al.: "No 'as if' methodology, including the technique of interpersonal simulation is an adequate substitute for the intensive study of the actual situation being modeled [p. 273]." Aronson (1969) was even more specific about the next logical step:

What must be established in future experiments is whether or not the subject's behavior (writing a counteratfitudinal essay) becomes so very salient that it overwhelms his memory about his original position The question remains an open one [pp. 15-16].

The present authors, too, had arrived at Aronson's conclusion. Accordingly, the present study was designed to answer this very question: After engaging in counterattitudinal behavior, do subjects in cognitive dissonance experiments "know" their initial attitudes or don't they? Do they know their initial attitudes or do they perceive them to be the same as their postmanipulation attitudes, as the self-perception analysis requires?

To answer this question, two experiments were conducted simultaneously, an attitudechange experiment and an attitude-recall experiment. Both experiments utilized the forced-compliance paradigm in which subjects write counterattitudinal essays under varying conditions of freedom of choice to write against their initial positions on a current issue. The attitude-change experiment is conceptually identical to the usual forced-compliance experiment and ensures that we have, in fact, faithfully replicated the dissonance paradigm our model seeks to explain. It also yields a pattern of attitude changes among conditions with which we can compare the data from the recall experiment. The attituderecall experiment examines the salience of the

initial attitudes for forced-compliance subjects just after they have engaged in the counter-attitudinal behavior, but prior to the final attitude assessment. Separate subjects are employed in the two experiments to avoid the possible confounding effects of obtaining both the attitude change and attitude recall measures from the same subjects.

METHOD

Volunteer subjects from introductory psychology classes at Carnegie-Mellon University participated as subjects in two group sessions separated by an interval of 1 week. Because the classes used for the experimental conditions were composed predominantly of males from the engineering and science college, the few females from the liberal arts and fine arts colleges who volunteered for these conditions were not included in the data analysis. All subjects received experimental credit points for their participation.

During the first session, all members of the introductory psychology course filled out attitude questionnaires on a number of current campus issues. The issue on which there was the most consensus of student opinion was selected for use in the experiment: "How much control should students have over the kinds of courses offered by the University?" Responses were obtained from a 61-point horizontal scale labeled at 10-point intervals from "no control" to "complete control." Ninety percent of the students at the first session held positions above the midpoint of the scale, "some control." Because the forced-compliance paradigm requires that all subjects argue the counterattitudinal position, the few students whose initial responses were below the midpoint were dropped from the experiment, and all subjects were induced to argue against student control of university curriculum.

At the second session, subjects assigned to the two experimental conditions were given a set of written instructions informing them that the psychology department was continuing its research into campus issues and that

This week we are collecting arguments for and against the various positions expressed. Each participant is being asked to write a short essay on one of the issues.

Half of the subjects were randomly assigned to the no choice condition; their instructions continued:

On the attached sheet, you are to write a one-page essay which argues as convincingly as possible that "Students should have VERV LITTLE or NO CONTROL over the kinds of courses offered by the University."

The remaining subjects were assigned to the choice condition. They were told,

You may write an essay arguing that students should have complete control over the kinds of courses offered by the University or an essay which argues that they should have little or no control. The choice is up to you.

But an addendum sheet inserted between the instruction form and the blank sheet on which these subjects were to write their essay told them:

We now find that we have enough "pro-control" arguments and are in need of "anti-control" arguments. Therefore, in this session we would appreciate it if as many of you as possible would write one-page essays which argued for the point of view that "students should have VERY LITTLE or NO CONTROL over the kinds of courses offered by the University," Thank you.

Subjects in the control conditions of the present study were run in separate group sessions. Their only task was to fill out the pretest and posttest attitude and attitude-recall measures, with 1 week intervening between sessions.

Attitude-Change Experiment

After the counterattitudinal essays were written, half of the subjects in each experimental condition were asked for their final opinion on the student control issue. Control subjects at their second session were also asked for their final opinion on the issue.

Attitude-Recall Experiment

After completing their essays, subjects assigned to the attitude-recall experiment were asked to recall the attitudes they had expressed on the student control issue at the first session. Control subjects assigned to the attitude-recall experiment were similarly asked to recall their initial attitudes. Since all subjects were required to identify themselves on both pretest and posttest materials, it was clear to them that we would be checking upon the accuracy of their recall. The design, in other words, attempted to place any "experimental demand" on accuracy of recall rather than on consistency of recall with current attitudes.

After this recall measure had been obtained and collected, all subjects in this experiment were then asked their final opinions on the student control issue. Next, experimental subjects in both the attitude-change and the attitude-recall experiments were asked to indicate how much freedom of choice they felt they had had in choosing which side of the issue to argue in their essays. These responses were also obtained on 61-point horizontal scales labeled at 10-point intervals from "no freedom of choice" to "complete freedom of choice." Finally, all experimental subjects in both experiments were asked to indicate whether or not they had perceived any attijude change in themselves on the student control issue. Again, it was clear to them that we could check their prior responses and, hence, the "experimental

TABLE 1 ATTITUDE CHANGE PRODUCED BY FORCED COMPLIANCE AS A FUNCTION OF FREEDOM OF CHOICE TO COMPLY

Treatment	Perception of choice	Initial attitude	Astitude change		
Choice (A)	26.3	37.0	-9.3		
No choice (B)	3.4	36.1	-2.8		
Control (C)		38,6	1		
t test		_			
A vs. B	3.70***	j <1	1.98*		
A vs. C	<u>'</u> —	<.1	2.89**		
B vs. C	·-	<1 :	1,38		
	I	l	l		

Note,—n = 16 in each treatment.

* p < .06, ** p < .01. *** p < .001.

demand" was for accuracy of recall rather than for reported constancy of opinion.

RESULTS

Attitude-Change Experiment

Before we can test the experimental hypotheses concerning the salience of initial attitudes, we must demonstrate that the present procedure does, in fact, faithfully replicate the usual forced-compliance study. Table 1 supplies the relevant data.

It is seen in the first column of Table 1 that the manipulation of the freedom-of-choice parameter was successful. On the 61-point freedom-of-choice scale, subjects in the choice condition averaged between 20, "little freedom of choice," and 30, "some freedom of choice." This is significantly higher than subjects in the no choice condition who averaged between 0, "no freedom of choice," and 10, "very little freedom of choice" (t = 3.70, p < .001).4

The second column of Table 1 indicates that subjects in the three conditions did not differ on their initial attitudes toward student control of university curriculum (30 = "some control"; 40 ="a lot of control").

The figures in the attitude-change column were calculated by subtracting each subject's initial attitude from his final attitude. Thus, negative quantities indicate that the subjects became less favorable toward student control of curriculum, the position argued in the essays. It can be seen that the usual disso-

⁴ Even though all hypotheses in this investigation are actually one-tailed, we have given two-tailed significance levels throughout.

TABLE 2

ATTITUDE RECALL ERROR PRODUCED BY FORCED COMPLIANCE AS A FUNCTION OF FREEDOM OF CHOICE TO COMPLY

=	_==		<u></u>
Treatment	Perception of choice	Initial attitude	Attitude recall error
Choice (A) No choice (B) Control (C) I test	33.0	39.1 38.0 39.0	-9.7 -3.2 -1.0
A vs. B A vs. C B vs. C	5.84*** —	<1 <1 <1	1.73* 2.54** .99

nance finding has been replicated; subjects given greater freedom of choice to engage in the counterattitudinal behavior show significantly greater attitude change in the direction of agreement with that behavior than do subjects given less freedom of choice (t = 1.98, p < .06) and significantly greater attitude change than control subjects (t = 2.89, p < .01). Finally, subjects in the no choice condition do not express final attitudes significantly different from those expressed by control subjects. It is clear, then, that the present experiment faithfully recreates the conditions of the typical forced-compliance experiment.5

Attitude-Recall Experiment

It is now possible to ask the major question of the present study. Can subjects recall their initial attitudes? The first answer to this question is seen in Table 2, which presents the data from subjects who were treated identically to those in the attitude-change experiment except that they were asked to recall their premanipulation attitudes rather than to express their current attitudes.

The first two columns of Table 2 reconfirm that the freedom-of-choice manipulation was

⁶ By requiring all subjects to write an essay, the design of the present study minimizes the noncompliance problem which sometimes occurs in forced-compliance studies. Only two subjects were discarded because they wrote procontrol rather than anticontrol essays, one in each experimental condition, Similarly, the noncompliance problem is negligible in the attitude-recall experiment which follows.

TABLE 3
PRODUCT-MOMENT CORRELATIONS HETWEEN RECALL
OF INITIAL ATTITUDES AND INITIAL AND
FINAL ATTITUDES

Treatment	Recall vs. initial attitudes	Recall vs. final attitudes	(dlifference)
Choice	.26	.98	10.05*
No choice	.71	.96	4.32*
Control	.75	.57	-1.33

Note.—n = 18 in each treatment, * $\phi < .001$.

effective and that the random assignment of subjects to conditions yielded groups which were comparable on initial attitudes. The first two columns of Table 2 are virtually identical to those in Table 1.

The figures in column 3 of Table 2, recall error, were calculated by subtracting each subject's initial attitude from his postmanipulation recall of that attitude. These figures, then, parallel the attitude-change figures in the third column of Table 1: a negative quantity indicates that the subjects recalled being less favorable toward student control than they in fact were. It can be seen in Table 2 that the attitude-recall figures closely parallel the attitude-change results themselves and display the same kinds of differences among the three conditions. The figures are so similar to those in Table 1 that it would appear that we had asked these subjects for their current attitudes rather than their initial attitudes. This is the pattern of results anticipated by the self-perception analysis of the forcedcompliance experiment; actual premanipulation attitudes are not salient features of postmanipulation phenomenology and are recalled as identical to postmanipulation attitudes.

The prediction that the postmanipulation attitudes are phenomenologically identical to the premanipulation attitudes for these subjects can be tested in another way as well. Subjects in the attitude-recall experiment were also asked for their final attitudes after they had attempted to recall their initial attitudes. These data permit us to ask if their recall of their initial attitudes is actually more highly correlated with their postmanipulation attitudes than it is with the actual initial attitudes they are attempting to recall. Table 3 yields the answer.

It can be seen in Table 3 that for all experimental subjects, that is, for all subjects who engaged in the counterattitudinal behavior, the correlation between their recall of their initial attitudes and their final attitudes is, in fact, significantly higher than the correlation between their recall and their actual initial attitudes. (The lower correlation between recall and initial attitudes for subjects in the choice condition is not surprising in view of the fact that they were the group who changed their attitudes from the initial to the final assessment.) The very high correlations between recall of initial attitudes and final attitudes for the experimental subjects confirm the hypothesis that the data from the incoming behavior "update" the attitudinal information for the subject and destroy any earlier information to the contrary. Accordingly, this is not true for the control subjects. who did not engage in any intervening behavior. The data from the control group also weaken the artifactual possibility that the similarity of recall and final attitudes of the experimental subjects is due to experimental demand for consistency between these two measures. If there had been any such pressure, control subjects should also have responded to it. Recall, also, that subjects knew that we could check the accuracy of their recall, an awareness which presumably motivates accuracy.

Jones et al. (1968) are thus correct in asserting that control subjects seem able to reproduce their initial attitudes when the final attitudes are assessed. Bem (1968), however, is correct in asserting that this is not germane to speculations concerning the phenomenologies of experimental subjects.

All subjects who wrote essays in both the attitude-change and attitude-recall experiments were asked if they had perceived any change in their own opinions on the student control issue. These data enable us to ask the final question: Do subjects perceive attitude change? Of the 62 experimental subjects, 51 showed attitude changes. Only 14 subjects reported perceiving any change, and five of these either had not, in fact, changed, or reported an attitude change opposite in direction to that which had actually occurred. It would seem, then, that the subjects in these

experiments did not perceive attitude change, a finding similar to that reported by Tannenbaum (1968, p. 66), who noted that cognitive adjustments toward attitudinal consistency are made without apparent awareness.

In sum, then, the results from this investigation support the implication of the self-perception analysis of dissonance phenomena that the premanipulation attitudes of subjects in dissonance experiments are not part of the "input" to their subsequent processing. The self-perception hypothesis that subjects in dissonance experiments arrive at their final attitudes by asking themselves "What must my attitude be if I am willing to behave in this fashion in this situation?" remains a viable alternative to the dissonance-reduction explanation of these phenomena.

DISCUSSION

As noted in the introduction, the present investigation can be viewed in the context of the methodology of simulation. As Bem has noted elsewhere (1968), a successful interpersonal simulation implies the same thing that a successful computer simulation implies; namely that the process model embodied in the "program" is functionally equivalent to the process being simulated, and, further, that the selection of the input statements was not in error. The simulation becomes a plausibility demonstration, a sufficiency test: The process model embodied in the program is sufficient-but not necessarily "true" or unique-for generating the output statements observed in the situation being modeled by the simulation.

But there are weaknesses in this methodology when it is applied in this context. Abelson (1968) has noted some of the validation problems connected with the simulation methodology in general, and his discussion of the "degrees of freedom" problem is particularly relevant to Bem's interpersonal simulations. Abelson stated the problem this way:

If a simulation could be "right for the wrong reasons," that is, fit the data by virtue of compensating errors, then in what sense can a good fit be regarded as support for the theory underlying the simulation model? . . . Most cognitive simulations are so rich in qualitative detail that it is very easy for them to fail Because it is so hard to

obtain good data fits, anything which comes close is impressive, and any cognitive model yielding an apparently perfect fit to a wide range of data would indeed deserve serious theoretical recognition.

With social simulations, however, the issue is probably more cogent. If the outcome variables of the model are few while the number of parameters to be juggled is great, there can always be the lingering suspicion that a good fit was too easy to achieve and thus not strongly supportive of the model [pp. 343-344].

This, then, is the main reason why the interpersonal simulations provide only weak support for the self-perception theory. There are too many "degrees of freedom," input variables that can be "juggled" (like the initial attitude) while the complexity of the output predictions rarely exceeds a prediction about the ordering of two or three means. Abelson suggests some of the paths open for strengthening simulation arguments, however. The most obvious remedy, of course, is "to design the simulation so as to generate as large a number of outcome variables as possible. The more outcomes that can be validated, the merrier—and the more convincing the underlying theory [Abelson, 1968, p. 344]."

This path toward strengthening the self-perception theory of dissonance phenomena was followed in two interpersonal simulations which not only replicated main effects of dissonance experiments but reproduced either an interaction effect which dissonance theory itself had not anticipated or the secondary effects of additional parameters in the experiments (Bem, 1967b). Although these extended simulations do not go very far toward eliminating the "degrees of freedom" problem, they are illustrative of the method.

A second remedy is "to show, if possible, that the fit was not so easy by changing the model in various ways and demonstrating consistent lack of fit [Abelson, 1968, p. 343]." In effect, this is what some of Bem's critics have done. They have altered some of the input assumptions of his model and demonstrated that the simulations fail (Jones et al., 1968; Piliavin et al., 1969). As Abelson has noted ⁶:

⁶ R. P. Abelson, personal communication, January 22, 1969.

Ironically, what [Bem's] detractors should now really be doing if they must still simulate is to replicate [his] outcome with clearly bad descriptions to the observer, rather than to reverse [his] outcome with purportedly good descriptions.

The present investigation illustrates a third way of strengthening simulation arguments which suffer from the "degrees of freedom" problem. One returns to the original situation and demonstrates that the assumed isomorphism between the inputs of the original situation and the inputs of the simulation actually exists. The process of moving back and forth between the simulation and the actual situation is precisely the one which cognitive theorists have attempted to follow and, in fact, it is this interaction between simulation and direct experimentation which comprises the heuristic utility of the simulation methodology. A simulation reveals an underlying assumption or implication of the model which was not originally observed or even anticipated. The theorist can then return to the original situation armed with a new hypothesis. Thus the hypothesis that subjects in dissonance experiments would perceive their postexperimental attitudes to be identical to their preexperimental attitudes came to light through the debate between Bem and his critics over the simulations. Even though the hypothesis was logically implied by the original analysis, it remained unarticulated until the "countersimulations" of Jones et al. (1968) raised it explicitly. Again, however, it is important to emphasize that once one of the isomorphisms is questioned, the issue can be resolved only by returning to the original situation. A simulation will not suffice.

Finally it should be noted that the present experiment was designed only to support the viability of the self-perception analysis of dissonance phenomena by demonstrating the validity of an isomorphism assumed by that analysis. Accordingly, neither the simulations themselves nor the present investigation provides a confrontation between self-perception theory and dissonance theory. Dissonance theory, for example, is not embarrassed by the finding that subjects fail to recall their initial attitudes; in fact it could be argued that forgetting an earlier conflicting attitude is itself a mode of dissonance reduction.

If the past history of controversies like this is any guide, it seems unlikely that a "crucial" experiment for discriminating between the two theories will ever be executed. At this juncture each theory appears capable of claiming some territory not claimed by the other, and one's choice of theory in areas of overlap is diminishing to a matter of loyalty or aesthetics (cf. Linder & Jones, 1969). A recent investigation by Kiesler et al. (1969) is illustrative. It confirmed the validity of the self-perception analysis in a forced-compliance experiment designed to rule out the dissonance explanation. Nevertheless, these investigators ---two of whom appear in the "et al." of Bem's critics (Jones et al., 1968) -- still prefer the dissonance explanation in those forced-compliance experiments where both theories can predict the outcome. Our preference for the selfperception explanation in these cases is, perhaps, no less a matter of taste.

REFERENCES

ABELSON, R. P. Simulation of social behavior. In G. Lindzey & E. Aronson (Eds.), Handbook of social psychology. Vol. 2. (2nd ed.) Reading, Mass.: Addison-Wesley, 1968.

Aronson, E. The theory of cognitive dissonance: A current perspective. In L. Berkowitz (Ed.), Advances in experimental social psychology. Vol. 4. New York: Academic Press, 1969.

Bandler, R. J., Madaras, G. R., & Bem, D. J. Self-observation as a source of pain perception. *Journal of Personality and Social Psychology*, 1968, 9, 205-209.

BEM, D. J. An experimental analysis of selfpersuasion. Journal of Experimental Social Psychology, 1965, 1, 199-218.

BEM, D. J. Inducing belief in false confessions. Journal of Personality and Social Psychology, 1966, 3, 707-710.

Bem, D. J. Reply to Judson Mills. Psychological Review, 1967, 74, 536-537. (a)

Bem, D. J. Self-perception: An alternative interprelation of cognitive dissonance phenomena. Psychological Review, 1967, 74, 183-200. (b)

Bem, D. J. The epistemological status of interpersonal simulations: A reply to Jones, Linder, Kiesler, Zanna, and Brehm. Journal of Experimental Social Psychology, 1968, 4, 270-274.

ELMS, A. C. Role playing, incentive, and dissonance. Psychological Bulletin, 1967, 68, 132-148.

JONES, R. G. Forced compliance dissonance predictions: Obvious, non-obvious, or non-sense? Paper presented at the meeting of the American Psychological Association, New York, September 1966.

- JONES, R. A., LINDER, D. E., KIESLER, C. A., ZANNA, M., & BREHM, J. W. Internal states or external stimuli: Observers' attitude judgments and the dissonance theory—self-persuasion controversy. *Jour*nal of Experimental Social Psychology, 1968, 4, 247-269.
- KIESLER, C. A., NISHETT, R. E., & ZANNA, M. P. On inferring one's beliefs from one's behavior. *Journal* of *Personality and Social Psychology*, 1969, 11, 321-327.
- LINDER, D. E., & JONES, R. A. Discriminative stimuli as determinants of consonance and dissonance. Journal of Experimental Social Psychology, 1969, 5, 467-482.
- MILLS, J. Comment on Bem's "Self-perception: An alternative interpretation of cognitive dissonance phenomena." Psychological Review, 1967, 74, 535.
- PILIAVIN, J. A., PILIAVIN, I. M., LOEWENTON, E. P., McCauley, C., & Hammond, P. On observers' reproductions of dissonance effects: The right answers for the wrong reasons? Journal of Personality and Social Psychology, 1969, 13, 98-106.
- TANNENBAUM, P. A. The congruity principle: Retrospective reflections and recent research. In R. Abelson et al. (Eds.), Theories of cognitive consistency: A sourcebook. Chicago: Rand McNally, 1968.

(Received March 3, 1969)