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The Attribution of Attitudes

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Three experiments were conducted within the framework of correspondent inference theory. In each of the experiments the subjects were instructed to estimate the "true" attitude of a target person after having either read or listened to a speech by him expressing opinions on a controversial topic. Independent variables included position of speech (pro, anti, or equivocal), choice of position vs. assignment of position, and reference group of target person. The major hypothesis (which was confirmed with varying strength in all three experiments) was that choice would make a greater difference when there was a low prior probability of someone taking the position expressed in the speech. Other findings of interest were: (1) a tendency to attribute attitude in line with behavior, even in no-choice conditions; (2) increased inter-individual variability in conditions where low probability opinions were expressed in a constraining context; (3) that this variability was partly a function of the subjects' own attitudes on the issue; (4) that equivocation in no-choice conditions leads to the attribution that the equivocator opposes the assigned position. The main conclusion suggested is that perceivers do take account of prior probabilities and situational constraints when attributing private attitude, but perhaps do not weight these factors as heavily as would be expected by a rational analysis.

When a person verbalizes an opinion he may or may not hold an underlying attitude that "corresponds" to that opinion. The degree to which opinions and attitudes—or more generally, acts and dispositions—are seen as correspondent is a function of the relative weight assigned to internal versus external causal factors (cf. Thibaut and Riecken, 1955). Loosely stated, a person will be perceived to hold attitudes that correspond with his opinion statements when the statements seem to have been freely offered and not coerced by situational pressures.

Jones and Davis (1965) have attempted to develop a systematic statement of the attribution process in person perception which extends this

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common-sense reasoning. Building on Heider's earlier work (1944, 1958). they have proposed a theory of *correspondent inferences* to clarify the major variables involved in extracting information about dispositions from observed acts. An inference about an attribute is correspondent to the extent that the attribute and a sample of observed behavior are similarly described by the inference and the attribute serves as a "sufficient explanation" for the behavior. A "sufficient explanation" is one that accounts for the occurrence of an act to the reasonable satisfaction of the perceiver. Correspondent inferences imply a circularity in such explanations: "he dominated the meeting because he is dominant," "he cries because he is in pain," "he voted for prohibition because he is against the sale and consumption of alcohol."

But more than circular reasoning is involved in decisions about correspondence as defined in the theory. Since Jones and Davis were interested in the information *gained* about a person through the opportunity to observe him act, not every inference that takes behavior "at face value" is highly correspondent. If everyone were in favor of prohibition, and the perceiver was aware of this beforehand, he would gain no information about person *A* from observing him vote for prohibition. The concept of correspondence should reflect person *A*'s distinctiveness on the dimension in question. It is not that he (like everyone else) favors prohibition; our inference becomes correspondent when we attribute to *A* more intense feelings about alcohol than we attribute to the average person. Correspondence is high when the act tells us something in a direct way about the person that we did not know beforehand. To paraphrase the formal definition of correspondence offered by Jones and Davis (1965): Given an inference that assigns an attribute to account for an act, the correspondence of that inference increases as the judged value of the attribute departs from the judge's conception of the average person's standing.

In the original presentation of correspondent inference theory, Jones and Davis (1965) couched their analysis in terms of the effects of action, the uniqueness of a given act-effect linkage, and the assumed social desirability of the effects achieved. For our present purposes a simpler terminology will suffice, one which is easily mapped into the more general original statement. Given the fact that a person expresses himself on some opinion issue, the inference that he believes what he says, and that not everyone would say it, is correspondent. Correspondence should be high when perceived choice is high and the prior probability of the act occurring is low. This should be the condition where maximum information is gained from behavior (cf. Berlyne, 1965)—what a person says is unexpected or at variance with the norm and he seems to have said it

"on his own hook." Information gain is lowest when the person expresses highly conventional opinions under conditions where it would be extremely difficult for him to express any other opinions.

An alternative way of stating the relationship between perceived choice, prior probability, and correspondence conceives of the first two as orthogonal independent variables and the latter as the dependent variable. The crucial hypothesis to be tested by the experiments to be presented below is: When a person expresses a modal (high probability) opinion, attribution of underlying attitude will not vary as a function of perceived choice; when an unexpected or unpopular opinion is expressed, correspondent attribution will vary directly with the amount of choice perceived. We are predicting, then, a particular kind of statistical interaction between the amount of perceived choice and the prior probability of an opinion's being expressed, in determining the correspondence of resulting inferences about opinion-related attitudes.

This hypothesis is hardly paradoxical, though it does propose that persons perform a kind of implicit information theory calculus in making sense out of the behavior of others. The information contained in a statement (act) goes up as the prior probability of the statement goes down, assuming that the speaker was not forced, bribed, or otherwise constrained to make the statement. But does the average perceiver in fact follow this prescription? Relevant experimental evidence is sparse. Steiner and Field (1960) conducted an experiment in which an accomplice expressed pro-segregation opinions in a group discussion. In some cases he chose this role with apparent freedom, in other cases he was assigned the role by the experimenter. Other group members were more confident in their assignment of pro-segregation beliefs to the accomplice in the choice condition. They also liked the accomplice less, probably because the subjects were Northern college students who themselves were against segregation. In effect the Steiner and Field (1960) study tests half of the proposed hypothesis, whereas the present experiments attempt to show that choice is not an important variable when the prior probability of the behavior being observed is high. A number of other studies (e.g., Jones, 1965; Bem, 1965; Thibaut and Riecken, 1955; Jones, Davis, and Gergen, 1961) are indirectly relevant in assessing the role of perceived choice in correspondent attribution. They do not, however, provide a direct test of the theory.

Such a test requires a design in which a stimulus person states either an expected or an unexpected opinion under conditions of high- versus low-perceived choice. Three closely related experiments were conducted within this general design; the subjects' primary task in each was to estimate the true attitude of the person making the statement.

EXPERIMENT I

Method

In the first experiment subjects were asked to read a short essay on "Castro's Cuba" and to record their estimates of the essayist's true attitude toward Castro. The essay itself was either pro-Castro or anti-Castro; it had either been written under conditions of free choice or by assignment from a course instructor. The two variables of *choice* and *behavior direction* thus comprised a two-by-two factorial design. This basic design was repeated in each of the three experiments, though there were variations from experiment to experiment in the manner in which the cross-cutting variables were manipulated.

Subjects

Thirty-six male and 15 female students served in the experiment in one group session. They were volunteers from the introductory psychology course at Duke University who received course credit for their participation.

Procedure

Each subject was handed a mimeographed pamphlet that contained an essay on Castro's Cuba, a prior statement manipulating the choice variable, and a final questionnaire. The experimenter then explained the purpose of the experiment as "an attempt to determine if people can make valid judgments of another's personality and attitudes on the basis of very limited information." The subjects were led to believe that a variety of personal materials written by the same undergraduate student were distributed among them. They were told, "Some of you have an excerpt from the person's autobiography, which was originally written to accompany his college application. Others have in your pamphlet a short essay prepared for a creative writing course. The essay deals with conflicting values in contemporary society. . . . The remainder of you have an answer from a political science hour exam." The subjects were then told to glance at the material to identify their condition. They were led to believe that the conditions would be compared to see which kind of written material produced the most valid impression, as measured by "a lot of additional information that you do not know about." The experimenter went on to state that other target persons would be evaluated by other subjects.

Actually, each subject was in the "political science exam" condition. His task was to read the examination answer and attempt to judge the true attitude of the "target person" toward the topic. The experimenter concluded his orienting overview with some brief remarks identifying the author of the materials as a student at the University of North Carolina, a resident of the state, and the son of an automobile salesman. The mimeographed material began with a reproduction of the exam question. This instructed the target person in one of three ways: (a) "Based on the past week's discussion and lectures, write a short cogent *criticism* of Castro's Cuba as if you were giving the opening statement in a debate"; (b) " . . . short cogent *defense* of Castro's Cuba as if . . . "; (c) " . . . short cogent essay either defending *or* criticizing Castro's Cuba as if. . . ." This constituted the *choice* manipulation, with subjects in conditions where the target person received either (a) or (b) instructions considered as "no choice" subjects.

The essay that followed was approximately 200 words. It was either pro- or anti-Castro, and in the no choice conditions the direction of the essay was always that called for by the examination question. Although the essay was typed, there

were occasional spelling errors, false starts, and cross-outs. The experimenter explained that this would provide information about the "style and approach" of the target person. The essay itself was neither polished nor crude; it had a C+ quality, embodying a few reasonable and familiar arguments. For example:

pro-Castro essay

"...the people of Cuba now have a share in the government and are demonstrating their ~~feelings by their actions~~ approval by their tremendous response to the trials of building a new society from the wreckage left by the exploiters of foreign industry."

anti-Castro essay

"Castro can and does attempt to take over our neighbors and convert them to communist sattelites by using methods of infiltration sabotage and subversion."

Response measures

The essay was followed in the booklet by (a) a 12-item semantic differential scale for rating various personal qualities of the target person; (b) a 10-item Likert-type scale for the subject to use in estimating the target person's true attitude toward Castro; and (c) a second copy of the same scale for the subject to record his own attitude.

Results

The subjects' own attitudes toward Castro were roughly comparable (not significantly different) from condition to condition. Not surprisingly, the scores clustered at the anti-Castro end of the scale, with very few scores beyond the midpoint in the pro-Castro direction.

The main response measure of interest is the prediction by the subject of the target person's true attitude. This measure was taken in the form of scale ratings on ten items concerning Castro and Cuba. Five were stated in a pro-Castro direction (e.g., "Cuba has as much right as any other country to choose her own form of government free from outside interference by the United States"), five in an anti-Castro direction (e.g., "The communist government of Cuba is one which cannot be tolerated by the U. S., and must at all costs be destroyed"). Subjects indicated degree of predicted agreement or disagreement with each statement on a seven-point scale. The maximum score (pro-Castro) was thus 70, the minimum score (anti-Castro) was 10. Since the pro-Castro items were

TABLE 1
EXPERIMENT I: MEANS[a] AND VARIANCES FOR ATTRIBUTED ATTITUDE SCORES

		Speech direction		
		Pro-Castro	*Anti-Castro*	p_{diff}
Choice	N	13	13	
	$\bar{X}$	59.62	17.38	$< .001$
	s^2	13.59	8.92	
No Choice	N	10	15	
	$\bar{X}$	44.10	22.87	$< .001^b$
	s^2	147.65	17.55	
p_{diff}		$< .01^b$	$< .01$	

[a] Possible range from 10 (extreme anti) to 70 (extreme pro). The average subject's "own score" was 32.23, $s^2 = 35.54$.

[b] Degrees of freedom, and therefore probability values, adjusted for unequal population variances.

more indirect and permissive toward differing viewpoints than the anti-Castro items, the scale has no true neutral point.

Table 1 presents the means and standard deviations of the subjects' prediction ratings. A number of things are clear by inspection. The direction of the speech was of great importance in guiding the prediction ratings. This was especially true in the choice conditions, as one would expect, but it was also true in the no choice conditions to a highly significant extent ($t = 5.32$, df 10.76, $p < .001$). It is also clear that within each speech condition, correspondence between speech direction and attributed attitude was greater when the speaker had choice than when the essay direction was assigned ($p < .01$ in both cases). An equally obvious fact is that the variances are heterogeneous, that of the No Choice-Pro condition being almost 10 times as large as the next largest variance. Because of this heterogeneity, all the statistical comparisons mentioned above were evaluated with the reduced degrees of freedom called for when t tests are performed under an assumption of unequal population variances (cf. Walker and Lev, 1953, pp. 157–158).

The inflated variance in the No Choice-Pro condition is of interest in its own right, for it is precisely in this cell that the largest variance might be expected. From the subjects' perspective, this should be the condition of greatest ambiguity: the behavior direction is at variance with population expectations, but the target person was told to behave that way. What does he really believe? Apparently some subjects put more weight on the behavior direction than the context, others discounted the behavior almost entirely because of the context.

The main hypothesis was that the difference between Choice and No

Choice means would be greater for subjects hearing the pro-Castro speech than for those hearing the anti-Castro speech. While the mean differences in the pro-Castro condition were larger, both Choice-No Choice comparisons were significant (as noted above), and the predicted difference between differences did not approach significance. The hypothesis was not confirmed.

Returning to the inflated variance in the No Choice-Pro condition, one might wonder whether the subjects' own attitudes toward Castro affected their predictions of the target person's true attitudes. There is some slight evidence that this was so. The correlation between own and imputed attitude was +.50 in the No Choice-Pro condition; in the other conditions the comparable correlations ranged from −.12 to +.05. Because of the small N's involved, none of these correlations differ significantly from zero.

The semantic differential ratings revealed little information of interest. There were twelve 7-point scales involving such antonyms as bad-good, worthless-valuable, weak-strong. Scores were totaled for each subject to provide a measure of favorability of trait attribution. There was a significant tendency ($p < .05$) for subjects in the No Choice conditions to feel more positively toward the target person than those in the Choice conditions. This may be understood as a sympathy reaction to a student forced to take a particular side on a touchy issue in writing an examination essay.

Perhaps the most striking result of the first experiment was the tendency to attribute correspondence between behavior and private attitude even when the direction of the essay was assigned. If the subjects fully understood the conditions under which the essay was written, their tendency to be affected by the essay content in attributing an attitude to the target person would seem to reflect incomplete or distorted reasoning in the No Choice conditions. Perhaps some of the subjects were inattentive and did not clearly understand the context of choice or no choice in which the exam essay was written. Perhaps some felt that the assignment to write an exam essay on Cuba was unlikely and were skeptical of the cover story. In order to check on these possibilities, a second experiment was conducted.

The main hypothesis of the first experiment was not confirmed at least in part because the choice variation affected attitude attribution more than was expected in the anti-Castro essay conditions. In spite of the fact that subjects in the four conditions had comparable "own" attitudes, as measured by a simple one-way analysis of variance, those in the Choice-Anti condition did have the most pro-Castro attitudes. The mean "own score" in that condition was greater by t test than the means in each of

the other three conditions. The effects of this fortuitous event cannot be estimated, but its occurrence provides another reason for replicating the first experiment before rejecting the main experimental hypothesis.

EXPERIMENT II

Method

The second experiment included a modified replication of the four basic conditions of the first experiment plus eight additional conditions. Before describing the new conditions, the procedural modifications of the basic replication will be described.

Changes in Basic Procedure

In order not to depart too radically from the conditions of the first experiment, the issue of Castro's Cuba was retained along with the notion of free choice versus assignment by an authority. The differences were:

1. *Context of behavior.* The essay was presented as the first draft of an opening statement in a college debate, with appropriate specifications to make this cover story plausible. We assumed that the subjects would realize that debaters often try to defend positions in which they do not believe. The topic of the debate was written on the blackboard in all cases as, "Resolved that Castro's Cuba is a legitimate member of the family of nations and that the United States should not interfere with the sovereign rights of another country." The choice-no choice manipulation was delivered orally: the debater had either been directed by the team advisor to argue a specified side of the topic or was given his choice of sides.

2. *Behavior itself.* The "essays" were changed very little in content, though they were distributed as Xerox copies of the handwritten original rather than in mimeograph form.

3. *Judgment task.* Subjects were again told that the experimenter was interested in their ability to judge beliefs and personality on the basis of limited information. However, no mention was made of other subjects working from different materials on the same target person.

4. *Response measures.* The scale for measuring imputed and own attitudes toward Castro was identical. The semantic differential items were modified to increase their relevance. Such items as poor-rich, sane-insane, and dirty-clean were eliminated in favor of such items as foolish-wise, trite-original, and disorganized-organized. A final questionnaire was also included to check on the experimental manpulations.

Added Conditions

The results of the first experiment raised a number of questions concerning the choice manipulation and how it was perceived by the subjects. In the added conditions, an attempt was made to increase the salience of the choice manipulation by requiring the subject himself to write a pro- or anti-Castro essay before reading the target person's. In condition **5** (the first four replicated the basic design, as noted above) subjects were instructed to write a pro-Castro debate opening speech and then were exposed to a No Choice-Anti target person; in condition **6** subjects were instructed to write an anti-Castro speech and were then exposed to a No Choice-Anti target person; and in condition **7** subjects were instructed to write a pro-Castro speech and were then exposed to a No Choice-Pro target person. These additions

represented a compromise in design, since the major purpose was to make the subjects in the No Choice conditions aware of how it feels to be assigned a particular side of the debate, and the remaining combinations of subject- and target person-instructions were not expected to be equally informative.

Five additional conditions were added in which, regardless of what the target person was instructed to do, the resulting speech was ambivalent. It combined both pro- and anti-Castro arguments in a balanced presentation. Pre-instructions to the subject and to the target person were varied to generate these five conditions. The full design of Exp. II is presented in Table 2, along with the means and N's for each of the twelve conditions. The ambivalent speech conditions were included to explore the attribution of attitude when behavior is out of line with role prescriptions. Presumably someone who is instructed to write a pro-Castro debate opener, but in fact writes an ambivalent statement, should be seen as strongly anti-Castro. The obverse should also be true: an ambivalent statement following anti-Castro instructions should lead to predictions of pro-Castro attitude.

Administration of Experiment

A total of 97 subjects (male and female volunteers from the introductory psychology course) were run in 11 experimental sessions during a 1-week period. The number of subjects signing up for a particular session could not be entirely pre-determined, and two sessions were sometimes required to fill one condition. Otherwise two conditions, which differed only in the direction of the debate statement being evaluated, were run in the same session.

Results

The subjects' own attitudes were again predominantly anti-Castro, and this time the mean "own scores" in each condition were almost identical. There is no question that the subjects were attentive to the choice manipulation. When asked how much choice the target person perceived he had (on a 9-point scale) there was very little overlap between the Choice and the No Choice distributions ($t = 8.09$, $p < .001$). Whether or not the subject himself was instructed to write an essay (in the choice-salience conditions) did not affect the attribution of choice-perceived-by-target-person.

Turning to the major dependent variable, attribution of attitude toward Castro, the mean attribution scores for all 12 conditions are presented in Table 2. Comparing conditions 5 and 6 with condition 1, and condition 7 with condition 2, it is clear that there were no systematic effects of the choice-salience manipulation. Since this was the case, all No Choice-Anti conditions were combined, and all No Choice-Pro conditions were combined, to produce the data presented in Table 3. These data may be compared directly with those presented in Table 1. (The attribution data for the ambiguous speech conditions will be deferred for later consideration.)

Once again there were striking effects for direction of speech. These effects were significantly greater when the target person was given a

TABLE 2
DESIGN OF EXPERIMENT II

	Instructions to subject	Instructions to target person	Target person's performance	$\bar{X}$	N
A. Basic conditions					
1. NCA	—	NCA	anti	21.78	9
2. NCP	—	NCP	pro	38.57	7
3. CA	—	C	anti	22.89	9
4. CP	—	C	pro	57.67	9
B. Salience-of-choice conditions					
5. Pro-NCA	pro	NCA	anti	25.89	9
6. Anti-NCA	anti	NCA	anti	23.56	9
7. Pro-NCP	pro	NCP	pro	43.75	8
C. Salience-ambivalent conditions					
8. Pro-NCA-a	pro	NCA	amb	42.00	7
9. Anti-NCA-a	anti	NCA	amb	39.33	9
10. Pro-NCP-a	pro	NCP	amb	33.00	7
11. Pro-C-a	pro	C	amb	40.00	7
12. C-C-a	C	C	amb	42.86	7
				Total N	97

Note. C stands for free choice, NC for assignment by the debate captain, A for anti-Castro speech, P for pro-Castro speech, and a for ambivalent speech.

choice, but the pro-anti difference was highly significant even when the debate side was assigned. Once again the variances were heterogeneous, and since the greatest variability recurred in the No Choice-Pro condition this replicated the pattern of variances in Experiment I. The mean values seem to provide strong support for the main hypothesis that degree of

TABLE 3
EXPERIMENT II: MEANS[a] AND VARIANCES FOR ATTRIBUTED ATTITUDE SCORES

		Speech direction		
		Pro-Castro	Anti-Castro	p_{diff}
Choice	N	9	9	
	$\bar{X}$	57.67	22.89	$<.001$
	s^2	21.00	34.86	
No Choice	N	15	27	
	$\bar{X}$	41.33	23.74	$<.001$[b]
	s^2	134.81	50.12	
p_{diff}		$<.001$[b]	n.s.	

[a] Possible range from 10 (extreme anti) to 70 (extreme pro). The average subject's "own score" was 31.67, $s^2 = 82.25$.

[b] Degrees of freedom (and therefore probability values) adjusted for unequal population variances.

choice makes a greater difference when the behavior has a low prior probability. An interaction t test, adjusting the degrees of freedom to compensate for heterogeneity of variance, is significant ($t = 3.37$, $df = 36.1$, $p < .01$). This test compares the means in the following way: (57.67–41.33) > (23.74–22.89), cf. Table 3, and thus appropriately ignores the direction of the differences in each column. Otherwise the interaction test would merely show that the means are further apart in the first row than in the second row, or that the differences between speeches is greater when choice is allowed. As we have already noted above, this form of the interaction is also significant, linking degree of correspondence of inference directly to degree of choice.

Effects of making an ambivalent speech. When a target person is directed to make an anti-Castro presentation and equivocates in his argumentation, he should be seen as relatively pro-Castro. The same ambivalent speech under pro-Castro directions should result in the attribution of an anti-Castro attitude. The results of conditions 8, 9, and 10 bear out this hypothesis (see Table 2). When conditions 8 and 9 are combined (since both require the target person to give an anti-Castro speech) and contrasted with condition 10, the difference is significant ($t = 2.07$, $df = 21$, $p < .05$). The target person who gave an ambivalent speech under free choice conditions was seen to be rather in favor of Castro, as one would expect. In spite of the differences noted, the effects on attitude attribution of having the target person violate instructions are far from overwhelming. The target person who gave an ambivalent speech under anti-Castro instructions was seen as no more in favor of Castro than the one who gave a pro-Castro speech under pro-Castro instructions. The target person who responded ambivalently under pro-Castro instructions was seen as much more in favor of Castro than the target person who slavishly followed anti-Castro directions. This seems to be further evidence that the average subject in these experiments attaches insufficient weight to the constraining force of authoritative directions to behave in a certain way.

Own and attributed attitude. Table 4 presents the pattern of correlations between the subjects' own attitudes toward Castro and the attitudes imputed to the target person. There are several points of interest in this table, though conclusions drawn from correlations with such small N's are obviously risky. First of all, there is a dramatic replication of the correlation between own attitude and imputed attitude in the No Choice-Pro condition. Apparently we may venture the conclusion that when a subject attempts to predict attitude in a situation with conflicting cues (where the behavior tells him one thing and the context tells him another), he tends to fall back on his own attitudes as a guide for his estimate. Note, however, that this was only true in the no-salience

TABLE 4
EXPERIMENT II: RELATIONSHIP BETWEEN OWN ATTITUDE TOWARD CASTRO AND IMPUTED ATTITUDE
(Product Moment Correlations)

		Speech direction			
		Pro-Castro	Anti-Castro	Ambivalent	
Choice	N	9	9	14	
	r	−.03	.09	−.61*	
				Instructions	
No Choice-No Salience	N	7	9		
	r	.93**	.37	Pro	Anti
No Choice-Salience	N	8	18	7	16
	r	−.51	.33	.64	−.43*

* $p < .05$.
** $p < .01$.

condition. When the prediction task was preceded by the task of writing a pro-Castro speech under directions, the correlation vanishes. Having to write a speech against one's own position seems to reduce the significance of that position when it comes to imputing the attitude of a target person operating under the same prescription. Perhaps the subjects in the No Choice-Salience condition were alerted to concentrate more on the speech itself, being sensitive to any nuances or signs of sincerity in the arguments presented.

The other intriguing feature of the correlational data is the tendency for own position to be *negatively* related to imputed position when an ambiguous speech was given, unless the instructions were to give a pro-Castro speech. In order to account for this we present the following *post hoc* speculation. The target person in the Pro-Ambivalent condition does not follow instructions slavishly and is therefore seen as quite anti-Castro on the average. Perhaps this is what the anti-Castro subject thinks *he* might do in the same circumstances, thus causing him to assimilate the target person's attitude to his own. The target person who writes an ambivalent speech when told to write an anti-Castro speech, or told to choose one side or the other, reveals himself as moderately pro-Castro. Here there seems to be a contrast effect: the more anti-Castro the subject, the more he judges the speech (and therefore the debater) to be pro-Castro. These speculations are based on rather complex assumptions, but the reasoning is compatible with the judgmental theory of Sherif and Hovland (1961) further elaborated by Berkowitz (1960). This theory proposes that opinion positions close to one's own will be judged as closer than they are; the extremity of more distant positions will be exaggerated.

The semantic differential results were essentially negative. The tend-

ency to respond more favorably to the No Choice target person noted in the first experiment did not replicate.

The second experiment established the main hypothesis much more firmly than the first and did so under better controlled and probably more involving conditions. The choice variable does seem to make a greater difference in attributing correspondence when a noncustomary act is being assessed than when the act is customary or highly normative. Once again, the direction of the act had a striking effect even when the actor had no choice. What are the determinants of this tendency to overemphasize the content of behavior when attributing attitude? Two major possibilities suggest themselves. First, the subjects may perceive that the target person has an important degree of choice even in the No Choice condition. Perhaps the examination question (described in the first experiment) was one of several alternative possibilities. In the second experiment, the debater could have refused the assignment, quit the debating team, or maneuvered for another issue, if he really found it distasteful to argue on behalf of Castro. On the other hand, students are familiar with settings, like the debate context, where a person has good and compelling reasons to argue against his own private attitude. Also, the average subject in the No Choice-Pro condition affirmed on the postexperimental questionnaire that the target person had very little choice (average of 2.08 on a scale where 7.00 represents complete freedom).

A more likely possibility is that the speech content conveys information about the talent of the speaker, his familiarity with the issues involved, and his experience at concocting, say, pro-Castro arguments. Where does the material come from that goes into the speech? In the first experiment, presumably, developments in Cuba had been discussed in class along with arguments attacking and defending the regime. In the second experiment, the debater presumably had access to various resource materials in preparing his speech. Nevertheless, in neither case was it crystal clear that the preparation of arguments was merely a matter of putting together information assembled by others. Perhaps the pro-Castro statement was so constructed that it was hard for the subjects to believe that the arguments were not spontaneous and at least partly believed by the target person.

The third experiment was designed with a number of purposes in mind. First, it was necessary to show that the results were not a peculiar function of the particular speeches used or of the Cuban issue. In order to test the generality of the findings an entirely different attitudinal area was tapped. Second, it was important to make more explicit the fact that stock arguments prepared by others were available for composing the speech. Finally, an attempt was made to vary the reference group of the target person so as to manipulate directly the probability that he would express

opinions in a certain direction. To accomplish these objectives, subjects were exposed to tape-recorded speeches for or against segregation, delivered by a Northerner or a Southerner, who did or did not have prior choice. The design was thus a $2 \times 2 \times 2$ factorial with eight experimental conditions.

EXPERIMENT III

Method

Administration of experiment

The subjects were 125 male volunteers drawn from the same introductory psychology course and recruited by the same incentive conditions (fulfilling a course requirement for experimental participation) as in the previous two experiments. Four subjects were dropped from the analysis, three for suspecting the cover story and one for elementary failure to follow instructions. Once again, the number of subjects signing up for a particular session could not be entirely predetermined. Each condition included data from at least two but no more than three experimental sessions. There were no significant between-session effects within conditions.

Rationale

The purpose of the experiment, the subjects were told, was to "determine the predictability of a target person's attitudes on various issues given information about his attitudes on other issues." In order to explain the origin of the tape recordings to be played, the experimenter's introduction included a rather complex cover story describing the recruitment of ten target persons: An advertisement had been placed in the student newspaper at the University of North Carolina asking for volunteer upperclassmen to participate as research subjects. Accepted volunteers were promised $2.50 for "about a half-hour's work." The advertisement invited interested participants to leave their name and phone number at a particular box number. Of those that responded, the cover story continued, ten were selected as target persons because data were available (from a large-scale survey of undergraduate opinion conducted by the sociology department) on their attitudes toward segregation and other issues. Appointments were arranged to meet with each of these persons in their dormitory rooms. After the experimenter arrived there, the target person was asked to study a list of arguments for and against segregation, to construct a speech based on these arguments, and to deliver the speech in a convincing manner into a portable tape recorder. As in the previous two experiments, the target person was either given his choice of constructing a pro- or anti-segregation speech or he was instructed to take a particular side. Each target person was reassured that he would receive $2.50 for approximately a half-hour's work.

The latter portions of this cover story were conveyed on the tape recording itself, in the form of instructions to the particular target person. The arguments he was asked to study were allegedly taken from the Letters-to-the-Editor section of a daily newspaper. In all cases, the target person asked whether he was supposed to use the arguments provided for him and was told "you can use any arguments you wish from the list but you don't have to use the list at all if you don't want to." The experimenter emphasized that he did not necessarily endorse any of the arguments on the list.

The entire tape recording, including the speech itself, was a carefully scripted playlet in which the target person presented himself as a junior political science major from either Sandersville, Georgia or from New Brunswick, New Jersey. The target person's accent was accordingly very southern or very northeastern.[2] At the end of the speech, which either favored or opposed segregation, the experimenter (on the tape) asked the target person to sign a voucher for the $2.50, explained that the tapes would be used as stimulus materials in an attitude perception project at Duke, and secured his permission to use the recording for this purpose without ever, of course, revealing his identity.

The speeches. The scripted speeches were as comparable as possible except for their direction and conclusion. They were constructed so that the same "facts" were discussed from different perspectives. For example:

Pro-segregation	Anti-segregation
It is a stardard argument of the "do-gooders" and others that the reason for the Negro's weaknesses is due not to innate factors but rather to environmental conditions. . . . This argument . . . is completely fallacious.	It is a standard argument of the "die-hard" segregationists that Negroes are innately inferior to whites and that environmental factors are of little account. Such an argument is completely fallacious. . . .
Negroes, while contributing far less than their share to the development of America, have contributed far more than their share to crime statistics and welfare case lists.	The fact that a high percentage of Negroes are involved in major crimes and on welfare case lists is but further evidence of the awful effects of segregation and deprivation.
Etc.	Etc.

Each speech was approximately 375 words in length.

Attitude prediction measure. A 15-item Likert scale was constructed to measure the subject's own attitude toward segregation and his attribution of attitude to the target person. This scale contained three 5-item subsets in scattered order. Subset A consisted of statements taken directly from the speeches (e.g., "The Negro is innately inferior to the white"). Subset B consisted of statements directly referring to the segregation issue, but not specifically mentioned in the speeches (e.g., "Integration threatens one of the basic principles of democracy, the right of each citizen to choose his own associates"). Subset C consisted of statements making no explicit reference to the segregation issue but reflecting a more pervasive conservatism—a liberalism likely to be highly correlated with attitude toward segregation (e.g., "A union should be free to organize workers whether or not the management wants it to," and "The federal government has long overstepped its legal authority as defined by the Constitution and has consistently infringed on constitutionally guaranteed states' rights").

The attitude scale was constructed in this manner to determine whether the independent variables of choice and speech direction would affect attribution in areas related to, but not specifically mentioned in, the speech. Do the subjects conceive of an underlying attitude structure when predicting the target person's behavior, or do their attributions merely reflect the explicit content of the speech? While the choice of items was *a priori,* we were successful in selecting items for

[2] We are indebted to Thomas Hammock and Lloyd Stires for their effective portrayals of the target persons.

subsets B and C that the average subject used in the same manner as the A items. For all subjects combined, the attribution of segregationist attitude on A correlated with attribution in the same direction on B, $r = .90$, $df = 120$; A correlated with C, $r = .85$; B with C, $r = .81$ (all p-values $< .001$).

An additional reason for constructing the scale in three parts was the possibility of testing a rather subtle hypothesis concerning behavioral departures from reference group norms. How do subjects perceive a Southerner who chooses to construct an integrationist speech, or a Northerner who chooses to act like a segregationist? Perhaps a more coherent attitude structure is assigned to such a "maverick" because his position differs from the expectations of his community of origin and does not simply reflect reference group norms. The Northerner who espouses the cause of integration may be judged to be a "knee-jerk liberal" who passively reflects reference group norms without fighting through to a coherent attitudinal integration. The same kind of conclusion ("knee-jerk racist"?) may also be applied to the Southern segregationist. These considerations suggest the following hypothesis: (1) the "maverick" who chooses to differ with the assumed position of his community reference group will be perceived to have a more correspondent attitude than one who chooses to stand with his reference group; thus the Southern integrationist will be seen as more pro-integration than the Northern integrationist and the Northern segregationist will be seen as more in favor of segregation than his Southern counterpart. (2) There will be a higher correlation among the subsets of the attitude scale for "mavericks" than for "knee-jerk liberals" or "knee-jerk racists." In other words, if the "maverick" is seen as anti-segregation he will also be seen as basically liberal; if he is seen as pro-segregation he will also be seen as basically conservative.

Postexperimental questionnaire. After the subject recorded his attitude predictions ("please try to predict how the target person would honestly respond to the following statements"), he was asked to indicate his own attitude on the same 15-item scale. Finally, each subject answered seven questions in the form of 9-point scales, each designed to check on some aspect of the subject's perceptions of the experiment.

Results

Once again, the subjects were very attentive to the choice manipulation. When asked how much choice the target person perceived he had (on a 9-point scale), there was very little overlap between the Choice and the No Choice distributions ($t = 10.63$, $p < .001$).

Attribution of Attitude toward Segregation

As noted above, the attitude scale for measuring attribution was constructed of three subsets of items varying in degree of remoteness from the arguments specifically mentioned in the speech. As might have been expected from the high overall correlations among these subsets (see above), attribution to each subset was highly comparable within experimental conditions. This can be verified both by close inspection of Table 5 and by the fact that significance levels for all statistical tests are roughly the same whether they refer to subset A, B, C, or the combined total.

For convenience we shall concentrate on the total attribution scores, except where interesting differences among the subsets emerge.

For the third time, there were striking effects for direction of speech. Whether the speech was made by a Southerner or a Northerner, and whether or not he had choice, all differences between the pro-segregation speech and the anti-segregation speech were highly significant. The interactive effects of choice and speech direction were again significant, but the interaction took the same form for Southern and Northern target persons. That is, the target person with a choice was seen as more pro when he made a pro speech and more anti when he made an anti speech than the target person without a choice.

For those subjects exposed to the northern target person, the main hypothesis was that choice would affect attribution when a pro-segregation speech was made but not when an anti-segregation speech was made. The obverse was predicted for those exposed to the Southerner: choice would affect attribution when an anti-segregation speech was made but not under pro speech conditions. The northern target person data in Table 5A fall into the predicted pattern on each item subset and the total. In each case the predicted interaction, obtained by comparing the pro (no choice minus choice) difference with the anti (choice minus no choice) difference, was significant. For subset A, $t = 2.30$, $p < .05$; for B, $t = 3.64$, $p < .01$; for C, $t = 3.90$, $p < .001$; and for all items combined, $t = 3.80$, $p < .001$. Degrees of freedom were adjusted in each case to accommodate heterogeneity of variance. Clearly, at least for the northern target person, attributions to related attitudinal issues are affected by the experimental variables to an extent that is at least as great as when issues mentioned in the speech are involved.

A glance at the data summarized in Table 5B indicates that the main hypothesis was definitely *not* confirmed in the case of the Southern target person. In each condition the Southerner was seen as more in favor of segregation than his Northern counterpart, as one would expect. The overall Southern-Northern difference was highly significant ($t = 4.86$, $p < .001$). However, the Southern pattern of means was an attenuated version of the Northern pattern rather than its obverse. When the Southerner made a speech under no choice conditions, the attributed attitude was less extreme whether the speech was in a pro- or anti-segregation direction. The subjects did not readily assume the Southerner was a pro-segregationist when he had no choice but to make a pro speech.

A plausible explanation of this failure of prediction is available. Perhaps the prior probability that a college student from Georgia is pro-segregation is not strikingly high, especially one who has gone "north" to enroll at the University of North Carolina. Some support for this salvag-

TABLE 5

EXPERIMENT III: MEANS[a] AND VARIANCES FOR ATTRIBUTED ATTITUDE SCORES

A. *Northern target person*

		Speech direction: Pro-segregation				Speech direction: Anti-segregation			
		A[b]	B	C	Total	A	B	C	Total
Choice	$\bar{X}$	10.05	13.80	13.80	37.65	31.52	29.76	28.76	90.06
	s^2	38.95	29.46	16.36	212.66	9.07	10.53	6.41	50.43
				$N = 20$				$N = 17$	
No Choice	$\bar{X}$	16.36	21.00	22.36	59.73	31.14	30.86	27.50	89.50
	s^2	47.14	34.54	17.32	162.82	5.28	3.41	12.68	31.65
				$N = 11$				$N = 14$	

B. *Southern target person*

		Speech direction: Pro-segregation				Speech direction: Anti-segregation			
		A	B	C	Total	A	B	C	Total
Choice	$\bar{X}$	8.25	9.31	11.31	28.88	28.33	27.46	25.00	80.80
	s^2	11.81	12.72	18.34	75.72	34.75	26.38	23.33	191.89
				$N = 16$				$N = 15$	
No Choice	$\bar{X}$	13.93	17.13	16.80	47.87	25.38	25.62	22.15	73.15
	s^2	46.19	31.72	22.69	231.40	65.16	45.16	27.21	402.30
				$N = 15$				$N = 13$	

[a] Possible range (subsets A, B, C) from pro-segregation 5 to anti-segregation 35. Possible range for total scores: 15 to 105.

[b] Refers to item subsets ranging from A (explicitly in speech), through B (mentions segregation), to C (segregation not explicitly mentioned).

ing speculation may be found in the actual attitude scale scores of subjects from the South. The home states of 100 subjects could be readily ascertained from the Duke student directory. Fifty-seven of these were from southern states, while 43 were from the North. The average scale score of northern subjects ($\bar{X} = 80.42$) was significantly higher than that of the average Southerner ($\bar{X} = 70.07$; $t_{diff} = 3.49$, $p < .001$). The southern subject was, not surprisingly, more in favor of segregation. Of greater interest for our present argument, however, is the greater variability among Southerners ($s^2 = 260.42$) than Northerners ($s^2 = 166.01$) —significant at the .06 level. Thus, being a college student from a southern town is not a very informative objective indicator of attitude toward segregation. The attribution results suggest that the subjects were aware

of attitudinal variability among southern college students (from a neighboring university) and were especially responsive to the evidence that the target person had chosen his speech. The No Choice Southerner is an ambiguous stimulus object, a conclusion that is supported by the fact that subjects were more variable in attributing attitudes to this target person than to others. It may be noted in Table 4 that the two largest variances (total score columns) appear in the two No Choice Southerner conditions.

Own and attributed attitude. Although subjects were assigned to conditions through their own initiative in signing up for particular times, there were some rather peculiar variations among subjects exposed to the southern target person. Those in the Choice Pro and No Choice Anti conditions were significantly more against segregation than those in the No Choice Pro and Choice Anti conditions. No such pattern emerged in subjects exposed to the northern target person. However, among the latter subjects, those hearing the anti-segregation speech ended up significantly more opposed to segregation than those hearing the pro-segregation speech. Since the subjects filled out the own-attitude questionnaire after hearing the speech and after making their attribution ratings (as was the case in the two preceding experiments as well) it is impossible to estimate the extent to which they may have been influenced by the speech. The pattern of "own attitude" scores is reproduced in Table 6 but we demur from any attempt to interpret the differences between conditions.

Also presented in Table 6 are the correlations between own and attributed attitude for each experimental condition. Each correlation is positive, suggesting a general tendency to assimilate the target person's attitude to one's own. This tendency reaches significance in only three conditions, all involving the northern target person. In the two previous experiments, the highest correlation between own and attributed attitude occurred in the condition where no choice was combined with a pro-Castro speech (low prior probability behavior). The present correlational results neither replicate closely nor disconfirm the proposition that the correlation is highest when ambiguous or conflicting information is presented. The correlation *is* high for subjects in the Northern-No Choice-Pro condition, but it is also high in two other Northern conditions. The correlations among subjects exposed to the Southern speaker are low and nonsignificant.

Perception of the "maverick's" attitude structure. We proposed in introducing this experiment that correspondence of attribution would be especially high in the case of the "maverick" who chooses to differ with the assumed position of his community reference group. A second hypothesis, developed from the same reasoning, was that the intercorrela-

TABLE 6

EXPERIMENT III: SUBJECTS' OWN ATTITUDES TOWARD SEGREGATION ($\bar{X}$), AND CORRELATIONS BETWEEN OWN AND ATTRIBUTED ATTITUDE (r), BY CONDITIONS

A. *Northern target person*

	Speech direction					
	Pro-segregation			Anti-segregation		
	$\bar{X}$	r	N	$\bar{X}$	r	N
Choice	69.70	.09	20	76.70	.49*	17
No Choice	64.91	.60*	11	78.36	.60*	14

B. *Southern target person*

	Speech direction					
	Pro-segregation			Anti-segregation		
	$\bar{X}$	r	N	$\bar{X}$	r	N
Choice	86.50	.06	16	71.53	.24	15
No Choice	69.60	.38	15	84.15	.07	13

Note. Significant comparisons across conditions. Northern target person: Anti versus Pro, $F = 6.67$, $p < .05$; Southern target person: interaction $F = 13.78$, $p < .001$; Northern versus Southern: $F = 3.87$, $p < .10$.

* $p < .05$.

tions among item subsets would be higher for "mavericks" than for those who choose the expected speech direction, the "knee-jerk liberals" and "knee-jerk racists." We have already noted that there is no support for the first of these hypotheses. The Southerner who chooses to give a pro-integration speech is not seen as more in favor of integration than the Northerner who chooses pro-integration; the Northerner who chooses pro-segregation is not seen as more of a segregationist than his Southern counterpart. Perhaps the reasoning behind this hypothesis confused extremity with certitude. The pro-integration Southerner may be more confident that he is right, without being more extreme in his dedication to integration. There is no evidence in the present study that would support this alternative, however.

The second hypothesis does receive some support. Table 7 presents the intercorrelations between item subsets for each experimental condition. These correlations are generally positive and, as we have already noted, the three over-all correlations are very high. Those correlations especially involved in the second hypothesis are italicized in the table, and the probabilities of the observed differences are indicated. The correlations between subsets for the "mavericks" (Southern-Choice-Anti, and

TABLE 7
EXPERIMENT III: CORRELATIONS BETWEEN ITEM SUBSETS, ATTRIBUTED ATTITUDE SCORES, BY CONDITIONS

Condition	N		A-B	B-C	A-C
NNCA	14		.00	.11	.43
SNCA	13		.74**	.76**	.93***
NNCP	11		.62*	−.41	.34
SNCP	15		.72**	.61*	.43
SCA[a]	15		.83***	.53	.43
NCA	17		*.48*	*.21*	*.56**
		p_{diff}	n.s.	n.s.	n.s.
SCP	16		.23	.07	.69**
NCP[a]	20		*.74****	*.68****	*.74****
		p_{diff}	< .05	< .05	n.s.
Total	121		.90***	.81***	.85***

[a] "Mavericks."
* $p < .05$
** $p < .01$
*** $p < .001$

Northern-Choice-Pro subjects) did tend to be higher than the correlations for the remaining choice subjects in five of six comparisons. Two of these were statistically significant. While these results suggest that further research on the attribution of a coherent attitude structure to the "maverick" might be fruitful, the evidence in support of the hypothesis is only suggestive.

DISCUSSION

We have presented three experiments involving the same general design. In each case subjects were asked to rate the true attitude of a target person from a set of his opinion statements. The content of these statements was either in the direction expected from such a target person or in the opposite direction. The target person either chose to express opinions in the direction he did or was instructed by an authority figure to do so. Our main interest was to test the hypothesis from correspondent inference theory (Jones and Davis, 1965) that degree of choice would affect attribution more when the opinions expressed were in an unexpected direction than when their prior probability was high. Figure 1 summarizes the findings that bear on this hypothesis in a form that facilitates comparing the similarities and differences from experiment to experiment. Confirmation was clear in the second experiment and for the northern target person in the third experiment. The difference between differences was in the predicted direction in Exp. I, but was not significant. In Exp.

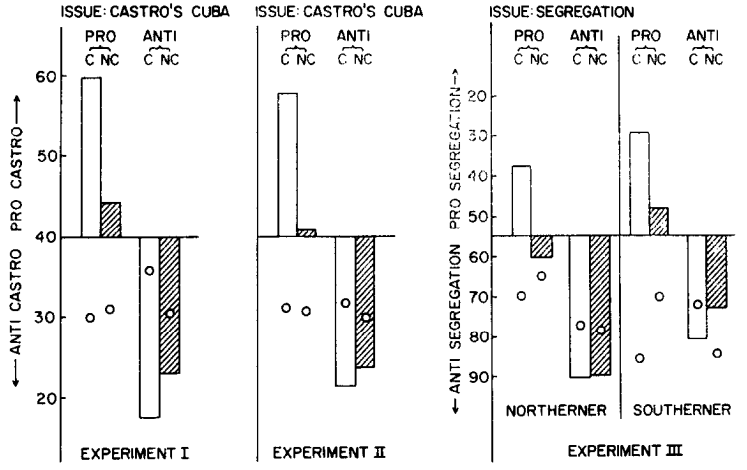

FIG. 1. Attribution of attitude in each of three experiments. The dividing midline in each case represents the arithmetic mid-point of the possible scoring range; it bears no necessary relation to the psychological neutral point. The symbol *o* superimposed on each column refers to the mean "own rating" for subjects in that condition.

III, we presented evidence to suggest that a southern college student's attitudes toward segregation are difficult to predict if all the predictor knows is that the student was born in the South. Objectively, there is high variability among Southerners on the segregation issue and the subjects seem to be aware of this. In general, given fairly determinate expectations about the target person's most probable private attitude, the hypothesis may be considered confirmed.

A striking feature of the results in each experiment was the powerful effect on attribution of the content of opinions expressed. While the subjects do take account of choice and prior probability, as correspondent inference theory proposes, they also give substantial weight to the intrinsic or "face value" meaning of the act itself in their attributions of attitude. This is true even when the act occurs in a no choice context. The question is whether this tendency reflects an irrational bias that is inherent in person perception, or whether it is a function of specific, removable cues in the three procedures. Heider (1958) comments on the common tendency to assign too little significance to the determining context of action in social perception. "It seems that behavior in particular has such salient properties it tends to engulf the total field rather than be confined to its proper position as a local stimulus whose interpretation requires the additional data of a surrounding field" (p. 54).

Perhaps behavior did "engulf the field" in the present experiments, but

this describes the results without really explaining them. We have already wondered (in the introduction to Exp. III) whether the amount of choice perceived in the no choice conditions is enough to have significant effects. Obviously, the target persons did have the ultimate option to refuse their instructor in Exp. I, their debate captain in Exp. II, or the dormitory visitor in Exp. III. Nevertheless, it seems fair to assume that each subject himself would agree to express false opinions under comparable circumstances of authoritative assignment, and the subjects' postexperimental ratings of choice indicated their awareness of strong external constraints on the target person's behavior.

An important area of choice does remain, however, even in the no choice condition. This is the choice between various ways of expressing the directed opinion. The arguments advanced in each essay or speech were not specified in detail by the constraining authority; an unknown degree of freedom to select and organize arguments remained even in the third experiment. In planning the present experiments, we assumed that this minimal ambiguity was necessary to bring out the specific interaction that was the test of our major hypothesis. If the target person had been merely handed a speech to read under very strong external constraints, his compliance would have conveyed little or no information to the subjects. Under these circumstances we would have expected no differences between No Choice-Pro and No Choice-Anti conditions. Were the constraints to extend to every detail and facet of an observed performance, the prediction that attribution is uninfluenced by performance would be a trivial one. The present experiments show that when the major decisions about the direction and form of behavior are made for the target person, his performance is still a powerful source of variation in the attribution results. Short of some extreme degree of specification, behavior does engulf the field and it is difficult for the perceiver to assign appropriate weights to the situational context.

We are led to conclude that correspondence in attributing underlying attitudes to account for expressed opinions is high when the opinions are unexpected and expressed in a context of free choice. However, the content and direction of the opinions exert a clear inference on attribution even when choice is drastically reduced. In a context that permits the target person some very minimal degree of spontaneity, the perceiver seems to view his performance as more informative than a rational analysis of act and context would suggest. This bias may have important implications for interpersonal relations, and we might propose a hypothesis for further research that distortion, in the form of assigning too much significance to performance, increases as the objective constraints on a target person's actions increase.

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