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Accountability: A Social Check on the Fundamental Attribution Error

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Previous attitude-attribution studies indicate that people are often quick to draw conclusions about the attitudes and personalities of others—even when plausible external or situational causes for behavior exist (an effect known as the overattribution effect or fundamental attribution error). This experiment explores whether accountability—pressures to justify one's causal interpretations of behavior to others—reduces or eliminates this bias. Subjects were exposed to an essay that supported or opposed affirmative action. They were informed that the essay writer had freely chosen or had been assigned the position he took. Finally, subjects either did not expect to justify their impressions of the essay writer or expected to justify their impressions either before or after exposure to the stimulus information. The results replicated previous findings when subjects did not feel accountable for their impressions of the essay writer or learned of being accountable only after viewing the stimulus information. Subjects attributed essay-consistent attitudes to the writer even when the writer had been assigned the task of advocating a particular position. Subjects were, however, significantly more sensitive to situational determinants of the essay writer's behavior when they felt accountable for their impressions prior to viewing the stimulus information. The results suggest that accountability eliminated the overattribution effect by affecting how subjects initially encoded and analyzed stimulus information.

A central goal of attribution theory is to understand how people explain and draw inferences from their observations of behavior (Heider, 1958; Kelley, 1967). An extensive research literature now points to the existence of a systematic bias in this person-perception process: a pervasive tendency on the part of observers to overestimate personality or dispositional causes of behavior and to underestimate the influence of situational constraints on behavior (Jones and Nisbett, 1971; Jones, 1979; Nisbett and Ross, 1980; Ross, 1977). Indeed, Ross (1977) was sufficiently confident in the robustness of the phenomenon to label it "the fundamental attribution error." Jones (1979) used a somewhat less judgmental term to describe the same phenomenon: the "overattribution effect."

Perhaps the most-cited evidence for the overattribution effect comes from research employing the attitude-attribution paradigm (Jones and Harris, 1967; Jones et al., 1979). In a typical experiment, subjects are presented with written or spoken statements of opinions that have allegedly been made by an unknown target person under conditions of high or low

choice. For instance, Jones and Harris (1967) presented subjects (observers) with pro- or anti-Castro essays that had supposedly been written under high-choice conditions (the writer freely decided to take the essay position) or under low-choice conditions (the debating-team advisor told the writer to prepare a particular position statement). The task of the observers was to infer the "true attitude" of the target person who developed the persuasive essay.

A very consistent pattern of results has emerged from such attitude-attribution experiments. As one would expect from Jones and Davis's (1965) correspondent inference theory, observers attribute more strongly essay-consistent attitudes to the essay writer under high-choice than under low-choice conditions. A less intuitively obvious finding, however, also emerges. Observers still infer a significant degree of correspondence between the essay writer's stated position and true attitude even when it is clearly stated that the writer had been compelled to defend the position taken in the essay. This latter (overattribution) effect is remarkably difficult to eliminate. It appears and reappears across a wide range of manipulations of essay topic and choice contexts (Jones and Harris, 1967; Jones et al., 1971; Miller, 1974, 1976; Schneider et al., 1979; Snyder and Jones, 1974).¹

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¹ To be sure, there are boundary conditions for the overattribution effect. The effect can be reduced, for example, by presenting subjects with very weak

Although the overattribution effect is one of social psychology's better-replicated phenomena, considerable controversy continues to surround its interpretation. One point of contention has been the value-laden characterization of the effect as an error or bias.² Skeptics have correctly noted that in many attitude-attribution experiments there is no objective standard against which to assess attributional accuracy (cf. Harvey et al., 1981; Kelley, 1971); the essays are often inventions of investigators and no "target person" really exists. This objection, however, has lost much of its force in the face of experimental demonstrations of the overattribution effect which have used essays composed by actual naive subjects assigned to argue for particular positions. These experiments indicate that observers do, indeed, err when they draw correspondent inferences from essays written under low-choice conditions (Reeder, 1982; Snyder and Jones, 1974). Evidence from other lines of experimental research, moreover, reinforces this point (e.g., Bierbrauer, 1979; Napolitan and Goethals, 1979; Ross et al., 1977). In light of such findings, most reviewers of the literature have concluded that the overattribution effect does, in fact, represent a significant shortcoming in how people typically process information about others (Fiske and Taylor, 1984; Nisbett and Ross, 1980; Schneider et al. 1979).

Granting that the overattribution effect represents a widespread error or bias in social judgment, there still remains the vexing task of explaining it. The prevailing wisdom in the field traces the effect to people's reliance on simple, highly overlearned, judgmental heuristics in social-perception tasks. Heider (1958)

or ambivalent essays that suggest the writer felt coerced into performing the task (Miller and Rorer, 1982; Schneider and Miller, 1975). The effect is, however, surprisingly difficult to eliminate (cf. Miller et al., 1981).

² Following Harvey et al., bias is defined here simply as a tendency to prefer a given cognition (e.g., a dispositional attribution) over its possible alternatives (e.g., situational attributions). By this definition, the consistent preference of attributors for dispositional explanations represents a robust attributional bias. Error, by contrast, is defined as an inconsistency between a causal attribution and a proposition in which one is so confident that one deems it a fact. It follows that error can be demonstrated only by comparing a given causal attribution to a generally accepted factual criterion. Working from this distinction, the current study is best thought of as an investigation of the overattribution bias. (There is no "true" essay-writer attitude which we can use to assess the accuracy of subject's causal attributions.)

proposed the earliest variant of this explanation. Behavior, he argued, engulfs the perceptual field. The person and his or her behavior form a natural perceptual-cognitive unit (a gestalt). What, after all, could be more obvious than the basic palpable fact that without the actor there can be no act? And what could be simpler than to ascribe behavioral dispositions to the actor that render the actor-act linkage intelligible (aggressive people behave aggressively, intelligent ones, intelligently, . . .)? Nisbett and Ross (1980) noted the compatibility of this explanation with recent work on judgmental heuristics. Personal traits or dispositions of actors are generally the most cognitively *available* and *representative* explanations for behavior. People prefer dispositional explanations because such explanations are typically the first plausible ones to come to mind and people rarely bother to consider less obvious situational ones. People—cognitive misers that they are reputed to be—are content with top-of-the-head causal interpretations of behavior (Fiske and Taylor, 1984).

Jones's (1979) explanation of the overattribution effect is in the same spirit. Jones agrees that the initial reaction of most perceivers to behavior is to draw a dispositional conclusion about the actor. Drawing on Tversky and Kahneman's (1974) work on the anchoring heuristic and insufficient adjustment, Jones goes on to argue that this initial reaction creates a dispositional "perceptual anchor" which people do not adequately adjust in response to information on situational constraints surrounding the behavior. The result is an underutilization of situational information and a tendency to view behavior—even under highly constraining conditions—as revealing dispositional qualities of the actor.

The above explanations paint a less than flattering portrait of the human information processor. Perceivers are depicted as "lazy organisms" (McGuire, 1969; Taylor, 1981) whose preference for simple, easy-to-execute heuristics (the principle of least effort) renders them vulnerable to inferential biases such as the overattribution effect. Good reasons now exist, however, for doubting the completeness of this cognitive-miser portrait (Einhorn and Hogarth, 1981; Janis and Mann, 1977; Payne, 1982; Tetlock, 1985). A number of experiments indicate that under certain conditions people can be motivated or stimulated to process information in complex, effort-demanding ways (Chaiken, 1980; McAllister et al., 1979; Rozelle and Baxter, 1981; Tetlock, 1983a, 1983b). Such experiments suggest potential boundary conditions for the overattribution effect. Previous attitude-attribution studies have given subjects few incentives to reason carefully about the

attributional problems posed to them. Subjects rarely feel accountable or responsible for the judgments they express. If the overattribution effect is the result of reliance on cognitively simple heuristics, and if this reliance is at least partly rooted in motivational factors (the desire to minimize mental effort) as opposed to cognitive-capacity limitations, then it is reasonable to hypothesize that experimental manipulations which encourage thoughtful analysis will be at least partly successful in eliminating the overattribution effect.

What types of experimental manipulations might encourage effort-demanding, thoughtful analysis? Judging from past work, a rather wide range of factors may have such effects, including the seriousness or consequentiality of the decision problem (Langer et al., 1978; McAllister et al., 1979; Taylor, 1975), the irreversibility of the decision (Janis and Mann, 1977; McAllister et al., 1979), and the existence of social pressures to explain or justify the position one has taken to others (Chaiken, 1980; McAllister et al., 1979; Rozelle and Baxter, 1981; Tetlock, 1983a, 1983b). The latter factor—social demands for accountability—is of special interest here. Evidence has now accumulated that accountability can profoundly affect the cognitive strategies that people use to process social information. Accountable decision makers are more likely than unaccountable ones to rely on cognitively complex procedures in choosing among response alternatives (Cvetkovich, 1978; Tetlock, 1983a), to display greater consistency and stability of judgment (Hagafors and Brehmer, 1983), to process persuasive messages in detail rather than to rely simply on their generalized evaluation of the source of the messages (Chaiken, 1980), and to be more discriminating and responsive to evidence in evaluating others (Rozelle and Baxter, 1981; Tetlock, 1983b).

This study explores the impact of accountability on the overattribution effect. To address this issue, we created an attitude-attribution experiment in which subjects were presented with pro- or anti-affirmative-action essays that a target person had supposedly written under high- or low-choice conditions. Subjects were led to believe that they either would or would not be accountable for the impressions they formed of the essay writer. Subjects in the accountability condition learned of being accountable either before or after exposure to the behavioral evidence.

One major hypothesis was that subjects who felt accountable for their impressions of the essay writer would be much less susceptible to the overattribution effect than subjects who did not. In this view, accountability would reduce,

perhaps even eliminate, the overattribution effect by motivating subjects to invest greater cognitive effort in making attributional judgments and to process behavioral evidence in more analytic and complex ways. Subjects who expect to justify their impressions of the essay writer would be especially likely to pay careful attention to all of the relevant evidence (not just the most salient), to be cautious in jumping to firm conclusions in the face of causal ambiguity (the existence of plausible external as well as internal explanations for behavior in low-choice conditions), and to make relatively subtle and complex distinctions (behavior sometimes is and sometimes is not diagnostic of true attitudes). In brief, accountability would transform subjects into more complex, self-critical information processors.

An alternative hypothesis holds that accountability may well reduce the magnitude of the overattribution effect, but through a very different psychological mechanism. Social demands for accountability may not so much affect *how* people think as *what* they are willing to say. Accountability may induce a cautious response set—a generalized unwillingness to make dispositional attributions that might later prove awkward or difficult to justify. Accountability, in this view, turns people into fence sitters who rarely stray from the “safe” neutral points of the scales on which they express judgments.

The present study allows us to distinguish between the cognitive-motivator and response-bias interpretations of the effects of accountability. The cognitive-motivator interpretation suggests that the effects of accountability should be much more selective than does the response-bias interpretation. If, for example, accountability is simply creating a general reluctance to draw dispositional conclusions about others, accountability should result in less extreme dispositional attributions to essay writers under high-choice as well as under low-choice conditions. The effects of accountability should not, moreover, depend on whether subjects learn of the need to justify their judgments before or after exposure to the behavioral evidence. In both cases, accountability should simply produce less extreme dispositional attributions, and it should do so, to an approximately equal extent, for high- and low-choice essay writers.

The cognitive-motivator interpretation, by contrast, maintains that accountability transforms people into more discriminating and complex information processors. Accountability should have minimal effect on dispositional attributions under high-choice conditions (little causal ambiguity exists here), but

should sharply reduce dispositional attributions under low-choice conditions (where plausible external as well as internal causal explanations exist). The timing of accountability also becomes a crucial variable. If accountability affects how people think about the evidence (not just the attributional judgments they are willing to express), the effects of accountability should be much more dramatic when people learn of the need to justify their positions before rather than after exposure to the evidence. Pre-exposure accountability can affect the actual processing of the evidence; post-evidence accountability can affect only the recall and analysis of already processed evidence. Tetlock's (1983b) work on accountability and belief perseverance reinforces this point. He found that accountability prior to viewing evidence on a criminal case was much more effective in eliminating primacy effects in judgment than was accountability after viewing the evidence. The theoretical principle may be that social demands for accountability are potent tools for preventing, but not reversing, judgmental bias.

METHOD

Subjects

Undergraduate subjects ($N = 103$) at the University of California participated in the study in return for course credit or money (\$3.00). Subjects were assigned to experimental conditions in a $2 \times 2 \times 3$ between-subjects design (8 or 9 subjects per cell). Subjects were run in small groups ranging in size from 3 to 6 individuals. Subjects within groups were always randomly assigned to different experimental conditions.

Procedure

The experimenter began each session by informing subjects that they would be participating in a study concerned with the "person-perception process"—with how people form impressions of others from various types of information. Subjects then received a booklet containing the following materials: an essay on the topic of minority quota systems in college admissions; information on the circumstances in which the essay was written; and a series of questions to be completed by the subjects. The essay either supported or opposed increased quota systems in college admissions. Each essay was approximately 300 words and contained four major arguments for the position advocated.

Prior to reading the essay, subjects were given background information on the circumstances under which the essay was written.

They learned that the essay writer had been a participant in an earlier social-psychological experiment that focused on "the types of persuasive arguments and strategies that people use to change others' opinions on controversial social issues." The experimenter had asked the essay writer to develop a series of persuasive arguments on the specific issue of affirmative action in college admission decisions. Subjects were led to believe, however, that the writer prepared the essay under either "low-choice" or "high-choice" instructions. In the low-choice instructions, the experimenter assigned the essay writer a pro- or anti-affirmative-action position. The experimenter supposedly stated: "Today I would like you to write a persuasive essay favoring (opposing) the implementation of minority quota systems in making college admission decisions. Do the best possible job you can. Feel free to use these reference materials (newspaper and magazine articles) in preparing your essay." In the high-choice instructions, the experimenter emphasized that the writer was free to advocate or oppose affirmative action. "Today I would like you to write a persuasive essay either favoring or opposing the use of minority quota systems in college admissions—whichever position you choose to take. Do the best possible job you can. Feel free to use these reference materials (newspaper and magazine articles) in preparing your essay." Subjects then read the essay that the writer had supposedly prepared in response to these instructions.

Accountability Manipulation

Subjects received one of the three sets of accountability instructions. Subjects in the no-accountability conditions were informed that their impressions of the essay writer would be totally confidential and could in no way be traced back to them. Subjects in the pre-exposure accountability conditions learned (before being presented with the essay or the information on the circumstances under which it was written) that the researchers were interested in the "interpersonal communication of beliefs and attitudes" and that subjects would later be called upon to justify the impressions they formed of the essay writer to an associate of the experimenter interested in the "person-perception process." Subjects in the postexposure accountability conditions also expected to justify their impressions of the essay writer to an associate of the experimenter. However, these subjects did not realize that they were accountable for their impressions until after they had been exposed to information on the essay and the circum-

stances under which it was written (postexposure accountability).

Dependent Variables

Subjects were asked to estimate the essay writer's attitudes toward minority quota systems in college admissions and toward a set of four related issues. These related issues included quota systems in employment decisions, in lay-off decisions, in promotion decisions, and in admission to professional and technical training schools. Subjects also rated their confidence in their attributions of pro- or anti-affirmative-action attitudes to the essay writer. The questionnaire concluded with several manipulation checks ("How much freedom did the essay writer have to choose the position or side he took?" "How strongly do you feel the essay supported or opposed minority quota systems in college admissions?"). The last questions asked for subjects' own attitudes toward minority quota systems and their estimates of the "typical undergraduate's" attitudes toward such systems. Subjects responded to all questions on 21-point rating scales. The experimenter thoroughly debriefed subjects after they had completed their questionnaires.

RESULTS

The primary objective of this experiment was to explore the impact of social demands for accountability on how subjects process behavioral information in an attitude-attribution paradigm. We were particularly interested in testing three hypotheses:

(1) Subjects would draw more extreme inferences about the essay writer's views on affirmative action when they believed that the writer freely chose to take a particular position (pro or con) than when they believed that the writer had been assigned a position. Subjects would, however, still draw inferences about the essay writer's attitudes even under low-choice conditions.

(2) Subjects who felt accountable for their views prior to exposure to any of the stimulus evidence would be less likely than unaccountable subjects to draw inferences about the essay writer's attitudes under low-choice conditions, but would not differ from unaccountable subjects in their willingness to draw inferences about the essay writer's attitudes under high-choice conditions.

(3) Accountability would reduce willingness to draw dispositional conclusions under low-choice conditions only when subjects learned of being accountable prior to exposure to the stimulus evidence, not when subjects learned

of being accountable after exposure to the evidence.

Replicating the Overattribution Effect

Figure 1 presents the mean attitude that subjects attributed to the essay writer in each of the experimental conditions in the $2 \times 2 \times 3$ design (see also Table 1). Not surprisingly, the position on affirmative action taken in the essay was an extremely powerful determinant of the inferences that subjects drew about the writer's attitudes. Subjects who received the pro-affirmative-action essay saw the writer as much more sympathetic to the policy ($M = 16.02$) than did subjects who received the anti-affirmative-action essay ($M = 6.28$), $F(1, 91) = 590.20$, $p < .00001$. No other main effects emerged as significant.

Consistent with previous findings showing greater correspondence of attitude attribution under high- than under low-choice conditions, a significant essay direction \times choice interaction emerged in this experiment. When the essay writer allegedly chose to write the essay, he was thought to hold a more extreme attitude toward affirmative action (in line with the direction of the essay) than when he was thought to have no choice ($F(1, 91) = 15.35$, $p < .001$).

The results also replicated previous findings of significant correspondence between attitude attribution and essay direction even under low-choice conditions. In general, the low-choice pro essayist ($M = 15.18$) was seen as much more supportive of affirmative action than the low-choice anti essayist ($M = 7.99$), $F(1, 91) = 7.84$, $p < .01$.

Debiasing Social Judgment

The above results indicate that the classic overattribution effect was indeed reproduced

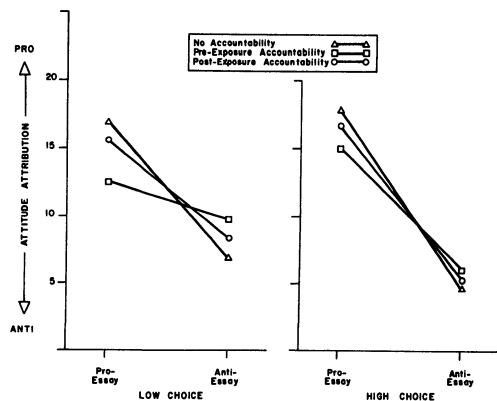


Figure 1. Attitude Attribution as a Function of Essay Position, Choice and Accountability.

Table 1. Mean Attitude Attributed to the Essay Writer^a

	Low Choice		High Choice	
	Pro Essay	Anti Essay	Pro Essay	Anti Essay
No Accountability	16.88	6.89	17.89	4.33
Pre-Exposure Accountability	12.78	9.33	16.00	5.89
Post-Exposure Accountability	15.88	7.75	16.78	5.00

^a Higher numbers indicate that a more pro-affirmative-action position is attributed to the writer.

in our study. Planned contrasts indicated, however, that accountability was a highly significant moderator of the overattribution effect. Subjects who did not feel accountable for their attributional judgments were significantly more likely to draw strong inferences about the attitudes of the low-choice essay writer ($M_s = 16.88$ and 6.89) than were subjects who expected to justify their judgments before exposure to the evidence ($M_s = 12.78$ and 9.33 , $F(1, 91) = 19.25$, $p < .00001$). This effect, moreover, cannot be simply dismissed as a response-bias artifact—a reflection of the more cautious (closer to the midpoint) ratings of accountable subjects. Two lines of evidence are particularly revealing in this regard.

First, accountability per se was not sufficient to eliminate subjects' willingness to draw dispositional conclusions about a low-choice essay writer. Subjects who learned of being accountable after exposure to the stimulus evidence made attitudinal attributions to the low-choice essay writer that were almost as strong ($M_s = 15.88$ and 7.75) as those made by the unaccountable subjects ($M_s = 16.88$ and 6.89). The timing of the accountability manipulation was a critical factor. Accountability produced less extreme attitude attributions to the essay writer under low-choice conditions only when subjects learned of being accountable before exposure to the stimulus evidence. Although a borderline significant essay-direction effect still emerged under low-choice conditions for pre-exposure-accountability subjects ($M_s = 12.78$ and 9.33 , $F(1, 91) = 2.68$, $p < .10$), the effect was significantly smaller than those observed under low-choice conditions for no-accountability ($M_s = 16.88$ and 6.89) and post-exposure-accountability ($M_s = 15.88$ and 7.75) subjects (planned interaction contrast ($F(1, 91) = 9.54$, $p < .001$).

Second, pre-exposure accountability substantially reduced the effects of essay direction in the low-choice conditions, but had virtually no influence on the magnitude of the essay-direction effect in the high-choice conditions. Pre-exposure-accountability subjects were no less likely to make strong attitudinal attributions to the essay writer under high-choice conditions ($M_s = 16.0$ and 5.89) than were no-accountability subjects ($M_s = 17.89$ and

4.33) and postexposure accountability subjects ($M_s = 16.78$ and 5.00) (planned interaction contrast ($F(1, 91) = 1.36$, ns.).

Additional Dependent Variables

The four attitude scales designed to measure attitudes toward quota systems in other spheres of life (employment, lay-offs, promotion, professional schools) were highly inter-correlated (mean $r = .91$). We combined these scores into a composite index which was, in turn, highly correlated with our major dependent variable: attitude toward quota systems in college admission ($r(101) = .93$). Not surprisingly, a $2 \times 2 \times 3$ analysis of variance of the composite index revealed the same pattern of findings as the analysis of variance reported for attitude toward quota systems in college admissions.

Analysis of variance of subjects' confidence in their attributions revealed a number of effects. Subjects were, in general, less confident when they were told that the essay writer had written the essay under low-choice than under high-choice conditions ($M_s = 11.02$ and 14.69 , $F(1, 91) = 43.26$, $p < .0001$). A significant choice \times accountability interaction also emerged ($F(2, 91) = 3.16$, $p < .05$). Subjects who learned of being accountable prior to exposure to the evidence were more affected by the choice manipulation ($M_s = 8.04$ and 14.90) than subjects who did not feel accountable ($M_s = 12.56$ and 15.16) and subjects who learned of being accountable only after exposure to the evidence ($M_s = 12.40$ and 14.01).

Analysis of variance of subjects' perceptions of the essay writer's freedom to choose a policy stand revealed, as expected, a powerful choice effect. The high-choice writer was seen as having been significantly more free ($M = 10.41$) than the low-choice writer ($M = 15.44$, $F(1, 91) = 49.03$, $p < .0001$). An unexpected effect also emerged. Subjects perceived the anti-affirmative-action writer ($M = 14.26$) as less free than the pro-affirmative-action writer ($M = 11.67$, $F(1, 91) = 12.64$). This result is consistent with the finding that students saw the "typical undergraduate position" on campus as somewhat supportive of affirmative action ($M = 9.12$). Presumably, more coercion is

needed to "force" a person to advocate a position with which that person disagrees.

Finally, we explored possible effects that our experimental treatments might have had on subjects' perceptions of their own and of the typical undergraduate's attitude toward minority quota systems in college admissions. No reliable effects emerged from either of these analyses. Also, no consistent patterns were found in the (between-cell or within-cell) correlations between own attitude and attitude attributed to essay writer or between estimates of typical undergraduate attitude and attitude attributed to essay writer (cf. Jones, 1979; Jones et al., 1979).

DISCUSSION

The overattribution effect—the willingness of subjects to make strong inferences about the attitudes of low-choice essay writers—was replicated, but only under certain conditions. The effect occurred only when subjects did not expect to justify their impressions of the essay writer or learned of the need to justify their impressions only after exposure to the relevant behavioral and contextual information. Subjects who expected to justify their impressions before exposure to the relevant evidence were "immune" to the overattribution effect.

In general, the data suggest that pre-exposure accountability eliminated the overattribution effect by affecting how subjects encoded and processed incoming information, not by merely affecting the types of judgments subjects were willing to express. Two specific findings support this interpretation. First, accountability had no impact on the attitude attributions made to high-choice essay writers; it led to less extreme attributions only under low-choice conditions. The selectivity of these effects indicates that accountability did not simply make subjects more cautious about making dispositional attributions. Accountability encouraged subjects to be selectively cautious: to be discriminating and complex information processors who recognized that behavior sometimes is, and sometimes is not, diagnostic of underlying dispositions.

Second, and most important, accountability *per se* was not sufficient to eliminate the overattribution effect. Subjects who realized that they had to justify their views only after exposure to the behavioral evidence were as susceptible to the overattribution effect as subjects who felt completely unaccountable. Only pre-exposure-accountability subjects were resistant to the effect. This latter finding is especially interesting in view of Tetlock's (1983b) results. Tetlock (1983b) found that accountability was effective in eliminating primacy ef-

fects in assessments of a defendant's guilt when subjects learned of being accountable prior to exposure to the case evidence, but not when subjects learned of being accountable after exposure to the evidence. Taken together, these findings point to two conclusions:

(a) accountability motivates subjects to process social information in more analytic and complex ways, and that can check judgmental biases such as belief perseverance and the fundamental attribution error;

(b) the timing of accountability is a crucial variable in that accountability appears much more effective in preventing than in reversing judgmental biases. Once subjects have assimilated or integrated information into their impression of a person or event, they have a hard time discounting that information. Accountability seems to have substantial impact on the initial impression-formation process (accountability can place subjects in a vigilant mental set that "protects" them from certain common inferential biases), but to have relatively little impact once that initial processing has occurred (accountability cannot "undo" biased processing at an earlier analytic stage).

The differential effectiveness of the pre- and post-exposure-accountability manipulations sheds some interesting light on such judgmental biases as belief perseverance and the fundamental attribution error. Such biases may be the product of highly overlearned or automatic processing sequences that, once enacted, people have a very hard time retrieving or reporting (cf. Bargh, 1984). To use Nisbett and Wilson's (1977) distinction, people may have access only to the products of such processes, not to the processes themselves. Accountability can be effective in "de-biasing" social judgment only when people learn of being accountable before automatic processing routines are activated. Pre-exposure-accountability subjects have an opportunity to adopt a more self-conscious, controlled approach to how they will analyze the social information available to them. This self-consciousness is, by definition, disruptive of automatic processing. Post-exposure-accountability subjects—with access only to the products of automatic processing—are in no position to "correct" the inferences they have already drawn. They also have little motivation to do so. The products of automatic processing provide plausible answers to the questions to which post-exposure-accountability subjects are asked to respond.

It is also instructive to compare the results of the current study with other attempts to explore the impact of motivation or cognitive set on the overattribution effect. Consider, for instance, work on the effects of "cognitive tun-

ing" (Zajonc, 1960) on impression formation. Subjects in transmission sets (who expect to communicate the impressions they form of an interpersonal event) tend to make more extreme dispositional attributions than subjects in no-set control conditions (e.g., Harvey et al., 1976; Harkins et al., 1977). By contrast, the accountability manipulation used here led subjects to make less extreme dispositional attributions—at least under low-choice conditions. This discrepancy may be less puzzling, however, than it first appears. Important differences exist between transmission set and accountability manipulations. Expecting to communicate one's impressions of an event places a premium on one's ability to generate a succinct and readily comprehensible description of that event; expecting to justify one's impressions of an event places a premium on one's ability not only to communicate one's opinions, but also to defend those opinions against possible counterarguments. The former type of manipulation encourages people to suppress ambiguity and to present events in sharp, polarized terms. The latter type of manipulation encourages people to express complex, many-sided opinions that are difficult to refute and easy to justify.

The present results also differ from those reported by Quattrone (1982). Quattrone attempted to motivate subjects to be thoughtful by offering monetary incentives for accurate predictions and by informing subjects that good judgment on the task was associated with valuable interpersonal skills. This manipulation completely failed to influence the magnitude of the overattribution effect. Although it is obviously risky to draw strong conclusions from a single, null-hypothesis result, Quattrone's results do raise the interesting question of why accountability was effective in the current study in attenuating the overattribution effect. The key may lie not so much in the power of accountability to stimulate thought per se, but in the types of thought that accountability stimulates. Accountability may reduce or eliminate judgmental biases because it prompts subjects to adopt a reflective attitude toward their own initial reactions to events. Accountable subjects may engage in pre-emptive self-criticism in which they try to anticipate objections and counterarguments that imaginary skeptics might raise (cf. Mead, 1934; Tetlock, 1983a). In this view, accountability does more than simply motivate cognitive work; it triggers complex cognitive coping responses that sensitize people to potential shortcomings in the views they hold and to potential strengths of alternative ways of looking at events.

Finally, we should consider the broader

theoretical implications of the study. The results add to the now substantial evidence indicating that accountability can under certain conditions promote complex or vigilant information processing. These results are encouraging to advocates of contingency models of human judgment which emphasize the capacity of people to shift information-processing strategies in response to task or situational requirements (e.g., Jenkins, 1981; Payne, 1982; Showers and Cantor, 1985; Tetlock, 1985; Tetlock and McGuire, in press). The rules or strategies people employ in making judgments appear to depend (among other things) on whether they expect to justify the positions they take. Further work is needed to explore the processes that mediate the effects of accountability as well as the impact of accountability on other cognitive biases (e.g., overconfidence in the correctness of one's judgment, illusory correlation). Accountability may represent a simple, but surprisingly effective, social check on many judgmental shortcomings documented in the current literature. Existing theories of attributional inference ignore the social context of information processing at their peril.

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