An Alternative Metaphor in the Study of Judgment and Choice: People as Politicians

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Abstract. Researchers who study judgment and choice have assumed it is useful to think of people as either intuitive psychologists or economists who strive either to understand the people around them or to maximize subjective expected utility. This article proposes that it is also useful to think of people as intuitive politicians who strive to please the diverse constituencies to whom they feel accountable. The article specifies two hard-core assumptions of a political research program on judgment and choice and a testable middle-range theory (the social contingency model). The article also explores both the descriptive and normative implications of shifting from the psychologist and economist metaphors to the politician metaphor. At a descriptive level, the political research program highlights a variety of social and institutional variables that moderate (either attenuate or exacerbate) response tendencies that have been labelled as errors or biases. At a normative level, the political research program highlights an alternative set of criteria for labelling effects as errors or biases. Response tendencies that look flawed from one metaphorical perspective often look quite reasonable from another. The politician metaphor suggests more normatively generous ways of viewing several effects, including the fundamental attribution error, the dilution effect, ambiguity aversion, the attraction effect and the status quo effect.

Our initial assumptions about human nature profoundly influence how we design, execute and interpret research in the psychological and social sciences. Lakatos's (1970) concept of the research program offers a useful framework for thinking about the influence of these underlying assumptions. He argues that underlying all research programs are 'hard-core' assumptions that alternatively inspire and inhibit theoretical creativity. Hard-core assumptions inspire creativity by highlighting phenomena that otherwise would have been neglected and by pointing to ways of articulating middle-range theories that are sufficiently specific and falsifiable to guide
actual empirical work. Lakatos calls this function the ‘positive heuristic’ of a research program. Hard-core assumptions can also inhibit creativity by limiting the range of research questions that investigators pose and by encouraging a rigid, defensive attitude toward research findings that challenge hard-core assumptions. Lakatos calls this function the negative heuristic of a research program. The negative heuristic directs researchers to develop a protective belt of auxiliary hypotheses that shelters the hard-core from refutation.

Although the research literatures on judgment and choice are voluminous and in some cases forbiddingly technical, these literatures have not outgrown their roots in hard-core assumptions. Implicitly or explicitly, researchers still make assumptions about the underlying goals or functions of judgment and choice. One influential hard-core metaphor has been that of the social perceivers as intuitive psychologists whose primary goal is to achieve cognitive mastery of the causal structure of the environment (Kelley, 1967). This metaphor contains the seeds of an ambitious research agenda as well as a set of normative criteria for evaluating judgment and choice. The key question becomes: What kind of intuitive psychologist is the average perceiver? How good a job does the intuitive psychologist do in generating hypotheses about the causes of behavior, testing hypotheses dispassionately against the evidence, and abandoning favorite hypotheses in the face of contradictory evidence? The psychologist metaphor should not, of course, be confused with the theories derived from it. It is possible to spin out many testable middle-range theories of our competence as intuitive psychologists. The most optimistic middle-range theorists depict people who rely on lay versions of formal logical and statistical procedures to arrive at conclusions (Kelley, 1967). The most pessimistic theories depict people as ‘cognitive misers’ who are prone to a variety of judgmental failings (Nisbett & Ross, 1980). There are also middle-range theories near the midpoint of the optimism–pessimism continuum—theories that emphasize people’s capacity to shift from simpler to more complex cognitive strategies in response to situational demands (Fiske & Taylor, 1991; Kruglanski, 1990; Petty & Cacioppo, 1986).

Another metaphor has profoundly shaped the development of the decision-making literature: that of the intuitive economist whose primary goal in life is to maximize subjective expected utility. Once again, the hard-core metaphor highlights an ambitious research agenda as well as a set of normative criteria for evaluating the quality of judgment and choice. The key question becomes: How effective or ineffective are people as intuitive economists? Working from this metaphorical premise, it is again possible to articulate and refine many testable middle-range theories of the intuitive economist—some more optimistic (neoclassical theory is predicated on optimism), and some more pessimistic (Kahneman & Tversky, 1979).

The optimists downplay the frequency and severity of violations of the normative axioms of rational choice theory (sometimes even by reformulating the axioms); the pessimists stress the robustness of the violations, even when people are making high-stakes decisions in competitive market environments.

The preponderance of the current evidence favors a moderately pessimistic assessment of our skills as both intuitive psychologists and economists. As intuitive psychologists, we appear to be too quick to draw strong conclusions about others’ personalities from fragmentary and unrepresentative evidence (Jones, 1979), too slow to revise our hypotheses in response to new evidence (Nisbett & Ross, 1980), too confident in the correctness of our judgments in many settings (Fischhoff, 1982), and too quick to lose faith in genuinely diagnostic evidence when that evidence is embedded among irrelevant or distractor variables (Nisbett, Zuckier, & Lemley, 1981). Our record as intuitive economists is hardly more impressive. We try to avoid the painful value trade-offs that expected utility maximization demands we confront. We give far too much weight to considerations that normative theory says we should ignore. Far from ignoring sunk costs, for example, we often escalate our commitments to failing policies. And we often ignore variables to which normative theories say we should attend. In many situations, people appear as oblivious to opportunity costs as they are attentive to sunk costs.

There is substantial convergence in the theoretical explanations advanced for our shortcomings as intuitive psychologists and economists. People, it is widely agreed, are limited-capacity information processors who rely on inferential shortcuts to help them make sense of an otherwise impossibly complex environment and to make otherwise hopeless difficult decisions. We rely on the availability, representativeness, anchoring and simulation heuristics to make inferences about causality and probability; we rely on noncompensatory choice rules to escape dissonant trade-offs; and we rely upon our preconceptions (‘existing knowledge structures’) in interpreting new evidence. The price of cognitive economy, in this view, is increased susceptibility to error and bias.

The Political Research Program

Although the psychologist and economist metaphors have stimulated important discoveries, both research programs are seriously incomplete.¹ In the pursuit of general laws of thought, the psychologist and economist research programs have largely ignored the social environments in which people make most decisions. Subjects in laboratory studies of cognitive processes rarely feel accountable to others for the positions they take.
They function in a social vacuum (or as close an approximation as can be achieved) in which they do not need to worry about the interpersonal consequences of their conduct. Such issues are simply irrelevant to the explanatory goals of these research programs.

Such issues are absolutely central, however, to the politician research program, which picks up where the cognitive research programs leave off. The starting point for analysis is the information processor—with whatever general cognitive limitations he or she may possess—in a complex social-institutional environment. Whereas the central objective of the cognitive research programs is to identify fundamental laws of thought, the central objective of the political research program is to identify the strategies that people have developed for coping with fundamental features of their everyday social world.

Like the psychologist and economist research programs, the politician program rests on hard-core assumptions. And like the other metaphors, the politician metaphor contains the intellectual seeds of a research agenda. The key questions become as follows. What kind of intuitive politician is the average person? How well do people do in placating the constituencies to whom they feel accountable? And what strategies do people use in coping with accountability demands? This shift in questions posed proves to be profoundly consequential from both a descriptive and a normative perspective. At a descriptive level, the politician metaphor stimulates middle-range theorizing that stimulates experimental work that leads to new insights into the social and political boundary conditions on particular response tendencies. It turns out that many well-replicated effects interact in complex ways with accountability manipulations. Whether people deny trade-offs, jump to conclusions from fragmentary evidence, persist with first impressions despite contradictory evidence, or display overconfidence in their predictions depends critically on whether they expect to justify their views to others, the identity of those others, and when they learn of the need to justify their views.

At a normative level, the politician metaphor highlights an alternative set of criteria for judging effects to be errors or biases. Response tendencies that look like judgmental flaws from one metaphorical perspective frequently look quite prudent from another perspective. In this paper, we note five effects that look like errors within the psychologist or economist research programs but that look quite reasonable within the politician research program. To be sure, it is possible to extend this line of argument too far and to search for a political rationale for every judgmental shortcoming in the literature. One can push Quine's 'principle of charity' to the point of absurdity. Ultimately the reader must judge whether we have struck a reasonable balance among competing metaphorically-grounded conceptions of rationality.

The Hard Core of the Politician Research Program

Given the crucial role that underlying assumptions play in guiding empirical work, these assumptions deserve to be spelled out in detail. The first assumption deals with the nature of the social world in which people make up their minds; the second, with the goals and motives that drive judgment and choice.

Assumption 1: Accountability of Conduct as a Universal Feature of the Natural Decision Environment

In everyday life, people are presumed to be agents of their actions who can be held responsible for what they do. It makes sense to ask people for the reasons underlying their actions because it is assumed that people can monitor and control their conduct in accord with self-generated plans of action (a once heretical idea that is now widely accepted—Bandura, 1977).

The accountability of conduct is a social-cultural adaptation to the problem of how to co-ordinate relationships among self-regulating agents. As such, accountability is a key component of the solution to the original Hobbesian riddle of how society is even possible (cf. Scott & Lyman, 1968). Organized social life cannot exist without regularity. This regularity is provided by shared norms and social practices. Accountability is a critical rule and norm enforcement mechanism—the social psychological link between individual decision-makers and the social systems to which they belong. Expectations of accountability are an implicit or explicit constraint on virtually everyone people do (If I do this, how will others react?). Failure to act in ways for which one can construct acceptable accounts leads to varying degrees of censure, depending on the gravity of the offense and the norms of the society.

Assumption 2: People as Approval-and-Status-Seekers

People seek the approval and respect of those to whom they are accountable for many reasons, including:

1. The motivation to protect and enhance one’s social image or identity. One of the most influential assumptions in social science is that people seek approval and respect as ends-in-themselves. Indeed, Zetterberg (1957, p. 189) has gone so far as to propose that 'the maximization of favorable attitudes from others is the counterpart in sociological theory to the maximization of profit in economic theory'. A warehouse of findings in social psychology attests to the influence of this view of human nature, including work on ingratiating, conformity and strategic attitude shifts (Jones & Wortman, 1973; Tetlock, 1983a, 1983b).
2. The motivation to protect and enhance one's self-image. This assumption has an equally venerable status in psychology (Sherif & Cantril, 1947). From this perspective, people do not seek approval as an end-in-itself, but rather as a means of bolstering their own self-worth. A substantial literature exists on the ego-defense tactics that people use to dissociate themselves from negative outcomes and to associate themselves with positive outcomes (Tetlock & Levi, 1982).

3. The motivation to acquire power and wealth. Social exchange theorists (e.g. Blau, 1964) have emphasized a third motive for seeking approval and respect: the quest for material resources. Researchers in organizational behavior have been most sensitive to this motivational dimension of human nature: people can be fruitfully viewed as rational actors who compete for scarce resources within rule-governed political contests for power (Pfeffer, 1981).

Strategies for Coping with Accountability

To summarize, the politician research program rests on two hard-core assumptions: the first posits that accountability of conduct is a universal problem of social life; the second posits that people seek the approval and respect of those to whom they are accountable. These postulates direct empirical work in radically new directions.

Just as there are middle-range theories that depict people as more or less effective intuitive psychologists and economists, so one can imagine theories that depict people as more or less effective politicians. At one end of the effectiveness continuum would be theories that posit Machiavellian levels of political cunning. People, in this view, are incessant schemers who actively seek out information about the expectations of others, carefully calculate the impact of their decisions, anticipate potential objections and craft accounts to pre-empt these objections (Snyder's high self-monitors). At the other end of the effectiveness continuum would be theories that portray people as hopelessly inept politicians who may try to maintain good relations with important constituencies, but who instead frequently antagonize them. Indeed, it may be reasonable to extrapolate from work within the economist and psychologist traditions that people often are poor politicians. Insofar as people fail on cognitive tasks critical for 'good judgment' defined within a psychological or economic framework, there is a good chance they will also fail on cognitive tasks critical for skillful political maneuvering.

The social contingency model of judgment and choice falls near the midpoint of the effectiveness continuum. The model is an eclectic creation that borrows from a number of theoretical traditions. The model posits, for instance, that the cognitive miser image of the information processor provides a useful first approximation for predicting how people cope with accountability. All other things being equal, people prefer least effort solutions. They adopt positions likely to gain the favor of those to whom they feel accountable. The social contingency model also posits, however, that the solutions to accountability predicaments are not always straightforward. The model predicts that, when people do not know the views of the prospective audience and are not under pressure to justify past actions, accountability will motivate them to abandon their cognitive-miserly ways and to become relatively flexible, and self-critical thinkers. Finally, the model identifies a third coping strategy. When people have irrevocably committed themselves to a course of action, accountability will again motivate cognitive effort. This time, however, the result will be not self-critical thought, but instead rigid, defensive and evaluatively consistent thought. Accountability will prompt people to generate as many reasons as they can why they are right and potential critics wrong.

The Acceptability Heuristic: The Cognitive Miser in Social Context

The simplest strategy for coping with accountability is to make decisions that one is confident others will accept. This coping strategy is compatible with the view of people as cognitively lazy. Often the socially acceptable option is obvious, likely to come to mind quickly, and to be bolstered by supportive arguments readily available in the environment (especially true in group polarization and groupthink situations). The acceptability heuristic allows one to avoid 'unnecessary' cognitive work (analyzing the pros and cons of courses of actions, interpreting contradictory evidence, making trade-offs). All one needs to do is to adopt the salient acceptable option.

People frequently do exactly that. For instance, several experiments have found that negotiators who expect to justify bargaining outcomes to the groups they represent have much more difficulty arriving at mutually beneficial compromise agreements than do negotiators who are not under such pressure ( Pruitt, 1981). The most plausible explanation is that accountability to constituents (who presumably favor tough stands) induces concern for appearing strong by refusing to make concessions. Negotiators respond by employing competitive tactics that, while obstacles to resolving conflicts of interest, are effective in protecting their images in the eyes of constituents.

In our own experimental work, subjects who know the views of the audience and do not feel locked into any prior attitudinal commitment tend to shift their views toward those of the prospective audience (Tetlock, 1983b; Tetlock, Skitka, & Boettger, 1989). Subjects who feel accountable to a liberal audience report substantially more liberal attitudes than do subjects who feel accountable to a conservative audience. Moreover, most subjects do not internalize these attitude shifts. When we content analyze confidential thought protocols, accountability to a known audience effects
neither the number nor the self-rated importance of the liberal and conservative thoughts. When we have assessed attitudes in a follow-up interview, these strategic attitude shifts quickly disappear. Consistent with Cialdini et al. (1981), most people quickly revert back to their original positions.

The acceptability heuristic is not limited to laboratory experiments; it operates in high-level policy-making settings. The political necessity of defending one’s conduct is a key constraint on how policy-makers make choices. Historical case studies of government decisions abound with references to policy-makers assessing possible lines of defense against critics and opponents (Anderson, 1981; Graber, 1976).

In the same spirit, Pfeffer (1981) stresses the importance of justifiability in managerial decision-making. He argues that the primary task of managers is to make what is going on in the organization meaningful to the participants and to develop a consensus around key activities. A critical determinant of managerial success is the ability to convince both internal (within the organization) and external observers that the operations of the organization are consonant with prevailing systemic values.

In overview, the acceptability heuristic complements and flushes out the cognitive miser characterization of the decision-maker. The most salient consideration in many decisions is the justifiability of policy options. The cognitive research program tells us that people use few items of information in making up their minds; the social contingency model tells us that subjective estimates of the reactions of those to whom they are accountable will be prominent among those few items of information considered. The cognitive research program focuses on process (how people think), the social contingency model focuses on content (what people think). Although this may seem a natural division of labor, the distinction is far from airtight. Demands for accountability not only affect what people think, they also affect how people think.

Motivating cognitive misers to be thoughtful. Although the acceptability heuristic is a cognitively economical and socially adaptive strategy, its usefulness is limited to settings in which one can easily discern the expectations of those to whom one is accountable. The question arises: How do people cope with accountability in normatively ambiguous situations in which they do not know what the audience wants and they are not locked into any prior commitments?

Under these conditions, accountability can indeed induce people to abandon their cognitive miserly ways. Predecisional accountability to unknown audiences has been found in numerous studies to motivate vigilant, complex and self-critical thought (for reviews, see McAllister, Mitchell, & Beach, 1979; Tetlock, 1985).

In one series of studies, Tetlock (1983a, 1983b) and Tetlock et al. (1989) hypothesized that when people know the views of those to whom they are accountable they rely on the acceptability heuristic and shift their views toward the anticipated audience. By contrast, when people do not know the views of the prospective audience, they think through the issue much more carefully to defendable position. Accountability to unknown others motivates people to consider arguments on both sides in order to prepare themselves for a wide variety of critical reactions to their views. To test these hypotheses, we asked subjects to report their positions on controversial issues (capital punishment, affirmative action) under one of four conditions: expecting their positions to be confidential or expecting to justify their positions to an individual with liberal, conservative or unknown views. In addition, subjects were asked to report their thoughts (confidentiality always guaranteed) on each issue prior to committing themselves to a position. These thought protocols were then subjected to detailed content-analysis to assess the ‘integrative complexity’ of subjects’ thinking on the issues. (How many aspects of each issue did they distinguish? Did they interpret issues in dichotomous, good–bad terms, or did they recognize arguments of both sides?)

Subjects coped with pressures to justify their opinions in two qualitatively distinct ways: strategically shifting their public positions (thus making the task of justification easier) and thinking about issues in more multidimensional ways (thus preparing themselves for possible arguments that could be raised against their positions). Subjects relied on strategic attitude shifts when accountable to an audience with well-defined liberal or conservative views. Not surprisingly, subjects accountable to a liberal expressed more liberal views whereas subjects accountable to a conservative expressed more conservative views. Accountability to an audience with well-defined views had no impact on the complexity of private thoughts on the policy issues. The reverse pattern of findings emerged among subjects who felt accountable to an individual with unknown views. Here accountability had no impact on the liberalism/conservatism of the public stands taken, but had a pronounced impact on the complexity of private thoughts on the issues. Subjects displayed much more tolerance for cognitive inconsistency (recognizing good features of rejected policies and bad features of accepted ones) and much more recognition of value trade-offs (e.g. the need to deter crime and protect the lives of the innocent, the need to remedy past racial injustices without creating new ones). Subjects accountable to an unknown audience appeared to engage in pre-emptive self-criticism. They attempted to anticipate arguments that critics might raise. This cognitive reaction can be viewed as an adaptive strategy to protect one’s self- and social-image. Expecting to justify one’s views to an unknown audience raised the prospect of failure: the other person might find serious flaws in the positions taken. To reduce the likelihood of such an esteem-threatening and embarrassing event, subjects demonstrated
their awareness of alternative perspectives on the issues. The implicit message was: 'You can see I'm no fool. I may believe this, but I understand the counterarguments.'

The Rationalization Heuristic: The Cognitive Miser on the Defensive

The previous section focused on situations in which the desire for approval and respect motivated integratively complex thought. In all these situations, people had no basis for confidently inferring the policy preferences of those to whom they were accountable, thus reducing the usefulness of the acceptability heuristic. Another critical ingredient was also present. People realized that they had to explain their conduct before they had committed themselves to a course of action. Pre-decisional accountability—combined with normative ambiguity—promoted thoughtful analysis of options.

Other circumstances can trigger very different coping responses. For instance, imagine that people are accountable not for decisions they have yet to make, but for decisions they have already made. Imagine, moreover, that these decisions have led to questionable or undesirable consequences (lower profits, employee dissatisfaction, etc.). Under these conditions, the same motive—the desire for approval and respect—is likely to lead not to a forward-looking rationality, but rather to a backward-looking rationality: a defensive search for ways of rationalizing past conduct. The primary concern of decision-makers will be with portraying earlier actions in the best possible light.

Tetlock et al. (1989) showed how a minor variation in the timing of an accountability manipulation can dramatically influence the coping strategies activated. In this study, subjects reported their thoughts on four controversial issues either before or after they had made a commitment to attitudinal stands. Some subjects believed their stands were private; others believed that they would later be asked to justify their stands to an audience with unknown, liberal, or conservative views. Subjects who felt accountable and reported their thoughts after making attitudinal commitments became much less integratively complex than unaccountable subjects who reported their thoughts after making the attitudinal commitment and than either unaccountable or accountable subjects who reported their thoughts prior to taking a stand. Once accountable subjects had publicly committed themselves, the major function of thought became the generation of as many justifications for those stands as they could. As a result, the integrative complexity of the thoughts reported plunged (subjects were far less likely to see the other point of view), and the number of pro-attitudinal thoughts increased (subjects generated thoughts that were evaluatively consistent with their public attitudinal stands).

There is also considerable evidence that post-decisional accounting goes beyond mere verbal rationalizations (Festinger, 1964; Staw, 1980). In a variety of experimental paradigms (The Dollar Auction, The Waiting Game, Business Simulations) investigators have demonstrated that the need to justify policies that have worked out badly places great pressure on decision-makers to increase their commitments to those failing policies.

Normative Assessments of Coping Strategies

Thus far, we have considered three strategies people use to cope with accountability. We turn now to an explicitly normative issue: to what extent, and under what conditions, do these coping strategies enhance or degrade the quality of judgment and choice?

The Acceptability Heuristic

This strategy has obvious adaptive value for the individual decision-maker. People, quite correctly, view opinion conformity as a reliable means of gaining the approval and respect of others. Although limiting conditions exist (one should not be too sycophantic), we generally evaluate others more positively to the degree their attitudes are similar to our own.

The acceptability heuristic also has adaptive value for groups and organizations. To the degree group members practice this heuristic, it will be easy to reach consensus. And, to the degree group members feel accountable to constituencies who have a good understanding of the issues, decision-makers who take the views of these constituencies into account are likely to do a better job than decision-makers who ignore them. Under such conditions, the acceptability heuristic may check judgmental failacies that decision-makers never would have corrected on their own.

The acceptability heuristic can, of course, also be highly dysfunctional. From the standpoint of maximizing individual career prospects, a decision-maker who relies solely on the acceptability heuristic runs the risk of appearing uncreative, unnecessary or spineless. Decision-making groups that consist solely of practitioners of the acceptability heuristic are likely candidates for groupthink (Janis, 1989). If no-one is willing to voice unpopular doubts, the likelihood of serious miscalculations may increase dramatically. Finally, just as decision-makers can recommend the right solution because they are accountable to a wise audience, they can also recommend the wrong solution because they are accountable to a shortsighted audience. The acceptability heuristic may cause doctors to over-prescribe drugs and tests for their patients (because they expect to be accountable to judges and juries who are prone to certainty-of-hindsight) or it may cause the chief financial officers of corporations to argue against costly long-term modernization programs (because they are accountable to an investment community that focuses on maximizing quarterly returns).
The acceptability heuristic implies that decision-makers can be no better as well as no worse than the constituencies to whom they are accountable.

Several experiments have illustrated the dysfunctional effects of the acceptability heuristic. In a simulation of Food and Drug Administration decisions to admit or ban particular drugs on the US pharmaceuticals market, Tetlock and Boettger (1991a) found that accountable subjects were much more responsive to the level of risk posed by the drug even when the predicted benefits substantially outweighed the predicted risks. We also demonstrated that accountable subjects were much more influenced by the knowledge that the drug either already was or was not on the US market. Accountable subjects became especially risk-averse when considering a drug that had not yet been allowed into the market. They were also more likely to try to escape the decisional dilemma that had been created for them (cf. Janis, 1989, on defensive avoidance). Accountable subjects confronted by close-call cost-benefit decisions were more likely to procrastinate (by deferring the decision until further research had been done, although many people would die in the interim and there was little prospect of more conclusive evidence from the further work) and to buckpass (to refer the decision to another government agency). One can, of course, attach very different normative labels to these effects. From a harsh perspective, accountability encourages political cowardice that results in unnecessary deaths; from a more charitable perspective, accountable subjects were appropriately circumspect about their qualifications to make decisions that would profoundly affect the well-being of others.

In short, simple normative generalizations about the acceptability heuristic fail us. Whether one applauds the results of the heuristic depends critically on whether one approves of the priorities of the relevant audience.

Pre-emptive Self-criticism

Pre-decisional accountability to unknown audiences often motivates people to anticipate objections that others might raise to their views and to incorporate those objections into their own attitudinal position. The result is more flexible and multidimensional patterns of thinking.

Once again, a highly conditional normative assessment is in order. Considerable evidence now indicates that encouraging pre-emptive self-criticism attenuates, sometimes even eliminates, certain judgmental biases (belief perseverance, the fundamental attribution error and overconfidence). Sometimes, however, encouraging complex, self-critical thought leads to judgments that many normative observers decry (the dilution effect, the tendency to pay undue attention to worst case scenarios and the tendency to take weak initial negotiating stands). In short, from one normative perspective, pre-emptive self-criticism represents a laudable movement toward open-mindedness and complexity. From another normative perspective, pre-emptive self-criticism looks like confusion, vacillation and weakness.

The Benefits of Complexity

Inducing pre-emptive self-criticism has proven to be a powerful method of eliminating judgmental biases that other types of incentives appear to have limited effects on. I consider three such examples here: belief perseverance, the fundamental attribution error and overconfidence.

Reducing belief perseverance. The prevailing view of the person within the cognitive research program has been that of a theory-driven thinker who relies heavily on initial impressions in integrating new evidence. Belief perseverance is not, however, an immutable law of human thought. Tetlock (1983b) found that accountability could—under certain conditions—prevent first impressions from dominating final judgments (although it could not reverse the effect once it had occurred). Subjects were presented with arguments from a murder trial: half of the arguments cast doubt on the defendant's guilt and half suggested that the defendant was indeed guilty. Subjects also received the evidence, in one of three orders: an exonerating/incriminating, an incriminating/exonerating and a randomly alternating order of presentation. Unaccountable subjects showed a substantial primacy effect: early evidence had greater impact on subjective probability ratings of guilt than later evidence. Subjects who expected to justify their judgments of the defendant's guilt before viewing the evidence were, however, immune to the primacy effect. Moreover, accountability did not eliminate the primacy effect by merely affecting the types of judgments subjects were willing to express (e.g. by turning people into fence-sitters). Two lines of evidence argued strongly against such a response bias artifact. First, accountability per se was not sufficient to eliminate the primacy effect. Subjects who realized they were accountable only after exposure to the evidence displayed primacy effects comparable in magnitude to those of unaccountable subjects. Only accountability prior to the evidence destroyed the primacy effect. Second, subjects who realized they had to justify their views prior to the evidence recalled more case information than subjects who felt unaccountable or accountable only after exposure to the evidence. A response bias-interpretation cannot explain these effects on memory. Taken as a whole, the data strongly suggest that pre-exposure accountability induced people to become more vigilant information processors who were willing to revise initial impressions in response to changing evidence.
A social check on the fundamental attribution error. An extensive body of work now points to the existence of a systematic bias in person perception: a pervasive tendency among observers to overestimate dispositional causes of behavior and to underestimate situational constraints on behavior (Jones, 1979; Nisbett & Ross, 1980). Indeed Ross (1977) was sufficiently confident in the robustness of the phenomenon to label it the fundamental attribution error.

The most widely accepted explanation for the effect emphasizes people’s reliance on simple heuristics in social perception. Behavior, it is argued, engulfs the ‘perceptual field’. The person and his or her behavior form a natural perceptual-cognitive gestalt. What could be more obvious than the palpable act that without the actor there can be no act? And what could be simpler than to ascribe dispositions to the actor to render the actor–act linkage intelligible (aggressive people behave aggressively, intelligent ones intelligently . . .)? Nisbett and Ross (1980) noted that personality dispositions are generally the most available and representative explanations for behavior. People prefer dispositional explanations because such explanations typically come first to mind, and people rarely consider less obvious situational ones.

The most widely cited evidence for the fundamental attribution error comes from the attitude-attribution paradigm (Jones, 1979) in which subjects are presented with written or spoken statements of opinion that a target person allegedly made under conditions of high or low choice. The task is to infer the ‘true’ attitude of the target person.

Tetlock (1985) conducted an essay attribution experiment that explicitly manipulated whether subjects felt accountable for their attributional judgments and when they learned of being accountable. Subjects were sometimes confronted by an essay that advocated a minority quota system for college admissions and sometimes by an essay that opposed such a system. In addition, subjects sometimes learned that the essay writer did not choose the position advocated (it was a requirement for participating in the experiment) or sometimes learned that the writer had freely chosen to take the position advocated. The final independent variable was accountability. Subjects either did not feel accountable for their causal attributions, learned they were accountable prior to exposure to the evidence on which they would be basing their judgments, or learned of being accountable only after exposure to the evidence.

Several findings stand out. First, the classic overattribution effect was replicated when subjects did not feel accountable for their attributional judgments or when subjects learned of being accountable only after all the evidence. Although these subjects made less confident inferences about the writer’s attitudes in the low choice than in the high choice conditions, they still made quite strong inferences about underlying attitudes in the low choice conditions. Second, subjects who learned of being accountable prior
to the evidence did not ‘overattribute’. When these subjects learned that the writer had not chosen the position, they refrained from drawing strong inferences about the writer’s underlying attitudes from the essay. It is also worth noting that pre-exposure accountability did not make subjects indiscriminately cautious. Pre-exposure accountability subjects drew every bit as extreme inferences about the writer’s underlying attitudes in the high choice condition as did unaccountable or post-exposure accountability subjects.

These results are difficult to reconcile with a response bias interpretation. If accountability merely transformed people into fence-sitters, it should not have mattered when subjects learned of being accountable or whether subjects made inferences about low vs high choice writers. The specificity of the effects on attributional judgments suggests that accountability did not just shift response thresholds; rather, it encouraged people to become more differentiated and circumspect thinkers about the causes of behavior.

Inducing appropriate confidence. People are often excessively confident in the correctness of their factual judgments and predictions (Fischhoff, 1982). Tetlock and Kim (1987) investigated the impact of accountability on cognitive processing in a personality prediction task. They presented the subjects with the responses of actual test takers to 16 items drawn from a widely used personality test and then asked subjects to perform three tasks: (a) to form written impressions of each test taker; (b) to predict how each individual responded to an additional 16 items; and (c) to assign confidence ratings to their predictions.

Three experimental conditions were of special interest: no accountability (subjects learned all responses would be anonymous), pre-exposure accountability (subjects learned of the need to justify their predictions prior to forming impressions of the test takers) and post-exposure accountability (subjects learned of being accountable only after forming impressions and reporting them).

Several effects emerged. First, pre-exposure accountability subjects formed more integratively complex impressions of the test takers. They were more likely to recognize contradictory evidence on the test taker’s standing on personality dimensions (e.g. needs for achievement and affiliation) and to offer multidimensional trait characterizations of the test takers. Pre-exposure accountability subjects were more likely to say things like: ‘This person is friendly and outgoing in some situations, but not in others’, or: ‘This person likes the company of others, but will give priority to his work when push comes to shove.’

Second, pre-exposure accountability subjects made more accurate predictions of the actual responses of the test takers to the remainder of the tests. Few people have such extreme scores on the Affiliation or Achievement scales that one can do a good job predicting their responses to
individual items from undifferentiated trait labels. It helps, in most cases, to be more integratively complex.

Third, pre-exposure accountability subjects reported more realistic levels of confidence than no-accountability and post-exposure accountability subjects. Moreover, this accountability did not merely make people more cautious or socially risk-averse. Three aspects of evidence allowed us to eliminate this interpretation:

1. Post-exposure accountability subjects did not display a reduction in the overconfidence effect. Post-exposure accountability subjects reported confidence ratings that were virtually identical to unaccountable subjects.
2. The confidence ratings of pre-exposure accountability subjects were not just lower, they were also better calibrated.
3. The superior calibration was not achieved at a cost in resolution (another sign that accountability subjects were not just indiscriminately bunching up all of their confidence ratings at the low end of the probability scale).

A final result is worth noting. Analysis of covariance indicated that when we controlled for the effects of pre-exposure accountability on the complexity of the initial impressions subjects formed of the test takers, the improvements in both accuracy and calibration were substantially reduced. Pre-exposure accountability may be an effective debiasing manipulation, at least in part, because it motivates complex, self-critical thought.

**Potential Dysfunctional Effects of Motivating Integrative Complexity**

Motivating integrative complexity and improving judgment and choice are not synonymous. Sometimes encouraging integrative complexity, far from debiasing judgment, may make matters worse. Tetlock and Boettger (1989), for instance, have shown that pre-exposure accountability to an unknown audience motivates integrative complexity, but also increases the magnitude of an effect often viewed as a judgmental bias—the tendency to make increasingly regressive predictions when diagnostic evidence is accompanied by non-diagnostic information (what Nisbett et al., 1981, have called the dilution effect). In one experimental scenario, we asked subjects to predict the grade-point average of target students. Subjects received either only diagnostic evidence (e.g. a student studies 3 or 31 hours per week) or diagnostic evidence plus irrelevant information (e.g. the student is a cheerful person, plays tennis three or four times a month, and has never dated anyone for longer than two months). This information had been carefully selected from pre-testing; pre-test subjects were virtually unanimous that the information was useless. Nonetheless, this ‘useless’ information caused subjects to be less confident in their predictions. Moreover, accountability exacerbated this dilution effect. Accountable subjects tried to be ‘good’ complex thinkers and to integrate both diagnostic and non-diagnostic evidence in making predictions about grade-point average. By motivating integrative complexity, the accountability manipulation sent our subjects off on inferential wild goose chases. One accountable subject concluded that because the student is cheerful he is well-adjusted and likely to be doing well in school; another concluded from the fact the student occasionally plays tennis that he has a high activity level and is likely to be successful. In short, pre-exposure accountability to an unknown audience motivated subjects to be more integratively complex, but it did not make them more discriminating consumers of the information at their disposal.

Another example of the arguably maladaptive effects of integrative complexity comes from the Tetlock and Boettger (1991a) study that examined judgments of the acceptability of a drug on the US pharmaceutical market. As noted earlier, accountable subjects were more responsive to the level of risk posed by the drug, and especially so when they believed the drug had not yet been admitted into the market. Analysis of covariance indicated that subjects who thought in more integratively complex ways were largely responsible for this three-way interaction between the status quo manipulation, the accountability manipulation and the level of risk manipulation. Examination of the thought protocols revealed a preoccupation with worst-case-scenario thinking and explicit concern for what they would say to those who might be injured by their decisions. There is, of course, nothing immoral or irrational about such concerns. It is noteworthy, however, that these subjects were much more tolerant of risk created by a drug that was already on the market (the status quo condition). Removing a drug with a high benefit–cost ratio from the market would antagonize those constituencies that are currently using it. Introducing a drug with an equally positive benefit–cost ratio focuses attention on those constituencies who would be hurt. In short, there are some settings in which accountability pressures that motivate integrative complexity also increase reluctance to make decisions that involve painful trade-offs. The Tetlock and Boettger (1991a) study, for instance, found that accountable subjects (especially in the non-status-quo conditions) were not only more hesitant to accept levels of risk from the new drug, they were more likely to search for ways of passing responsibility for making the decision to others and to defer making the decision until later.

**The Rationalization Heuristic**

Post-decisional accountability often triggers defensive bolstering. The normative costs and benefits of this coping strategy look like mirror images
of those for pre-emptive self-criticism. The danger of defensive bolstering is that one will rigidly persevere with a failing policy in a vain effort to recoup sunk costs. By generating supportive cognitions, decision-makers who practice defensive bolstering blind themselves to changing policy in ways that would better promote their long-term values. Of course, it is not always a good idea to abandon a policy at the first sign of trouble. Decision-makers who practice defensive bolstering are more likely to stick with a fundamentally good policy that has recently run into short-term difficulty. There is a fine line between principled determination 'to stay the course' and stubborn refusal 'to acknowledge the facts'.

Another Look at Normative Issues

From a social contingency perspective, each of the three major coping responses to accountability is appropriate under some circumstances and inappropriate under others. An Aristotelian golden mean is lurking here. One should be sensitive to the views of important constituencies, but avoid appearing so chameleon that one loses their trust and confidence. One should be self-critical, but not to the point of paralysis. And one should stick by one's principles but not to the point of dogmatism and self-righteousness.

In discussing the normative pros and cons of different coping strategies, I have implicitly accepted the characterization of certain effects as errors or biases within the cognitive research programs. The social contingency model of judgment and choice reminds us, however, that response tendencies that look like errors and biases given one set of functionalist assumptions often look prudent given another set of functionalist assumptions. Before labelling an effect an error or bias, one should consider: (a) the interpersonal and political goals that people are trying to achieve by making judgments of a particular type; (b) whether cognitive strategies that serve people well in everyday life lead them seriously astray in laboratory experiments on judgment and choice.

(a) The Fundamental Attribution Error

The tendency to overestimate dispositional causes and to underestimate situational ones looks like an error within the intuitive psychologist framework. If we assume, however, that people are intuitive politicians who have incentives to hold others strictly accountable for their conduct, the same judgment policy takes on a different normative complexion. One way of pressuring other people to behave is by indicating to them that one has a low tolerance for justifications or excuses and that one will treat their behavior as automatically diagnostic of underlying intentions.

In one study discussed earlier, Tetlock (1985) found that accountable subjects were more resistant to the overattribution effect. The interpretation was that accountability had improved the quality of attributional judgment by motivating subjects to be more discriminating and thoughtful information processors. The social contingency model warns us, however, not to assume that: (a) accountability will always have such an effect; (b) that the preference for dispositional explanations is always best viewed as an error. In some situations, accountability may make people into more thoughtful, intuitive scientists; in other situations, accountability may transform people into more punitive, intuitive lawyers or politicians. Much hinges on exactly how subjects define the experimental situation (is the experimenter interested in my ability to make subtle causal distinctions, or in the moral and political soundness of my judgment?). A testable hypothesis is that when subjects feel their moral judgment is of primary interest, accountability demands will motivate them to hold people more rigorously responsible for their actions. As Axelrod (1984) notes, people are not only expected to act in accord with prevailing norms, they are also expected to censure those who violate norms (a norm to enforce norms or a metanorm). Insofar as accountable subjects feel that their moral mettle is being tested (their willingness to apply metanorms), they may be more motivated to hold others responsible and to reject situational explanations or excuses.

(b) The Dilution Effect

From a purely cognitive standpoint there is little justification for reducing one's confidence in the diagnosticky of a cue when that cue is accompanied by irrelevant information. From the perspective of the social contingency model, however, this erosion of confidence may be fully justified. Far from representing bias, the dilution effect may be a rational response to the interpersonal and institutional demands on individual perceivers. The presentation of information in dilution experiments can be likened to a conversation between the researcher and the subject—an interaction in which subjects assume, following Grice's (1975) 'axioms of conversation', that the information presented is indeed relevant to the task at hand. This assumption is hardly unreasonable. In most contexts, people refrain from making statements that are utterly irrelevant to the interaction. Given that, the experimenters deemed it appropriate to include an assortment of evidence in their communications to subjects, one would expect a good Bayesian to attach a high prior probability to the evidence being relevant to the task. The dilution effect—and its magnification in the accountability conditions—may be as much an expression of demand characteristics (the experimenter expects me to use all the evidence in preparation for the conversation) as of judgmental heuristics.
In a recent experiment, we disentangled these diverging normative interpretations of the dilution effect by presenting information in ways that were more or less likely to evoke a conversational mental set (Tetlock & Boettger, 1991b). The experiment replicated the work of Tetlock and Boettger (1989), with the addition of one major independent variable: whether subjects were told that the information had been screened for relevance (explicit priming of conversational axioms), whether subjects had been told that all of the information was not relevant for this prediction task (explicit de-activation of conversational axioms) and whether subjects were given no explicit guidance one way or the other with respect to the relevance of the information. This experiment revealed that accountability magnified the dilution effect, as before, in the no-priming condition and, to a lesser extent, in the explicit-priming-of-conversational-axioms condition. Accountability did not, however, magnify the dilution effect when subjects were warned that all the information was not relevant. These results suggest that accountability motivated subjects to integrate the information at their disposal only when there was a reasonable presumption of relevance. When that presumption was removed, accountable subjects became somewhat more resistant to the dilution effect than unaccountable subjects.

(c) Ambiguity Aversion

Ellsberg (1961) notes that one or more axioms of utility theory are violated whenever choices are made on the basis of avoidance of ambiguity. Ambiguity about probabilities, even when expressed as second-order probabilities, are formally irrelevant in decision analysis but play a large role in everyday decision-making. There is considerable evidence, however, that avoidance of ambiguity affects public policy. Insurers are unwilling to cover chemical and waste-processing firms because it is so difficult to specify the distribution of anticipated claims (Kunreuther, 1987). Einhorn and Hogarth (1981) have also suggested that ambiguity aversion explains why some technologies are feared more than their first-order probabilities of failure or accident warrant.

One interpretation is that dislike of ambiguity is simply a pure preference, like the preference for a ‘fair’ coin over a coin biased in some unknown way. Another interpretation is suggested by Loomes and Sugden (1982), who argue that people sacrifice transitivity to accommodate feelings of regret. In this scheme, people avoid ambiguity because they anticipate the deep regret they would feel if a worst-case scenario materialized (if they bet on a coin that was severely biased against them).

It should not be surprising from a social contingency model perspective that accountability exacerbates ambiguity avoidance (as Curley, Yates, & Abrams, 1986, found). Accountable decision-makers are more likely to anticipate how difficult it would be to justify choosing an option that led to a worst-case outcome. One would stand accused of recklessness.

(d) The Attraction Effect

Imagine a choice between two major alternatives, A and B. A is superior to B on one major dimension of evaluation (say, less expensive) whereas B is superior to A on the other major dimension of evaluation (say, quality). One confronts a trade-off, a difficult one because the options have been carefully preselected to have approximately equal offsetting strengths and weaknesses. People find the choice much easier, however, if one introduces (a logically irrelevant) third option, C, that is inferior in both cost and quality to B, but inferior in only one respect compared to A. B becomes more attractive vis-à-vis A by virtue of being the dominant option with respect to C.

From a rigorous rational actor perspective, people who fall prey to the attraction effect have committed an error (violation of Luce’s principle of regularity). Why should a difficult trade-off become easier by adding an inferior third option? From a social contingency perspective, subjects’ behavior makes a good deal of sense. As Simonson (1989) notes, it is now easier to justify selecting B than A. B ‘dominates’ C whereas A does not. Simonson shows that holding subjects accountable for their choices magnifies the attraction effect. A kind of social rationality is at work. People seem to reason ‘I’m less likely to be blamed if I choose the option that dominates at least one option than if I choose the option that requires trade-offs no matter what comparison I make. In justifying B, I can point to its unequivocal superiority over C.’ From social experience in both giving and receiving accounts, people have learned that one is less likely to be blamed when one can offer a clear-cut, sensible-sounding set of reasons for one’s conduct.

(e) The Status Quo Effect

Standard models of rational choice posit that individuals select one of a known set of alternative choices with certain outcomes. People possess preferences that satisfy the basic choice axioms—that is, they have a transitive ranking of these alternatives. Rational choice simply means that they select their most preferred alternative in this ranking. If we know the decision-maker’s ranking, we can predict his/her choice infallibly. For instance, an individual’s choice should not be affected by removing or adding an irrelevant (i.e. not top ranked) alternative. Conversely, when we observe his/her actual choice, we know it was his/her top ranked alternative.

A fundamental property of the rational choice model, under certainty or uncertainty, is that only preference-relevant features of the alternative should influence the individual’s decision (Luce, 1977). Thus, neither the
order in which the alternatives are presented nor any arbitrary labels they may carry should affect the individual's choice. Of course, in real world decision-problems the alternatives often come with influential labels. Indeed one alternative inevitably carries the label status quo—that is, doing nothing or maintaining one's current or previous decision is almost always a possibility.

In a series of experimental studies, Samuelson and Zeckhauser (1987) have shown that, faced with new options, decision-makers often stick disproportionately with the status quo alternative. This preference for the status quo is not, of course, automatic evidence of irrationality. Decision-makers might prefer the status quo in order to avoid transaction costs or uncertainty. Samuelson and Zeckhauser, however, eliminated these alternative explanations experimentally.

From the perspective of the social contingency model, the preference for the status quo has a number of additional 'rational' sources. Decision-makers may prefer to persist with current policy in order to justify the sacrifices that they have already made on behalf of that policy. Such retrospective rationality is highly consistent with the defensive bolstering strategy of coping with anticipated accountability demands. Another factor contributing to commitment to the status quo is regret avoidance. Occasionally people find themselves in the unpleasant position of regretting the consequences of previous decisions. These 'lessons of experience' teach people to avoid, if possible, regrettable consequences. Indeed, there is substantial evidence that regret avoidance influences decision-making. For instance, people tend to avoid decisions in which they could appear after the fact to have made the wrong choice, even if in advance the decision appeared correct given the information available at the time (see earlier discussion of ambiguity aversion). And, as Kahneman and Tversky (1982) argue in their discussion of the simulation heuristic, people feel greater regret for bad outcomes that are the result of new actions than for similar outcomes resulting from inaction. Avoidance of decision regret is therefore one additional cause of status quo bias. It favors adherence to status quo norms or routine behavior at the expense of innovation, and it reinforces the inclination to conform to social norms.

This reasoning suggests that, if anything, accountability demands will magnify rather than attenuate the effect of status quo. This prediction is consistent with what Tetlock and Boettger (1991a) found in their simulation of decisions to admit or reject particular drugs from the US pharmaceutical market.

Concluding Thoughts

The major theme of this paper can be stated simply: experimental research on judgment and decision-making has adopted a misleadingly narrow focus on its subject-matter. It needs to be broadened to take into consideration the impact of social and institutional context. Enormous room exists for an expansion of theoretical and empirical work on the role of contextual variables—in particular, accountability—in shaping both what and how people think. People are in a fundamental sense politicians who depend on the good will of the constituencies to whom they are accountable. The strategies people develop for coping with this ubiquitous problem of social existence merit much more systematic attention than has thus far been accorded them.

Notes

1. One could argue that the psychologist and economist metaphors are best thought of as special cases of the more general metaphor of the person as statistician (Gerd Gigerenzer, personal correspondence). Psychologists draw on methods of statistical inference such as analysis of variance and Bayes' theorem to set normative standards for good judgment; economists draw on probability theory and differential calculus to characterize rational choice. This common denominator helps to explain the emphasis in both metaphorical frameworks on formal models, the interest in deviations from the predictions of formal models, and the relative neglect of both content and context.

References


ACKNOWLEDGEMENTS. I very much appreciate the thoughtful comments on this article by Gerd Gigerenzer, Klaus Fiedler and Randall Peterson.

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