

CHAPTER 7

Conclusions

Everyone confronts many risks, in various forms, every day. In many instances, risks go unrecognized or are underestimated. For instance, it is notoriously difficult to get people to change their eating, exercise, and smoking patterns in order to lower their risk of stroke or heart attack in the future. In other instances, objectively trivial risks are blown out of proportion. Even disasters that are large in terms of financial impact, such as the 1989 and 1993 California earthquakes, can result in a comparatively small loss of life, relative to, say, the number of motor vehicle deaths in the same state during those years. Finally, in some cases, people do not have enough experience with particular risks to know whether or not they are acceptable.

This section relates some of the findings in the case studies to larger issues of risk assessment in the political world. It also strives to integrate some seemingly peripheral concerns, such as emotion, into the analysis of risk propensity. Discussion begins with a contrast between experts' notions of appropriate risk assessment and laypersons' characterizations of acceptable risk. The role of emotion in decision making is addressed next. Evaluations of the relative merits and limitations of the application of prospect theory to international relations are offered last.

Risk Assessment versus Risk Perception

What distinguishes risks people fear and act upon from those they ignore? Why do the experts' judgments differ in their assessments of risk from the concerned layperson's perception of what constitutes an acceptable level of risk? The source of much of the discrepancy in risk analysis between experts and laypersons involves this very difference between risk assessment and risk perception.¹ Most experts, in assessing risk, use rational models to define "acceptable risk." In practical terms, invoking this procedure means that risk is typically analyzed in terms of the number of impairments or deaths caused per year in a certain geographical area, like the United States, or within a specific population group, like women, for a given product or event. As with most rational models, more advanced

models adjust for assessments that involve the probability and severity of the risk. In some circumstances, assessments can include estimates of damage to future generations, such as when radiation exposure is assumed to increase the incidence of birth defects in subsequent generations. However, in many cases, probability and severity are unknown in advance. Even with sincere effort and adequate planning, it is often impossible to determine what measures need to be taken to reduce the death rate from various natural hazards and man-made disasters.

So how do laypersons understand risk?² Risk assessment offers a rational basis upon which a decision maker can evaluate options; risk perception provides an identical service from a differing, more nonrational, perspective. Most people think about risk in ways that are much more in line with risk perception than with formal risk assessment models.

In their seminal work on risk perception, Paul Slovic and his colleagues take issue with the rational models of risk perception advocated by analysts such as Chauncey Starr.³ Starr uses a model quite similar to the decision analyst's notion of "revealed preferences" that often argues that what actually comes into being represents an acceptable level risk almost by virtue of its very existence. In other words, Starr and, later, his followers contend that society has reached an "essentially optimum" balance between risks and benefits. Slovic and his colleagues have demonstrated, through a psychometric approach that they label "expressed preferences," that Starr's characterization is misguided.⁴

Slovic and his colleagues argue that the public's perception of risk is both predictable and quantifiable, however drastically it may depart from rational "expert" assessments.⁵ Two aspects of their argument are crucial here. First, there are some risks that people systematically overestimate and others that people systematically underestimate.⁶ The curve for these values is similar to the decision weight curve (fig. 2) found in prospect theory.

Second, researchers have found that risk perception can be thought of as involving a two-factor space (see fig. 3).⁷ Slovic has come to call these factors the "unknown" factor and the "dread" factor.⁸ In essence, the unknown factor means that people tend to be more affected by, and thus overestimate, risks that are seen to be unobservable and novel, and whose effects are relatively unknown to the victim or to science. An example of this kind of threat might be exposure to invisible chemicals in drinking water.

The second factor, dread, refers to perceived lack of control, potential for catastrophic consequences, certainty of fatal effects, and inequitable distribution of risks and benefits. In more concrete terms, people are more willing to accept risks that they see as voluntary, controllable, and natural.

For example, risks associated with sporting injuries are rarely viewed as ominous. On the other hand, risks that are man-made or result from novel technologies are often greatly feared. In this category, biological and chemical weapons are considered highly unacceptable, even though the people who have *died* as a result of their use in the last several decades appear to be mostly restricted to Kurdish settlers in Iraq.⁹

The dread factor appears to be more important in people's assessment of risk than the unknown factor. Slovic posits that one of the reasons for this is that many of these kinds of threats are seen to possess "signal value."¹⁰ In other words, accidents such as Three Mile Island and Chernobyl, the explosion at the chemical plant in Bhopal, India, and the toxic contamination at Love Canal serve as indicators to people of how much worse a particular hazard might become if it is not controlled immediately. In other words, some crises are somehow recognized as harbingers of worse consequences to follow.¹¹ Such beacon events are acknowledged to presciently indicate the catastrophic nature of particular risks and to disclose new information about the risks inherent in a particular event or technology. Other crises, particularly those resulting from familiar sources, are seen to represent nothing more than themselves. So, for example, a car accident tells others nothing new about the nature of automobile technology and is not assumed to increase the likelihood of other accidents occurring.¹² However, an accident involving genetic mutation could easily be interpreted as a dangerous warning of the potential for this technology to precipitate even more disastrous accidents in the future. Because genetic engineering is not well understood and its consequences not well calibrated, any information about its harmful consequences appears to portend poorly for the ability of scientists to monitor safety concerns adequately in the future.

But what do risk assessment and perception of technological and environmental hazards have to do with political realities? Aside from the obvious response that many political decisions involve these very issues, the more important point is that concern about the "unknown" or "dread" aspects of any risk are not irrelevant to a decision maker, even if they are considered nonrational to a decision analyst. Risks that involve unknown outcomes present a challenge to values, and it is often the case that values are not limited to the number of lives lost per year. Even more significantly to politicians, such values can also help to win or lose an election. Other values, which include fear of the unknown and dread catastrophes, can play important and salient roles in political decisions. These factors are neither irrelevant nor irrational to consider in approaching the value trade-offs inherent in most political decision-making processes.

In some sense, the understanding of risk in terms of dread and

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unknown factors can be seen as kinds of heuristic biases, ways people automatically come to think about and evaluate the risks they encounter. As with the tendencies demonstrated in prospect theory, policymakers are not immune to these heuristic tendencies by virtue of their role. Indeed, decision makers are more likely to approach risk problems like laypersons than like decision analysts. And it is not clear that embodying this more psychologically holistic approach is inappropriate; many of the empirically important factors, which decision analysts regard as irrational to consider, have important political consequences. It is not clear, after all, that scientists and formal models have a monopoly on determining the appropriate hierarchy of societal values.¹³ In fact, decision makers are not irrational to consider factors that are considered irrelevant in risk assessment by classical modelers; such dread or unknown factors can make or break political careers.

This model of expressed preferences in risk perception provides additional empirical grounding for the descriptive accuracy of prospect theory. It is yet another example of how the situation, the very nature and character of the risk itself, is more definitive in the perception of risk than the perceiver's "personality." Scholars and decision makers alike often argue that risk-taking is most closely correlated with the personality of the individual leader. While it may be easy to fall prey to the fundamental attribution error in analyzing risk propensity, prospect theory cautions against such a tendency. Prospect theory demonstrates that the situation is more important to understanding the psychological mechanisms behind risk-taking than the personality of a particular individual. In the language of prospect theory, the situation is characterized as domain and categorized in terms of gains and losses. Dread and unknown factors related to the nature of the risk itself exacerbate these situational forces. In the end, these situational forces are neither "irrational" nor "irrelevant"; they are merely empirical realities that run counter to the normative models.

The Role of Affect

Another influence on judgment and decision making that often runs contrary to normative modeling is emotion.¹⁴ Prospect theory stresses the central role of cognitive effects on judgment and decision making. As a result, the role of emotion or motivation has received relatively less attention in the treatment of risk propensity here. The unfortunate result of this emphasis is that people can emerge sounding rather like machines; the image conjured up is one of a rather flawed computer circumnavigating decisional pitfalls on two legs. Obviously, that is an inaccurate portrayal of the complexity of human consciousness.

From a psychological perspective, cognitive strategies have evolved and are maintained because they are, by and large, very useful and efficient processes for understanding, interpreting, and integrating the vast amount of information people encounter every day.¹⁵ Heuristic cognitive strategies are largely effective in helping individuals to assimilate information quickly, make accurate judgments easily, and generally allow people to make effective sense of the world. Problems arise because these strategies encourage systematic perceptual biases, under certain circumstances, such as when uncertainty or risk are centrally involved in decision making.

In spite of this disclaimer, some people may feel that the processes that have been described in this book do not adequately reflect their subjective experience of decision making. Individuals may agree that situational factors affect the sort of options considered, and that thinking about things plays an important role in decision making, but many people still believe that a lot of important decisions in their lives are greatly affected by how they *feel* about particular things. Few Americans in the twentieth century will admit that they chose their mate, for example, on the basis of ostensibly superficial considerations such as wealth, physical attractiveness, or status, although these forces may have a larger impact than most people would be willing to acknowledge openly. Rather, people prefer to believe that they married because of “love” or they chose their career path because of “interest.” These emotive notions invoke a more psychodynamic kind of psychology that focuses, if not primarily on sex and aggression, at least on “hot” motivations like greed, anger, fear, shame, guilt, or lust, rather than on “cold” cognition like probability assessments, utility calculations, attributional biases, and risk propensity.

Indeed, it is as misleading to assume that emotion has no role in cognition as it is to assume that cognition has no role in emotion. Although early motivational theorists were eclipsed in their influence by the rise of social cognition research,¹⁶ the lay understanding of psychology still places greater emphasis on feelings than on thoughts. Recently, a more interactionist approach has begun to hold sway, and researchers are willing to acknowledge the mutual impact of affect and cognition on human behavior.¹⁷ Nonetheless, most lay people still do not respond to the cognitive perspective as enthusiastically as researchers might advocate; Freud’s perspective still holds the most sway on the Oprah Winfrey show.

As a result, the role of affect in judgment and decision making does deserve some further direct discussion. People often believe that they are greatly affected by their emotional states and can readily give many examples of being influenced by something as seemingly trivial as a passing mood. Others are willing to validate the definitive impact of affective disturbances. For example, people who are less efficient following the death

of a family member are usually given leeway by others who understand the effect of emotions on performance. On the other hand, many people believe that they should not be affected by their emotional state and try to be as “rational” as possible in their approach to decision making. When someone takes this approach, problems arise when part of the outcome should involve a consideration of how a person might *feel* about something. For example, when a person makes a job choice based solely on the characteristics of the job itself, he may be very unhappy when he takes a job in a place where he hates living; in this case, the person’s failure to take feelings into account can produce a much worse outcome than if he took his emotions seriously in reaching his decision. In this way, lack of consideration for emotion in decision making typically fails for cognitive as well as emotional reasons.

Moreover, as prospect theory indicated, loss aversion may lead people to evaluate improperly the risks they confront because they do not want to pay the price of loss from an emotional standpoint. For example, a politician does not want to be publicly humiliated or chastised or to lose the next election for personal as well as professional political reasons. Such a politician may thus be motivated to believe that the risks he takes to recoup losses are not as severe as the political consequences of appearing to passively accept the loss. In this situation, such a leader may not realize that if the risk fails, he will be worse off than if he had quietly absorbed the loss from the beginning because he wants to believe that the gamble will succeed. In this way, such a leader may create a self-fulfilling prophecy and bring about the reality he fears the most: public humiliation, chastisement, and defeat.

Throughout this process, unmotivated and motivated biases can *combine* with political forces to make it easier for leaders to perceive inaccurately the magnitude or scope of the risks they confront, or undertake, in an attempt to save political face. Motivated biases involve responses that are based on strong emotions, such as fear, greed, anger, hate, or revenge. Unmotivated biases include the situational effects that have been delineated throughout this study. More specifically, high risks may not be fully appreciated not only because of the cognitive properties of loss aversion, but because of motivated biases, such as revenge, as well.

Political pressures can engender motivated biases on the part of decision makers just as easily as cognitive factors can reinforce political predispositions. It is easy to imagine a leader becoming so angry at a particular enemy for getting the better of him in some public way that subsequent risks will be taken to “win” out of sheer desire for revenge. In this way, influence becomes overdetermined as political, cognitive, and motivational

factors each reinforce one other. Political exigencies can raise emotional issues that work to strengthen the direction and impact of underlying cognitive tendencies. People are often impassioned about politics and become committed to the process, seduced by the power, and frightened of the fall. Forceful emotional elements, including greed, hatred, and revenge, combine to produce deep loyalties and even deeper antagonisms that only serve to fuel the flame of political ambition in the direction of greatest self-promotion.

This motivational phenomenon is particularly important in political situations that involve heated debates about emotional issues, abortion providing a paradigmatic domestic example. Politicians need to be responsive to their constituencies in order to stay in office, and yet they are also affected by their own attitudes and feelings on the particular issue. In addition, politicians are often constrained by the thoughts and feelings of colleagues whose support they need on other issues that they may feel strongly about. Indeed, in highly polarized issues, it may be impossible to please everyone by seeking the middle ground, because certain issues are inevitably categorized in zero-sum terms.¹⁸ In these situations, framing can become nine-tenths of the battle—as the linguistic distinction between “anti-abortion” and “pro-life” nicely demonstrates.

Moreover, evidence strongly suggests that people are often unaware of what really influences their behavior.¹⁹ In this regard, the cognitive arguments presented here are particularly important for two reasons. First, it can be shown experimentally that people are affected by various factors that they are not even aware exist. Just because people are not conscious of the operation of these cognitive processes does not mean that such biases do not have an enormous impact on their behavior. The psychophysical analogy is instructive in this regard. People are not aware of the perceptual processes that translate various stimuli into sight and sound, and yet there is irrefutable evidence for the systematic operation of these mechanisms. No one questions the reality or value of what they see or hear on the basis of their failure to understand the nature of the neuropsychophysiological processes involved in translating various stimuli into sight and sound. Yet people remain prone to question the psychological reality of unconscious processes that might affect conscious thought for these very reasons.

The importance of bringing these psychological effects to the fore in decision making is analogous to recognizing the fundamental attribution error. Prospect theory attempts to rectify the underestimation of situational variables in risk propensity. By calling explicit attention to these cognitive biases in judgment and decision making, it becomes possible to understand the way certain forces can affect behavior, even when people

remain unaware of the systematic operation of both cognitive and affective biases. And, as with substance abuse, awareness of the process constitutes the first step toward intervention.

Second, these findings are important because they run contrary to normative admonitions. When informed, most people agree that trivial forces, such as framing effects, should not have an impact on the substance of their decisions, or at least not as big an impact as they can be demonstrated to possess. Many people will be prompted to reevaluate their judgments and decisions once they have been made aware of the ways in which their behavior violates normative axioms. Nonetheless, most people will not spontaneously seek out the potential sources of perceptual error prior to decision making unless it is explicitly brought to their attention. Perhaps even more significantly, if people are not continually reminded, they tend to relapse into their natural, powerful, biased cognitive tendencies in judgment and decision making.

Cognitive biases are not the only influences that matter. But people are more likely to be aware of emotional factors than cognitive processing ones. Cognitive biases are not stressed because they matter *more* than emotional ones; they are emphasized because people do not pay them the attention they merit. People often overestimate the role of affect while underestimating the role of these more cognitive and situational factors in their attributions concerning their own judgments and decisions. In many cases, people are not accurate in their intuitions about the overriding importance of affect; as with probability, sometimes the importance of emotion is overstated, and at other times its significance is underestimated.²⁰ While affect is certainly more than a cognitive illusion, emotions do not always function the way people *feel* like they do.

Affect is *not* irrelevant in judgment or decision making, although it is often the case that people think emotion is not a good *enough* reason on which to base serious decisions. Yet affect matters in two major ways. First, people act solely on the basis of their emotions, however irrationally based, in many instances. Such emotion-based action is the basis for much self-destructive behavior; smoking and drinking, which might feel good but are not good for you, are classic examples. Second, affect becomes important when people *believe* that it makes a difference in their behavior. These beliefs can then have an impact on choice; the person may act *as though* affect makes a difference, and so affect ends up making a difference. However, from a social cognition position, affect is greatly overestimated in explaining and justifying judgment and decision making, if not in other areas of life, just as cognitive processes tend to be greatly underestimated.

Affect clearly plays *some* role in judgment and decision making. Tversky and Johnson, for example, found to their surprise that inducing nega-

tive affect increased subject's estimates of the frequency of other undesirable events. This was true regardless of the similarity of the estimated events to the target event.²¹ This finding is consistent with work on mood and memory that has demonstrated that mood-congruent memories are more accessible than mood-incongruent ones.²²

Mood can influence the cognitive estimates that subsequently effect judgment and the choices upon which they are based. Even in the areas where people realize that their emotions affect them, they are not quite aware of the precise way in which their mood actually does influence their judgments and choices. Memory processes may provide the key to understanding the overlap between affect and cognition in judgment and decision making.

Evaluation of Prospect Theory²³

From the perspective of prospect theory, human decision-making processes are best conceptualized in terms of reason-based choice, as opposed to norm-based choice, which rational theories of decision making advocate.²⁴ In reason-based choice, there need not be any numerical value associated with a particular choice decision, but there are often qualitative reasons that are invoked both to construct and to justify a choice or resolution. Indeed, these reason-based choices may be more appropriate for examination of uncontrollable events, such as those that take place in the real world, outside of the confines of a controlled laboratory experiment. While reason-based analyses may lack the parsimony of more formal modeling, they have many redeeming qualities. First, reason-based choice is closer to the way people think about their own decision-making processes than are the normative mathematical models advocated by rational choice theorists. Second, reason-based choice permits a full examination of framing effects in the context of each choice set. This is worthwhile because analysis of framing effects allows for the nature of conflict and value trade-offs to be made explicit in the decision-making process. Finally, reason-based choice allows for a consideration of nonnormative factors, such as affect, which can be quite powerful but are often ignored or purposely excluded from more norm-based analyses.

Relative Strengths

The relative strengths of a prospect theory approach can be summarized in four basic categories. These include the dynamic nature of the theory; its empirical basis and descriptive accuracy; its situationalist emphasis; and its explanatory power.

Dynamic Nature

One of the most useful aspects of prospect theory is the dynamic nature of its predictions. Many theories of international relations, including classic realist and neorealist approaches, are static in nature. Prospect theory provides explanations and predictions that allow for change over time in response to changes in the external environment.

In prospect theory, the independent variable has to do with the context in which a decision maker is acting, usually constructed in terms of relative gains or losses. Prospect theory predicts that when a decision maker is choosing in the context of gains, she is most likely to be cautious in her choices; on the other hand, if she is acting in the face of recent losses, she is likely to be more risk seeking in her decisions. Thus, prospect theory provides a ready framework on which to examine substantive changes in decision making that take place over time. Many policy gambles in the political arena, especially in the area of bargaining and negotiation, take place over time. During this evolution, many forces in the environment may precipitate changes in a decision maker's risk propensity. Prospect theory offers one interpretation as to why such changes take place.

Additionally, prospect theory offers provocative insights into phenomena that are dynamic processes by their very nature. For instance, escalation of commitment in the face of sunk costs is not consistent or explicable from a standard normative perspective. Nonetheless, the reality of the incorporation of sunk costs into future decisions holds up robustly to the mirror of introspection. Prospect theory demonstrates that people who are averse to losses, particularly if they feel responsible for having made the decisions that led to them, are more likely to attempt to recoup sunk costs through further escalation than those who are not confronted with a similar previous loss.²⁵

Moreover, prospect theory illuminates other aspects of time perspective in decision making as well. It helps explain why particular decisions might be spaced the way they are, or announced in a certain order, in order to buffer bad news with more positive information to soften the blow. Couching negative information in a positive context is a particularly salient consideration in reporting emotionally negative information. Certainly intuition supports that body counts are much more tolerable in the context of a victory celebration than a military rout.

Empirical Support

Most rational theories of decision making start with a set of assumptions that remain essentially unchallenged. These assumptions are necessary in

order to derive the normative predications and prescriptions that these rational theories offer. However, when these assumptions are called into question, the descriptive accuracy of the relevant theory is fundamentally challenged.

Prospect theory represents exactly that kind of fundamental challenge to normative theories of decision making. Because prospect theory is based on empirical studies, it does not require these kinds of implicit and unexamined assumptions in order to support its predictions. Empirical and descriptive support for prospect theory has been extensive, robust, and consistent. Prospect theory makes no normative claims. Unlike rational choice theories, it does not claim that people *should* behave according to the tenets of the theory, merely that they *do* behave that way. This is in contrast to rational theories that argue that people *should* behave in line with their prescriptions, but that have been unable to marshal any systematically clear evidence that people actually *do* act in such ways.

In the descriptive realm, prospect theory is fundamentally incompatible with normative theories that conflate descriptive and normative aspects. Yet standard theories of rational choice have been remarkably slow to respond to the challenges inherent in prospect theory concerning descriptive accuracy and empirical support. The strongest responses argue that if the predictions of rational models are accurate, it does not matter whether the assumptions are true. While that may be an adequate response if an analyst's interest is limited to prediction, it is woefully inadequate if the quest is for an understanding or explanation of the process of decision making itself.

As Tversky argues:

The rational theory of choice seems to provide a better account of people's normative intuition than of their actual behavior . . . the descriptive analysis of choice is concerned with principles that govern actual decisions; the normative analysis of choice is concerned with human intuitions about what constitutes rational behavior.²⁶

It is not possible to argue that normative approaches to decision making are descriptively accurate. Normative theories, while often elegant in form and rigorous in prediction, are not able to accurately capture the process of decision making itself with any reliability or richness.

Situationalism

The fundamental attribution error argues that people tend to have a basic bias in their attributional style and inferences concerning the assessment of

causality in the world around them.²⁷ This bias suggests that people tend to overestimate the impact of personality while simultaneously underestimating the impact of the situation upon behavior, including choice.

Most theories of international relations avoid this bias by excluding people from the analysis, as for example Waltz does when he argues that the distribution of power in the international environment determines outcome regardless of the leaders involved.²⁸ However, literature that has focused on the decision-making level of analysis has not been so fortunate in escaping the pervasive nature of this bias in its analysis. A great deal of political psychology literature has suffered from the tendency to overestimate the impact of a given leader on a particular outcome while simultaneously underattributing cause to situational factors. Many psychohistories, as exemplified by Nathan Leites's infamous work on the Bolsheviks, are rife with explanations for decisions based on the personality or psychopathology of a particular person or culture that is assumed to have a pervasive impact on all members of a particular group.²⁹ There is, of course, great difficulty in pursuing this line of research well because of the exhaustive amount of information about the personality of a leader and the information available to him at the time of a particular decision that is required in order to conduct an accurate analysis. This problem is often compounded by the pervasive influence of retrospective bias in memoirs and oral histories as well.

Prospect theory avoids this bias not by eliminating the leader from consideration but by reintroducing the impact of the situation, in the form of domain, on the decision maker's choices. An analyst need not know so much about the idiosyncrasies of a particular leader in order to be able to predict and explain behavior on the basis of the situation confronting that leader. But an analyst need not eliminate the leader either, since a decision maker's framing of options, especially when evoking powerfully vivid, salient, concrete historical analogies, can be critical if the analyst is interested in examining framing for explanatory purposes. In this way, the power and impact of the situation is reintroduced into political psychology without losing the individual altogether or falling prey to an overestimation of the effect of his "personality" on outcome.

Explanation versus Prediction

Prospect theory by its nature as a psychological theory of decision making is necessarily approximate and incomplete at times. However, prospect theory's virtue lies in its superior explanatory power. This can be useful in two specific instances.

First, prospect theory may be able to address issues and problems that standard theories of rational choice cannot explain adequately. For example, the following situations are often difficult to explain, much less justify, from a normative perspective: when sunk costs are overweighted in evaluating escalation decisions; when the same alternatives produce different choices when framed in different ways; when choice depends on the other options available. Rational choice theories cannot explain such behavior because they argue that such behavior can not be justified in decision-making contexts. Normative theories rely on implicit assumptions in order to derive their predictions, and yet outcomes are often notoriously inconsistent with the premises upon which rational theories rest. Prospect theory offers a useful tool for analysis and explanation of behavior that can neither be predicted nor explained adequately from a more rational perspective.

Second, it may well be that prospect theory is better suited for certain types of questions and problems while rational choice models provide a better fit for different kinds of issues and concerns. For example, studies that use a large number of cases in order to make quantitative arguments about the probability of certain outcomes may indeed be best suited for an analysis conducted according to formal quantitative models. However, if an analyst wants to trace the process of a particular decision, or is interested in investigating a particular case in depth, prospect theory offers richer and more flexible tools to proceed with such analysis. Some problems are not addressed by classical rational models because they do not easily “fit” into large number studies; these kinds of investigations may be precisely the cases that are particularly amenable to examination through the lens of prospect theory, but remain particularly inexplicable from a more normative perspective. And these difficult or anomalous cases may, in fact, be among those that are most interesting and significant in furthering understanding of a particularly important or uncommon phenomenon such as escalation in the face of sunk costs or launching preemptive war.

Relative Weaknesses

Obviously prospect theory has its disadvantages in application to cases in international relations. Several of these obstacles are particularly troublesome in attempting to examine political phenomena from a psychological perspective in general and through the lens of prospect theory in particular. Only some of these limitations will be addressed here, but these include the difficulty of operationalizing the variables; the fact that political and

psychological imperatives often converge in determining causation; the relative lack of parsimony; and the difficulty of undertaking a contextual application of psychological findings to political phenomena.

Operationalization

Operationalization is a particularly difficult aspect of applying prospect theory to cases in international relations. The challenges take place in the construction of both independent and dependent variables; operationalization of domain and risk propensity present unique methodological quandaries.

Even a relatively simple assessment of domain as gains or losses can be more complex than it appears at first pass. Gains or losses may be straightforward but can be substantively altered by the placement of the reference point. Usually the reference point is theoretically placed at the status quo, but it can be theoretically justified at the level of a decision maker's aspirations or expectations about a particular outcome as readily as it can be based on the losses that most recently occurred and have yet to be assimilated. There are indications that individuals adjust, accommodate and renormalize to gains faster than to losses.³⁰

Nonetheless, it is possible to make a fairly good argument based on relatively straightforward indicators, especially if the situation is extreme. Documents that can be particularly helpful in this regard include public opinion polls, general economic indicators such as GNP, inflation and unemployment figures, as well as political indicators such the number of congressional overrides. Regardless, this can be a difficult variable to solidify. The evidence will likely be different from case to case, and the choice of indicators must in any event be justified theoretically.

Second, the operationalization of risk propensity is even more taxing to consolidate. Risk propensity, whether acceptant or averse, can be assessed in a number of ways. An analyst can make such a judgment of propensity relative to the other options available at the time of the choice, but these comparisons are notably affected by framing issues that are notoriously difficult to predict in advance, much less control for in retrospect.³¹ An analyst may decide to make an assessment of risk based on more economic models. In this way, for example, one might assess the risk propensity of various options based on each one's variance around a particular mean outcome, as was done in this study. In this view, choices that offer wider variances are considered to be more risky. It is critical that these variables do not become tautological in their operationalization or definition. However, it may still be very difficult to analyze domain and

risk propensity even once an analyst does decide which methods to employ in measuring them.

The problem of accurate measurement is further compounded by the fact that most leaders do not talk about their decisions in terms of the probabilities and utilities of various outcomes; outcomes may be too uncertain for such terminology to be helpful to a political leader trying to make a decision or justify a policy choice. Indeed, one of the reasons normative models are so psychologically unappealing is because they do not accurately reflect the intuitions that most people have about how they go about making decisions and which factors they take into account in reaching a decision. Thus, in a real-world context, where explanations and justifications and options can not be fully controlled, much less accurately manipulated as in a laboratory setting, it is not at all surprising that leaders do not offer their assessments of domain and risk propensity in quantitative forms.

Overdetermination

As Jervis has pointed out, it is often the case the political and psychological realities can converge to favor the same decision.³² In such cases, it may be superfluous to consider the impact of psychological factors on political outcomes.

In real-world politics, unlike the laboratory, decisions have real consequences, some negative and others positive. These consequences may be all that is needed to justify or explain a particular action or decision; psychological factors may be simply redundant. If political and psychological factors reinforce each other, one need not resort to psychological factors in order to explain the reasons for political decision making. For example, if a leader knows that a loss in a war is likely to be punished at election time, he may be particularly averse to allowing the possibility of that outcome, either by avoiding war from the outset or by pursuing victory at all costs if it occurs. In such a case, it is not irrational for a leader to demonstrate reluctance to incur political loss through mechanisms that might be methodologically indiscriminate from loss aversion. An analyst need only invoke political realities in order to explain behavior that, while not necessarily rational from a cost-benefit standpoint, is nonetheless totally rational from the perspective of personal political survival.

Thus the cases that will be most helpful in determining the accuracy and viability of using prospect theory over and above reasonable political imperatives are those where political behavior deviates from what would be expected solely from the standpoint of political expediency or rational

calculation. Cases where the political and psychological predictions converge are less likely to support the utility of prospect theory for analyzing political decision making independent of political motives. In such cases, it may be sufficient to attribute the outcome of the decision process to political motives and constraints, and an analyst need not invoke prospect theory, seeing it as superfluous explanation.

Lack of Parsimony

Prospect theory, as a psychological theory, is inherently prone to approximate and incomplete predictions. The only honest way to respond to this criticism is to admit it. However, this does not make prospect theory irrelevant. Prospect theory can be used to explain cases where outcomes diverge from what would be expected from a rational choice perspective. Prospect theory can also be used to illuminate process variables in depth, as well as questions and problems that are more concerned with explanation than prediction. As previously noted, prospect theory may be better suited for case studies in this respect, while formal rational models may be more useful for large number quantitative studies of probabilistic variables and outcomes.

Difficulty of Contextual Application

There is no question that the most difficult problem with any application of psychological theory to political phenomena is the question of translation from the laboratory to the real world. The challenges of contextual application are myriad. And here the reference is *not* to the fact that the original experimental studies were paper and pencil tests conducted on college sophomores. Paper and pencil is not an inaccurate model for how many people go about making decisions. And college sophomores are no less intelligent or educated, on average, than the majority of the population. However, extrapolating a phenomenon from a controlled environment with carefully designed and manipulated variables to a real-world event or decision with infinite complexities and uncontrollable factors can appear a seemingly insurmountable task at times.

The central question is whether an analyst can apply any kind of psychological theory to a complex environment where significant variables cannot be carefully controlled or measured as they would be in a laboratory setting. In the context of international relations, the answer at first pass must be no. The environment is too complex, the variance too uncontrolled, and too many alternative hypotheses must be manipulated as pos-

sible explanations before an analyst can assume that her theories account for even a part of the variance observed. However, generalization of laboratory phenomena to the real world is not the entire basis upon which to evaluate the utility and viability of a psychological theory to an analysis of political decision-making processes.

Leaders are people. That implies that they share the basic structure of human cognitive functioning, including the biases delineated earlier in terms of judgmental heuristics and prospect theory. With regard to international relations, then, the central question concerning utility must be whether *any* of the components of the theory or its implications are helpful in shedding light on the phenomena of decision making in general or on risk propensity in particular. This is especially important if the theory can do so in areas where other theories have proved fruitless in their explanatory or predictive attempts. Here the answer is not nearly so clear-cut or discouraging. In fact, studies like this are designed precisely to test the extent to which prospect theory *can* shed light on complicated phenomena in the real world.

The true contribution of psychological theories, such as prospect theory, to international relations is that they offer new explanatory concepts and theoretical tools that can be enormously useful in thinking through existing political phenomena in a novel, creative, or insightful way. Once this perspective on judging viability is offered as one way to appropriately evaluate the worth of prospect theory for an understanding of international relations, the theoretical picture becomes much brighter.

What are the elements of psychological theory in general and prospect theory in particular that help generate more intelligent discussion of the relevant phenomena? There are several that emerge as the most promising candidates. First, framing effects of all sorts appear to be a key consideration in both the manipulation and explanation of certain seemingly nonnormative or suboptimal choices. Second, loss aversion appears to be a hugely robust and widely generalizable phenomenon in a variety of areas, of which politics is only one. And finally, in cases where the data neither fit nor refute any particularly theoretical perspective from the standpoint of prediction, psychological variables may offer key insights into a richer explanation of how such outcomes came to occur.

Conclusion

Psychological theories do not exist for the sake of political analysis alone any more than economic ones do. Yet both economic and psychological theories can be put to good use in political analysis when they offer

unique perspectives and insights that are not available from existing viewpoints.

In many ways, prospect theory does not so much simplify political analysis as complicate it. The theory raises a broad array of psychological considerations that may be particularly relevant to certain kinds of analysis or explanations of the political decision-making process.

The relative advantages of introducing these factors into an analysis of political decision-making processes are several. Prospect theory offers a dynamic, empirically sound, situationalist explanation for decision making under conditions of risk. It offers insights into important phenomena, such as framing effects and loss aversion, which would not be obviously approachable from the standpoint of rational choice or other theories of decision making. Moreover, these insights appear to account for many of the very phenomena that remain inexplicable from other theoretical perspectives.

The relative disadvantages of prospect theory are notable, however. It is a difficult theory to operationalize in historical and political context. It often offers predictions that are superfluous to more elegant or parsimonious rational or political imperatives. And the contextual application of laboratory findings is challenging at best.

However, there are two important concerns that are brought to light by this examination of the relative strengths and weaknesses of applying prospect theory to international relations. One is the importance of reasons in decision making, as opposed to the imperatives offered by normative considerations. The second is the contextual importance of decision making that emphasizes that people are not necessarily value maximizers with preexisting preferences, but rather problem solvers whose preferences are constructed as part of creative solutions to the challenges and problems that individuals face.

When most normal people think about how they make important decisions, they often invoke a variant on Benjamin Franklin's suggestion of writing down a list of pros and cons, weighing each consideration by its importance, and choosing the side with the greater total.³³ While formal models may mimic that procedure in design, they certainly do not resemble it in process. Reasons matter to people; when individuals make decisions, they want to have a sense that they know why they make a particular choice and often need to feel justified in their choices, especially if they think they will have to explain it to others in the future, as politicians often must. Rational models of choice do not offer such succor to decision makers; instead, formal models offer utilities and values and calculations that only vaguely resemble the subjective sense of decision making that the

individual feels like he confronts. In this regard, reason-based choice offers a superior model for analyzing decisions in context, taking full account of the various historical and political forces that tend to offer reasons and justifications for decisions, not merely calculations and predictions. Formal models may be more appropriate for economic and even experimental psychological analyses, but they are probably poorly suited for nonexperimental data such as that which most commonly occurs in real-world political contexts.

Second, hard decisions are hard precisely because they involve some element of conflict over goals, values, and options. Easy decisions do not force such challenges. But hard decisions require careful consideration precisely because of the trade-offs involved in giving up some of one thing in order to have more of another or some similar dynamic. If preferences and values are constructed more than elicited, as strongly indicated by the empirical evidence, then people make choices in the relative absence of clear preexisting preferences, values, or goals. In such a context, where perhaps many decisions involving trade-offs must be made simultaneously, it is inevitable that decision making becomes quite complex and confusing very quickly. Under such conditions, Krantz may be correct when he argues that:

the normative assumption that individuals *should* maximize *some* quantity may be wrong. Perhaps . . . there exists nothing to be maximized . . . [B]ecause the calculations are impossible in principle: People do and should act as *problem solvers*, not *maximizers*, because they have many different and incommensurable . . . goals to achieve.³⁴

As problem solvers, and not value maximizers, individuals can claim more freedom to be as complex and unpredictable in theory as they unquestionably are in reality. And if theory seeks to understand and explain human behavior as opposed to simply predicting it, in political decision making or elsewhere, then psychological considerations are as intricate a part of that phenomenon as anything can be.

In the end, it is not even clear that people normatively *should* make decisions on the basis of rationality. As with risk assessment and perception, where societal values encourage appropriate appreciation of dread and unknown factors in a way admonished by rational calculations, rationality itself may not provide the most valuable measure of optimal choice behavior; after all, deifying rationality as the criterion upon which to evaluate the utility of behavior represents nothing more than a choice among values. In some alternative universe, it is possible to imagine that

the place now held by rationality might easily be replaced by “emotionality,” for example. However “irrational,” the cognitive strategies that have evolved over time have done so for a reason; namely, they are largely effective and efficient strategies for understanding and responding to the world. It is decidedly unclear whether, normatively, anyone would be better off if capable of surrendering these strategies in service of achieving more “rationality.”