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Power Politics and the Balance of Risk: Hypotheses on Great Power Intervention in the Periphery

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Great powers frequently initiate risky diplomatic and military interventions in the periphery—regions that do not directly threaten the security of a great power's homeland. Such risky interventions are driven by leaders' aversion to losses in their state's relative power, international status, or prestige. These leaders often persist in such courses of action even when they incur mounting political, economic, and military costs. More surprisingly, they undertake risky strategies toward other great powers in an effort to continue these failing interventions. Hypotheses concerning such interventions are derived from the prospect theory and defensive realist literatures.

KEY WORDS: balance-of-risk theory, escalation of commitment, loss aversion, expectation levels, prospect theory, defensive realism, periphery

During the Cold War, the United States and the Soviet Union expended vast amounts of blood and treasure defending client states in the Third World. The Johnson administration, for example, found itself mired in an inconclusive and arguably self-defeating air and ground war in defense of South Vietnam. President Lyndon Johnson, Secretary of Defense Robert McNamara, Secretary of State Dean Rusk, and other officials repeatedly escalated air and ground operations against the Viet Cong guerillas and North Vietnam, despite credible information that such strategies had a low probability of achieving the war's stated objective: an independent and non-communist South Vietnam. Rather than extricate itself from the vastly expensive and increasingly unpopular war, the Nixon administration extended the conflict into Cambodia and Laos in order to win concessions from North Vietnam (Kaiser, 2000, pp. 412–442). In December 1979, Soviet General Secretary Leonid Brezhnev, Defense Minister Dmitri Ustinov, KGB chairman Yuri Andropov, and other Politburo members had hoped to use minimal

force to quickly secure a stable and Soviet-aligned government in Afghanistan. Instead, the Soviet leadership soon found itself in a prolonged guerilla war against Afghan rebels, which exacerbated tensions with the United States, fueled the Reagan defense buildup in the 1980s, and ultimately contributed to the Soviet Union's collapse (Bennett, 1999, pp. 202–209; Litwak, 1992, pp. 72–78).

Great power diplomatic and military intervention in peripheral regions is not unique to the Cold War. Other examples abound. The Sicilian expedition during the Peloponnesian War, Great Britain's involvement in the 1841 Afghan War and the 1898–1902 South African (or Boer) War, France's wars in Indochina and Algeria in the 1950s, and Japan's pursuit of economic autarky through empire in the 1930s are all cases where great powers became entrapped in vastly expensive and arguably self-defeating interventions in the periphery.

This article addresses two questions. First, why do great powers initiate risky diplomatic or military commitments in the periphery? Second, why do great powers persist in peripheral conflicts despite the diminishing prospects of victory and increasing political, military, and economic costs? I argue that senior officials' aversion to perceived losses—in terms of their state's relative power, international status, or prestige—drives great power intervention in peripheral regions. Officials initiate risky diplomatic and/or military intervention strategies to avoid perceived losses. When faced with perceived losses, they tend to select more risk-acceptant intervention strategies. Leaders then persevere and even escalate failing peripheral interventions to recoup their past losses. Instead of cutting their present losses, they continue to invest blood and treasure in losing ventures in peripheral regions (Jervis, 1994, p. 26). These tendencies produce policies that are driven by concerns about power and security but are at odds with many variants of political realism. Drawing upon the defensive realist literature in international relations and the prospect theory literature in psychology, I construct a theory of foreign policy that I call *balance-of-risk theory*.

Great powers' preoccupation with the periphery has relevance for students of diplomatic and military history. Throughout history, the most powerful states in the international system have often become embroiled in strategically inconsequential regions. This topic is relevant to current debates about the national security policy of the United States and the criteria for diplomatic and military intervention.

Beyond policy relevance, I seek to contribute to the scholarly literature in four respects. First, the paper advances the debate between two camps of structural realism: *offensive realism* and *defensive realism* (Brown, Coté, Lynn-Jones, & Miller, 1999; Frankel, 1996; Glaser, 1996; Jervis, 1999; Mearsheimer, 1994/95, 2001; Taliaferro, 2000/01). Both camps see international politics as inherently conflictual, and both assume that international outcomes will broadly match the relative distribution of material power among states. They disagree primarily over whether the international system always generates intense security competition and therefore compels states to maximize relative power or maximize security.

Consequently, they also disagree over the types of calculations that senior leaders make and the conditions under which those leaders will pursue hard-line or accommodative strategies. Offensive realists have found empirical support for their core proposition: Increased relative power and international opportunity cause states to expand their interests abroad (Labs, 1997; Lieber, 2000; Mearsheimer, 2001; Zakaria, 1998). This article responds to the offensive realist challenge by framing defensive realist hypotheses about great power foreign policy. Although these hypotheses pertain to great powers' military and diplomatic intervention in the periphery, the broader theory that I develop should provide insights about other areas of great power foreign policy as well as the foreign policy behavior of less powerful states.

Second, my analysis provides a firmer intellectual foundation for defensive realism. Defensive realism proceeds from the assumption that the international system does not always generate intense competition and war among states. Only under certain conditions will the international system provide incentives for aggressive foreign policies. Examples of such structural incentives include increases in the level of international threat (a composite of aggregate power, offensive military capabilities, geographic proximity, and perceived aggressive intentions); rapid shifts in relative power; situations where states can exploit the resources of conquered territory; shifts in the offense-defense balance in favor of offensive weapons and technologies; and multipolarity. Defensive realism assumes that states value what they already possess over what they seek to acquire, for reasons rooted in the anarchic nature of the international system (see Christensen, 1996, 1997; Christensen & Snyder, 1990; Glaser, 1996, 1997; Glaser & Kaufmann, 1998; Jervis, 1978, 1996, 1999; Liberman, 1996; Posen, 1984; Van Evera, 1998a, 1999; Walt, 1987, 1996).

Unfortunately, the defensive realist literature does not fully address the origins of states' so-called status quo bias (Betts, 1999; Schweller, 1996, 1998; Zakaria, 1992, 1998). The origins of this bias may have less to do with the anarchic nature of the international system per se than with how leaders process information about the international environment and their state's position relative to that of other states. I seek to build upon defensive realism's foundation by introducing concepts from prospect theory and the related psychological literature on risk-taking behavior. Although I concur with offensive realism's assumption that central decision-makers make cost-benefit calculations, the specifics of the situation influence those calculations. In other words, states are not preordained toward intense competition by anarchy itself, and objective increases in relative capabilities do not necessarily lead to increased international ambition. Leaders' cost-benefit calculations will never be objectively efficient or predictable on the basis of systemic incentives alone, because the decision-making process will skew toward loss avoidance. The substance of perceived costs involves both material capabilities and intangible elements (such as loss of status or reputation) that may be particular to each state (Goldgeier & Tetlock, 2001).

Third, structural realism has not sufficiently addressed the empirical questions of why and under what conditions great powers will likely become involved in the periphery. Part of this inattention stems from a contradiction between the descriptive and prescriptive aspects of Waltz's systemic balance-of-power theory (i.e., neorealism). The theory holds that bipolar international systems are less prone than multipolar systems to major war (or to a crisis that risks inadvertent escalation to major war). Two strands of his theory are relevant here. The first argues that bipolarity is stable in part because each superpower recognizes that the other is the only serious threat to its survival. Because the addition or defection of weaker allies has little impact on the systemic balance of power, the superpowers can rely on internal balancing—defense spending and arms production—to ensure their survival. Under bipolarity, there are no systemic incentives for the two superpowers to attract smaller allies or to intervene in peripheral regions.

The second strand of Waltz's theory, however, attributes bipolar stability to each superpower's knowledge that because there are only two of them, each must block the other throughout the world. The acquisition of weaker allies, additional territory, and other material resources increases a superpower's ability to engage in internal balancing. Any increase in relative power for one superpower, by definition, is a decrease in relative power of equal magnitude for the other: "In a bipolar world there are no peripheries. With only two powers capable of acting on a world scale, anything that happens anywhere is potentially of concern to both of them. Bipolarity extends the geographic scope of both powers' concerns" (Waltz, 1979, p. 171).

The two strands of Waltz's theory are equally plausible but are mutually contradictory. As Jervis (1996) observed, "here Waltz faces a problem that is generic to realism. In arguing that the international environment compels certain lines of behavior, these theories are both descriptive and prescriptive, which means that actions that do not conform embarrass the theory as well as harm the country" (p. 118). If the acquisition of smaller allies and the control of third regions has little impact on the systemic balance of power under bipolarity, and if anarchy (i.e., the absence of a universal sovereign or worldwide government) compels weaker states to balance against stronger ones across different international systems, then what explains the United States and Soviet Union's propensity for costly military interventions in the Third World? Waltz ignored the descriptive strand of his argument that sees superpower intervention as stabilizing and systemically driven, and instead focused on the prescriptive strand—namely the folly of expending blood and treasure in defense of peripheral states such as South Vietnam. Jervis (1996) wrote, "While it is true that what happens in third countries [could not] directly influence either superpower, one cannot neglect the indirect and delayed effects that indeed constituted the main rationale—or rationalization—for many American interventions, most notably Vietnam: Defeat would lead other dominoes to fall, endangering the American position in Europe as well as in Asia" (p. 121).

Waltz, however, denied the validity of the so-called domino theory and argued that anarchy provides incentives for balancing, not bandwagoning. He characterized the American war in Vietnam and the Soviet invasion of Afghanistan as "overreactions" explained (albeit in a reductionist and ad hoc manner) by domestic politics, miscalculation, and poor leadership (Waltz, 1979, pp. 172–173).

Following Waltz, much of the structural realist literature focuses only on the prescriptive aspects of great power intervention in the periphery: Under what conditions should major states intervene in peripheral areas? How might the defense of the periphery contribute to the security of a great power's core interests? Does the Third World matter (see, e.g., Gholtz, Press, & Sapolsky, 1997; Johnson, 1985/86; MacDonald, 1993/94; Slater, 1993/94; Van Evera, 1990; Walt, 1987, 1989)? Few defensive realist or offensive realist works have explicitly addressed the questions of why and under what conditions great powers intervene, escalate intervention strategies, persist in failing strategies, and ultimately withdraw from peripheral commitments.

Finally, balance-of-risk theory represents a fusion of realism's core assumptions—the centrality of conflict groups under anarchy, the relative distribution of material power, positional conflict for scarce resources, and the utility of force (see Elman, 1996, pp. 18–21; Frankel, 1996, pp. xiv–xvii; Schweller & Wohlforth, 2000, pp. 68–73)—with prospect theory. Prospect theory is a psychological model of decision-making under conditions of risk. It holds that most individuals tend to evaluate choices with respect to an expectation level and pay more attention to losses than to comparable gains. They also tend to overweigh certain outcomes relative to probable ones; value what they already possess over what they seek to acquire; and display risk-acceptant behavior to avoid (or recoup) losses, but risk-averse behavior to secure gains (Kahneman & Tversky, 1979; Quattrone & Tversky, 1988; Tversky & Kahneman, 1981, 1992; Tversky, Slovic, & Kahneman, 1990). In short, the prospect theory literature suggests that many behaviors associated with defensive realism are not the result of anarchy per se.

In the past decade, various political scientists have applied prospect theory hypotheses and concepts to the study of international cooperation, crisis diplomacy, domestic economic reform, war initiation, and extended deterrence. Most empirical applications of prospect theory in the literature seek to demonstrate the theory's utility in explaining political behavior against expected utility theory or generic rational choice models (Berejikian, 1997; Farnham, 1994; Hass, 2001; Levy, 2000; McDermott, 1994, 1998; McInerney, 1994; Stein & Pauly, 1993; Weyland, 1996). However, neither prospect theory nor expected utility is a theory of foreign policy or international relations per se. Instead, they are abstract models of human decision-making that make no substantive predictions about political behavior. One can incorporate prospect theory or utility theory decision models into broader theories. One can then derive testable hypotheses about political behavior by adding substantive assumptions about actors and the environment in which they operate. To date, few works have tried to explicitly incorporate

prospect theory into existing bodies of international relations theory.[1] Before we undertake that task, several terms should be clarified.

Definitions

Great power intervention in the periphery can take several forms—diplomatic support or posturing, covert operations, arms sales, military advisors, or direct use of force. Each of these strategies involves a certain level of risk. I use the term *risk* to characterize situations where any action (or lack of action) may lead to serious losses resulting from a great power's own behavior, adversary or third-party reactions, or other exogenous events. This definition differs from the distinction between risk and uncertainty found in microeconomics (see Boettcher, 1997; Douglas, 1990; March & Shapira, 1992; Shapira, 1995; Vertzberger, 1995, 1998). In economic theory, risk refers only to those situations where the decision-maker has perfect knowledge of all possible outcomes associated with an event and the probabilities of their occurrence. Uncertainty refers to situations where the decision-maker lacks information about possible outcomes and the probability distribution of their occurrence. In short, uncertainty connotes a state of incomplete information (Morrow, 1994, pp. 28–33).

In the study of international politics and foreign policy, the microeconomic distinction between risk and uncertainty becomes untenable for several reasons. First, the classic conditions for risk and uncertainty rarely exist in the real world. Central decision-makers almost never have complete information about the outcomes associated with a foreign policy option and the probabilities of their occurrence. At the same time, the paucity of information about various outcomes is rarely so great as to make subjective probability estimates impossible. Central decision-makers can and do estimate (however imperfectly) the likely consequences of pursuing various strategies. Second, the distinction between risk and uncertainty focuses on outcome probability to the exclusion of outcome value. The value of a particular outcome depends on whether the decision-maker views its occurrence as desirable or undesirable. Obviously some outcomes will have higher values than others. This in turn will affect the decision-maker's preference among various outcomes, and therefore risk propensity. Third, even in situations where decision-makers make subjective probability assessments of particular outcomes, there will always be some level of uncertainty about exogenous phenomena. In short, the definition of risk in foreign policy must subsume uncertainty.

The definition of risk offered here focuses on the potential for loss or gain. Depending on the situation, losses and gains generally entail objective measures of a state's capabilities, such as military forces and equipment, territory, economic resources, and ability to absorb military and civilian casualties. They can also

[1] Two exceptions are Davis (2000) and Cha (2002).

involve subjective items of value that play a role in leaders' calculations, such as a great power's reputation for resolve, the credibility of commitments, and prestige.[2] *Risk-acceptant behavior* occurs when central decision-makers select a policy option that has three characteristics: (1) The preferred option must have more numerous and more divergent outcomes than the other available options; (2) in selecting that option, central decision-makers must perceive that negative outcomes are at least possible (and often highly probable); and (3) central decision-makers must recognize that their subjective probability estimates may be flawed or completely incorrect (Boettcher, 1995). *Risk-averse behavior*, on the other hand, occurs when central decision-makers select an option that has fewer and less divergent outcomes.

Risk acceptance and risk aversion are not dichotomous. A particular policy option is risk-acceptant or risk-averse relative to other options that decision-makers identify at the time. It makes little sense to rank the "real" risks associated with particular options on a cardinal or ordinal scale, because of the difficulties in measuring "objective" utilities and probabilities in foreign policy decision-making. Nor does it make sense to draw a sharp distinction between the "real risks" associated with a particular policy option and its "perceived risks" (Vertzberger, 1995, pp. 355–356, fn. 6). First, the term "real risk" connotes the probability estimates, costs, and benefits that a fully informed neutral observer would make. This approach, however, raises the danger of coding the relative risks of particular foreign policy strategies based on international outcomes. The theory-driven researcher, who presumably has full knowledge of how history actually unfolded, may code particular foreign policy options that led to disaster as risk-acceptant and those that led to success as risk-averse.[3] Second, focusing on the "perceived risk" of particular options poses a harder empirical test (Eckstein, 1975; King, Keohane, & Verba, 1994, pp. 209–212; Van Evera, 1998b, pp. 30–35). If central decision-makers select policy options they perceive as relatively risk-acceptant to avoid losses and options they perceive as relatively risk-averse to secure gains, then the core hypothesis of balance-of-risk theory will have withstood a stronger test.

Note also that the definition of risk and the distinction between risk acceptance and risk aversion refer only to leaders' preferences among particular strategies. These terms do not refer to international outcomes, which are phenomena resulting from the interaction of two or more actors in the international system. Risk-acceptant behavior is not synonymous with policy failure, and risk-averse

[2] Lamborn (1990, pp. 57–59) made a further distinction between policy risk and political risk. Policy risk is the probability that the substantive goals of established policy will not occur. Political risk is the probability that policy choices will have adverse effects on the political fortunes of decision-making factions.

[3] On the dangers of contamination by "outcome knowledge," see Tetlock and Belkin (1996, pp. 33–34).

behavior is not synonymous with policy success. It is entirely possible for a national leader to pursue a risk-averse foreign policy strategy that, through the actions of other actors and systemic variables, produces a suboptimal or even disastrous outcome. Likewise, the pursuit of a risk-acceptant foreign policy strategy may result, through the actions of other actors and systemic forces, in a desirable international outcome. Risk acceptance is not necessarily synonymous with the threat or use of force. Under many circumstances, military force may entail greater risks than other options under consideration. However, one can easily imagine a scenario where the use of force entails fewer and less divergent outcomes than the other available strategies.

The term *entrapment* denotes "a decision-making process whereby individuals escalate their commitment to a previously chosen, though failing, course of action in order to justify or 'make good on' prior investments" (Brockner & Rubin, 1985, pp. 3–4). The related concept of *escalating commitment* denotes a tendency to persist in the investment of resources in courses of actions where decision-makers have experienced past setbacks and where the ultimate outcome of continued investment remains in doubt (Bazerman, 1984; Jervis, 1994; Shaubroeck & Davis, 1994). In cases of foreign military intervention, *sunk costs* would include both the material costs of military operations (e.g., casualties, money, lost equipment, or opportunity costs) and any "political capital" or reputation costs (both domestic and international) that decision-makers expended to mount such operations. In the case of diplomatic disputes involving peripheral regions, sunk costs again include both reputation and material considerations.[4]

The *periphery* refers to geographic areas where actual conflict (or the likely conflict) cannot threaten the security of a great power's homeland. Whereas others draw a distinction between "periphery" and "core" based solely on geographic distance, I have tried to incorporate the relative distribution of capabilities into the definition. A region is "peripheral" vis-à-vis a great power to the extent that it meets some combination of two conditions: (1) it is geographically distant from the core, and (2) the peripheral state (or other political actors in the area) is unable to inflict damage on the great power's homeland. This is not to say that control of a peripheral region cannot enhance a state's power. Indeed, certain regions are strategically important because they contribute to the defense of the homeland or other intrinsically valuable regions. The Philippines, for example, constituted a periphery for the United States because of the islands' geographic distance from

[4] I do not consider the normative question of whether decision-makers *ought* to worry about reputation for resolve. Nor do I consider the empirical question of whether such reputations (once formed) influence other states' calculations. Recent works that cast doubt on the external validity of rational deterrence theory's reputation and interdependence-of-commitment assumptions include Mercer (1996, 1997) and Hopf (1994). For a critique of Mercer's findings, see Copeland (1997, esp. pp. 39–57) and Huth (1997, esp. pp. 89–97). I proceed from the assumption (which historical evidence strongly supports) that central decision-makers do worry (rightly or wrongly) about acquiring and maintaining reputations for resolve.

the mainland and the tremendous imbalance of relative capabilities. The occupation of the Philippines (1898–1946) and four decades of American military presence after independence, however, enhanced the United States' relative capabilities. Specifically, it allowed the United States to project naval power in the Pacific (Desch, 1993, pp. 3–17).

A Descriptive Summary of Prospect Theory

In the late 1970s, psychologists Daniel Kahneman and Amos Tversky developed prospect theory to explain systematic violations in the behavior predicted by expected utility theory observed in repeated experimental studies (Kahneman, Knetsch, & Thaler, 1990; Kahneman & Tversky, 1979; Quattrone & Tversky, 1988; Tversky & Kahneman, 1986, 1991). Subjective expected utility is a theory of decision-making under conditions of risk that purports to be both a normative model of rational choice and a descriptive model of how people actually behave. The expected utility principle holds that individuals seek to maximize expected utility in choosing between risky options: They weigh the utilities of particular outcomes by the subjective probability of their occurrence and choose the option with the highest weighted sum (Luce & Raiffa, 1957; Morrow, 1994; von Neumann & Morgenstern, 1947). Tversky and Kahneman, however, found that about 60% of their research subjects systematically violated the four axioms of utility theory: invariance, transitivity, cancellation, and dominance. They incorporated these findings into an alternative theory of individual decision-making under conditions of risk.

Prospect theory consists of two phases: the editing or framing phase and the evaluation phase. The editing phase involves a number of mental operations that simplify the subsequent evaluation and choice of options. These operations consist of the selection of the reference point or expectation level (coding), the framing of outcomes as deviations (losses or gains) from that reference point, the identification of available options, the possible outcomes or consequences of those options, and the values and probabilities associated with them (Kahneman & Tversky, 1979, pp. 284–285). The encoding of options around the reference point, in effect, functions as a heuristic—a mental shortcut that allows the decision-maker to quickly process information about the external environment, but with the effect of systematically biasing the decision-maker's response. In the evaluation phase, the decision-maker examines the edited prospects and selects the preferred option. Unlike expected utility theory and other rational choice theories, prospect theory does not purport to be a normative model of decision-making. Rather, it seeks to provide a descriptive and predictive model of how most individuals make decisions.

Since the late 1970s, prospect theory has generated an enormous literature in consumer economics, social and consumer psychology, management science, organizational behavior, and the relatively new field of behavioral economics.

Numerous experimental studies have found strong support for Kahneman and Tversky's findings in several contexts: simple gambles, consumer purchasing, health care, natural hazards, corporate and individual investing, and non-financial business decisions. In the mid-1990s, international relations and comparative politics scholars applied hypotheses derived from descriptive models of prospect theory to the study of political phenomena. Numerous articles and books describe the various experiments from which prospect theory derives, so there is no need to summarize them here (see Kahneman & Tversky, 1979, 1984; Kahneman et al., 1990; Levy, 1994a; McDermott, 1998; Slovic, Fischhoff, & Lichtenstein, 1988; Tversky & Kahneman, 1992; Tversky et al., 1990). Instead, I review those aspects of the prospect theory literature most pertinent to defensive realism in general and to the development of balance-of-risk theory in particular.

Prospect theory provides five main insights. First, most individuals evaluate gains and losses in terms of deviations from a neutral reference point, instead of net levels of wealth. In Kahneman and Tversky's studies, that point is generally the decision-maker's subjective understanding of the status quo. Decision-makers, however, can also frame options around an expectation level that does not reflect the status quo. For example, when an earlier status or prior outcome is preferable to the status quo, the decision-maker will generally adopt the status quo ante as a reference point (Gregory, Lichtenstein, & McGregor, 1993; Schneider, 1992). The evaluation of outcomes around the reference point or expectation level frames the choice problem as a matter of either achieving a gain or averting a loss. Decision-makers view anticipated outcomes that are at or above the reference point as gains; they view outcomes that fall below as losses. A shift in reference point, and by extension the encoding (or framing) of options in terms of gains and losses, can induce a reversal of preferences among equivalent options (Kahneman & Tversky, 1979).[5]

The second insight is loss aversion. Simply put, most people react differently to gains and losses. Losses (no matter how small) hurt more than gains (no matter how large) gratify. For example, the pain of losing $100 exceeds the pleasure of unexpectedly gaining $1000 (Nygren, 1998). The oft-cited quotation from tennis player Jimmy Connors nicely illustrates this point: "I hate to lose more than I like to win" (Levy, 1994a, p. 11).[6] Prospect theory suggests that the decision-making process will demonstrate a marked bias toward loss avoidance, whether projected or sunken (Tversky & Kahneman, 1991). In simple gambles or lotteries, individ-

[5] Specifically, prospect theory posits that the decision-maker edits the available options, then evaluates the edited prospects and selects the one with the highest values, as determined by the product of a value of an outcome and a decision weight.

[6] Prospect theory posits diminished sensitivity: The marginal utility of gains decreases faster than the marginal disutility of losses. Hence, prospect theory suggests an S-shaped value function, which is concave for gains (outcomes above the reference point) and convex for losses (outcomes below the reference point).

uals rarely accept symmetric gambles that involve a 50% probability of winning *X* and a 50% probability of losing *X*.

Third, most people value what they already possess over what they seek to acquire. This endowment effect is a logical outgrowth of loss aversion (Kahneman et al., 1990).[7] The process of acquiring a good enhances that good's value in the eyes of its owner. The gratification of acquiring a new good is less than the pain of losing something already in one's possession. As a result, the minimal compensation people demand to give up a commodity (the selling price) will often be several times the maximum amount they are willing to pay for a comparable commodity. In various experimental studies involving trivial items (such as coffee mugs), valuable commodities (such as real estate), and even proxies for tangible items (such as meal vouchers), the typical ratio of selling prices to buying prices was 2 to 1. These studies also suggest that the endowment effect is instantaneous: People accommodate to perceived gains very quickly. Once in possession of a given commodity, most people rapidly become attached. On the other hand, people do not adjust quickly or easily to losing a commodity initially in their possession (Tversky & Kahneman, 1991, pp. 1042–1043; see also Knetsch, 1989; Knetsch & Sinden, 1984, 1987; Sen & Johnson, 1997).

Fourth, prospect theory suggests that people do not respond to probabilities in a linear manner. Instead, they tend to overweigh outcomes considered certain compared with those that are merely probable. A hypothetical game of Russian roulette provides a graphic example of the so-called certainty effect. Players will pay more to reduce the number of bullets in the gun from 1 to 0 than from 4 to 3. Insurance buying behavior provides a second example. People will tend to pay far more to reduce the risk of catastrophic loss from 10% to 0 than from 20% to 10%, even though the change in expected utility is the same. Moreover, most people tend to treat extremely probable outcomes as if they were certain. Most variants of rational choice, on the other hand, hold that a decision-maker's utility for a given outcome is the product of its expected payoff and the probability of its occurrence (Quattrone & Tversky, 1988, p. 722; Slovic, Fischhoff, & Lichtenstein, 1988).

Finally, prospect theory, unlike theories of rational choice, makes definite predictions about individuals' propensity toward risk. Most individuals tend to be risk-averse in their selection of options if they perceive themselves to be facing gains. For example, a decision-maker facing gains would prefer a sure gain of $240 over a gamble involving a 25% chance to win $1,000 and a 75% chance to win $0. Conversely, individuals tend to be risk-acceptant in their selection of options if they perceive themselves to be facing losses. For example, a decision-

[7] The endowment effect, however, does not apply to normal commercial transactions. Consumers do not treat money expended on a product as a loss. A good purchased for eventual sale or barter does not generate an endowment effect.

maker facing losses (relative to the reference point or expectation level) would prefer a gamble involving a 75% chance to lose $1,000 and a 25% chance to lose $0 over a sure loss of $750 (Kahneman & Tversky, 1979; Tversky & Kahneman, 1981). Thus, situational factors and cognitive dynamics systematically influence most individuals' perception of and disposition toward risk.

Individual Versus Group Decision-Making

Most foreign policy decision-making occurs within group settings. Even in totalitarian states, several officials participate in the decision-making process. Prospect theory only provides a probabilistic model of individual choice; one cannot apply the theory to groups. Shafir (1994) argued that prospect theory "is based on specific assumptions regarding people's anticipated pleasure over gains as compared to their pain over losses. . . . All this may be significantly different for groups of individuals" (p. 149; see also Boettcher, 1995; Steen-Sprang, 1999). Levy (1997) observed that prospect theory (in its current state of development) cannot make predictions about the risk propensities of decision-making groups: "One problem is that the behavior of groups is not necessarily congruent with the aggregation of the risk orientations of individual members as demonstrated by the substantial body of literature in group dynamics on 'choice shifts' " (pp. 102–103). Some critics will further claim that simple behavioral decision theories cannot fully explain the complexities of risk-taking behavior, particularly in ill-structured foreign policy problems. Individual-level, group, organizational, cultural, and societal variables, along with state capabilities and the international environment, must all work together to shape risk-taking behavior in foreign policy. Therefore, a theory of foreign policy must take all of these factors into account (see, e.g., Vertzberger, 1995, 1998).

The critics overstate their case for several reasons. First, as noted above, prospect theory itself is not a theory of foreign policy or a theory of international politics. Expected utility theory and prospect theory, by themselves, do not generate substantive predictions about international outcomes or the foreign policy behavior of states. Instead, one must embed concepts from these decision theories into specific theories of foreign policy and international politics (Levy, 1989, p. 249; Levy, 1997, pp. 106–107).

Second, I reject the so-called "maximalist" approach to theory construction: the practice of including multiple explanatory variables operating at different levels of analysis in a single theory. A good theory should elucidate through simplification. There will always be a trade-off between parsimony and explanatory power. However, theories that posit every conceivable explanatory variable for an outcome do not elucidate potential causal effects. Sound theories (or more properly, testable hypotheses derived from such theories) should be falsifiable. Theories that generate omni-predictions fulfilled by all observable phenomena do not meet the falsifiability criterion (King et al., 1994, pp. 100–105; Van Evera, 1998a,

p. 20). Like many social science theories, prospect theory presents a simplified causal relationship; it cannot include all possible variables, which may (or may not) influence risk-taking behavior.

Finally, there is increasing experimental and empirical evidence that prospect theory provides a descriptive model for organizational and group decision-making. These studies suggest that groups, like individuals, tend to evaluate risky prospects in terms of deviations around a common expectation level (Garland, 1990; Qualls, 1989). They further suggest that the framing of decisions in terms of gains and losses, relative to that expectation level, influences the overall direction of the group's risk propensity.

Escalating Commitment to Recover Sunk Costs

The experimental research on prospect theory sparked renewed attention within the management studies and organizational behavior literature to the problem of escalation of commitment—the tendency for decision-makers to persist with failing courses of action despite mounting costs and risks. Contrary to the rational choice assumption that decision-making reflects incremental costs, considerations of sunk costs—any costs that decision-makers have incurred in the past, which decision-makers cannot change by any current or future action—often lead decision-makers to aim for higher goals as a means to recoup past losses (Jervis, 1994, pp. 26–27). This has two implications. First, it implies that decision-makers will persevere in failing ventures far longer than might be expected from a standard utility calculus. Expected utility models, on the other hand, suggest that decision-makers are more likely to escalate their commitment to an entrapping course of action to the extent that the likelihood of attaining their goal, or the perceived value of that goal, is high rather than low (Brockner & Rubin, 1985, pp. 33–39). Second, in these situations the decision-maker will likely continue and even escalate risk-acceptant strategies. Several studies in management sciences and organizational behavior find that these behavioral patterns associated with prospect theory—loss aversion, escalation of commitment, and risk acceptance to avoid loss—occur with greater severity in decision-making groups than among individuals (see Budescu & Weiss, 1987; Whyte, 1993).

Kameda and Davis (1990) found that subjects who had experienced a recent loss were more likely to make riskier choices than those who had not suffered a similar loss before decision-making. They further found that subjects within groups consistently showed riskier personal preferences than did subjects in individual conditions (see also Hartman & Nelson, 1996). Bazerman (1984) examined the effects of escalating commitment in both individual and group decision-making. One hundred eighty-three subjects participated in role-playing exercises in which Bazerman manipulated personal responsibility for an initial decision. Some of the subjects participated as individuals; others were assigned to decision-making teams. Upon making the final allocation decision, all subjects

completed a questionnaire assessing each of four process variables: commitment, relatedness, confidence, and reversal. As expected, both individuals and the decision-making teams invested additional resources in the failing venture (see also Shaubroeck & Davis, 1994).

Whyte (1993) conducted a similar study on the likelihood and degree of escalating commitment among individuals and groups. He found that the escalating commitment effect within groups appeared with greater frequency and severity than it did among individuals. Moreover, he found that personal responsibility for the consequences of sunk costs magnified the escalation effect (see also Arkes & Blumer, 1985). Rutledge (1995) conducted a similar study that examined escalating commitment effects in groups and the potential moderating effect of framing (around an expectation level). He found that overall, management groups had a greater preference for continuing a failing course of action when presented with negatively framed information than when presented with positively framed information. His findings further suggest that decision-makers' sense of responsibility for past choices exacerbates the loss aversion phenomenon within group settings (Rutledge, 1995; see also Caldwell & O'Really, 1982).

These results suggest that people will escalate their commitment to failing ventures in an effort to recover sunk costs. In other words, decision-makers escalate their commitment to an entrapping course of action despite a diminished likelihood of attaining their goal or a diminished value of their goal. More concretely, rather than cut their losses, they will continue to take "bad" gambles—strategies that have a lower likelihood of success—in order to recover their prior investments. One finds examples of this phenomenon in a variety of settings. Consider the 1995 collapse of Baring's, Great Britain's oldest merchant bank. Rather than accept responsibility for losing $24 million on the Japanese futures market, Singapore-based trader Nick Leeson continued to make high-risk investments, despite a diminishing likelihood of recouping the loss. Ultimately Leeson lost an estimated $1.8 billion, precipitating Baring's collapse in February 1995 (Kane & Franchetti, 1995; Searjeant, 1995).

Although these and other studies suggest that prospect theory can explain aspects of group decision-making under conditions of risk and uncertainty, there is one caveat. Prospect theory, like most social science theories, provides a *probabilistic* explanation of human behavior, not a deterministic one. About two-thirds to three-quarters of Kahneman and Tversky's research subjects displayed risk-averse behavior with respect to gains and risk-acceptant behavior with respect to losses; the remaining subjects did not (Kahneman & Tversky, 1984). Similarly, in the experiments cited above, there was some variation in risk propensity among the members of the decision-making teams. Nonetheless, the overall pattern of group risk behavior was largely consistent with the predictions of prospect theory: risk acceptance to avoid losses and risk aversion to secure gains. The behavior of groups with respect to risky choices is not necessarily an aggregation of the individual risk propensities of its members. A substantial body of literature on "choice

shifts" within groups demonstrates this. Experimental studies on "group polarization" suggest that groups tend to move toward either riskier or less risky options, depending on the circumstances (Brewer & Kramer, 1986; Myers & Bach, 1974; Myers & Lamm, 1976).

Clearly, individuals within a group may vary in their propensity toward risk. If the above experimental findings are externally valid, one should expect to see some difference in risk propensities among the members of any decision-making group. The aggregate risk-taking behavior of the group, however, should be largely consistent with prospect theory. Likewise, in foreign policy and international politics, we should expect some variation in risk propensity of individual leaders. The aggregate risk propensity of central decision-makers should be in the direction that prospect theory predicts: risk aversion for gains and risk acceptance for losses. Explaining this intragroup variation, however, would be beyond the scope of the present study and would entail a vastly different research design.

The Transition from Experiments to the "Real World"

Prospect theory appears to provide an accurate descriptive model of individual and group decision-making in experiments involving gambling, investment, insurance purchasing, and public health. The behavioral patterns associated with prospect theory—loss aversion, the endowment effect, and the certainty effect—appear plausible, albeit counterintuitive. However, the descriptive generalizations that underlie prospect theory emerge from experiments in highly structured settings. Researchers designed experiments that controlled for extraneous variables and ensured that prospect theory and expected utility theory would make different predictions. Before one can embed prospect theory insights into foreign policy theories, one must contend with a number of conceptual issues. These issues include the distinction between reference points and expectation levels and the concept of framing choices in terms of gains or losses. I address each of these issues in turn.

In all of the experiments cited above, the researchers presented subjects with scenarios framed in terms of gains and losses. The status quo, as indicated in the wording of the questionnaire, often served as the default or reference point. The reference point is simply a single point on a utility curve, which in most experiments corresponded to an "objective" status quo. Researchers manipulated the wording of the questions, which in turn induced a change in reference point and thus a reversal of most subjects' preferences among equivalent options. Kahneman and Tversky (1979) admitted that their experiments involved choice problems "where it is reasonable to assume either that the original formulation of the prospects leaves no room for further editing, or that the edited prospects can be specified without ambiguity" (p. 275). Thus, much of the experimental literature largely focuses on the evaluating phase of prospect theory and ignores the editing phase.

Many political scientists infer from the prospect theory literature that the reference point and the notion of domains of losses and gains refer to some objective "state of the world" that the researcher can clearly observe and code. In a similar vein, others have argued that leaders' aversion to losses on the domestic front affects their risk-taking in the international arena (see, e.g., De Rouen, 1995; Huth, Bennett, & Gelpi, 1992; McDermott, 1998). This "objective" approach, however, has major problems. The first concerns terminology. In the experimental literature, outcomes above the reference point fell into the "domain of gains" and those that fell below were in the "domain of losses." These terms refer to specific areas on a utility curve, not actual "states of the world." Instead of using "domain," it is more appropriate to say that decision-makers perceive themselves as facing gains or losses relative to their reference point (or expectation level).

Second, the objective approach ignores the problems of issue salience. In ill-structured settings, quantitative indicators of material capabilities or popular opinion cannot measure leaders' assessments of what constitutes a relative gain or loss. The researcher may inadvertently identify objective values that have little or no salience to decision-makers (Boettcher, 2000). Third, and most important, the notion of an immutable and "objective" domain of gains or losses ignores the reality that most aspects of foreign policy are future-oriented. National leaders may enjoy an objectively favorable balance of power in the present, but nonetheless fear relative decline in the future.[8] For example, in the decade before the First World War, Germany enjoyed a significant margin of superiority in military and economic power vis-à-vis each of the other great powers. Nonetheless, from 1903 onward German leaders worried about relative decline vis-à-vis a rapidly industrializing Russia and possible encirclement resulting from Britain's rapprochement with France and the existing Russo-French alliance. Leaders who perceive their state as less powerful vis-à-vis a potential adversary might contemplate drastic measures to arrest a widening power gap in the future. For example, Japanese leaders felt compelled to attack Russia in 1904 to stem the growth of Russian military power in East Asia. Similarly, in July 1914, fear of long-term growth in the potential military and economic power of Russia led Germany, a military preponderant but declining great power, to plunge the international system into major war (Copeland, 1999/2000; Van Evera, 1999).

Another problem involves the tendency of international relations and comparative politics scholars to aggregate the costs and benefits associated with different policy arenas into a single domain of gains or losses. Decision-makers may not perceive gains or losses in one dimension (for example, domestic politics) as

[8] This observation, of course, raises the danger that the correction between decision-makers' subjective measures of gains and losses and their risk propensity in choosing particular options will be spurious, rather than the product of loss aversion. To minimize this danger, I rely on primary and secondary sources to determine leaders' level of expectation, and their perceptions of what would constitute a gain or a loss relative to that level, independently of the policies eventually chosen.

determining values in another dimension (for example, foreign policy). Unless the theory specifies, a priori, which policy dimension the decision-maker values more, the determination of "objective" gain or loss becomes post hoc and potentially circular (Boettcher, 2000).[9] The theory-driven researcher may inadvertently explain any risk-taking behavior with reference to leaders' desire to avoid objective losses in a completely unrelated area. The decision-maker, however, may not view the potential losses in another area as salient to the area of interest. For the sake of theory construction and testing, I will assume that leaders evaluate outcomes relative to a single expectation level defined for a particular realm of policy—the international arena. This assumption is consistent with an underlying theme of defensive realism: In foreign policy decision-making, international factors weigh much more heavily in leaders' calculations than do domestic politics.

Expectation Levels

Several implications follow from this analysis. In ill-structured and complex settings, such as foreign policy, decision-makers are more likely to assess outcomes and contingencies in terms of deviations from an *expectation level*, not a neutral reference point. As Boettcher (1997) observed, "politicians are unlikely to focus on a unidimensional reference defined by the status quo. Indeed, foreign policy decisions often research the highest levels *because* the goals or interests at play in the current situation are complex or unclear" (p. 12; emphasis added). Kahneman and Tversky (1979) acknowledged that most of their experiments required subjects to evaluate options from a reference point that "usually corresponds to the current asset position, in which case gains and losses coincide with the actual amounts that are received and paid" (p. 274). They later admitted that "although this is probably true for most choice problems, there are situations in which gains and losses are coded relative to an expectation or expectation level that differs from the status quo" (p. 286).

Heath, Larrick, and Wu (1999) conducted several experiments suggesting that people evaluate outcomes in terms of deviations from an expectation level or performance goal that does not represent the status quo. Their research integrates prospect theory with expectation level theories and goal-setting behavior literature (see Feather, 1982, pp. 1–16; Locke & Latham, 1990). The encoding and evaluation of options around a performance goal inherits the behaviors associated with prospect theory's value function: loss aversion, diminishing sensitivity, risk acceptance for gains and risk aversion for losses. In one experiment, the researchers presented two groups of subjects with a hypothetical cost-cutting program for a company. The choice problem required managers to save costs in

[9] In fairness to McDermott, she acknowledges this limitation (1998, pp. 37–38).

their unit for the first quarter of the year. The members of the first group received a fixed performance goal (save $250,000), while the members of the second group received a more general goal ("do your best"). Both groups received two alternatives, both of which were one-time options and were only available during the current quarter. Program M would surely save $120,000 (a sure bet). Program N had an 80% chance of saving $50,000 and a 20% chance of saving $250,000. The number of people who chose the more risky Plan N doubled when people had a specific aspiration or goal (save $250,000), as opposed to a more general goal ("do your best"). This is consistent with prospect theory's prediction of diminishing sensitivity: Most people will pursue risk-acceptant strategies when they are below their goal. Furthermore, expectation levels need not entail extrinsic values or additional payoffs (such as promotions or salary increases). Intrinsic expectation levels, such as the goal of completing 25 sit-ups or scoring a B on a physics test, divide outcomes into regions of success or failure (Heath et al., 1999; see also Fershtman, 1996; Levin, Schneider, & Gaeth, 1998).

In a related study, Larrick, Heath, and George (1999) found that specific, challenging "mere" goals—levels of performance that do not entail additional payoffs—increase most people's risk acceptance to avoid loss and risk aversion to secure gain. In one experiment, the researchers presented 136 MBA candidates with a series of choice problems involving gambles and sure bets. All subjects received cash payments based on their decisions. The researchers told the subjects that they had a chance to earn money by choosing one option from a set of options, each of which offered a specific probability of a cash payoff. Moreover, options with higher expected payoffs would have lower expected values. Researchers randomly assigned the subjects to a "goal" condition or a "do your best" condition. They encouraged the first group to select a specific, challenging goal (or aspiration) for the money they would like to earn in the exercise. Most subjects chose the goal of winning $9. The second group received a more general instruction to "do their best" to make money. Both groups received 15 gambles that increased in payoff by 50 cents, ranging from a certain chance (100%) to win $3 to a 21% chance to win $10. Each gamble showed the expected values. Expected values decreased by about 5 cents with each 50-cent increase in absolute payoff. As predicted, participants in the "goal" condition selected significantly riskier options. Participants in the "do your best" condition, however, preferred the less risky options. For example, 37% of the "do your best" group preferred a sure gain of $3, as compared to 11% of the "goal" group.

Both proponents and critics of prospect theory point to the absence of a "theory of framing" (or more properly, a theory of reference point choice, maintenance, and change) as the main limitation to prospect theory's application outside experimental settings (Copeland, 2001b, p. 218, fn. 14; Davis, 2000, pp. 41–42; Downs & Rocke, 1995, pp. 18–19; Levy, 1994b, pp. 128–129; Levy, 1997, pp. 100–105; McDermott, 2001, p. 18; Morrow, 1994, pp. 29–33). The questions of why and under what conditions decision-makers select, adhere to, or

change a particular expectation level (and thus frame options as gains or losses) are important if prospect theory is to make causal inferences outside controlled settings. Furthermore, one must address the question of whether that expectation level reflects the current status quo or what the decision-maker would like to see arise in the future. In the absence of addressing these questions, one might reasonably argue that prospect theory hypotheses lack predictive power for "real world" behavior. Several works that apply prospect theory hypotheses to the study of foreign policy suggest various mechanisms for reference point selection and change (and thus, framing). Although many of these works present interesting descriptive inferences in individual case studies, they are ultimately post hoc. They do not generate and test generalized hypotheses on how national leaders select, change, or adhere to particular reference points or expectation levels (see Farnham, 1994, pp. 63–68; McDermott, 1994, pp. 81–88; McInerney, 1994, pp. 112–113). Below, I seek to fill this gap in the literature.

Hypotheses on Great Power Intervention in the Periphery

Defensive realism holds that anarchy does not preordain states toward belligerence. The international system only rarely provides incentives for expansion, such as when military technology objectively favors the offense or when resources are cumulative. Power can only influence foreign policy through the medium of national leaders' calculations, perceptions, and forecasts. The prospect theory literature portrays a human decision-making process where losses loom larger than gains, risk propensity varies with the situation, existing possessions have a higher value than those not yet acquired, certain outcomes loom larger than probable ones, and sunk costs receive priority over marginal costs. By building prospect theory into defensive realism, we can provide a more accurate descriptive account of elite decision-making and generate predictions about the likelihood, scope, and duration of great power intervention in the periphery.

Systematic incentives filter through an elite decision-making process that systematically skews toward loss avoidance. Thus, whether we are attempting to explain particular intervention decisions, predict how a state will behave once it has intervened, or justify particular intervention policies, balance-of-risk theory warns us that policy output can never be perfectly matched to the external input. This decision-making process has observable implications for great powers' foreign policy. Leaders who seek to avert losses (or recoup past losses) are more likely to adopt the more risk-acceptant among available policy options. In other words, they will likely pursue external strategies that could yield more numerous and diverse outcomes, including a high probability of adverse outcomes. At the same time, leaders will recognize that their subjective probability estimates may be flawed or completely incorrect. Conversely, if leaders perceive themselves as facing gains, they are more likely to pursue strategies that have fewer and less diverse outcomes and have a higher probability of positive outcomes.

Senior officials are acutely sensitive to the relative distribution of power and prestige among the great powers. All else being equal, the greater a state's aggregate power—population, industrial resources, territory, military capabilities, and technological resources—the greater a potential threat it can pose to others. A closely related factor is prestige, a state's reputation for having material capabilities or status and using those commodities to achieve its desired aims (Gilpin, 1981, pp. 30–31). The ultimate determinant of prestige is victory in a major (or hegemonic) war. The actual task of assessing relative power and prestige, however, is complicated. The various measurements upon which leaders rely are often imperfect. The relative distribution of power among states does not remain constant. The so-called law of uneven growth is a recurrent theme in classical realism and contemporary realism (see, e.g., Copeland, 1996, 2001a, 2001b; Gilpin, 1981, 1996; Levy, 1987, 1998; Organski, 1968; Van Evera, 1998a, 1999). Furthermore, the relative distribution of prestige does not always mirror the actual balance of power at any given time. For example, the disjuncture between prestige and the actual balance of power explains in part the European great powers' failure to form balancing alliances against Prussia in the wars of German unification (Christensen, 1997, pp. 70–81).

The central task that confronts leaders in making foreign policy involves the assessment of long-term power trends and their likely implications for a state's future security. Leaders' assessments, however, must take into account short-term trends in specific relative capabilities among particular potential competitors, as well as the global distribution of power. In making these assessments, however, leaders often face two dilemmas. The first is a paucity of information about other states' relative capabilities and intentions. The second is the more common dilemma of information overload: There are simply too many indicators of relative power and power trends (Friedberg, 1988, pp. 279–282). Senior officials must rely on judgmental structures or goals to assess their state's current and future standing relative to likely competitors. Dynamic expectations of relative power and status lead decision-makers to focus on a specific aspiration or policy goal as a yardstick against which to measure relative gains and losses. The expectation level establishes the level of relative power or status loss that leaders are capable of withstanding. Examples of such expectation levels would include leaders' war aims, territorial aspirations, minimum bargaining positions, and diplomatic expectations.

Prospect theory holds that most people are more sensitive to losses than to gains. They also overestimate high and moderate probabilities and underestimate low probabilities. Although the extant experimental literature focuses on the evaluation and selection of edited prospects, one could reasonably infer that loss aversion and the certainty effect may influence decision-makers' selection of an expectation level in the first place. Decision-makers who anticipate the erosion of assets over time should be more likely to evaluate outcomes relative to a more favorable position. That expectation level may be a higher performance level or

the status quo ante, that is, the status quo before the recent loss (Gregory et al., 1993). For example, consider a situation where a company has made a $10 million profit in the previous fiscal year but experiences a $1 million net loss in the first quarter of this year. Furthermore, management expects an additional $1 million net loss in the second quarter. In response to these adverse developments, the board of directors and senior management establish a profit target of $10 million for the present year, thus giving the company two quarters to recover.

Similarly, in foreign policy, national leaders who have experienced a sharp decline in relative power or prestige (real or perceived) will likely adopt the perceived status quo ante as an expectation level. The 1962 Cuban missile crisis provides a dramatic illustration, because both Soviet Premier Nikita S. Khrushchev and President John F. Kennedy adopted the perceived status quo ante for their respective states as an expectation level. Khrushchev responded to an adverse power oscillation caused by the Kennedy administration's defense buildup and its public disclosure that the "missile gap"—the widespread belief (based on Khrushchev's boasting) that the American arsenal of intercontinental ballistic missiles (ICBMs) was significantly inferior to the Soviet Union's—was mythical (Friedberg, 2000, pp. 139–148; Larson, 1997, p. 115). The successful tests of the first-generation Soviet ICBM, the SS-6, and the launch of Sputnik in 1957 had been technological and propaganda triumphs for the Kremlin. Khrushchev and the Soviet general staff decided not to proceed with the full-scale development of the SS-6, but to await the follow-on missile system. By 1960–61, however, Khrushchev faced a deteriorating strategic balance as the United States proceeded with the full-scale development and deployment of its first-generation ICBM, the Minuteman. In fiscal year 1962 alone, the Kennedy defense budget called for the production of 600 Minuteman missiles. The president further requested that 29 Polaris-class submarines and 465 sea-launched ballistic missiles (SLBMs) be operational by June 1965, instead of the 19 submarines and 304 SLBMs requested in the Eisenhower administration's last budget. In light of this adverse power shift, Khrushchev and his advisors adopted a return to the status quo ante—that is, Soviet nuclear parity—as their expectation level (Haas, 2001; Wohlforth, 1993; Zubok & Pleshakov, 1996).

Coming in the aftermath of the 1961 Berlin crisis and the debacle of the Bay of Pigs invasion, the Soviet Union's deployment of medium-range ballistic missiles to Cuba represented both an adverse shift of the strategic balance and a challenge to the Kennedy administration's resolve. Khrushchev chose to secretly deploy several dozen intermediate- and medium-range ballistic missiles, nuclear warheads, mobile launchers, and more than 40,000 Soviet military personnel to an island less than 90 miles from the U.S. homeland, despite recent and repeated warnings by the Kennedy administration not to do so (see Furensko & Naftali, 1997, pp. 191–193; May & Zelikow, 1997, pp. 674–676; Cold War International History Project, 1995, pp. 58–59). After U-2 spy planes discovered the missile sites, Kennedy and the Executive Committee of the National Security Council

(ExComm) immediately adopted a return to the status quo ante—that is, the complete removal of all missiles and Strategic Rocket Forces personnel from Cuba—as the expectation level for their deliberations. It is noteworthy that this expectation level did not entail the removal of Cuban president Fidel Castro (Welch & Blight, 1987/88; Whyte & Levi, 1994).

Conversely, if decision-makers perceive the current status quo as favorable and do not anticipate negative changes, they evaluate outcomes relative to the status quo or some aspect of the status quo. Similarly, if decision-makers anticipate an increase in relative power over time, they will tend to evaluate options relative to the status quo. As a result, they have a longer time horizon. The deliberations and policies of the Eisenhower administration during 1953–54 provide an illustration. As a result of the massive defensive buildup called for in NSC-68 and implemented during the Korean War, American defense spending increased from 4.6% of GNP in fiscal year 1950 (about $13.1 billion) to 12.8% of GNP in fiscal year 1954 (about $46.6 billion) (Gaddis, 1982, p. 359; Leffler, 1992, pp. 355–360). The United States had a clear advantage over the Soviet Union in the number of atomic bombs, the development of thermonuclear weapons, nuclear delivery systems, and economic capabilities. President Dwight Eisenhower and his advisors perceived the country to be in a much stronger position vis-à-vis the Soviet Union in 1954 than it had been in 1950 (Trachtenberg, 1991, pp. 103–107; see also Calingaert, 1988; Foot, 1988/89).

These considerations suggest the following hypothesis: *Senior officials' perception of relative power trends influences the choice of a common expectation level. If officials anticipate a diminution of relative power or status over time, they are more likely to adopt a more favorable international environment as their expectation level. Conversely, if senior officials anticipate a relative increase in power and status over time, they are more likely to adopt the status quo as their expectation level.*

If this hypothesis is correct, one should find the following behavioral patterns in elite deliberations. First, and most obviously, national leaders will be attentive to information regarding the present distribution of power and anticipated power shifts. One should find evidence of such power assessments in intelligence reports, diplomatic cables, and internal correspondence. Second, one should find evidence that leaders use these assessments to define an expectation level or baseline of expectations for future policy outcomes. In elite deliberations on the development of specific aspects of grand strategy or the examination of particular policy areas, one should see repeated references to minimum acceptable outcomes. Officials should encode these expectations in planning documents, instructions to diplomats abroad, public statements, and other materials. One should find evidence that senior officials then evaluate specific policy options (and their likely outcomes) relative to the expectation level.

Like the problem of expectation level (or reference point) selection, the existing experimental literature on prospect theory does not directly address the ques-

tion of how long and under what circumstances decision-makers adhere to a common expectation level. The literature on the anchoring and adjustment biases suggests that in many situations, people make estimates by starting from an initial value and then adjust that value to yield the answer. However, once people decide on that initial value (or an anchor), they are remarkably resistant to adjust it in response to new information, logical and evidential challenges, and alternative modes of reasoning. In an oft-cited experiment, Tversky and Kahneman asked subjects to adjust an arbitrary initial estimate of the percentage of African states in the United Nations. Subjects starting with anchors of 10% and 65% gave "adjusted" estimates of 25% and 45%, respectively. The researchers found the same anchoring effects with the initial estimates dictated by the subject's own previous spin of a roulette wheel. This anchoring bias is also evident in situations where people face simple events, conjunctive events, and disjunctive events. People tend to overestimate the probability of conjunctive events (such as drawing a red marble seven consecutive times from a jar containing 90% red marbles and 10% white marbles), whereas they tend to underestimate the probability of disjunctive events (such as drawing a red marble at least once in seven consecutive tries, with replacement, from a bag containing 10% red marbles and 90% white marbles (Nisbett & Ross, 1980, pp. 41–42; Tversky & Kahneman, 1982, pp. 14–15).

Anchoring and adjustment biases are also evident in risk perception. Slovic, Fischhoff, and Lichtenstein (1982) asked subjects to estimate the frequency of death in the United States from each of 40 different causes (including influenza, cancer, diabetes, heart disease, automobile accidents, and electrocution). Instead of telling one group of subjects that about 50,000 die annually in automobile accidents, the researchers told them that 1,000 die annually from electrocution. When subjects were asked to estimate the annual fatality rate across different causes, the electrocution anchor (1,000 deaths) systematically reduced their estimates of the other causes (Slovic et al., 1982, p. 481).

Loss aversion and the endowment effect suggest that most people can easily adjust to gains above their reference point (or expectation level) but have great difficulty in adjusting their expectations downward in response to losses. Readjustment to the new (and arguably less desirable) status quo takes a long time, and decision-makers do not adjust their expectation level downward. Jervis (1994) referred to this phenomenon as "renormalization." In an international dispute, renormalization to loss drives leaders' risk acceptance and creates situations where both sides seek to avert (or recoup) losses: "Thus in the Cuban missile crisis the status quo for the United States was the situation in which there were no Soviet missiles or bombers on the island" (Jervis, 1994, p. 36). Although the extant literature does not address the period for renormalization, it is reasonable to infer that the longer decision-makers adhere to a particular expectation level, they greater the difficulty they will have in renormalizing for loss.

To return to the historical example, the deployment of Soviet medium-range missiles and bombers to Cuba in October 1962 had the potential to shift the U.S.-

Soviet strategic balance in one fell swoop. Khrushchev had adhered to the aspiration of strategic parity with the United States for only several weeks before the Kennedy administration discovered the missile sites. Khrushchev, of course, withdrew the missiles after Kennedy imposed the blockade and agreed to remove Jupiter missiles from Turkey. Jervis (1994) speculated that the Soviet leader may have "been less accommodating if the installation had been completed and the new status quo formalized by an official announcement" (p. 36).

Twenty years later, however, it proved very difficult for Khrushchev's successors to revise their expectation level downward in response to adverse developments in Afghanistan. The breakdown of superpower détente in 1973–75, negative expectations for future U.S.-Soviet security and economic cooperation, Egypt's defection to the Western camp, and the 1978–79 Islamic revolution in Iran made Brezhnev and other members of the Politburo increasingly wary of future deterioration in the status quo (see Bennett, 1999, pp. 169–174; Copeland, 1999/2000; Gaddis, 1982, pp. 274–308). The maintenance of a friendly regime in Kabul was the expectation level that Brezhnev, KGB chief Andropov, Defense Minister Ustinov, and others adopted long before the actual invasion of Afghanistan in December 1979 (Cold War International History Project, 1996/97, pp. 136–145). When the Afghanistan intervention deteriorated into a quagmire and had negative repercussions across a range of areas in 1982–83, Ustinov, Andropov, and other hard-liners on the Politburo found it very difficult to abandon the expectation level. This suggests a second hypothesis: *Senior officials' ability to revise their expectation level in response to adverse outcomes will be directly proportional to the length of time they adhere to a particular expectation level. The longer senior officials adhere to a common expectation level, the less likely they will be to revise that expectation level downward in response to adverse policy outcomes.*

If this hypothesis is correct, one should observe several behavioral patterns. Officials who have adhered to a particular expectation level for several months or years will downplay or ignore disconfirming information. They will be resistant to new information that their prior goal is no longer realistic or achievable. One should find evidence that officials challenge and question the reliability of disconfirming information. Records of elite deliberations and internal documents should reveal that officials reject less lofty (and presumably more achievable) expectation levels. Conversely, in situations where leaders have adhered to a particular expectation level for days or weeks, one should find the opposite behavioral patterns. These leaders should be more receptive to disconfirming information. Although they should not be expected to immediately abandon their expectation level when initially confronted with adversity, they will gradually realign their aspirations.

These first two hypotheses concern how senior officials select and maintain a common expectation level. To recap, assessments of relative power trends cause senior officials to focus on a specific aspiration or policy goal as a yardstick

against which to measure relative gains and losses. The expectation level establishes the level of relative power or status loss that leaders are capable of withstanding. Senior officials establish an expectation level in their private deliberations and then encode that baseline of expectations in planning documents, white papers on national security goals and strategies, public pronouncements, instructions to subordinates, and diplomatic communications. The longer senior officials adhere to a common expectation level, the greater the difficulty they will have in adjusting their expectations to adverse outcomes. The next hypotheses directly address the question of great power intervention in the periphery.

Balance-of-risk theory holds that prospective loss in material power, international status, or reputation weighs more heavily in leaders' calculations than prospective gain. When leaders perceive themselves as facing losses relative to their stated expectation level, the avoidance of loss (or the recovery of sunk costs) takes on great importance. They are more prone to engage in worst-case thinking, heavily discount the future, and focus on the immediate necessity of avoiding the loss. Decision-makers will tend to treat negative but probable outcomes as if they were certain. Adverse developments in areas previously deemed peripheral to a great power's security will suddenly take on tremendous importance in elite deliberations. Central decision-makers are more likely to adhere to the so-called domino theory—a set of interconnected beliefs and assertions regarding the interdependence of strategic commitments, the relative prevalence of bandwagoning over balancing in alliance formation, the opportunistic nature of adversaries' actions, and the cumulative effect of conquests (Jervis, 1991).

A failure to demonstrate resolve across all issue areas and in all regions will result in the steady erosion of a great power's capabilities and the resolve of its allies. For example, the Kennedy and Johnson administrations became increasingly alarmed over the Viet Cong insurgency in South Vietnam and viewed the conflict as part of the global superpower struggle. The survival of South Vietnam, therefore, had implications for the global balance of resolve (ultimately the global balance of power) between the superpowers (Slater, 1993/94). It is worth noting that Johnson and his national security team did not see the Vietnam war as an opportunity to *augment* American power or influence in Southeast Asia or elsewhere. On the contrary, their primary concern was to prevent an erosion of American reputation for resolve and, by extension, the undermining of the containment policy worldwide.

Similarly, in 1978–79 Soviet leaders did not attribute the growing unrest in Afghanistan to the radical economic and land reforms of the new president, Nur Mohammed Taraki, and his ruling People's Democratic Party of Afghanistan; rather, Brezhnev, Ustinov, Andropov, and others attributed the situation to efforts by the United States and its proxies to foment unrest in the Soviet sphere of influence (Cold War International History Project, 1996/97, pp. 156–159; see also Bennett, 1999, pp. 197–200; Garthoff, 1994, pp. 1044–1048; Litwak, 1992,

pp. 76–78). As Garthoff (1994) noted, "the Soviet leaders decided to intervene militarily in Afghanistan not because they were unwilling to keep it as a buffer, but precisely because they saw no other way to ensure that it would remain a buffer. Intervention was not the next in a series of moves to increase Soviet influence, as in Angola, Ethiopia, and South Yemen, nor the first in a new series involving escalation to direct use of Soviet military power in the Third World" (p. 1037).

In situations where leaders perceive themselves as facing losses relative to their expectation level, the pursuit of relatively risky strategies in the periphery becomes more likely. Again, the American intervention in Vietnam is illustrative. In early 1965, the Johnson administration demonstrated a strong bias toward the high-risk options—in this case, the Rolling Thunder air campaign against North Vietnam and the introduction of 100,000 troops. Conversely, in situations where leaders perceive themselves as facing gains (or at least not facing losses) relative to their expectation level, the pursuit of risk-acceptant strategies in the periphery becomes less likely. Officials are less prone to engage in worst-case thinking; they adopt a longer time horizon and focus on the attainment of longer-term goals. Leaders will be less willing to tolerate the anticipated costs of risk-acceptant strategies and will prefer those strategies that appear to minimize potential negative outcomes. In short, balance-of-risk theory expects that opportunity is a less powerful inducement for risky intervention strategies than is the prospect of loss. These considerations suggest a third hypothesis: *Senior officials are more likely to initiate or persevere in risk-acceptant strategies in the periphery to avoid perceived losses. Conversely, senior officials are less likely to initiate or persevere in risk-acceptant strategies in peripheral regions to secure perceived gains.*

Several behavior patterns would support this hypothesis. Documentary evidence should show that leaders encode potential outcomes as gains or losses relative to their expectation level. Once potential outcomes have been encoded as losses, elite deliberation should show a marked bias not only toward intervention in the periphery, but also toward the more risk-acceptant of the available strategies. In other words, officials should demonstrate a bias toward those intervention options that have more numerous and diverse potential outcomes. One should find repeated statements by officials in private deliberations on the need to take drastic action to avert (or recoup) losses in relative power, status, or reputation. Although there might be some variation among the risk propensity of individuals, the leadership as a whole should favor and ultimately adopt risk-acceptant options to avoid loss. Evidence that leaders encode potential outcomes as losses and yet adopt less risky options would cast doubt on this hypothesis.

On the other hand, once potential outcomes have been encoded as gains, elite deliberations should show a marked bias in the opposite direction. Officials should be less willing to intervene in the periphery overall. In those instances in which they do contemplate intervention, officials should demonstrate a marked bias toward more risk-averse options. Decision-makers should be less susceptible to arguments in favor of drastic actions or arguments that highlight the benefits (or

gains) associated with intervention. Officials should be less tolerant of high risks associated with the pursuit of outcomes above their expectation level. Once having intervened in a peripheral region and secured their stated aims, leaders should not be expected to adopt risk-acceptant strategies in the pursuit of additional gains. For example, the expansion of war aims and the pursuit (or escalation) of risk-acceptant options to obtain these new war aims would cast doubt on the hypothesis.

Balance-of-risk theory posits that security concerns, not aggressive motives, are more likely to drive great power intervention. Central decision-makers' aversion to losses to their state's relative power, status, or reputation (relative to their expectation level) leads to the adoption of risk-acceptant intervention strategies in peripheral regions. This same tendency drives central decision-makers' calculations about ongoing intervention strategies. Peripheral intervention rarely involves a single once-and-for-all decision. On the contrary, once central decision-makers decide on a particular strategy, they will often have several opportunities to continue, modify, or terminate that strategy in response to negative feedback. However, as Jervis (1994) observed, "cutting losses after the expenditure of blood and treasure is perhaps the most difficult act a statesman can take; the lure of the gamble that persevering will recoup the losses is often too great to resist" (p. 27).

Balance-of-risk theory expects leaders to escalate their commitment to recover the sunk costs of prior intervention decisions. Leaders who initially intervened to avert losses in their state's relative power or international status will be quite reluctant to reassess, let alone reverse, strategies that fail to produce desired results (that is, an outcome at or above the expectation level). Instead, officials will likely persist in the investment of resources in courses of actions where they have experienced past setbacks and where the ultimate outcome of continued investment remains in doubt. In these situations, the sunk costs associated with a particular course of action weigh more heavily in leaders' deliberations than do the marginal costs of continuing a failing strategy. Such sunk costs include the prior investment of material resources as well as reputation. Loss aversion drives central decision-makers not only to persist in failing strategies, but also to take additional risks in the hope of recouping their initial investment. With respect to interventions in the periphery, great powers (or more properly, their leaders) will likely continue to pursue risk-acceptant (and failing) intervention strategies far longer than a standard cost-benefit analysis would suggest.[10]

[10] It is important to draw a distinction between the balance-of-risk hypothesis on escalating commitment and the rational choice notion of "gambling for resurrection" (see Downs & Rocke, 1995, pp. 56–78; Downs & Rocke, 1999). Drawing upon the principal-agent literature, Downs and Rocke developed a model to explain how information asymmetries and limited liability between the executive (the agent) and the constituency (the principal) give the former an incentive to escalate ongoing, but failing, foreign military interventions. In brief, when faced with adverse military outcomes, the executive will likely escalate the conflict in the hope that the situation will improve, thus

Consider, for example, the French war in Indochina. From 1946 to 1954, the Comité de Défense Nationale (CDN) and the French general staff continually escalated their commitment to the defense of Indochina, despite clear costs to France's security interests in Europe. Prosecuting the war against the Viet Minh placed additional strains on the already tight military budget and required the diversion of troops, armaments, and equipment to Southeast Asia. The Johnson and Nixon administrations displayed the same behavior in the Vietnam war. Johnson and his national security team repeatedly escalated air and ground operations against the Viet Cong guerillas and North Vietnam from 1965 until 1968. In 1970, President Richard Nixon and his national security advisor, Henry Kissinger, expanded the increasingly futile and domestically unpopular Vietnam war into neighboring Laos and Cambodia in an effort to win concessions from the North Vietnamese government. These considerations suggest a fourth and final hypothesis: *Senior officials will likely continue and even escalate their commitment to risky, and often failing, intervention strategies in the periphery. Therefore, senior officials are unlikely to reassess, scale back, or terminate ongoing risk-acceptant strategies.*

If this hypothesis is correct, one should find evidence that national leaders refuse to disengage from such conflicts despite available information about diminishing marginal returns. For example, one should find evidence in elite deliberations that officials downplay or minimize the costs of continuing intervention strategies. Furthermore, because most people are more inclined toward risk-seeking to avoid loss, we should observe national leaders selecting new risk-acceptant strategies or escalating ongoing strategies. In other words, one should not observe leaders paying attention to the marginal costs (in terms of casualties, military equipment, economic dislocation, and opportunity costs) and the diminishing returns of such conflicts. Thus, the null hypothesis would be that national leaders do not persevere in peripheral wars longer than a standard cost-benefit analysis would suggest.

Conclusions

Balance-of-risk theory represents a fusion of realism's core assumptions with prospect theory. Prospect theory provides a descriptive and predictive explanation for why leaders are extremely sensitive to losses, value what they possess more than what they seek to acquire, and display different risk propensities when faced

avoiding removal from office at the next election (in the case of a democracy) or through popular rebellion (in the case of an autocracy). The "gambling for resurrection" proposition is a subset of the diversionary-motive-for-war literature: Leaders' desire to remain in office drives their foreign policy behavior. The balance-of-risk hypothesis, on the other hand, suggests that leaders persist and escalate their commitment to failing intervention strategies in an effort to recoup losses in their state's material power or international reputation.

with prospective gains or losses. In short, the prospect theory literature suggests that many behaviors associated with defensive realism are not the result of anarchy per se. Rather, states' so-called status quo bias results from the way in which most human beings process information and select options in situations of risk and uncertainty.

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