Deterrence and Coercive Diplomacy: The Contributions of Alexander George

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Alexander George was a towering figure who made path breaking and enduring contributions to political psychology, international relations, and social science methodology. I focus on George's closely related research programs on deterrence and coercive diplomacy, with special attention to the importance of the asymmetry of motivation, strategies for "designing around" a deterrent threat, the controllability of risks, images of the adversary, signaling, the sequential failure of deterrence, the role of positive inducements along with coercive threats, and the need for actor-specific models of the adversary. In the process, I highlight other elements of George's theoretically and methodologically integrated research program: his conceptions of the proper role of theory; his emphasis on the infeasibility of a universal theory and the need for conditional generalizations that are historically grounded, sensitive to context, bounded by scope conditions, and useful for policy makers; and the indispensability of process tracing in theoretically driven case studies.

KEY WORDS: asymmetry of motivation, coercive diplomacy, crisis management, deterrence, extended deterrence, image of adversary, policy-relevant theory, political psychology

In a career that spanned nearly six decades, Alexander George made a number of pioneering and enduring contributions in the fields of political psychology, international relations, and social science methodology. His first book *Woodrow Wilson and Colonel House* (1956), written with Juliette George, is widely regarded as one of the best psychobiographies ever written, and is still in print after 50 years. George's 1974 book *Deterrence in American Foreign Policy*, coauthored with Richard Smoke, won the Bancroft Prize for American History and Diplomacy in 1975. In terms of methodology, George did more than any other scholar in the last three decades to advance a methodology of case study analysis in international relations, and his 2005 book with Andrew Bennett on *Case Studies and Theory* *Development in the Social Sciences* is likely to be a classic. George was also a leading figure in the study of the "operational code" belief systems of political leaders (1969), presidential advisory systems and management styles (1980; George & George, 1998), coercive diplomacy (George, Hall, & Simons, 1971; George & Simons, 1994), crisis management (1991b), and strategies for "bridging the gap" between academic theory and the practice of policymaking (1993).¹ The range of George's work, and the number of different areas in which he made truly distinctive contributions, is phenomenal. If I had to teach my students about foreign policy and international security based only on the work of two or three scholars, Alex George would certainly be one.²

This contribution will focus on Alexander George's interrelated research programs on coercive diplomacy and deterrence. It is admittedly difficult to analyze George's contributions in these areas in isolation from his other scholarly work, as one can find an underlying theoretical and methodological unity that integrates George's major research projects. Crisis management is central to both deterrence and coercive diplomacy, and in fact the first chapter of his book on coercive diplomacy (George, Hall, & Simons, 1971) included a section on "the principles of crisis management" that formed the basis of George's (1991b) later work on the subject.³ Coercive diplomacy and deterrence are political and psychological strategies that must be directed by political leaders, coordinated with diplomacy, and sensitive to the adversary's political constraints, world views, and perceptions. Even more fundamentally, strategies of deterrence, coercive diplomacy, and crisis management cannot be pursued in isolation, but must be subsumed within a coherent foreign policy or grand strategy that includes crisis prevention (George, 1983) as an important aim and that specifies the conditions under which the limited use of force might be appropriate.

George's theories of strategy were also strongly informed by his beliefs about the proper role of theory. He placed high priority on policy relevance, and in fact the introduction to *The Limits of Coercive Diplomacy* (1971) included a section on "the need for policy relevant theory." Throughout all of his writings George emphasized the limitations of abstract deductive theory and argued that both explanatory theory and policy relevant theory required conditional generalizations that were context dependent and informed by history. This conception of theory is closely tied to the methodology of structured, focused comparison that underlies

¹ George was the recipient of the MacArthur Prize in 1983, the National Academy of Sciences Award for Behavioral Research Relevant to the Prevention of Nuclear War in 1997, the Johan Skytte Prize in political science in 1998, and numerous other awards and honorary degrees.

² George was also a tremendous mentor for countless graduate students at Stanford and for young scholars throughout the discipline. On a personal note, it was Alex who brought me to Stanford as a visitor in 1985, opened up a number of new opportunities, helped integrate me into new scholarly networks, and encouraged me to think about theory and method in new ways. That experience was the turning point in my career.

³ For an analysis of George's theory of crisis management, see Janice Gross Stein's contribution to this symposium.

all of George's empirical research.⁴ George first presented that methodology in *Deterrence in American Foreign Policy* (1974), and while the methodology has evolved significantly, the 1974 book is probably still the best illustration of its application in practice.

I begin with George's research program on coercive diplomacy, continue with his closely related research program on deterrence, and end with some general remarks about his impact on the study of international relations and foreign policy.

Coercive Diplomacy

In George's view, the strategy of coercive diplomacy is an age-old instrument of statecraft that had never been systematized. His aim was to articulate a policy-relevant theory of coercive diplomacy in which threats, persuasion, positive inducements, and accommodation were integrated into a crisis bargaining strategy that provided political leaders with an alternative to war or to strictly coercive military strategies.⁵

In contrast to either war or the "quick, decisive military strategy," which George described as a military strategy that aimed to negate adversary capabilities to contest what is at stake, coercive diplomacy is a political-diplomatic strategy that aims to influence an adversary's will or incentive structure.⁶ It is a strategy that combines threats of force, and, if necessary, the limited and selective use of force in discrete and controlled increments,⁷ in a bargaining strategy that includes positive inducements. The aim is to induce an adversary to comply with one's demands, or to negotiate the most favorable compromise possible, while simultaneously managing the crisis to prevent unwanted military escalation.⁸

Coercive diplomacy also differs from deterrence. Deterrence invokes threats to dissuade an adversary from initiating an undesired action, while coercive diplomacy is a response to an action that has already been taken.⁹ George distinguished coercive diplomacy from compellence, which Schelling (1966) defined as one of two forms of coercion (the other being deterrence), in two ways. First,

⁴ See Andrew Bennett's contribution to this symposium.

⁵ The subtitle of George's (1991b) book, *Forceful Persuasion*, is *coercive diplomacy as an alternative to war*.

⁶ This distinction, similar to Schelling's (1966) distinction between "brute force" and "coercion," is quite useful, particularly in the short term. But since negating or eroding adversary capabilities affects the adversary's incentive structure in future interactions, all military strategies are simultaneously political-military strategies (Clausewitz, 1832/1976), as emphasized in contemporary theories of bargaining and war (Wagner, 2000).

⁷ George (1991a) refers to the "exemplary" use of "just enough force of an appropriate kind to demonstrate resolution to protect one's interests and establish the credibility of one's determination to use more force if necessary" (p. 5).

⁸ For typologies of different strategies for the use of force, see George, Hall, and Simons (1971, pp. 15–21), George and Simons (1994, pp. 7–11), George (1991b; chap. 16).

⁹ George and Smoke (1974) define deterrence as "the persuasion of one's opponent that the costs and/or risks of a given course of action he might take outweigh its benefits" (p. 11).

George emphasized more strongly than did Schelling that coercive diplomacy (and deterrence as well) can include positive inducements and accommodation as well as coercive threats. This is an important contribution, and one that led to subsequent efforts to incorporate assurances into analyses of influence strategies (Davis, 2000; Lebow & Stein, 1987; Stein, 1991). Second, George differentiated between defensive and offensive uses of coercive threats. He defined coercive diplomacy as a "defensive strategy that is employed to deal with the efforts of an adversary to change a status quo situation in his own favor," by persuading the adversary to stop what it is doing or to undo what it has done (George & Simons, 1994, p. 8; George, 1991a, p. 6).

George specified a number of "variants" of coercive diplomacy, defined in terms of tactics (George & Simons, 1994, p. 18). The starkest variant is the full-fledged *ultimatum*, which includes a demand, a time limit for compliance, and potent and credible threat of punishment for noncompliance. If the strategy involves an implicit rather than explicit form of any of these elements, it is a *tacit ultimatum*. George defined a *try-and-see* approach as one in which a demand is made without an explicit threat or time limit, and a *gradual turning of the screw* as involving the threat of a gradual rather than step-level increase in coercive pressure. These variants enhance the flexibility of the strategy of coercive diplomacy.

In a theme that runs throughout all of his work on decision making and strategic interaction, George emphasized that coercive diplomacy is highly context dependent. Its effectiveness is a function of the type of provocation, the magnitude and depth of the conflict of interests, actors' images of the destructiveness of war, the degree of time urgency, the presence or absence of allies on either side, the strength and effectiveness of leadership, and the desired postcrisis relationship with the adversary.

On the basis of a number of case studies, George concluded that the primary factors favoring the success of coercive diplomacy are an asymmetry of motivation favoring the coercing state,¹⁰ a sense of time urgency on the part of the target, and the target's fear of unacceptable escalation.¹¹ None of these factors is either necessary or sufficient for the success of coercive diplomacy, and other factors include clarity of what is demanded of the adversary, the strength of the coercer's motivation, and adequate domestic and international support.

With particular attention to the primary factors, George (1991a) argued that the effectiveness of coercive diplomacy in a particular case "rests in the last analysis on psychological variables" (pp. 76–84). George emphasizes the dangers

¹⁰ This is primarily a function of the balance of interests, but George argued that the coercing state can create a more favorable asymmetry by demanding only what is essential for its vital interests and minimizing demands on the vital interests of the adversary, and by offering positive inducements.

¹¹ Although George's cases include both successful and unsuccessful instances of coercive diplomacy, they focus exclusively on cases in which the strategy of coercive diplomacy was attempted. This raises the possibility of selection effects (Fearon, 1994; Levy, 1989a). The conditions which led political leaders to embark on a strategy of coercive diplomacy in the first place are not incorporated into the analysis, which risks underestimating their causal impact.

of misperceptions and miscalculations by both sides, particularly under the stressful conditions of crises,¹² and the importance of political leaders having a good understanding of adversary leaders, their mind-sets, and domestic constraints. This reflects George's emphasis on *situational analysis* (or the *diagnostic* ability of theory), the importance of actor-specific behavioral models of adversaries (George, 2002), and his skepticism about the utility of abstract, universal theories to capture the strategic dynamics in individual cases.

Another key consideration is how leaders combine different tactics, in what particular sequence, and at what pace in terms of time, all of which reflect skill in improvisation. How do leaders combine coercion, persuasion, compromise, and positive inducements, and in what sequence? There is no evidence that a particular combination and sequence is optimal under all circumstances, but a substantial amount of research suggests that George is correct that strictly coercive or bullying strategies are not optimal under most conditions (Axelrod, 1984; Leng, 1993). State selection of strategies is difficult to predict, but it is likely that political leaders' "crisis bargaining codes" (Rogers, 1991), a theoretical extension of George's (1969) concept of operational codes, have a strong influence.

The importance of sequencing is evident in George's (1994) own analysis of Kennedy's implementation of coercive diplomacy to induce a withdrawal of Soviet missiles from Cuba in 1962. George argues that while Kennedy was quite willing to be conciliatory toward Khrushchev, the president also believed that it was essential to begin with coercive threats and actions at the onset of the crisis in order to demonstrate his own credibility and reverse any image of weakness in the mind of the adversary. Only then was Kennedy willing to discuss concessions.¹³ This is an interesting interpretation, in part because it does not fit traditional categories. George was one of the first analysts to argue that Kennedy was willing to make substantial concessions to secure a peaceful resolution of the crisis, an interpretation that has been subsequently validated by the release of new documents (May & Zelikow, 1997). While George approved of that conciliatory strategy, he also approved of Kennedy's uncompromising emphasis on coercive threats in the early stages of bargaining, and George strongly implied that a purely diplomatic strategy without coercive threats would have been more likely to escalate to risky military action (George, 1994, p. 114).

Let me return to George's argument that coercive diplomacy is a defensive strategy in response to adversary encroachments, and to his use of the status quo to distinguish between offensive and defensive actions. Although it is useful to distinguish actions designed to change the status quo from those that try to preserve it, I am more skeptical of the utility of the more normatively loaded labels

¹² Holsti and George's (1975) essay on the impact of stress on foreign policy decision making—at the individual, group, and organizational levels—is probably still the best treatment of the subject.

¹³ In contrast, in the 1961–62 Laos crisis Kennedy signaled his willingness to compromise very early and followed with occasional military threats (Hall, 1994).

of "offensive" to refer to the former and "defensive" to refer to the latter.¹⁴ The actors themselves will certainly disagree on what is offensive and what is defensive, as will some of the analysts who study these influence attempts. I am even more skeptical of George's conceptualization of coercive diplomacy as a strictly "defensive" strategy in response to adversary encroachments, as I argue below.

Although preserving or changing the status quo provides a useful way to categorize motivations, even more useful, particularly for understanding the psychology of decision making, is the concept of a reference point. In prospect theory (Kahneman & Tversky, 1979), actors evaluate possible outcomes in terms of gains or losses from a subjectively defined reference point. They give more weight to losses than to comparable gains (or to forgone gains) and engage in risk-averse behavior in choices among gains and risk-acceptant behavior in choices among losses. These theoretical generalizations provide a causal mechanism underlying the hypothesis (Schelling, 1966) that compellence is more difficult than deterrence (since the former involves accepting a loss while the latter means abstaining from a possible gain, and the former but not the latter induces risk-acceptant behavior), and for George's argument that persuading someone to undo what they have done is more difficult than to persuade someone to stop what they are doing.¹⁵

The reference point concept is useful because it subsumes the status quo without being restricted to it. A state generally does not renormalize its reference point immediately after losing territory, and it usually perceives any subsequent attempt by others to deter it from recovering that territory as the imposition of losses (from the old status quo) rather than a denial of gains (from the new status quo). Similarly, if state decision makers are in trouble domestically and consider embarking on an aggressive foreign policy in order to induce a rally 'round the flag effect and restore its popularity, an attempt to deter that action would be perceived as an attempt to impose losses (Davis, 2000; Lebow & Stein, 1987).¹⁶ The more general proposition is that coercive diplomacy is more likely to succeed if the target sees itself in the domain of gains (international or domestic) and is contemplating an effort to improve its position. It is less likely to succeed if the target sees itself in the domain of losses and is considering how to prevent its position from deteriorating further or perhaps to recover its losses (Levy, 2000, pp. 208–209).¹⁷

All of the conditions George identifies as favoring the use of coercive diplomacy can be applied to its use as a more offensive strategy, but several of these conditions imply that the strategy is more difficult to use for achieving gains than for

¹⁴ George and Smoke (1974) were quite clear that they did not regard all attempts to maintain the status quo as either desirable or wise.

¹⁵ Prospect theory suggests that George's argument may not be valid if an actor's reference point is above the status quo, so that stopping what one is doing leaves one with losses.

¹⁶ On the rally 'round the flag effect and the diversionary theory of war, see Levy (1989b).

¹⁷ Thus coercive diplomacy is unlikely to succeed against a state that anticipates an adverse shift in power, expects future losses, and responds with a strategy of a preventive war (Levy, 2008).

limiting losses. Presumably the strength of a state's motivation will be less, though since it would adopt a strategy of coercive diplomacy only if it had sufficient motivation the difference might not be too great. The adversary's motivation might be much greater because it would be faced with losses rather than a denial of gains, resulting in an asymmetry of motivation favoring the defender. George's (1991a) argument that defensive coercive diplomacy is reinforced by the "legitimacy that norms of international law bestow on the defender" (p. 68) would now be reversed, undercutting domestic and particularly international support for the coercer. On the other hand, time urgency, fear of unacceptable escalation, and clarity of demands might be equally important in more aggressive uses of coercive diplomacy.

Thus I would argue that George's articulation of coercive diplomacy applies to aggressors as well as to defenders and that the theoretical propositions he develops predict that coercive diplomacy is less likely to be effective the more it attempts to make a favorable change in the status quo.¹⁸ Thus George's theory of coercive diplomacy is broader than he implies.

One example of the effective use of coercive diplomacy to improve the status quo in an actor's favor is Hitler's strategy of encroachments against French and British interests in the 1930s (Kershaw, 2000). Between the crisis over the Rhineland (which in George's terms involved a German *fait accompli* strategy) and the invasion of Poland, Hitler made a series of demands, each backed by a tacit or explicit ultimatum and threats of force. Each demand was designed to advance his objectives while avoiding an unwanted war (at least at the time) while simultaneously exploiting the adversary's fears of escalation to war. Each demand was specific and clear; each was limited in scope in order to minimize the defenders' motivations to resist; each was sensitive to the international and domestic political context (the multiple threats facing Britain, the domestic constraints on British and French leaders, the wavering of Mussolini, and the doubts of the German generals); and some were supplemented with verbal assurances ("this is my last territorial demand in Europe"). The demands were based on an actor-specific model of the adversary that was both politically and psychologically astute.¹⁹ The coercing state was also sensitive to signals of adversary resistance and made compromises when necessary (at Munich, in response to the British threat to go to war if the integrity of the rest of Czechoslovakia was threatened).

Deterrence

Whereas coercive diplomacy is a strategic response to encroachments by adversaries, deterrence aims to dissuade the adversary from initiating such

¹⁸ George and Simons (1994) stated that demand for changes in the adversary's government "stretches coercive diplomacy to its outer limits since it may blur the distinction between defensive and offensive use of threats" (p. 8). I prefer to say that such demands are still coercive diplomacy, but that they are less likely to induce compliance.

¹⁹ On the Western response, see Ripsman and Levy (2007).

encroachments and, if dissuasion fails, to prevent the resulting crisis from escalating to war. George and Smoke's (1974) *Deterrence in American Foreign Policy* reflected George's frustrations with existing theories of deterrence, which he regarded as too deductive and abstract, too insensitive to context, insufficiently informed by history, misleading in its psychological assumptions, and of little use to policy makers. *Deterrence* incorporated the first published description of the methodology of structured focused comparison, and it still stands as perhaps the most systematic application of that methodology. It was a more theoretically and methodologically sophisticated work than was *The Logic of Coercive Diplomacy* (1971), perhaps not surprisingly, since the deterrence study built on the earlier one and since it was the work of two authors rather than of several contributors. It was, in my view, one of the most important books in international relations published in the 1970s, and it continues to provide valuable insights after 30 years, despite the development and application of many new analytic tools for the study of deterrence.

The basic logic of deterrence is probably familiar enough to most readers that I need not elaborate here (see Snyder, 1961; Zagare & Kilgour, 2000). Nor do I have the space to summarize and evaluate the numerous variations of deterrence theory, critiques of deterrence theory, or debates about rational deterrence theory and about quantitative-empirical studies of deterrence.²⁰ My aim is to highlight some of George's distinctive and enduring contributions to the study of deterrence.

George and Smoke (1974, pp. 11, 38–45) distinguished three different levels of deterrence, based on the threat against which deterrent threats are aimed: an attack on the homeland; limited wars, particularly involving conventional forces in Europe; and "sublimited" conflicts, which involve a range of encroachments short of limited war. George and Smoke (1974) argued that the sophistication of deterrence theory and doctrine was high for the first level, much more modest for the second level, and practically nonexistent for the third level. The absence of well-developed theory at the lowest levels led to a tendency for theorists "to employ strategic deterrence as the paradigm case for thinking about deterrence in general," and to a tendency for American policy makers to rely excessively on military threats to deal with situations and crises that were fundamentally diplomatic in nature. The first was a conceptual failure, and the second contributed to policy failures.²¹

The absence of adequate theory at the second and third levels led George and Smoke (1974) to focus their efforts there and to develop a theory of "extended

²⁰ See Jervis (1979), Lebow and Stein (1987), and "The Rational Deterrence Debate: A Symposium," (*World Politics*, 41, 2 [January 1989]), which includes contributions by Christopher Achen and Duncan Snidal, George and Smoke, Robert Jervis, Lebow and Stein, and George Downs. On the quantitative literature see Huth and Russett (1990), Levy (1989a), and Lebow and Stein (1990).

²¹ Although George and Smoke (1974) argued that American foreign policy has generally been characterized by an overreliance on deterrent threats, they noted the occasional under-reliance on such threats. They argued, for example, that the Korean War was "less a failure of attempted deterrence than it was a failure to employ deterrence more effectively" (p. 142; chap. 6).

deterrence," with the aim of developing an explanatory theory that would improve theory and provide a useful guide to policy makers.²² They identified the difficulties that an effective deterrence strategy must overcome, how those difficulties might vary for different types of adversaries and for different types of threats, the strategies for dealing with those obstacles, and more generally the uses and limitations of deterrence as an instrument of foreign policy (George & Smoke, 1974).²³ They criticized the "simplifying assumptions" of "abstract deterrence theory" and specified a number of questions that a theory of deterrence needs to answer.²⁴ They used those questions as a framework to guide a structured focused comparison of a number of cases of deterrence failure in American foreign policy since World War II, and they used evidence from the cases to generate a more refined set of propositions about deterrence failure.²⁵ The ongoing dialogue between theory and evidence in the George and Smoke study is a central feature of George's case study methodology and itself provides an excellent model of how theory-driven case study research ought to proceed.²⁶

The judgment of an overreliance on deterrence and military threats in American foreign policy reflects a theme that runs throughout the book: deterrence theory does not define its own scope. It is not a separable, self-contained strategy. It does not specify when a state should adopt a strategy of deterrence, and in combination with what other strategies. Deterrence (and deterrence theory) needs

- ²² The term "extended deterrence" is from Morgan (1977; chap. 2) and refers to deterrence against threats to a state's allies or interests beyond its borders. Most of their cases involve "extended immediate deterrence"—situations in which a state, perceiving that an adversary is seriously considering an attack or encroachment on its allies or other interests, issues an explicit threat to deter such behavior. But some cases (the Korean War, for example) focus on general deterrence, in which no such attack is anticipated and consequently no specific deterrent threat is made.
- ²³ It is important to distinguish the success or failure of deterrence from that of deterrence theory. Deterrence fails if the target of a deterrent threat defies the threat and takes the unwanted action. Deterrence theory succeeds if it explains both when deterrence fails and when it succeeds.
- ²⁴ George and Smoke (1974) developed "commitment theory" to explain how states signal a commitment to implement their deterrent threats, "initiation theory" to explain how states signal a commitment to implement their deterrent threats, "initiation theory" to explain the conditions under which the target defies or complies with a deterrent threat, and "response theory" to explain how the state issuing the deterrent threat responds to the defiance of that threat. The behavior in each of these phases is presumably linked, in that the adversary's decision on whether to defy a deterrent threat, and the deterring state's prior decision on whether to initiate a threat in the first place, are each made in anticipation of subsequent behavior by the adversary. These strategic relationships are developed more fully in game theoretic models of deterrence (Fearon, 1994) based on analytic techniques (particularly equilibrium solutions to games of incomplete information) that were not available in the early 1970s.
- ²⁵ Cases investigated include the Berlin Blockade (1948), the outbreak of the Korean War (1950), Chinese intervention in the Korean War (1950), Indochina (1953–54), the Taiwan Strait Crisis (1954–55), the Hungarian crisis (1956), the Eisenhower Doctrine and deterrence in the Middle East (1957–58), the Quemoy Crisis (1958), the Berlin crises (1958–59 and 1961), and the Cuban missile crisis (1962). For the purposes of generating a typology of deterrence failure and the mechanisms driving each path to deterrence failure, the absence of cases of unambiguous deterrence success is not a serious problem, as it would be if the primary aim of the study were hypothesis testing (George & Bennett, 2005). On "typological theory," see Bennett's contribution to this special issue.
- ²⁶ This dialogue is a good social science example of Popper's (1962) conception of scientific progress as a series of conjectures and refutations.

to be incorporated within a broader strategy (and theory) of interstate influence, and subsumed within a broader foreign policy that prioritizes values and vital interests. Deterrent threats are often most effective when they are combined with assurances and positive inducements (George & Smoke, 1974, pp. 590–591).²⁷

George and Smoke (1974) repeatedly stated that their goal was not a universal theory of deterrence, but instead a differentiated explanatory theory based on contingent generalizations that are sensitive to context and that specify the scope conditions within which a theory is valid. This is exemplified by the chapter on patterns of deterrence failure, which emphasizes that deterrence can fail in different ways. They identify three distinct causal paths to deterrence failure, based on the action taken by the initiator (the target of the deterrent threat): (1) a fait *accompli*, driven by the perception of a weak commitment; (2) a limited, reversible probe, in which the initiator creates a controlled crisis in order to put pressure on the defender and force it to clarify its ambiguous commitment;²⁸ (3) controlled pressure, by an initiator that recognizes an unequivocal commitment by a defender but that believes it possible to erode that commitment by exploiting certain weaknesses or situational advantages and by convincing the defender that its options are limited and that the risks are too great.²⁹ Deterrence can also fail if the adversary is "undeterrable," given its goals and risk-acceptant attitudes. Hitler is the classic example.

While a *fait accompli* by the adversary constitutes a failure of deterrence that is easy to identify as occurring at a specific point in time, in the limited probe and controlled pressure strategies the adversary's challenge to the status quo may be implemented over a longer span of time. This leads George and Smoke (1974, pp. 101, 119–120) to argue that deterrence may fail (or succeed) in stages. This provides defenders with additional warning and the opportunity to strengthen deterrence, but it also provides challengers with feedback to refine its tactics. George and Smoke conclude (p. 103) that nearly all of their 11 case studies of deterrence failure are characterized by the "sequential, gradual failure of deterrence."

Contributing to the sequential failure of deterrence is the fact that it is extraordinarily difficult to anticipate all of the different ways a determined adversary might encroach on one's position. A state intent on maintaining the status quo might "draw a line in the sand" and identify specific adversary actions that will trigger a costly response. This might help to minimize misperceptions and enhance the perceived likelihood that the defiance of the threat will lead to punishment, but the specificity of the threat creates certain "loopholes" that the challenger may try

²⁷ At a minimum, a threat that if you do x I will do y needs to be combined with an assurance that if you do not do x I will not do y.

²⁸ Examples include China's behavior in the 1954–55 Taiwan Straits crisis and the USSR's construction of the Berlin Wall in 1961.

²⁹ The Soviet blockade of Berlin in 1948 is a prototypical example.

to exploit by "designing around" a deterrent threat—circumventing the original threat and eroding the defender's interests in other ways.

The United States and its NATO allies made it clear during the Cold War, for example, that Soviet military action against Berlin would trigger a major military response. The Soviet Union circumvented that specific threat and challenged American interests by exploiting its situational advantages: in 1948 with a blockade of Allied ground access to West Berlin; in 1958–59 by threatening to turn over control of access to West Berlin to East Germany; and in 1961 by threatening to sign a peace treaty with East Germany unless the West entered negotiations over the "normalization" of Berlin, by repeating a variation of the earlier threat over control of access, and finally by constructing the Berlin Wall. These were certainly failures of deterrence, but at the same time the United States successfully deterred the Soviet Union from escalating any of these crises to a military confrontation. The concept of "designing around a deterrent threat" is a useful contribution to the theoretical literature on extended deterrence, and it nicely demonstrates the limitations of the dichotomous categorization of outcomes as success and failure that is so common in the literature.

Another important contribution of George and Smoke (1974) is their analysis of the motivations of participants. First, building on George's work on coercive diplomacy, they emphasize the importance of the asymmetry of motivation in shaping deterrence outcomes. Earlier theories of deterrence gave primary attention to the cost side of the equation and neglected motivations—probably because of their focus on the strategic nuclear level, where each side is presumably equally determined to avoid an attack on its homeland. In the case of China's entry into the Korean War, for example, George and Smoke (1974; chap. 7) show that the asymmetry of motivation favoring China (which wanted to prevent a hostile regime from being established on its borders), compounded by the American failure to empathize with the adversary and understand its values and interests, was a major factor in the U.S. failure to deter Chinese intervention in the Korean War.

An essential component of motivation is risk assessment. If the perceived risks of a course of action increase, presumably one's motivation to pursue it decline. Risk, however, is a highly intractable and undertheorized concept. If analysts pay any attention at all to risk or to risk attitudes, they assume that risk is a unidimensional concept that refers to an actor's degree of risk aversion or risk acceptance. For formal decision theorists, risk orientation is simply the shape of the utility function (concave downward for risk aversion, linear for risk neutrality, and convex for risk acceptance). Prospect theorists posit an S-shaped value function, so that risk orientation varies as a function of losses and gains around a subjectively defined reference point. George and Smoke (1974, pp. 489, 527–530) introduce an additional dimension—actors' perceptions of the *calculability* and *controllability* of risks. They argue that political leaders are concerned not just with magnitude of the (perceived) risks, but also with the extent to which they can calculate and control those risks throughout the evolution of the crisis.

In some (but not all) cases where political or military leaders anticipate that a particular course of action might encounter high risks later in a sequence of interaction or crisis, they might still be willing to embark on that course of action if they are confident that they can manage and control those risks as part of a strategy of limited probes or controlled pressure. George and Smoke (1974) go so far as to posit that "The initiator's belief that the risk of his action are calculable and that the unacceptable risk of it can be controlled and avoided is, with very few exceptions, a *necessary* condition for a decision to challenge deterrence, i.e., a deterrence failure" (p. 529). They find some evidence in support of this argument and conclude that in nearly all their historical cases "the initiator tried to satisfy himself before acting that the risks of the particular option he chose could be calculated and . . . controlled by him so as to give his choice of action the character of a rationally calculated, acceptable risk" (p. 527).³⁰

This new conceptualization of risk behavior helps to explain why targets of deterrent threats might undertake what appear to be risky challenges to deterrence. It also helps to explain the misperceptions leading to deterrence failure. As George and Smoke (1974) write, "The assumption that the opponent's approach to risk-calculation and risk-acceptance is the same as one's own will lead to possibly serious miscalculations of his intentions and to inadequate signaling of the cred-ibility of one's commitment and resolution in reinforcement efforts" (p. 489). They argue that this hypothesis helps explain American misperceptions of Soviet intentions in the Cuban missile crisis: U.S. leaders assumed that Soviet leaders would not deploy offensive missiles to Cuba because it would be too risky to do so, while Soviet leaders believed that the risks were calculable and controllable. George and Smoke (1974) make it clear that the source of the U.S. misperception was "not an underestimation of Soviet motivation" but instead "failing to envisage . . . how the Soviets might satisfy themselves that the missile deployment was a *calculable and controllable risk*" (pp. 478–481).

The reference to the calculability of risks refers to George and Smoke's (1974) interesting distinction between "a willingness to take what are calculated to be high risks" and "a willingness to act when unable to calculate the risks" (p. 528). They argue that deterrent threats might be more effective in the second case, if such threats are accompanied by attempts to convince the adversary that the risks are actually quite calculable and in fact sufficiently high as to be intolerable. If an adversary is predisposed to take risks that he already judges to be high (as George and Smoke characterize Japanese calculations leading to the attack on Pearl Harbor), then a deterrent strategy is less likely to be effective.

³⁰ The "tried to satisfy himself" phrasing suggests another hypothesis about the psychology of risk, and more specifically about the direction of the causal arrow between risk assessment and motivation. While perceptions of risk often shape motivation, they may sometimes be endogenous to it. A highly motivated actor might subconsciously adjust its risk assessment so as to help justify an action it wants to take, or the actor might consciously alter its risk assessment for strategic reasons, in order to help influence other actors.

This hypothesis that actors should be less willing to defy a deterrent threat when risks are incalculable than when risks are calculable and high is quite plausible, even without the qualification about persuading the adversary that the risks are high. There is substantial evidence in experimental economics suggesting that people have an aversion to incalculable risks. As Camerer (1995) concludes, "subjects would rather bet on known probabilities *p* than on known probability distributions of probability (compound lotteries) with a mean of *p*" (p. 646).³¹ In other words, building on Donald Rumsfeld's famous distinction, people are more risk averse in response to "unknown unknowns" than they are to "known unknowns."³²

These are intriguing hypotheses about the calculability and controllability of risks and a potentially useful contribution to the undertheorized subject of the psychology of risk in the study of deterrence, coercive diplomacy, and crisis management in international relations.³³ These hypotheses are all the more important because they pose a challenge to the conceptualization of risk orientation in formal decision theory and game theory, which assume that preferences over outcomes—and hence an actor's utility function and its orientation toward risk—are stable throughout the course of the decision or game being analyzed. These hypotheses need to be theoretically refined, operationalized, and subject to further empirical exploration.³⁴

George and Smoke's (1974) recognition of the importance of actors' value systems, motivations, attitudes toward risk, time horizons, domestic constraints, etc., reflects their emphasis on the importance of actors' images of the adversary in explaining the effectiveness of strategies of deterrence and coercive diplomacy.³⁵ It also reflects George's (2002) long-standing skepticism about universalist models of foreign policy and strategic interaction, and his repeated emphasis on the need for "actor-specific behavioral models of the adversary."

Conclusion

Alexander George's contributions to the study of decision making and strategic interaction, political psychology, and social science methodology are so

³¹ The technical term is ambiguity, and studies of ambiguity aversion go back to Ellsberg's (1961) famous paradox. For a review of the evidence see Camerer (1995, pp. 644–646).

³² Rumsfeld said that "There are known knowns . . . known unknowns . . . [and] unknown unknowns" (Department of Defense news briefing, 12 February 2002).

³³ An extensive literature on the psychology of deterrence and threat perception has developed in the last 30 years (Lebow, 1981; Jervis, 1982–83; Jervis, Lebow, & Stein, 1985; Stein, 1991). On the social psychology of risk behavior see Yates (1992), and on applications to international relations see Vertzberger (1998).

³⁴ George and Smoke (1974) conceded that their hypotheses were provisional and their empirical evidence incomplete, in part due to the lack of access to relevant documents in the authoritarian regimes (mainly Communist) that they studied.

³⁵ An actor's time horizon is another important but undertheorized concept in international relations (Streich & Levy, 2007).

wide-ranging and extensive that it is difficult to provide a brief summary. Many of his contributions, however, can be summarized by single concepts that are closely linked to his name: structured focused comparison, process tracing, bridging the gap, and operational code. In addition, George made distinctive contributions to our understanding of coercive diplomacy, extended deterrence, crisis management, president advisory systems and management styles (1980), multiple advocacy (1972), and the impact of stress on decision making.

George's work on deterrence, coercive diplomacy, and these other substantive topics is also invaluable for policy makers. George's belief that policy relevance is an important criterion for theory evaluation helped shape his interest in explanatory theory that aimed at middle range, contingent generalizations that were sensitive to context and informed by history and by "actor-specific behavioral models." Many aspects of his critique of American foreign policy 30 years ago—that it relied too much on deterrence and military threats, failed to supplement deterrent threats with sufficient positive inducements, and that it was often based on incorrect images of the adversary—have not lost their relevance.

For many, however, George's larger impact is defined in other ways providing unparalleled mentorship and guidance, scribbling incisive (but often barely legible) comments in the margins of our papers, serving as a role model, and being a trusted friend.

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