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Kosovo and the Great Air Power Debate

Daniel L. Byman and
Matthew C. Waxman

The capitulation of Serbian President Slobodan Milosevic on June 9, 1999, after seventy-eight days of bombing by the North Atlantic Treaty Organization (NATO), is being portrayed by many as a watershed in the history of air power. For the first time, the use of air strikes alone brought a foe to its knees—and at the cost of no NATO lives. The prophecies of Giulio Douhet and other air power visionaries appear realized.[1] Lieut. Gen. Michael Short, who ran the bombing campaign, has argued that "NATO got every one of the terms it had stipulated in Rambouillet and beyond Rambouillet, and I credit this as a victory for air power."[2] This view is not confined to the air force. Historian John Keegan conceded, "I didn't want to change my beliefs, but there was too much evidence accumulating to stick to the article of faith. It now does look as if air power has prevailed in the Balkans, and that the time has come to redefine how victory in war may be won."[3] Dissenters, of course, raise their voices. Noting the failure of air power to fulfill its promise in the past, they are skeptical of its efficacy in Kosovo. Instead, they point to factors such as the threat of a ground invasion, the lack of Russian support for Serbia, or the resurgence of the Kosovo Liberation Army (KLA) as key to Milosevic's capitulation. Without these factors, dissenters argue, air strikes alone would not have

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1. See Giulio Douhet, *The Command of the Air* (Washington, D.C.: Office of Air Force History, 1942). Works by other visionaries include H.H. Arnold and Ira C. Eaker, *Winged Warfare* (New York: Harper, 1941); and William M. Mitchell, *Winged Defense* (New York: G.P. Putnam's Sons, 1925). Much of the early debate over how best to use air power took place inside various air forces. For useful overviews of this history, see Robert Futrell, *Ideas, Concepts, Doctrine: Basic Thinking in the United States Air Force* (Maxwell Air Force Base, Ala.: Air University Press, 1989); and Phillip S. Meilinger, ed., *The Paths to Heaven: The Evolution of Airpower Theory* (Maxwell Air Force Base, Ala.: Air University Press, 1997).
2. Quoted in Craig R. Whitney, "Air Wars Won't Stay Risk Free, General Says," *New York Times*, June 18, 1999, p. A8. Gen. Michael J. Dugan, a former U.S. Air Force chief of staff, declared: "For the first time in history—5,000 years of history of man taking organized forces into combat—we saw an independent air operation produce a political result." Quoted in James A. Kitfield, "Another Look at the Air War That Was," *Air Force Magazine* (October 1999), p. 40.
3. Quoted in John Diamond, "Air Force Strategists Fight Overconfidence Built by Air Victory," *European Stars and Stripes*, July 4, 1999, p. 1.

forced Milosevic's hand. They also point out that air power failed to prevent the very ethnic cleansing that prompted Western leaders to act in the first place.[4]

The importance of this debate goes beyond bragging rights. Already, some military planners are using their interpretations of the air war in Kosovo, Operation Allied Force, to design future campaigns. All the services are drawing on Kosovo's supposed lessons in their procurement requests.[5]

Unfortunately, the current debate over air power's effectiveness confuses more than it enlightens. The Kosovo experience does little to vindicate the general argument that air attacks alone can compel enemy states to yield on key interests. But this caution to air power's champions should be tempered by an equally firm rejection of its critics: air power's past failures to coerce on its own do not discredit its role in successful coercive diplomacy. Air power is like any other instrument of statecraft. Instead of asking if air power alone can coerce, the important questions are: how can it contribute to successful coercion, and under what circumstances are its contributions most effective?

The academic contribution to this debate increases rather than untangles the confusion.[6] The U.S. military has spent more than a decade trying to learn to think in terms of joint operations—the synergistic integration of air, land, space, and sea forces—and move away from service-specific perspectives.[7]

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4. The lessons drawn by both sides of this debate are outlined in Nick Cook, "War of Extremes," *Jane's Defence Weekly*, July 7, 1999, pp. 20–23. See also John D. Morrocco, "Kosovo Conflict Highlights Limits of Airpower and Capability Gaps," *Aviation Week & Space Technology*, May 17, 1999, pp. 31–33.
5. Clifford Beal, "Lessons from Kosovo," *Jane's Defence Weekly*, July 7, 1999, p. 20. One retired U.S. Army general fears that "the strategic relevancy and future of our Army have suffered a grave blow from the Kosovo experience." See Robert F. Wagner, "In Kosovo, the Army's Guns Were Silent and Forgotten," *Army Times*, July 12, 1999, p. 46. Various assessments of the bombing campaign, including its successes and limits, are summarized in Bradley Graham, "Air vs. Ground: The Fight Is On," *Washington Post*, June 22, 1999, p. A1; and Tim Butcher and Patrick Bishop, "Nato Admits Air Campaign Failed," *London Daily Telegraph*, July 22, 1999, p. 1.
6. The leading academic work on the use of air power as a coercive instrument is Robert A. Pape, *Bombing to Win* (Ithaca, N.Y.: Cornell University Press, 1996). See also Pape's works "The Air Force Strikes Back: A Reply to Barry Watts and John Warden," *Security Studies*, Vol. 7, No. 2 (Winter 1997/98), pp. 200–214; and "The Limits of Precision-Guided Air Power," *Security Studies*, Vol. 7, No. 2 (Winter 1997/98), pp. 93–114. For the best critique of Pape, see Karl Mueller, "Denial, Punishment, and the Future of Air Power," *Security Studies*, Vol. 7, No. 3 (Spring 1998), pp. 182–228. Other valuable works on the use of air power include Eliot A. Cohen, "The Mystique of U.S. Air Power," *Foreign Affairs*, Vol. 73, No. 1 (January/February 1994), pp. 109–124; Stuart Peach, ed., *Perspectives on Air Power* (London: Her Majesty's Stationery Office, 1998); Meilinger, *Paths to Heaven;* and Phillip S. Meilinger, *Ten Propositions Regarding Air Power* (Washington, D.C.: Air Force History and Museums Program, 1995).
7. A collection of military publications on joint operations can be found at http://www.dtic.mil/jcs.

Despite a partial shift in the air force's own thinking, the most prominent work on air power theory remains focused on air power–centric or air power–only strategies.[8] At the same time, most academic examinations of *coercion* focus on a single coercive instrument at a time—does air power alone, for instance, cause adversaries to capitulate?—while in reality adversaries consider the damage wrought by air power only in the context of overall military balance, internal stability, diplomatic support, and a host of other factors.[9]

This article argues that the current air power debate is fundamentally flawed. The classic question—can air power alone coerce?—caricatures air power's true contributions and limits, leading to confusion over its effectiveness. In Kosovo the use of air power was a key factor in Belgrade's decision to surrender, but even here it was only one of many. U.S. and coalition experience in Kosovo and in other conflicts suggests that air power can make a range of contributions to the success of coercion, including: raising concern within an adversary regime over internal stability by striking strategic targets, including infrastructure; neutralizing an adversary's strategy for victory by attacking its fielded forces and the logistics upon which they depend; bolstering the credibility of other threats, such as a ground invasion; magnifying third-party threats from regional foes or local insurgents; and preventing an adversary from inflicting costs back on the coercing power by undermining domestic support or by shattering the coercing coalition.

In the Kosovo crisis, Serbian concerns over regime instability, NATO's threat of a ground invasion, and an inability to inflict costs on NATO (particularly an inability to gain Moscow's backing) probably played the largest role in motivating Milosevic's concessions. Air power played a critical role in all three of these, but in none of them did air power truly operate in isolation from other coercive instruments or pressures.

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8. In this respect, contemporary theory resembles that of air power pioneers, such as Giulio Douhet, Hugh Trenchard, and William (Billy) Mitchell. Their modern-day heirs, such as John Warden, Harlan Ullman, and James Wade, also focus on air power's exclusive contributions, and have been properly criticized for making excessive claims. See John Warden, "Employing Air Power in the Twenty-first Century," in Richard Shultz, Jr., and Robert L. Pfaltzgraff, Jr., eds., *The Future of Air Power in the Aftermath of the Gulf War* (Maxwell Air Force Base, Ala.: Air University Press, 1992), pp. 57–82; John Warden, "Success in Modern War," *Security Studies*, Vol. 7, No. 2 (Winter 1997/98), pp. 172–190; and Harlan K. Ullman and James P. Wade, *Shock and Awe: Achieving Rapid Dominance* (Washington, D.C.: National Defense University, 1996). This focus of these scholars, however, largely ignores far more important developments such as the air-land battle and joint doctrine, which dictate how air power is most likely to be used in actual war.
9. These issues are elaborated in Daniel L. Byman, Matthew C. Waxman, and Eric Larson, *Air Power as a Coercive Instrument* (Santa Monica, Calif.: RAND, 1999).

This article uses the Kosovo crisis to illustrate many of its arguments on the effectiveness of air power. It does not, however, pretend to offer a definitive case study. The motivations of Milosevic and other Serbian leaders—the key data for understanding coercion—remain opaque at this time.[10] We draw inferences about Serbian decisionmaking based on available evidence, and point out where more information is needed to assess popular hypotheses on why Belgrade capitulated. When possible, we try to indicate how new evidence from the Kosovo experience would affect our conclusions. Rather than settling the many controversies over air power's effectiveness and the broader Kosovo conflict, our primary intention is to reshape the air power debate.

The following section provides an overview of how to think about air power and coercion, addressing several key limits of the current literature. We next examine NATO goals in Kosovo and the mixed success eventually achieved. Using that baseline, we explore various explanations for Belgrade's eventual capitulation and clarify how air power's role in each of them should be understood; we leave aside the issue of whether coercion was a proper strategy for addressing the Balkan crisis and focus instead on how to assess air power as a tool of that strategy. We conclude with recommendations for recasting the air power debate to better reflect air power's true contributions and limits.

Air Power and Coercion: Clarifying the Debate

As NATO Cmdr. Gen. Wesley Clark explained, the air war "was an effort to coerce, not to seize."[11] Discerning air power's contribution in Kosovo and elsewhere therefore requires first understanding the nature of "coercion."[12]

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10. As Gen. Wesley Clark noted when asked why Serbian forces withdrew, "You'll have to ask Milosevic, and he'll never tell you." Quoted in Michael Ignatieff, "The Virtual Commander," *New Yorker*, August 2, 1999, p. 31.
11. Quoted in Dana Priest, "The Commanders' War: The Battle inside Headquarters," *Washington Post*, September 21, 1999, p. A1.
12. Among the most widely cited works on coercion are those of Thomas C. Schelling and Alexander L. George and William E. Simons. See especially Schelling, *Arms and Influence* (New Haven, Conn.: Yale University Press, 1966); and George and Simons, eds., *The Limits of Coercive Diplomacy* (Boulder, Colo.: Westview, 1994). Other valuable works include Patrick M. Morgan, "Saving Face for the Sake of Deterrence," in Robert Jervis, Richard Ned Lebow, and Janice Gross Stein, eds., *Psychology and Deterrence* (Baltimore, Md.: Johns Hopkins University Press, 1985), pp. 125–152; John J. Mearsheimer, *Conventional Deterrence* (Ithaca, N.Y.: Cornell University Press, 1983); Jonathan Shimshoni, *Israel and Conventional Deterrence: Border Warfare from 1953 to 1970* (Ithaca, N.Y.: Cornell University Press, 1988); Uri Bar-Joseph, "Variations on a Theme: The Conceptualization of Deterrence in Israeli Strategic Thinking," *Security Studies*, Vol. 7, No. 3 (Spring 1998), pp. 145–181; Elli Lieberman, "What Makes Deterrence Work?: Lessons from the Egyptian-Israeli En-

This section defines this confusing term and then elaborates three general propositions critical to the air power debate: coercion should be understood dynamically; air power's impact is both additive and synergistic with other types of pressure; and the "successful" use of force must be assessed as a spectrum of possible outcomes, not as a binary variable. These points provide a foundation upon which to build hypotheses about how air power contributed to the outcome of the Kosovo crisis and, more broadly, when coercive diplomacy is likely to accomplish desired goals.

DEFINING COERCION

Coercion is the use of threatened force, including the limited use of actual force to back up the threat, to induce an adversary to behave differently than it otherwise would.[13] Coercion is not destruction. Although partially destroying an adversary's means of resistance may be necessary to increase the effect and credibility of coercive threats, coercion succeeds when the adversary gives in while it still has the power to resist. Coercion can be understood in opposition to what Thomas Schelling termed "brute force": "Brute force succeeds when it is used, whereas the power to hurt is most successful when held in reserve. It is the threat of damage, or of more damage to come, that can make someone yield or comply."[14] Coercion may be thought of, then, as getting the adversary to act a certain way via anything short of brute force; the adversary must still have the capacity for organized violence but *choose* not to exercise it.[15]

COERCION AS A DYNAMIC PROCESS

There is a strong temptation to treat coercive threats as single, discrete events, failing to capture the dynamic nature of coercion. Analysts instead should view coercive contests as series of moves and countermoves, where each side acts not only based on and in anticipation of the other side's moves, but also based on other changes in the security environment.

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during Rivalry," *Security Studies*, Vol. 4, No. 4 (Summer 1995), pp. 833–892; and Daniel Ellsberg, "Theory and Practice of Blackmail," P-3883 (Santa Monica, Calif.: RAND, 1968).

13. We use this particular definition to emphasize that coercion relies on the threat of future military force to influence adversary decisionmaking, but that limited uses of actual force may form key components of coercion. Limited uses of force sway adversaries not only because of their direct destructive impact but because of their effects on an adversary's perceptions of future force and the adversary's vulnerability to it. There are, to be sure, many types of coercive pressure (sanctions, diplomatic isolation, etc.); unless specified otherwise, we use the term "coercion" to mean *military* coercion.

14. Schelling, *Arms and Influence*, p. 3.

15. Pape, *Bombing to Win*, p. 13 (emphasis added).

Most standard explorations of coercion rely on an expected utility model to explain whether coercion succeeds or fails.[16] These models predict outcomes by comparing the expected costs and benefits of a particular action. In his study of strategic bombing as an instrument of coercion, for example, Robert Pape uses such a model: "Success or failure is decided by the target state's decision calculus with regard to costs and benefits. . . . When the benefits that would be lost by concessions and the probability of attaining these benefits by continued resistance are exceeded by the costs of resistance and the probability of suffering these costs, the target concedes."[17] Coercion should work when the anticipated suffering associated with a threat exceeds the anticipated gains of defiance.

This "equation" is useful for understanding coercion in the abstract, but it often confuses the study of coercion when taken as a true depiction of state behavior. One problem is that this equation fosters static, one-sided thinking about coercive contests. It encourages analysts to think about costs and benefits as independent variables that can be manipulated by the coercer, while the adversary stands idle and recalculates its perceived interests as various threats are made and implemented.

A more accurate picture requires viewing coercion as a dynamic, two-player (or more) contest. The adversary, too, can move so as to alter the perceived costs and benefits associated with certain actions.[18] It can divert resources from civilian to military functions, for example, to offset a coercer's attempts to undermine the adversary's defensive capacities. It can engage in internal repression to neutralize a coercer's efforts to foment instability. Rather than simply minimizing the effect of coercive threats, an adversary may try to impose costs on the coercing power; it can escalate militarily or attempt to drive a diplomatic wedge between states aligned against it, perhaps convincing the coercer to back down and withdraw its own threat to impose costs.[19]

Coercive pressure does not exist only at particular moments. Military capabilities and other forms of pressure, and the threat of their use, exert constant

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16. In addition to Schelling's work, a rationalist, cost-benefit approach is employed in many other major works on coercion, including Bruce Bueno de Mesquita, *The War Trap* (New Haven, Conn.: Yale University Press, 1981); and Christopher H. Achen and Duncan Snidal, "Rational Deterrence Theory and Comparative Case Studies," *World Politics*, Vol. 41, No. 2 (January 1989), pp. 143–169.
17. Pape, *Bombing to Win*, pp. 15–16.
18. Pape examines this issue briefly in his discussion of why Germany did not surrender before May 1945. See ibid., p. 256, especially n. 4. This point is also implicit in Pape's discussion of how adversaries offset coercive pressure. For a summary, see ibid., p. 24.
19. For an assessment of such strategies, see Daniel Byman and Matthew Waxman, "Defeating U.S. Coercion," *Survival*, Vol. 41, No. 2 (Summer 1999), pp. 107–120.

influence on allies and adversaries alike, though in varying degrees. When we think about a "case" of coercion, then, we are really not talking about a sudden appearance of the threat of force. Instead, we are talking about relative changes in the threat of force—usually denoted by demonstrative uses of force, explicit threats and demands, and other overt signs. In other words, there is an ever-present baseline, or level of background threat, and we seek to examine deviations from, or spikes in, that level of threat.[20] Using the 1972 Christmas bombings as an example, a standard question is: did the Christmas bombings coerce North Vietnam to negotiate terms more favorable to the United States? This is a poor and misleading proxy for the more useful question to understanding air power's contribution: did the marginal increase in force represented by the Christmas bombings increase the probability that North Vietnam would engage in behavior it would not otherwise choose?

Of course, the latter question is extremely difficult to answer because it requires inquiry into adversary decisionmaking, which in turn requires picking apart the many different coercive pressures bearing on an adversary at any given time and assessing their individual contribution. Did strategic air attacks cause Japan to surrender in World War II? Yes, Japan surrendered. And, yes, air attacks undoubtedly were a key element in its decisionmaking. But these attacks took place in the context of a crippling blockade, Soviet attacks in Manchuria, and so on.

Any assessment of air power's effectiveness should focus on the perceived costs it creates in an adversary's mind. But, viewing coercion dynamically, that assessment should incorporate the adversary's ability to neutralize those costs (or its belief that it can) as well as the set of other threats bearing down on the adversary at any given time.

THINKING SYNERGISTICALLY

Not only are coercive pressures sometimes additive, but they may combine synergistically. A major limit of the air power debate is its focus on one instrument in isolation. Assessments of air power, or any other coercive instrument, should focus instead on its effect in combination with other instruments.

Pape's critical assessment of why the bombing of adversary populations does not lead to adversary capitulation is often wrongly used as evidence for the ineffectiveness of air power as a coercive instrument at all. This has

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20. These points are discussed in Karl Mueller, "Strategy, Asymmetric Deterrence, and Accommodation," Ph.D. dissertation, Princeton University, 1991, chap. 1; and John Mueller, *Quiet Cataclysm: Reflections on the Recent Transformation of World Politics* (New York: HarperCollins, 1995), chap. 4.

contributed to an underestimation of air power's importance. As Richard Overy pointed out about the bombing campaign against Germany and Japan: "There has always seemed something fundamentally implausible about the contention of bombing's critics that dropping almost 2.5 million tons of bombs on tautly-stretched industrial systems and war-weary urban populations would not seriously weaken them. . . . The air offensive was one of the decisive elements in Allied victory."[21] Overy's point is not that air power won the war single-handedly, but that air power contributed significantly to Allied success, as did victories at sea and on land. Air power and other instruments must be understood in context, not in isolation.

The bombing of North Korea during the Korean War highlights some synergistic effects of coercive air attacks. Pape argues that the risk posed by the U.S. atomic arsenal, not strategic bombing, pushed Pyongyang to the bargaining table.[22] But by separating these instruments for analytic purposes, we lose track of how they, in tandem, reinforce each other. Air power destroyed North Korean and Chinese fielded forces and logistics and demolished North Korean industrial complexes. Although North Korea and China retained the ability to continue military operations, U.S. air attacks made doing so more costly. When combined with the threat of atomic strikes, the costs of continuing fruitless conventional operations increased further. The combination of these instruments, however, may have been greater than the sum of their parts: escalating conventional air attacks may have bolstered the credibility of U.S. atomic threats by showcasing Washington's willingness to devastate North Korea's population and industrial base.[23]

The difficulties of dissecting adversary decisionmaking to assess the impact of particular coercive pressures are considerable. Hence analysts typically are tempted to focus on adversary states' observed behavioral response—did it *do* what the coercer wanted?—and correlate that response to particular events. But this is a misleading substitute for the more fundamental issue of whether specific threats, in the context of other pressures, significantly affected opponents' decisionmaking. A narrow focus on whether a coercive instrument either achieved objectives or failed outright leads to arbitrary and misleading coding of coercive strategies. Even limited, contributory effects, when combined with

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21. Richard Overy, *Why the Allies Won* (New York: W.W. Norton, 1995), p. 133.
22. Pape, *Bombing to Win*, pp. 141–142.
23. See Robert F. Futrell, *The United States Air Force in Korea, 1950–1953*, rev. ed. (Washington, D.C.: Office of Air Force History, 1983), for a detailed account of the air campaign in Korea. A superb account of Chinese decisionmaking is Bin Yu, "What China Learned from Its 'Forgotten War' in Korea," *Strategic Review*, Vol. 26, No. 3 (Summer 1998), pp. 4–16.

other coercive instruments, may be enough to force a policy change even though the use of an instrument in isolation may have failed.[24]

THE UNCERTAIN MEANING OF "SUCCESS"

Even if air power is evaluated in combination with other instruments rather than in isolation, assessing its contribution to successful coercion requires picking a baseline: what is success? Studies of coercion often pay inadequate attention to the range of goals pursued by a coercer. Moreover, they typically employ absolute, binary metrics of success, in which a coercive strategy either worked or it failed.[25] Assessments of coercive strategies must shed these tendencies and consider a spectrum of possible outcomes.

Classifying a case as "success" or "failure" depends on the particular definition of the behavior sought in that case, leading to confusion when comparing different analyses of the same event. For example, in Operation Desert Storm the behavior sought from Saddam Hussein might have been Iraq peacefully retreating from Kuwait. Or, it might have instead simply been Iraq not being in Kuwait, one way or another. One might conclude that the air campaign successfully coerced Iraq because Iraq was willing to withdraw by the end of the air campaign under conditions relatively favorable to the United States.[26] Classifying the air campaign as successful coercion, however, assumes that the coalition's objective was simply an Iraqi expulsion. But was that the objective? Janice Gross Stein concludes that the air campaign represented a failure of coercion because she interpreted differently what behavior the coalition sought.[27] To Stein, the air campaign represented a failure of coercion the moment the ground war began, because coalition objectives were to induce Iraq to withdraw *without having to forcefully expel it* through the use of ground troops.

The way in which the very issue of "success" is framed exacerbates this confusion. The use of absolute, binary measures—did air power coerce, yes or

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24. As Barry Watts argues, mapping coercion to binary rankings is highly reductionist and wrongly assumes that complex campaigns can be reduced to zero or one. Watts, "Theory and Evidence in Security Studies," *Security Studies*, Vol. 7, No. 2 (Winter 1997/98), p. 136.
25. The use of these binary metrics of success stems largely from measurement concerns. If we wish to test certain hypotheses about coercion by correlating success with independent variables (such as type of force used or type of adversary assets threatened), then we would like to code as many cases as possible. A binary coding of success avoids the messy gray area into which many cases might fall if a nonabsolute measure were used.
26. Lawrence Freedman and Efraim Karsh, *The Gulf Conflict, 1990–1991* (Princeton, N.J.: Princeton University Press, 1993), pp. 380–385.
27. Janice Gross Stein, "Deterrence and Compellence in the Gulf, 1990–91: A Failed or Impossible Task?" *International Security*, Vol. 17, No. 2 (Fall 1992), pp. 147–179.

no?—does not capture the complex and often subtle effects of coercive threats. Iraq both conceded and defied the United States during Desert Storm: it offered a partial withdrawal from Kuwait while it refused to accept all U.S. demands. The straitjacket of binary metrics distorts the lessons we may draw from aggregated empirical data when cases in which air power helped move an adversary in favorable ways but short of the coercer's maximal objectives are coded as either absolute failures or absolute successes.[28]

At the same time as binary metrics may bias studies of coercion one way or the other, they may also overlook the detrimental effects of coercive strategies. Coercion carries the potential for backfire; threatening an adversary may provoke an increase in unwanted behavior rather than the desired course. The 1967 Arab-Israeli War and the 1969–70 Israeli-Egyptian War of Attrition are frequently cited examples of inadvertent escalation resulting from coercive threats.[29] In other words, coercive strategies can leave the coercer worse off than before. Yet within the binary framework, the worst outcome recognized is the null result: backfires and hardening of adversary resistance are coded just as if coercive threats caused no effect.

Conceptually, the dependent variable should be understood as a marginal change in probability of behavior. Against a fluctuating background level of threat (and blandishments, for that matter), the probability of the adversary altering its behavior is never zero. Viewing success in absolute terms, based on observed behavior, ignores this positive probability and classifies all desired behavior as "successful" coercion, regardless of how likely that behavior was prior to the additional coercive threat. Data limits may require a focus on observable behavior, but analysts should not forget that the true effects of coercive strategies lie in the altered—or, in some cases, hardened—policy preferences or decisionmaking calculi of the actors involved.

CONCLUSIONS FOR THE STUDY OF AIR POWER
This critique of the air power debate and previous attempts to resolve it yields several implications for assessing the coercive use of air power in Kosovo or

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28. For an example of the binary coding of success or failure, see Walter J. Peterson, "Deterrence and Compellence: A Critical Assessment of Conventional Wisdom," *International Studies Quarterly*, Vol. 30, No. 3 (September 1986), pp. 269–294.
29. See Janice Gross Stein, "The Arab-Israeli War of 1967: Inadvertent War through Miscalculated Escalation," and Yaacov Bar-Siman-Tov, "The War of Attrition, 1969–1970," in Alexander L. George, ed., *Avoiding War: Problems of Crisis Management* (Boulder, Colo.: Westview, 1991), pp. 126–159 and pp. 320–341, respectively.

elsewhere. First, the dependent variable must be understood conceptually as a change in probability even though for measurement reasons we must largely focus on changes in observed behavior. That is, the effect of a coercive instrument such as air power should be thought of as the increased (or decreased) likelihood of an adversary's capitulation. Ultimately, such an assessment can be achieved only through an in-depth analysis of the Milosevic regime's decisionmaking process. Second, the independent variable must be thought of as a marginal increase in threatened costs that air power created, not the absolute level of force. In assessing NATO air attacks on Serbia, analysts should focus not on the role air power played *instead of* a ground invasion, for example, but on the role it played in combination with the possibility of one. Third, the likelihood of successful coercion depends on the expected impact of the coercer's threat as well as the available responses of the adversary. Analysts must therefore evaluate coercive strategies and the tools used to implement them not only by judging the perceived costs of resistance that threats create. They must also focus on the ability of these strategies to block possible counter-moves that would otherwise neutralize the threats.

NATO Goals and Kosovo Outcomes

A first step in determining the success or failure of air power in Kosovo is understanding the goals set by the NATO coalition. At the outset of the crisis, the Clinton administration articulated three goals of the bombing campaign: to "demonstrate the seriousness of NATO's opposition to aggression," to deter Milosevic's "continuing and escalating" attacks in Kosovo, and "to damage Serbia's capacity to wage war in the future."[30] These goals were reflected in official NATO statements, which required that Milosevic end repression in Kosovo, withdraw his forces from the province, agree to an international military presence there as well as to the safe return of refugees and displaced persons, and provide assurances of his willingness to work toward a political framework agreement along the lines of the Rambouillet accords.[31]

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30. R.W. Apple, Jr., "A Fresh Set of U.S. Goals," *New York Times*, March 25, 1999, p. A1. See also Barton Gellman, "Allies Facing the Limits of Air Power," *Washington Post*, March 28, 1999, p. A1. General Clark described NATO goals as "the Serbs out; NATO in; the refugees home; a ceasefire in place; and a commitment to work for a peace settlement." See "Interview: General Wesley Clark," *Jane's Defence Weekly*, July 7, 1999, p. 40.
31. Statement Issued at the Extraordinary Ministerial Meeting of the North Atlantic Council, NATO Headquarters, Brussels, April 12, 1999, http://www.nato.int/docu/pr/1999/p99-051e.htm (visited

In practice these policy statements boiled down to several complementary objectives: to compel a cessation to the Milosevic regime's policy of ethnic terror; to force a withdrawal of Serbian troops to ensure the return of Albanian refugees; to compel Belgrade to accept a political settlement that promised a high degree of autonomy to Kosovo; and to demonstrate the viability of NATO to the post–Cold War world.[32]

In a defeat for overall strategy, NATO threats and bombing did not halt the ethnic terror for seventy-eight days, more than enough time for Serbia to displace almost a million Kosovar ethnic Albanians and kill thousands within Kosovo. But, in the end, Belgrade yielded. Most of the refugee and displaced Albanians have returned home, and Serbian troops are no longer in the Kosovo province. Milosevic accepted a deal that effectively ended Serbian control over the Kosovo province. "Success" for the objective of the cessation of ethnic terror becomes a definitional question: is stopping the terror and expulsion after two-and-a-half months too little too late or the best of a bad situation?

The answer is both. NATO forced Serbia to capitulate along lines similar to Rambouillet and remained relatively cohesive in the process. But NATO failed to prevent a massive ethnic cleansing campaign, and strains in alliance unity exposed limits to future operations.[33] When analyzing the Kosovo operations and air power's role, it is this decidedly limited victory that must be used as the benchmark.

Coercive Air Power and Kosovo

Commentators and analysts have advanced different explanations for why Milosevic eventually capitulated to NATO demands, with varying implications for the broader air power debate. None of these is mutually exclusive, and our analysis indicates that several of these factors indeed played a role in Milosevic's decision to surrender. These explanations include (1) NATO had destroyed a wide range of strategic targets in Serbia and threatened to continue destroying others, thus posing the specter of popular and elite dissatisfaction with the regime and increased internal unrest; (2) NATO had destroyed Serbia's fielded forces, making it impossible for Milosevic to hold Kosovo; (3) the

August 8, 1999); and Statement on Kosovo Issued by the Heads of State and Government Partici- pating in the Meeting of the North Atlantic Council in Washington, D.C., April 23–24, 1999, http://www.nato.int/docu/pr/1999/p99-062e.htm (visited August 8, 1999).
32. Another goal—deterring future Serbian aggression–cannot be judged as of this writing.
33. Joseph S. Nye, Jr., "Redefining the National Interest," *Foreign Affairs*, Vol. 78, No. 4 (July/ August 1999), p. 34; and Peter W. Rodman, "The Fallout from Kosovo," ibid., pp. 45–51.

prospect of a ground campaign intimidated Milosevic; (4) Milosevic and his forces perceived a growing military threat from the KLA; and (5) Serbia lacked any means of imposing costs on NATO countries, either militarily or diplomatically, or by shattering the coalition; most important, Serbia proved incapable of enlisting the support of Russia to offset NATO pressure.

These explanations are complementary rather than competing. All could have affected Milosevic's willingness to concede. For each of the first four arguments, this section first outlines the suggested hypothesis, offering theoretical or historical evidence that supports it. Next, it describes the NATO activities that would have contributed to this factor and any observed impact on Serbia's behavior or decisionmaking. Finally, it assesses the contribution of air power and proposes how this assessment, and future reassessments based on new evidence, should be interpreted within the broader air power debate. The analysis of the last hypothesis—the failure of Serbian counter-coercion—has a different structure given its counterfactual nature.

Our reading of available evidence indicates that the bombing of strategic targets inside Serbia, the threat of a ground invasion, and the failure of Serb counter-coercive strategies against NATO countries (particularly Belgrade's inability to gain Moscow's support) contributed greatly to the success of coercion. The KLA attacks probably counted for less, while the destruction of Serbian fielded forces played only a marginal role. Air power facilitated several of these factors, leading to the limited success of coercion, as qualified earlier.

FOSTERING DISCONTENT BY STRIKING STRATEGIC TARGETS

Some analysts attribute NATO's success to air strikes that destroyed a wide range of "strategic" targets such as command bunkers, power stations, and infrastructure. As one NATO official proclaimed, hitting valuable targets in Belgrade is "what really counted."[34] The theory behind this explanation is that NATO was able to ratchet up pain on a recalcitrant Serbia until the attacks (and prospects of more to come) proved too costly. The weight of these attacks, it is argued, brought home the war to the people of Serbia and its leaders, demonstrating to them the price of continued resistance to NATO.

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34. Matthew Kaminski and John Reed, "KLA Played Key Role in Allied Air War," *Wall Street Journal*, July 6, 1999, p. A11. A Joint Chiefs of Staff spokesman declared, "We're satisfied we destroyed enough stuff to get him to say uncle." Quoted in Steven Lee Meyers, "Damage to Serb Military Less than Expected," *New York Times*, June 28, 1999, p. A1. Some of the arguments for and against this view are summarized in Butcher and Bishop, "Nato Admits Air Campaign Failed," p. 1.

Beginning on March 29, 1999, after several days of tightly circumscribed targeting, NATO broadened and intensified the air campaign. Allied air attacks destroyed key roads and bridges in Yugoslavia, as well as oil refineries, military fuel installations, and other fixed targets, including army bases. NATO also attacked targets in Belgrade, such as the headquarters of Milosevic's Socialist Party and radio and television broadcasting facilities. On May 24, NATO aircraft disabled the national power grid.[35] Yugoslav government reporting indicates that NATO damaged or destroyed twelve railway stations, thirty-six factories, twenty-four bridges, seven airports, seventeen television transmitters, along with other infrastructure and communications targets.[36]

Air war planners hoped that NATO strikes would foster elite and popular discontent with the Milosevic regime. Gen. Klaus Naumann, who chaired the NATO alliance's military committee, declared NATO's intention "to loosen his grip on power and break his will to continue."[37] By striking military barracks and other military targets, NATO also sought to increase military dissatisfaction: through propaganda leaflets, air planners tried to create a direct link between the cutoff of gasoline, electricity, and other resources and the Milosevic regime's policies.[38]

Historical evidence suggests that threats to internal stability created through strategic attacks can contribute to coercion, though this contribution is seldom decisive by itself, and attempts often backfire in practice. Internal security is of overriding concern to developing states.[39] Even in cases where outside

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35. The June 10, 1999, Department of Defense briefing indicated that NATO had destroyed all of Yugoslavia's petroleum refining capability; most of its ammunition production capacity; 40 percent of its armored vehicle production; 100 percent of the rail bridges into Kosovo; and 45 percent of its TV broadcast capability. See Anthony Cordesman, "The Lessons and Non-Lessons of the Air and Missile War in Kosovo," July 27, 1999, http://www.csis.org (visited on August 3, 1999), p. 79; Meyers, "Damage to Serb Military Less than Expected," p. A1; and Eric Schmitt and Michael R. Gordon, "Shift in Targets Lets NATO Jets Tip the Balance," *New York Times*, June 5, 1999, p. 1. General Clark received authorization to go after a wider range of targets at the end of March, after several weeks of limited strikes. Ignatieff, "The Virtual Commander," p. 32.
36. Priest, "The Commanders' War: The Battle inside Headquarters."
37. Michael R. Gordon, "NATO Plans Weeks of Bombing to Break Grip of Serb Leader," *New York Times*, April 1, 1999, p. A1.
38. Steven Erlanger, "NATO Attack Darkens City and Areas of Serbia," *New York Times*, May 3, 1999, p. A13. John Warden has postulated: "Unless the stakes in the war are very high, most states will make desired concessions when their power-generation system is put under sufficient pressure or actually destroyed." Warden, "The Enemy as a System," *Air Power Journal*, Vol. 9, No. 1 (Spring 1995), p. 49.
39. See Mohammed Ayoob, "The Security Problematic of the Third World," *World Politics*, Vol. 43, No. 2 (January 1991), pp. 257–283; and Stephen David, *Choosing Sides: Alignment and Realignment in the Third World* (Baltimore, Md.: Johns Hopkins University Press, 1991).

attacks failed to produce unrest—the norm, not the exception, despite the hopes of strategists in the coercing state—the *fear* of unrest has often prompted adversary leaderships to respond. In both World War II Japan and Germany, leaders spent vast sums of money on air defense and conducted otherwise senseless military operations to demonstrate that they were responding to the Allies' bombing attacks.[40] During the War of Attrition, Israeli strikes against a range of targets in Egypt generated intense leadership concern about unrest in Cairo, even though the Egyptian people remained behind their government.[41] Israeli air attacks on strategic targets in Syria during the 1973 Arab-Israeli war shook Hafez al-Asad's regime. More recently in Iraq, Saddam Hussein has demonstrated a penchant for backing down in the face of U.S. and other countries' threats when defiance risked eroding support for Saddam within his power base.[42] Popular or elite unrest is a sensitive point for many regimes but, as discussed later in this subsection, it is often one that adversary regimes are well equipped to counter.

Some evidence suggests that Milosevic capitulated in part because of concerns about internal unrest. Milosevic, like many demagogues, shows concern with his popularity, or at least the effects that unpopularity may have on his standing with elements of his power base.[43] Initially the air strikes bolstered the Yugoslav president's stature. Belgrade hosted large rallies in support of Milosevic after the NATO air strikes began.[44] Over time, however, NATO air strikes appear to have contributed to discontent in the federation. Rallies in support of the president receded, and Milosevic may have feared that continued conflict would lead to further losses in popularity.

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40. Japan, for example, needlessly deployed air assets for homeland defense in December 1942 and overextended its naval forces to demonstrate that it was acting forcefully after the first U.S. bombing of Japan. For two superb analyses of World War II and the importance of adversary reactions (and overreactions) to Allied bombing, see James G. Roche and Barry D. Watts, "Choosing Analytic Measures," *Journal of Strategic Studies*, Vol. 14, No. 2 (June 1991), pp. 165–209; and Overy, *Why the Allies Won*, pp. 101–133.
41. Trevor N. Dupuy, *Elusive Victory* (Dubuque, Iowa: Kendall Hunt, 1992), p. 372; and Shimshoni, *Israel and Conventional Deterrence*, p. 16
42. See Daniel Byman, Kenneth Pollack, and Matthew Waxman, "Coercing Saddam Hussein: Lessons from the Past," *Survival*, Vol. 40, No. 3 (Autumn 1998), pp. 127–151.
43. In early 1997, Milosevic reinstated opposition municipal election victories after massive protest rallies threatened to expose weaknesses in his regime. See Dean E. Murphy, "Yugoslav Protesters Walk Fine Line," *Los Angeles Times*, February 8, 1997, p. A5; and Rod Nordland, "End of the Road," *Newsweek*, February 17, 1997, p. 26. For general accounts of Milosevic's concern with political support, see Franklin Foer, "Slobodan Milosevic: How a Genocidal Dictator Keeps Getting Away with It," *Slate*, June 20, 1998, http://www.slate.com; and Misha Glenny, *The Fall of Yugoslavia* (New York: Penguin, 1993), pp. 32–33, 60–70. An account of Milosevic as a diplomatic tactician can be found in Richard Holbrooke, *To End a War* (New York: Random House, 1998).
44. Gordon, "NATO Plans Weeks of Bombing."

The NATO bombing also fed dissatisfaction within the military.[45] The number of Serbian desertions increased during the campaign, and morale problems were considerable. Several of Milosevic's top generals had to be placed under house arrest, testifying to his sensitivity about possible loss of political control.[46]

The threat of unrest elsewhere in the federation may also have unnerved Milosevic. Before the conflict began, Montenegro had elected an anti-Milosevic leader and had relatively independent television and newspapers. In the months preceding Operation Allied Force, friction grew between Montenegrin leaders and the government in Belgrade. Montenegrin officials sought greater autonomy and opposed the war in Kosovo. The war heightened this tension, as Montenegro kept out of the war and stepped up efforts to develop its internal security forces.[47]

Air power played a major role in raising these various threats to regime stability. Although neither the Serbian population nor the military appeared ready to rebel and overthrow Milosevic, discontent from the air strikes was clearly growing by the end of the campaign. As in previous conflicts, the psychological impact of air strikes was probably magnified because Serbia could do little in retaliation or response.[48]

Although the Kosovo experience offers evidence that strategic attacks aimed at undermining regime support can, under some circumstances, contribute to coercive success, popular or elite unrest in response to coercion often does not occur or takes time to develop. Indeed, a recurring historical lesson is that attempts to force an adversary's hand by targeting its populace's will to resist may backfire.[49] Coercion often stiffens an adversary's determination, as the leadership and the country as a whole unite against the coercer. A coercive

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45. Press reporting that NATO strikes increased Milosevic's popularity with the army in Serbia appear in retrospect to have been erroneous. See Steven Brill, "War Gets the Monica Treatment," *Brill's Content* (July/August 1999), pp. 103–104.
46. Ibid., pp. 104–105.
47. James M. Dorsey, "Montenegro Girds against Attempt by Milosevic to Topple Government," *Wall Street Journal*, April 5, 1999, p. 1; and Michael Dobbs, "Montenegro Easing Away from Serb Ally," *Washington Post*, June 25, 1999, p. A1.
48. Roche and Watts, "Choosing Analytic Measures," p. 182; and Stephen T. Hosmer, *Psychological Effects of U.S. Air Operations in Four Wars* (Santa Monica, Calif.: RAND, 1996), p. 196.
49. For various works on the psychological impact of bombing, see Hosmer, *Psychological Effects of U.S. Air Operations in Four Wars*; Mark Clodfelter, *The Limits of Air Power: The American Bombing of North Vietnam* (New York: Free Press, 1989); and Futrell, *The United States Air Force in Korea*. See also *U.S. Strategic Bombing Survey: The Effects of Strategic Bombing on German Morale* (Washington, D.C.: U.S. Government Printing Office, December 1946), in David MacIsaac, ed., *The United States Strategic Bombing Survey*, Vol. 4 (New York: Garland, 1976).

threat itself may raise the cost of compliance for an adversary's leadership by provoking a nationalist backlash. In Somalia, U.S. army helicopter strikes on Mohammed Farah Aideed's subordinates not only failed to intimidate the warlord but may have provoked anti-U.S. sentiment, contributing to the demise of the U.S.-led operation. Although many clan leaders had been critical of Aideed's confrontational stance toward the United States, they united behind him when faced with an outside threat. Russian attempts to bomb the Chechens into submission during the 1994–96 fighting produced unified defiance, as even residents who formerly favored peaceful solutions—or favored fighting each other—banded to expel the invader.[50] In Kosovo spontaneous pro-Milosevic rallies occurred in response to the initial bombing. Over time, support fell, but only after a sustained and lengthy campaign.[51]

Part of the difficulty of manipulating adversary regime support with military attacks stems from the ability of dictatorial regimes to maintain order through extensive and well-oiled propaganda machines, in addition to repressive police and security forces.[52] During Operation Allied Force, Milosevic shut down independent newspapers and radio stations inside Serbia, used state-run television to stoke nationalist reactions, electronically jammed some U.S. and NATO broadcasts intended for the Serbian populace, and prohibited the Western press from entering much of Kosovo (while granting it permission to film bombed sites).

To the extent that NATO air attacks fostered internal dissent and therefore moved Serbian leadership decisionmaking, the Kosovo experience confirms past lessons. Air power can contribute to coercion by striking targets whose destruction helps foment dissent and by raising fears among an adversary's leadership. However, while air power and other military instruments that can strike valuable targets may be extremely precise in a technological sense,

50. An excellent account of the air campaign in Chechnya and the Chechen response is Benjamin S. Lambeth, "Russia's Air War in Chechnya," *Studies in Conflict and Terrorism*, Vol. 19, No. 4 (October 1996), pp. 365–388. On Somalia, see John Drysdale, "Foreign Military Intervention in Somalia," in Walter Clarke and Jeffrey Herbst, eds., *Learning from Somalia* (Boulder, Colo.: Westview, 1997), p. 118.
51. The resilience of police states in the face of wartime hardships was a key finding of the U.S. Strategic Bombing Survey of World War II air operations against Germany. See Clodfelter, *The Limits of Air Power*, p. 9.
52. When coercive operations threaten to foster instability, whether wittingly or unwittingly, target regimes often are well prepared to respond. If widespread domestic unrest appears likely, regimes will increase the police presence, use mass arrests, and even slaughter potential opposition members to preserve their power. Milosevic, for example, has constructed an extensive police state to resist both internal and external pressure. Susan L. Woodward, *Balkan Tragedy* (Washington, D.C.: Brookings, 1995), p. 293.

fine-tuning their political effects on an adversary population remains largely beyond the capability of planners and political leaders.

It is in assessing this relationship between targeting and desired political effects—the heart of coercive strategy-making—that shedding the binary analytical framework is critical. On the one hand, NATO attacks eventually appeared to erode support among some segments of the Serbian population, thereby intensifying pressure on Milosevic to capitulate. On the other hand, these attacks also inflamed nationalist passions among other segments (especially in the short term), and Milosevic proved skilled at exploiting these passions with his propaganda machinery. Analyzing possible outcomes of coercive strategies and the impact of certain types of threats as either a "yes" or a "no" obscures the potential for strikes or any other use of force to backfire, hardening adversary resistance and alleviating coercive pressure. From a policy standpoint, the message should be one of caution: the threat of internal instability is often a critical element of adversary decisionmaking, but it is one that remains difficult to shape with coercive instruments.

THE DESTRUCTION OF SERBIAN ARMED FORCES

One of air power's most important functions—one increasingly practical given continuing advances in intelligence and precision-strike capabilities—is threatening an adversary with defeat or otherwise preventing it from achieving its military objectives. Such a "denial" strategy focuses on the benefits side of the coercion equation, reducing the incentives for an adversary to engage in the unwanted behavior.[53] According to Pape, "Denial strategies seek to thwart the enemy's military strategy for taking or holding its territorial objectives, compelling concessions to avoid futile expenditures of further resources."[54]

The NATO air campaign made a priority of attacking Serbian armed forces. General Clark stated that "what we are trying to do is interdict and cut off Kosovo and make it much more difficult for [Milosevic] to sustain military operations there."[55] General Short described targeting fielded forces as Clark's

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53. A denial strategy at times blurs with "brute force," as both usually seek to defeat an adversary's military, but coercive "denial" focuses on convincing an adversary that future benefits will not be gained, while more conventional war fighting focuses on physically stopping an adversary regardless of whether its leadership believes it can fight on.
54. Pape, "The Limits of Precision-Guided Air Power," p. 97.
55. Quoted in Cordesman, "The Lessons and Non-Lessons of the Air and Missile Campaign in Kosovo," p. 94.

"No. 1 priority."[56] NATO dedicated approximately 30 percent of its sorties to striking Serbian forces in addition to attacking air defenses, striking command-and-control assets, interdicting military supplies, and otherwise trying to damage Serbia's war machine.[57] NATO focused particular attention on striking Serbian heavy military equipment, both because NATO was better able to hit these targets than lighter Serbian forces and paramilitary units and because this entailed a relatively low risk of hitting civilian targets by mistake.[58] By degrading Serbian military capabilities in Kosovo, NATO planners sought to pry off Milosevic's grip on the province one finger at a time until he conceded in the face of potentially losing Kosovo without even nominal control—the ultimate threat to a man who rose in part by exploiting Serb nationalism over Kosovo.[59] Even if Milosevic refused to back down, it was hoped that degrading his forces would reduce his capacity for ethnic repression.

The historical record offers strong support for Pape's theses that neutralizing an adversary's ability to achieve its desired ends through force is critical to coercion, and that such denial is a key contribution that air power can make to coercion—an argument that we do not repeat here. Successful denial, however, requires defeating the enemy's particular *strategy*, not simply stopping its conventional military operations.[60]

The precision, flexibility, and versatility of the air arm suits it well for denying an adversary the perceived fruits of military operations—as long as the adversary's strategy relies on the employment of heavy forces or requires extensive resupply efforts. Air power can be extremely effective against fielded forces in certain environments. Desert Storm demonstrated this capability vividly, when U.S. air power disabled parts of two Iraqi corps before they even engaged U.S. ground forces near al-Khafji. The small Iraqi force that did capture the empty town was then easily isolated and destroyed by coalition ground and air forces.[61] Air power has also proven a powerful interdiction

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56. Quoted in John A. Tirpak, "Short's View of the Air Campaign," *Air Force Magazine* (September 1999), p. 43. General Short believed that the focus of the air campaign should be strategic targets in Serbia proper.
57. Cordesman, "The Lessons and Non-Lessons of the Air and Missile Campaign in Kosovo," figs. 18, 19, 20.
58. Ibid., p. 118.
59. Glenny, *The Fall of Yugoslavia*, pp. 32–33; and Woodward, *Balkan Tragedy*, pp. 7, 133.
60. Pape, *Bombing to Win*, p. 30.
61. Thomas A. Keaney and Eliot A. Cohen, *Gulf War Air Power Survey Summary Report* (Washington, D.C.: Government Printing Office, 1993), p. 109.

tool, as shown in Operation Desert Storm, the Linebacker operations in Vietnam, and Israel's experience in the 1967 war, where Israeli attacks on Egyptian supplies and reinforcements greatly contributed to Israel's success.[62]

But contrary to much of this historical experience, the air attacks directed at fielded Serbian forces in Kosovo appeared to play little role in Belgrade's concessions. The NATO campaign did not defeat Serbia's strategy for controlling Kosovo because Milosevic was able to induce the ethnic Albanian exodus he desired before NATO air attacks had significant effects on his fielded forces; even after Operation Allied Force reached its full intensity, these forces could continue to terrorize local populations without exposing themselves by massing. NATO's reporting of Serbian ground activity indicated that the air campaign had not halted Serbia's infantry and artillery attacks nor prevented Milosevic from increasing the size of his forces in Kosovo. Despite the massive air strikes, Milosevic could have maintained de facto control of Kosovo for many months and completed his ethnic cleansing.[63]

Although air strikes diminished the Serbs' offensive power, the degree of damage to Serbian armed forces is not known at this time. Using a range of deception techniques, the Serbian army limited damage done to its key assets, particularly tanks and artillery pieces. Even assuming considerable devastation to Serbian forces, however, they remained more than a match for KLA irregulars.[64] In operations during the last days of the war, KLA offensives pulled Serbian forces out into the open where they were substantially more vulnerable to NATO air attack. But even then the KLA failed to open a corridor to resupply

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62. Mark Clodfelter argues that air power was ineffective when North Vietnam employed a guerrilla strategy, but was effective when North Vietnam used conventional military operations: "Because of revamped American political objectives and the North's decision to wage conventional war, Linebacker proved more effective than Rolling Thunder in furthering U.S. goals in Vietnam." Clodfelter, *The Limits of Air Power*, p. 148. See also Pape, *Bombing to Win*, pp. 193–194. Analyses of the Israeli experience can be found in Martin van Creveld with Steven L. Canby and Kenneth S. Brower, *Air Power and Maneuver Warfare* (Maxwell Air Force Base, Ala.: Air University Press, 1994), pp. 153–192; Dupuy, *Elusive Victory;* and Edgar O'Balance, *No Victor, No Vanquished: The Yom Kippur War* (London: Barrier and Jenkins, 1979).

63. Cordesman, "The Lessons and Non-Lessons of the Air and Missile Campaign in Kosovo," p. 95. After the war, many NATO commanders concluded that the Yugoslav 3d Army could have held out for a considerable length of time despite NATO air attacks. See Dana Priest, "The Commanders' War: The Plan to Invade Kosovo," *Washington Post*, September 19, 1999.

64. As of this writing, data on actual Serbian losses are limited. Press reports suggest that NATO may have overestimated the initial damage it inflicted. Figures released by General Clark in September 1999 indicate that allied strikes destroyed or damaged roughly one-third of the Serbian army's weaponry and vehicles in Kosovo. Priest, "The Commanders' War: The Battle inside Headquarters." The initial baseline of Serbian forces in Kosovo is not known at this time, however, making actual losses very difficult to discern.

its forces, nor did it demonstrate that it was capable of holding territory against the Serbian army for long.[65] It could be argued that the prospect of greater and greater losses created fear in Milosevic's mind that his forces might eventually be overrun. At this time, though, there is little evidence linking NATO's tactical success scored late in the conflict to the Serbian decision to surrender. Moreover, it is now clear that Milosevic retained considerable heavy forces and that his troops probably could have defeated the KLA with superior Serbian numbers and organization even had the bombing continued through the summer.

Operation Allied Force exposed several limits to air power's ability to coerce through denial. Most notably, air power's effectiveness is limited against particular types of targets and in particular environments. Adversaries fighting in mountainous, urban, or jungle terrain can often camouflage their movements, making them harder to attack. The effectiveness of air power against light infantry targets is limited in almost any environment.[66] Technological advances in surveillance, all-weather operations, and precision-guided munitions make air power more effective against these difficult-to-target foes, but such forces remain elusive. In Kosovo, air power faced an adversary skilled at deception and able to hide its forces. Perhaps more important, Pape's argument regarding the need to counter a foe's particular strategy is borne out in Kosovo: because only lightly armed forces were needed to purge village populations and defeat KLA insurgents, attacks on supply or on mechanized forces would not foil Milosevic's strategy.

The key lesson, however, for the broader coercive air power debate is not to cast general doubt on air power capabilities or their potential contribution to coercion. Rather, the Kosovo experience points to the need to assess coercive instruments and their effectiveness within the context of each crisis, including the strategic goals of the adversary and the extent to which its pursuit of those goals is vulnerable to military force.

THE PROSPECT OF A GROUND CAMPAIGN
NATO considered, and took several steps to prepare for, a ground campaign against Serbia, consideration of which featured heavily in the decisionmaking of both NATO and Serbia. General Clark argues that NATO ground troops posed an implicit threat that contributed to Milosevic's decision to capitulate,

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65. Kaminski and Reed, "NATO Link to KLA Rebels."
66. For ways to improve this capability, see Alan Vick, David T. Orletsky, John Bordeaux, and David A. Shlapak, *Enhancing Airpower's Contribution against Light Infantry Targets* (Santa Monica, Calif.: RAND, 1996).

even though NATO leaders refused to issue any explicit threats of ground assault.[67] Indeed, Milosevic came to terms on the day that President Bill Clinton planned to discuss ground options with his U.S. generals. British Prime Minister Tony Blair pressed openly for a ground war, and many U.S. leaders, including General Clark, called for greater consideration of the option.[68] Several ground options were publicly debated, ranging from a limited push to secure a small enclave for fleeing ethnic Albanians to a large-scale invasion aimed at occupying Serbia and removing the Milosevic regime. Most options involved the risk to Milosevic that NATO would wrest at least a portion of the disputed territory from Serbia with significant numbers of troops.

To some degree, U.S. deployments corroborated the growing rhetoric surrounding possible ground action. The United States moved elements of the 82d Airborne Division and a limited number of ground combat forces to the region; NATO in total deployed some 25,000 troops to Albania and Macedonia and planned to deploy thousands more as part of an ostensible peacekeeping force that could be used for a ground invasion.[69] The United States also shored up roads to support heavy assets and took other limited steps to prepare for ground attacks.[70]

NATO's wielding of the ground threat, however, was uneven and unclear. Many NATO members, including Germany and France, openly opposed any ground deployment. President Clinton and various senior U.S. officials stated repeatedly that they had no plans to use ground forces.[71] At times, Clinton and his advisers took the wind out of their own sails by hinting publicly that the presence of Apache helicopters and other ground assets was meant only as a threat and would never be used.

A decision to use ground forces had not been reached by the end of the air campaign, though by then momentum toward a ground intervention was growing.[72] But its possibility was sufficiently plausible to influence Milosevic's calculus. A ground invasion, even if the preponderance of the evidence avail-

67. "Interview: General Wesley Clark."
68. National Security Advisor Samuel Berger also authorized General Clark to examine various ground options. Priest, "The Commanders' War: The Plan to Invade Kosovo."
69. Carla Anne Robins and Thomas E. Ricks, "NATO Weighs Plan for Bigger Kosovo Force," *Wall Street Journal*, May 19, 1999; and Schmitt and Gordon, "Shift in Targets." The deployment of Apache helicopters may have been in part intended to convince Milosevic of the plausibility of a ground invasion. Ignatieff, "The Virtual Commander," p. 33.
70. Priest, "The Commanders' War: The Plan to Invade Kosovo."
71. Apple, "A Fresh Set of U.S. Goals."
72. Robbins and Ricks, "NATO Weighs Plan for Bigger Kosovo Force"; Thomas E. Ricks, David Rogers, and Carla Anne Robbins, "NATO to Reconsider the Issue of Ground Troops in Kosovo,"

able to Milosevic suggested that it was unlikely, threatened to take away the very objective—Serbian control of the Kosovo province—that his policy aimed to hold. Still more frightening to Milosevic, a ground war might have led to the occupation of other parts of Serbia. Serbia's stationing of forces along likely attack routes and efforts to fortify against a ground attack evinced sufficient concern among its leaders that ground threats affected resource allocation decisions.[73]

When more evidence of Serbian decisionmaking emerges, what might it tell us about the broader air power debate? One view would hold that the more influence ground threats had on Serbian decisionmaking, the weaker the claim of air power advocates that air strikes alone can compel territorial concessions. Air advocates might retort that even if the ground threat mattered, it was still subordinate to coercive air power.

Both of these perspectives fail to understand the synergistic contribution of air power to the threat of ground invasion. In probabilistic terms, the threat of ground war at the outset of the Kosovo crisis carried immense potential costs for Serbia, but its likelihood was small. As the intensity of NATO air attacks increased, however, they enabled NATO potentially to launch a ground campaign at less cost to itself and at more cost to Serbia by softening up Serbian forces before the ground push. In the Gulf War, air attacks did not prompt Saddam Hussein's quick surrender, but they facilitated a coalition rout once the ground assault was launched. Viewing the crisis dynamically, Milosevic's most obvious counter to a NATO ground campaign and the biggest deterrent to its launch—heavy casualties on NATO forces—was far less viable in the face of the air supremacy that NATO would have enjoyed. The previous section emphasized the need to avoid viewing the effects of coercive strategies in absolute, binary terms. The analysis of this section, in turn, demands that independent variables such as "threat of ground invasion" be viewed not in terms of whether the threat existed—even in the face of ardent denials by administration officials, it remained a possibility—but in terms of whether a surge in its probability, made possible by air attacks, contributed to the Serbian decision to capitulate.

Even the Kosovo experience, where air operations were conducted in isolation more than has been typical of modern military campaigns, suggests that

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Wall Street Journal, April 21, 1999; and Rowan Scarborough, "Apaches Were Sent to Scare Serbs," *Washington Times*, May 21, 1999, p. 1.
73. Michael R. Gordon, "NATO Says Serbs, Fearing Land War, Dig In on Border," *New York Times*, May 19, 1999, p. 1.

air power can be made far more effective when combined with ground forces.[74] Although NATO ground forces did not directly engage Serbian troops, air power's effectiveness increased when combined with ground assets and movements. Army radars from bases in Albania helped pinpoint Serbian artillery, enabling more accurate air strikes.[75] Reports circulated that British Special Forces may have helped direct NATO aircraft when poor weather hindered target identification.[76] Even the KLA's meager force augmented the devastation that air power could inflict. Air forces' effectiveness might have been enhanced still more through ground forces that could effectively reconnoiter, designate targets, assure safe air space for low-flying aircraft, and maneuver Serbian forces into vulnerable terrain. As the U.S. military services continue to progress in thinking jointly, it is critical that the broader air power debate progresses, too, and captures combined effects.

THE THREAT FROM THE KLA

Although Serbian forces' early thrust into Kosovo devastated the KLA, over time the guerrillas grew stronger, portending Milosevic's possible failure to secure Serbian hegemony over Kosovo. Had a potent KLA threat materialized, his terror campaign would have backfired. A popular explanation for Milosevic's eventual willingness to compromise posits that this scenario heavily influenced his calculus.[77] To those seeking to rebut the claims of air power advocates, this explanation has particular appeal because it emphasizes the importance of a ground presence, even if not a NATO one.

  After the collapse of the Rambouillet talks, the lightly armed, poorly organized KLA cadres proved no match for the better-armed and -trained Serbian forces that poured into Kosovo. Ethnic cleansing, however, generated support for the KLA, swelling its ranks with refugee recruits. Albanians from abroad increased their financial support. The KLA began working with U.S. intelligence to locate Serbian forces and, toward the end of the campaign, the KLA began operations against Serbian forces, though with only limited success. Fighting from bases near the Albanian border, the KLA attacked Serbian troops and tried to conduct guerrilla operations throughout Kosovo. In the last weeks

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74. See Thomas A. Keaney, "The Linkage of Air and Ground Power in the Future of Conflict," *International Security*, Vol. 22, No. 2 (Fall 1997), pp. 147–150.
75. Joseph Fitschett, "NATO Misjudged Bombing Damage," *International Herald Tribune*, June 23, 1999, p. A1.
76. Michael Evans, "SAS 'On the Ground in Kosovo,'" *London Times*, April 13, 1999.
77. See Cordesman, "The Lessons and Non-Lessons of the Air and Missile War in Kosovo," p. 6.

of the fighting, the KLA increasingly appeared to coordinate its actions with NATO.

Inside Kosovo itself, NATO air strikes and KLA attacks had synergistic effects. KLA ground offensives drew Serbian forces out of hiding, greatly increasing the lethality of air strikes. NATO aircraft were better able to strike tanks, armored personnel carriers, and artillery pieces as a result of KLA efforts. As one U.S. Army general claimed, "What you had, in effect, was the KLA acting as a surrogate ground force."[78]

The potential for an insurgency or other third-party force to act as a multiplier for coercive threats can be seen in many historical cases, the most recent demonstration being Operation Deliberate Force, the NATO campaign against Bosnian Serb forces in 1995 that contributed to the Serb leadership's decision to enter negotiations at Dayton. For several years, the Bosnian Serbs had ignored United Nations and NATO ultimatums. NATO's September 1995 air strikes on Bosnian Serb forces occurred in conjunction with Croat and Muslim successes on the battlefield, particularly the Croat offensives against the Serbs in western Slavonia and in the Krajina. The strikes not only hurt the Bosnian Serbs directly, but they also posed the risk that Bosnian Muslim and Croat forces would make further advances at the Serbs' expense.[79] U.S. strikes that by themselves imposed only limited damage proved tremendously potent because they complemented the local military balance and exposed vulnerabilities in Serb defensive capabilities.[80]

The relative success of Operation Deliberate Force may have inflated the expectations of policymakers who assumed Milosevic would back down quickly in the face of air attacks over the Kosovo issue. This time, however, available evidence suggests that KLA successes had only marginal effects on

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78. Quoted in Graham, "Air vs. Ground," p. A1. See also Fitschett, "NATO Misjudged Bombing Damage," p. A1. One of NATO's most effective strikes occurred on June 7, shortly before Milosevic capitulated, when B-52 bombers caught Serbian soldiers exposed on an open plain and may have killed several hundred—strikes that owed their success in part to KLA operations and intelligence. Kaminski and Reed, "NATO Link to KLA Rebels." NATO, however, sought to avoid serving as the KLA's air force and denied it communication equipment to serve as forward air controllers to call in strikes.
79. One post–Operation Deliberate Force analysis concluded: "Hitting communication nodes, weapons and ammunition storage areas, and lines of communication took away Serb mobility and did not allow them to respond to . . . offensives elsewhere in Bosnia." Michael O. Beale, "Bombs over Bosnia: The Role of Airpower in Bosnia-Herzegovina," master's thesis presented to the School of Advanced Airpower Studies, Maxwell Air Force Base, Air University Press, August 1997, p. 37.
80. For a more complete description of Operation Deliberate Force, see Robert Owen, ed., *The Air University Bosnian Air Campaign Study* (Maxwell Air Force Base, Ala.: Air University Press, forthcoming).

the Serbian decision to negotiate. The KLA, despite having gained strength by the end of Operation Allied Force, still had not defeated the Serbian army in battle and had at best limited control over territory inside Kosovo. (Note that in Bosnia in 1995, the Serbs faced not an insurgency but, for the most part, regular forces; in Croatia, too, it was regular army units that launched offensives in the Krajina and western Slavonia.) Although information is scarce as to whether the growing strength of the KLA played into Milosevic's decision to capitulate, at the time he gave in the KLA posed no immediate threat to Serbian control over the province. Moreover, Belgrade had sounded out Russian and other mediators on the possibility of a settlement before the latest round of targeting successes in June, implying that Milosevic was already seriously considering capitulation.[81] Finally, the concessions Milosevic accepted—in essence the complete removal of his forces from Kosovo—were far more than what the KLA could have accomplished anytime soon, even with NATO air support.

The Kosovo experience illustrates some of the difficulties of exploiting insurgent threats facing an adversary. Operationally, coordination with the KLA proved difficult. Although KLA operations forced Serbian troops out of hiding, the KLA could not sustain anything near the intensity that even a relatively small NATO ground force would have. The KLA could not integrate air operations into its ground attacks or otherwise help coordinate air strikes in more than an ad hoc manner. On a political level, the KLA was an unattractive ally, with many of its leaders linked to undemocratic ideologies and the drug trade.[82] NATO's goal of creating regional stability also required that the KLA's strength not swell so much that it undermined post-operation political settlement efforts.

As is true with respect to the threat of ground invasion, the important insight for the broader air power debate is not whether the insurgents' ground presence was a decisive factor in this particular crisis, but under what conditions such a presence can contribute to coercion. Despite its limited impact on Milosevic in 1999, air power can be particularly effective in shifting the local

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81. Serbia's efforts to work with Russia for a diplomatic solution apparently began in earnest in mid-May, well before the early June strikes against Serbian forces that proved more effective because of the KLA's presence. See BBC News, "Belgrade Diplomacy Leaves NATO Unmoved," August 1, 1999, http://bbc.co.uk/hi/english/world/europe; and Steven Erlanger, "With Milosevic Unyielding on Kosovo, NATO Moved toward Invasion," *New York Times*, November 7, 1999, p. 1.
82. Chris Hedges, "Kosovo's Next Masters?" *Foreign Affairs*, Vol. 79, No. 3 (May/June 1999), pp. 24–42.

balance of forces, leaving an adversary vulnerable to another external adversary. By interdicting the flow of men and arms to the front, air power can greatly enhance rivals' offensive power. Strikes on command-and-control facilities, as in Operation Deliberate Force, can hinder a foe's efforts to coordinate defenses against a rival. And the establishment and maintenance of "no-fly zones" can deprive one side of command of the air, oftentimes removing a critical element of its military prowess. In ways such as these, the use of air power, coordinated to exploit third-party threats, can not only threaten to impose immediate costs on an adversary, but can threaten to deny it benefits from resistance.

The experience of Bosnia revealed, and that of Kosovo corroborated in its converse, that magnifying a ground threat, even one not part of the coercing power's forces, is a potent source of coercive leverage. Such a strategy, however, requires a rare, preceding condition: the existence of a *viable* indigenous or allied force that the coercing power can support.

SERBIA'S INABILITY TO INFLICT COSTS ON NATO
By viewing coercion dynamically, as chess-like contests of move and counter-move, it becomes clear that successful coercion requires not only effective threats, but also the neutralization of adversary responses.[83] By threatening to impose costs on a coercer, an adversary may be able to turn the tables and force the coercing power to back down. Inflicting costs back on the coercer is also important for psychological reasons, allowing the adversary leadership to demonstrate to its followers that they are not alone in suffering. Like past opponents, Serbia tried at least three strategies for imposing costs on NATO: creating casualties; fostering sympathy through its own suffering; and disrupting NATO cohesion. Serbia's inability to inflict costs—particularly its failure to gain Russian support—prevented it from defeating the NATO coercion effort and decreased its ability to shore up popular morale.

To varying degrees, the use of air power helped prevent Serbia from successfully propagating these counter-strategies, a major factor in the overall qualified success of coercion. This "explanation" would not account for Milosevic's capitulation on its own because neutralizing the counter-strategies imposed no direct costs by itself. But it is as important an explanation as the others considered above because negating counter-coercive strategies fortified

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83. Byman and Waxman, "Defeating U.S. Coercion."

the credibility of NATO threats: Milosevic realized that he could not escape the other costs being imposed upon his regime without conceding.[84]

IMPOSING CASUALTIES. A potentially fruitful means of countering U.S. coercion appears to be by killing or credibly threatening U.S. soldiers. Although a number of empirical studies have shown that the effects of U.S. casualties on public support depend heavily on other variables and contextual factors— for example, support is likely to erode with casualties when the public views victory as unlikely or when vital U.S. interests are not at stake—this sensitivity affects policy and planning decisions both prior to and during operations, when concern for potentially adverse public reactions weighs strongly.[85]

Adversaries often view casualty sensitivity as the United States' "center of gravity" and adopt their strategies accordingly. Ho Chi Minh famously warned the United States: "You can kill ten of my men for every one I kill of yours. But even at those odds, you will lose and I will win."[86] Somali militia leader Mohammed Farah Aideed echoed this view to U.S. Ambassador Robert Oakley: "We have studied Vietnam and Lebanon and know how to get rid of Americans, by killing them so that public opinion will put an end to things."[87] Even if these perceptions misunderstand U.S. politics, coupling them with a belief that U.S. forces are vulnerable may be enough to cause an adversary to hold out.

Milosevic appears to have shared previous estimations that American political will would erode as U.S. casualties mounted. As he noted in an interview,

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84. Note that a counter-coercive strategy such as inflicting casualties need not succeed for coercion to fail. Coercion relies on manipulating an adversary's perceptions of future costs, so even if an adversary is badly mistaken in its beliefs about a coercer's willingness and ability to incur costs, it may nevertheless hold out.
85. For such conclusions and evidence drawn from other studies, see Eric Larson, *Casualties and Consensus: The Historical Role of Casualties in Domestic Support for U.S. Military Operations* (Santa Monica, Calif.: RAND, 1996). See also John E. Mueller, *Policy and Opinion in the Gulf War* (Chicago: University of Chicago Press, 1994), pp. 76–77, who reports empirical findings from previous conflicts to support the theory that U.S. casualties, especially under certain circumstances, erode public support for continued operations. Harvey M. Sapolsky and Jeremy Shapiro present a strong argument that many empirical works underestimate casualty sensitivity among politicians. See Sapolsky and Shapiro, "Casualties, Technology, and America's Future Wars," *Parameters*, Vol. 26, No. 2 (Summer 1996), pp. 119–127.
86. Quoted in Stanley Karnow, *Vietnam: A History* (New York: Penguin, 1997), p. 184. Saddam Hussein shared this belief prior to the Gulf War, reportedly having told the U.S. ambassador to Baghdad shortly before the invasion of Kuwait, "Yours is a society which cannot accept 10,000 dead in one battle." Quoted in Freedman and Karsh, *The Gulf Conflict*, p. 276.
87. Quoted in Barry M. Blechman and Tamara Cofman Wittes, "Defining Moment: The Threat and Use of Force in American Foreign Policy," *Political Science Quarterly*, Vol. 114, No. 1 (Spring 1999), p. 5.

NATO is "not willing to sacrifice lives to achieve our surrender. But we are willing to die to defend our rights as an independent sovereign nation."[88] Rhetorically embellished as this statement may be, Milosevic probably perceived NATO's will to sustain operations in the face of casualties to be weak.[89]

PROPAGANDIZING COLLATERAL DAMAGE. Recent conflicts have highlighted U.S. decisionmakers' concern not only with potential U.S. casualties but with the deaths or suffering of enemy civilians, which policymakers worry can contribute to the breakdown of domestic or allied support for an operation. Toward the end of Operation Desert Storm, Saddam dramatized before the media Iraqi civilian deaths resulting from a U.S. intelligence failure—U.S. aircraft had struck the al-Firdos bunker, which was thought to house command-and-control facilities but was instead used at the time as a bomb shelter —hoping to play on the West's humanitarian sentiments and create a backlash in the United States and among its allies. Although this effort failed to disrupt the entire campaign or even to generate sympathy among the American people, it did lead U.S. commanders to curtail the air strikes on Baghdad.[90]

Some coalition partners may be more sensitive than the United States to civilian injuries resulting from military operations, and planners must at times design operations to fall within the political constraints of the most sensitive members. During the early phases of Operation Allied Force, most major targets were scrutinized by representatives of a number of allied capitals. To strike politically sensitive targets, General Clark required authorization from the Joint Staff in the Pentagon, which in turn passed decisions on major targets up to the defense secretary and ultimately the president.[91] Some European allies resisted escalated air attacks that would endanger civilians, and NATO officials also scrutinized the target list to comply with international legal proscriptions.[92]

Serbia tried to undermine allied support for the air war by propagandizing collateral damage. Belgrade publicized the deaths of Serb and Albanian civil-

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88. United Press International, text of Milosevic interview, April 30, 1999.
89. The head of Serbian forces in Kosovo also publicized the threat of heavy casualties to deter a NATO ground attack. BBC News, "NATO Promised 'Hell' in Kosovo," May 30, 1999, http://news.co/uk/hi/english/world/monitoring (visited on August 1, 1999).
90. William M. Arkin, "Baghdad: The Urban Sanctuary in Desert Storm?" *Air Power Journal*, Vol. 10, No. 1 (Spring 1997), pp. 4–20; and Michael R. Gordon and Bernard E. Trainor, *The Generals' War: The Inside Story of the Conflict in the Gulf* (Boston: Little, Brown, 1994), p. 326.
91. Steven Lee Myers, "All in Favor of This Target, Say Yes, Si, Oui, Ja," *New York Times*, April 25, 1999, sec. 4, p. 4.
92. Ignatieff, "The Virtual Commander," p. 33. For a sample of common arguments against the legality of some NATO targeting practices, see Michael Dobbs, "A War-Torn Reporter Reflects," *Washington Post*, July 11, 1999, p. B1.

ians resulting from tragic target misidentifications or errant bombs, trying to capitalize on NATO's humanitarian conscience.[93] Milosevic's efforts to exploit collateral damage failed to erode significantly U.S. or allied support for the operation. It did, however, result in the short-term tightening of targeting restrictions on NATO bombers: in April, for instance, NATO modified its procedures to require that U.S. pilots receive authorization before striking military convoys, after a U.S. warplane mistakenly hit a refugee convoy.[94]

DISRUPTING NATO UNITY. Coalition members often have diverse goals or different preferences, leading the coalition as a whole to adopt positions that may reflect the "lowest common denominator" rather than more assertive positions. Coalitions sometimes have difficulty escalating their threats because diplomats must accede to restrictive operation mandates or rules of engagement as the price of allied cohesion.[95]

Exploiting coalition fissures offers adversaries an enticing counter-coercive strategy, as an alternative or adjunct to combating threats of force directly. Saddam Hussein attempted to widen coalition splits at several key junctures in the Gulf crisis and its aftermath, in an effort to undermine the threat of escalation against Iraq. Prior to the coalition ground assault, his attempted negotiations with the Soviet Union not only nearly averted war but also caused some coalition members to question the need for military action. Iraq simultaneously tried to dislodge Arab support for coalition operations by linking resolution of the Kuwaiti crisis to the Arab-Israeli dispute, thereby driving a wedge between the Arab states and the U.S.-Israeli axis.

Like Saddam, Milosevic appears to have believed that he could outlast the coalition arrayed against him. Diplomatic rifts among NATO partners and public disagreement over strategy likely contributed to his defiance by fostering his beliefs that NATO unity would collapse. Greece and Italy opposed an extended bombing campaign and pushed for limits on the damage inflicted, France resisted plans for a naval blockade, and Germany opposed any consideration of ground options.[96] But toward the end of the campaign, Milosevic's hopes of disrupting NATO unity seem to have evaporated, as the allies' momentum shift toward possible ground assault signaled greater cohesion

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93. Cordesman, "The Lessons and Non-Lessons of the Air and Missile War in Kosovo," pp. 45–46.
94. Elaine Harden and John M. Broder, "Clinton's War Aims: Win the War, Keep the U.S. Voters Content," *New York Times*, May 22, 1999, p. A1.
95. Matthew C. Waxman, "Coalitions and Limits on Coercive Diplomacy," *Strategic Review*, Vol. 25, No. 1 (Winter 1997), pp. 38–47.
96. Michael R. Gordon and Eric Schmitt, "Thwarted, NATO Agrees to Bomb Belgrade Sites," *New York Times*, March 31, 1999, p. A1.

than expected. In addition, the air campaign actually intensified as time went on, further diminishing hopes that NATO's own disagreements would collapse the coercion effort.[97]

AIR POWER AND COUNTER-COUNTER-COERCION. Several of air power's attributes allow coercers to defend against common counter-coercive strategies, such as those just outlined. An understanding of these contributions, and their limits, is critical to assessing air power as a coercive instrument. These issues, however, are frequently put aside in air power debates because participants focus on actual damage inflicted and observed behavior, ignoring what an adversary is *unable* to do in response.

The most publicized advantage of air power in restricting adversary countermoves is the relative invulnerability of U.S. aircrews compared with that of engaged ground forces. By reducing force vulnerability, reliance on air power can help sustain robust domestic support by lowering the likelihood of U.S. casualties. At the same time, air power's ability to conduct precision operations can reduce concerns about adversary civilian suffering (though efforts to keep air forces relatively safe may create moral and legal concerns if doing so places civilians at much greater risk).[98] Both of these attributes of air power—relatively low force vulnerability and high precision—can also fortify coalition unity, which is itself susceptible to disruptions as friendly casualties and collateral damage mount.

These potential advantages of air power over other instruments were largely borne out in the Kosovo experience. Serbia inflicted zero NATO casualties, an amazing figure given the length and extent of the air campaign. Although NATO air strikes did lead to the deaths of innocents, collateral damage was sufficiently contained that domestic and international support remained steady.[99]

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97. The total number of strike aircraft tripled after the first month, and the overall sortie rate increased dramatically as well. Cordesman, "The Lessons and Non-Lessons of the Air and Missile War in Kosovo," pp. 11–14.

98. Interpretations of legal obligations and factual circumstances vary. Moreover, some political pressures push against rather than with the humanitarian goals of the legal regime; while concern with collateral damage may caution tremendous restraint in conducting air operations, concern with force protection, military effectiveness, and even financial cost may cause planners to undervalue civilian costs to operations, arguably beyond legal bounds. For critical appraisals of NATO's practices, see Fintan O'Toole, "Nato's Actions, Not Just Its Cause, Must Be Moral," *Irish Times*, April 24, 1999, p. 11; and Julian Manyon, "Robinson Criticizes Nato's Bombing," *Independent* (London), May 14, 1999, p. 4. It must be noted that such critiques often failed to address the immense risks that civilians would face in the event of a ground war.

99. Thomas E. Ricks, "NATO Commander's Job Is Maintaining Support from Members for Airstrikes," *Wall Street Journal*, April 13, 1999, p. 10.

The advantages that air power offers in negating adversary counter-strategies are not cost-free, and there are typically trade-offs among them. To evade Serbian air defenses, NATO aircraft flew at medium or high altitudes (often 15,000 feet), therefore increasing the risk of collateral damage. Maintaining necessary levels of precision and force protection comes at the price of military effectiveness and overall cost, as alternatives that entail greater risk or fewer forces are shelved.[100] Appreciation of these trade-offs is critical; analysts must resist the temptation to compare coercive instruments only in terms of manifest effects, because the manifest destructive impact of coercive strikes is but one side of the equation.

While air power is well suited against some counter-strategies, those outlined in this section are only three of many. Adversaries also, for instance, try to impose costs and counter-coerce through nonmilitary means. If an adversary can forge a new alliance with a foe of the coercing power or otherwise raise the stakes, it can often succeed in halting a coercion campaign.

Serbia failed to gain Russian support for its cause, which likely played a key role in Milosevic's decision to concede. Had Serbia won strong Russian support, it would have gained a means of resistance and diplomatic escalation. The price to NATO of continued war in Kosovo would have meant alienating a great power on the edge of Europe. Initially, Russia pressed NATO to end the bombing as a prelude to a diplomatic settlement, and, even in late May, Russia publicly touted its opposition to NATO.[101] Although evidence is not available, Milosevic probably looked at Russia's rhetorical support and condemnation of the NATO campaign as an indication that Moscow would champion Belgrade's cause in the international arena. But while Russia opposed NATO's air war and complicated the subsequent occupation of Kosovo, it never sided firmly with Serbia. Russian envoy Viktor Chernomyrdin even acted as NATO's de facto envoy, pressing Milosevic to yield to NATO.[102] The timing of Milosevic's capitulation suggests the importance of this factor: NATO had long offered similar conditions to those ultimately accepted by Milosevic, but Russia's lack of support had not been clear until this point. Lieut. Gen.

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100. Critics who complained that bombing from high altitudes undermined the sheer military effectiveness of air strikes generally miss the point that although such practices do carry disadvantages such as reduced accuracy or ability to hit key targets under certain weather conditions, they removed Milosevic's only practicable opportunity to inflict casualties.
101. See Viktor Chernomyrdin "Impossible to Talk Peace with Bombs Falling," *Washington Post*, May 27, 1999, p. A39.
102. David R. Sands, "U.S. and Russia Patch Up Relations," *Washington Times*, June 25, 1999, p. A1.

Michael Jackson, NATO's commander in Kosovo, concluded that Russia's decision to back NATO's position on June 3 "was the single event that appeared to me to have the greatest significance in ending the war."[103]

We emphasize Milosevic's failed efforts to exploit Russian sympathy because, unlike other counter-coercive strategies such as imposing U.S. casualties, there is little that air power or any other military instrument can do to neutralize such efforts.[104] Russia's unwillingness (or inability) to help Belgrade was a product of Moscow's own limits and Serbia's unattractiveness as an ally, not factors shaped by air power. The diplomatic importance of Russia in ending the conflict, of course, must also be seen in context. Without the constant battering of the air campaign, Russia's pressure on Belgrade probably would have accomplished little.

Kosovo and the Future Use of Air Power

As frequently happens in the aftermath of U.S. air operations, participants at both poles of the air power debate claimed vindication from Kosovo. But the key lesson of the Kosovo crisis is that neither side of this debate is, or can be, correct. This conclusion will strike many readers as unsatisfying because it urges participants to take several steps backward and reassess the terms of the debate rather than move forward and resolve it based on new data. The methodological propositions advanced in this article, however, should guide analysis of any instrument of coercion, whether military, economic, or diplomatic.

When weighing the balance of ground and air forces (as well as the type of air forces needed), policymakers must consider not only what they seek to accomplish through coercion, but also what they seek to prevent. As the Kosovo contest attests, air power's and other instruments' greatest accomplishments are often what they preclude an adversary from doing. The role air power can play, for example, in stopping an adversary from shattering a coalition or generating domestic opposition in the United States has value beyond the damage it inflicts. In the future, adversaries will develop new

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103. Quoted in Andrew Gilligan, "Russia, Not Bombs, Brought End to War in Kosovo Says Jackson," *London Sunday Telegraph*, August 1, 1999, p. 1. General Clark also refers to Serbia's "isolation" as a major factor in Milosevic's ultimate decisionmaking. See "Interview: General Wesley Clark."

104. Ironically, the most significant diplomatic windfall for Serbia occurred when a U.S. warplane hit—very precisely—the Chinese embassy based on faulty intelligence.

counters, both political and military, and air power may be of only limited value in stymieing these. Anticipating counter-strategies, and planning accordingly, is essential.

Finally, policymakers and military officials must recognize when reliance on air power may undermine U.S. and allied credibility. Use of air power can help sustain domestic support or coalition unity, but it cannot eliminate underlying political constraints. In Eliot Cohen's words, "Air power is an unusually seductive form of military strength, in part because, like modern courtship, it appears to offer gratification without commitment."[105] This view poses a challenge for air power. Because policymakers often see air strikes as a low-risk, low-commitment measure, air power will be called on when U.S. public or allied commitment is weak—a situation that will make successful coercion far harder when casualties do occur or when air strikes fail to break adversary resistance. Air power, like other military instruments, cannot overcome a complete lack of political will. Policymakers' use of coercive air power under inauspicious conditions and in inappropriate ways diminishes the chances of using it elsewhere when the prospects of success would be greater.

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105. Cohen, "The Mystique of U.S. Air Power," p. 109.