

Realists as Optimists

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Cooperation as Self-Help

Structural realists are pessimistic about the prospects for international cooperation; they believe that competition between the major powers in the international system is the normal state of affairs. The structural-realist argument is driven by the implications of international anarchy, that is, the lack of an international authority capable of enforcing agreements. Responding to the pressures of anarchy, during peacetime countries will be inclined to deal with adversaries by arms racing and gaining allies, rather than by cooperating via arms control or other approaches for realizing common interests. Anarchy discourages cooperation because it requires states to worry about the relative gains of cooperation and the possibility that adversaries will cheat on agreements. In short, the standard structural-realist argument predicts that cooperation between adversaries, while not impossible, will be difficult to achieve and, as a result, will be rare and contribute relatively little to states' well-being.¹

This characterization of structural realism is offered by both its proponents and its detractors. Kenneth Waltz argues that self-help systems "make the cooperation of parties difficult. . . . Rules, institutions, and patterns of cooperation . . . are all limited in extent and modified from what they might otherwise be." Summarizing the views of realists, Joseph Grieco says, "realism presents a fundamentally pessimistic analysis of the prospects for international coop-

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1. Structural realists are sometimes referred to as neorealists. Kenneth N. Waltz, *Theory of International Politics* (New York: Random House, 1979) remains the most important statement of these arguments. Some authors want to reserve "neorealism" to refer to the theory as articulated by Waltz, while using structural realism to refer to a broader family of systemic theories; see Barry Buzan, Charles Jones and Richard Little, *The Logic of Anarchy: Neorealism to Structural Realism* (New York: Columbia University Press, 1993). In this essay, I use "structural realist" as an ideal type—an analyst who believes that only international or systemic-level factors influence international politics. I recognize, however, that virtually all structural realists actually believe that other levels of analysis have some influence.

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eration." Critics essentially agree. Robert Keohane concludes that, "realism sometimes seems to imply, pessimistically, that order can be created *only* by hegemony. If the latter conclusion were correct . . . at some time in the foreseeable future, global nuclear war would ensue. . . . No serious thinker could, therefore, be satisfied with Realism." Steve Weber declares that structural realism claims that any cooperation that emerges under anarchy will "be tenuous, unstable, and limited to issues of peripheral importance."²

I argue that this pessimism is unwarranted. Contrary to the conventional wisdom, the strong general propensity for adversaries to compete is not an inevitable logical consequence of structural realism's basic assumptions. Structural realism properly understood predicts that, under a wide range of conditions, adversaries can best achieve their security goals through cooperative policies, not competitive ones, and should, therefore, choose cooperation when these conditions prevail.

This article focuses on states' military-policy options during peacetime. In this context, "cooperation" refers to coordinated policies designed to avoid arms races,³ while competition refers to unilateral military buildups, which are likely to generate arms races, and to alliance formation.⁴

The implications of my reevaluation are not limited to peacetime policies, however: Adversaries find peacetime cooperation desirable because it enables

2. Kenneth N. Waltz, "Reflections on *Theory of International Politics: A Response to My Critics*," in Robert O. Keohane, ed., *Neorealism and Its Critics* (New York: Columbia University Press, 1986), p. 336; Joseph M. Grieco, *Cooperation Among Nations: Europe, America and Non-tariff Barriers to Trade* (Ithaca, N.Y.: Cornell University Press, 1990), p. 27; Robert O. Keohane, "Theory of World Politics: Structural Realism and Beyond," in Ada W. Finifter, ed., *Political Science: The State of the Discipline* (Washington, D.C.: American Political Science Association, 1983), p. 532, reprinted in Keohane, *Neorealism and its Critics*; and Steve Weber, "Realism, Detente, and Nuclear Weapons," *International Organization*, Vol. 44, No. 1 (Winter 1990), pp. 58-59. Weber claims further that realism "cannot comfortably encompass the more constraining provisions of SALT," the Strategic Arms Limitation Treaty.

3. In other contexts, cooperation can refer to decisions to make concessions during a crisis and to decisions to forgo launching a war. Cooperation—including both formal and informal reciprocated restraint—is not the only alternative to competitive policies. Uncoordinated but unthreatening, and therefore uncompetitive, policies can sometimes be a second key alternative. For example, if defensive forces have an advantage over offensive forces, then countries could choose defense, independent of others' choices.

4. I consider alliance formation to be a type of competition because, although the allies are cooperating with each other, they are competing with a common adversary. Since balancing in the form of alliance formation is probably the most prominent and widely accepted prediction of structural realism, the standard pessimism about cooperation presumably does not count alliances as cooperation. The key questions about cooperation therefore focus on cooperation between adversaries. However, because today's ally could be an adversary in the future, the line between allies and adversaries is not always sharp, and under certain conditions concern about relative gains could inhibit cooperation between allies.

them to moderate causes of war that already exist or to avoid competition that would intensify causes of war. Consequently, beyond being more optimistic about the prospects for peacetime cooperation, my alternative structural-realist analysis, which I label *contingent realism*, is also more optimistic about the likelihood of avoiding war than is the standard structural-realist analysis.

My argument draws on various strands of international relations theory, including arguments about the security dilemma, costly signaling, relative-gains constraints, arms control, and cooperation under anarchy. I develop a number of specific arguments that are required to apply these strands of theory to the security realm and to integrate them fully into a structural-realist argument. However, the overall argument is bigger than the sum of the individual strands: it offers a direct and thorough challenge to the standard structural-realist explanation of the prevalence of international competition.

Recent critics of structural realism have come to be viewed as advancing a competing theory, instead of correcting flaws within structural realism.⁵ In part, this is because the critics have emphasized factors such as institutions and regimes that structural realists believe have little explanatory power, and have underplayed factors that structural realists believe are critical, such as the relative gains of cooperation. This article focuses more closely on the elements that structural realists identify as most important. Therefore, my argument should be understood as identifying basic corrections that follow deductively from structural realism's core assumptions, not as another theory being counterposed against structural realism.

Contingent realism challenges neo-institutionalists, who see institutions as the key to cooperation, by explaining international cooperation without focusing on institutions. Moreover, to the extent that institutions facilitate cooperation, contingent realism explains why they are necessary and how they help.

The first section of this article summarizes the "standard" structural realist explanation for competition. The next section presents the three arguments that together constitute contingent realism. The first argument shows that the stan-

5. One challenge comes from cooperation theory, which employs game theory to study the implications of potential cheating. Robert Axelrod, *The Evolution of Cooperation* (New York: Basic Books, 1984), provides the foundation for much of this work. Key works include Robert O. Keohane, *After Hegemony: Cooperation and Discord in the World Political Economy* (Princeton, N.J.: Princeton University Press, 1984); and Kenneth A. Oye, ed., *Cooperation Under Anarchy* (Princeton, N.J.: Princeton University Press, 1986). Cooperation theory has been criticized for overlooking constraints imposed by concern over relative gains; see Grieco, *Cooperation Among Nations*. David A. Baldwin, ed., *Neorealism and Neoliberalism: The Contemporary Debate* (New York: Columbia University Press, 1993), includes many of the key articles in this debate. Robert Powell, "Anarchy in International Relations Theory: The Neorealist-Neoliberal Debate," *International Organization*, Vol. 48, No. 2 (Spring 1994), pp. 313-44, explores many of the key issues.

dard explanation is biased, because it emphasizes the benefits of competition while overlooking its risks, and it implies that “self-help” necessitates competition; in fact, cooperative policies are an important type of self-help. The second corrects problems with how the standard formulation deals with states’ military capabilities, specifically their ability to perform military missions. In assessing their security, states should focus on their ability to perform military missions. However, the standard structural-realist argument is cast in terms of power.⁶ Power influences mission capability, but is only the beginning of the story. Contingent realism corrects this mis-specification by integrating offense-defense variables into structural-realist theory. This integration shows that, as the security-dilemma literature argues, cooperation can be a country’s best option, and identifies the conditions under which states should prefer arms control or unilateral defensive policies to arms racing.

The third argument shows that basic structural-realist assumptions leave open the possibility that a country can use its military policy to communicate information that should lead its adversaries to reassess its motives and intentions. Thus, contrary to the standard argument, countries should not focus solely on capabilities, but also on motives. Consequently, countries should sometimes exercise self-restraint and pursue cooperative military policies, because these policies can convince a rational opponent to revise favorably its view of the country’s motives. I explore the conditions under which these considerations favor cooperation.

The third section of this article addresses the three major arguments that structural realists use to support their standard prediction of competition, and that could be used to counter the conclusions that flow from my reformulation. These potential counter-arguments are: 1) states try to maximize relative power, which creates a zero-sum situation that usually precludes cooperation; 2) states’ concerns over relative gains make security cooperation especially difficult; and 3) states adopt competitive policies because the possibility of cheating makes cooperation too risky. I explain how each of these arguments is seriously flawed, holding only under certain conditions, and not under others.

6. To avoid confusion, it is important to distinguish the role that power plays in two major strands of realism. Classical realists hold that power is an end in itself; in contrast, structural realists hold that security is an end, and according to the standard argument, states measure their ability to achieve this end in terms of power. My discussion accepts the structural-realist assumption that security is the end, and explores problems that arise from focusing on power as the means to this end. Hans J. Morgenthau is often credited with presenting the fullest statement of classical realism; see his *Politics Among Nations*, 5th ed. (New York: Knopf, 1973). Robert O. Keohane, “Realism, Neorealism and the Study of World Politics,” pp. 7–16, in Keohane, ed., *Neorealism and Its Critics*, compares classical and structural realism.

The final section briefly considers implications for theoretical and policy debates. Contingent realism emphasizes that offense-defense variables and the security dilemma are central to the logic of structural realism, not a separate body of theory. Integrating these variables yields a set of conditional structural-realist predictions about when states should compete and when they should cooperate. Because structural realism is a parsimonious theory of rational behavior, these predictions establish an important baseline against which to compare theories that are less parsimonious or that deal with sub-optimal behavior. The thrust of my argument is not that contingent realism necessarily explains states' behavior correctly, but rather that such a baseline is essential for assessing the explanatory power of structural realism relative to theories built on other assumptions and at other levels of analysis.

Contingent realism makes clear that the standard structural-realist claim about the strong tendency for states to pursue competitive military policies is at best incomplete. Because contingent realism makes conditional predictions about cooperation and competition, a structural-realist case against cooperation must demonstrate that the conditions necessary for cooperation have not occurred; structural-realists have not provided this type of evidence. Furthermore, contingent realism contradicts the conventional wisdom that while structural realism does a good job of explaining the Cold War, it is severely challenged by the end of the Cold War, which runs counter to the theory's supposed predictions of competitiveness. Contingent realism suggests that structural realism, correctly understood, can explain the end of the Cold War relatively easily, but has greater difficulty explaining the latter half of the Cold War. The need for additional theories is clearest when trying to explain this competitive period. In terms of the future, contingent realism provides more optimistic predictions than those now often associated with structural realism.

Review of the "Standard" Structural-realist Argument

Structural realism is built on a small number of basic assumptions: that states can be viewed as essentially rational unitary actors; that states give priority to insuring their security; and that states confront an international environment that is characterized most importantly by anarchy.⁷ Structural realism is a

7. This formulation is consistent with Waltz, *Theory of International Politics*. For Waltz's view on rationality, see "Reflections on *Theory of International Politics*," pp. 330–331. Waltz does make other assumptions and basic arguments that significantly influence his conclusions, including claims that power is fungible. For discussion and criticism of his formulation see Buzan, Jones, and Little, *The Logic of Anarchy*. For useful discussions of the assumptions of realism, see Keohane, "Theory of

third-image theory: the constraints and opportunities created by the international system are used to explain states' behavior; and states view each other as "black boxes"—they focus on other states' observable behavior, not their type of government, the quality of their decision-making, or particular features of their leaders.⁸

Structural realism does not preclude the possibility that states have important motives in addition to security. States must worry that others have non-security ("greedy") motives that call for expansionist policies,⁹ but structural realism does not assume the presence of greedy states in the system.¹⁰ Central to the structural realist argument is the conclusion that security competition and war are possible even when there are no greedy states in the system, since states might seek to increase their security through expansion.

THE STANDARD ARGUMENT

Working from these basic assumptions,¹¹ structural realists argue that states live in a "self-help" world that results from international anarchy: without an

World Politics," pp. 163–169, and Robert G. Gilpin, "The Richness of the Tradition of Political Realism," pp. 304–305, both in Keohane, *Neorealism and Its Critics*. Another common assumption is that states are the major actors in the international system. I do not include this as an assumption, preferring to leave open to analysis the question of whether states would create or allow other actors that would replace them as the major actors.

8. On the third image, see Kenneth N. Waltz, *Man, the State and War* (New York: Columbia University Press, 1959), esp. chaps. 6 and 7. Other useful discussions of levels of analysis include J. David Singer, "The Level-of-Analysis Problem in International Relations," in James N. Rosenau, ed., *International Politics and Foreign Policy* (New York: The Free Press, 1969), pp. 20–29; and Robert Jervis, *Perception and Misperception in International Politics* (Princeton, N.J.: Princeton University Press, 1976), chap. 1.

9. Because expansion can be motivated by greed as well as insecurity, I do not use the terms "expansionist" and "aggressive" to define types of states. For similar reasons, I do not use the term "status quo" to define states that are motivated only by insecurity; pure security seekers may be unwilling to accept the status quo. For more on these points, see Charles L. Glaser, "Political Consequences of Military Strategy: Expanding and Refining the Spiral and Deterrence Models," *World Politics*, Vol. 44, No. 4 (July 1992), pp. 497–538.

10. Although the standard structural-realist explanation says little about the probability and severity of greedy states in the system, these variables and states' beliefs about them would influence their choices between cooperation and competition; see Glaser, "Political Consequences of Military Strategy," and the discussion below. Therefore, a more complete theory would incorporate variations in greed and generate a family of predictions, while holding other variables constant. In this spirit, see Randall L. Schweller, "Bandwagoning for Profit: Bringing the Revisionist State Back In," *International Security*, Vol. 19, No. 1 (Summer 1994), pp. 72–107.

11. The following description of the standard argument does not include some important nuances and it blurs some differences between authors that I have lumped together as contributors to the standard structural-realist analysis. Nevertheless, I believe that it captures the basic thrust of the standard argument. For a good summary of the realist literature, see Arthur A. Stein, *Why Nations Cooperate: Circumstances and Choice in International Relations* (Ithaca, N.Y.: Cornell University Press, 1990), pp. 4–13.

international authority capable of protecting them, major powers must look out for themselves.¹² The standard interpretation equates self-help with states' pursuit of unilateral, competitive policies.¹³ This inclination toward competition is reinforced by doubts about the adversary's motives and intentions. Intentions are unknowable, and even if known, could be different tomorrow. This uncertainty works against cooperation.¹⁴ States must not overlook the possibility that potential adversaries will use their full capabilities against them, and they therefore must focus on adversaries' capabilities instead of their intentions. Thus, at a minimum, cooperation is difficult because states are sensitive to how it affects their current and future relative capabilities;¹⁵ moreover, cooperation is often impossible because states find military advantages to be especially valuable and thus compete to acquire them.¹⁶ Making matters still worse, falling behind in this competition can carry extremely high costs: it invites war and, in the worst case, a major power can lose its sovereignty.¹⁷ Consequently, competition tends to be intense and cooperation is rare because the risks of being cheated are large.

In short, according to the standard structural-realist explanation, states prefer competitive policies for multiple, reinforcing reasons. Arms races occur because

12. On the nature and implications of self-help, see Waltz, *Theory of International Politics*, pp. 105–107, 111–112. The necessity of self-help also depends on the assumption that states do not believe that other states are highly altruistic—specifically, that they would be willing to risk their own security to guarantee others' security. If they were, then even under anarchy, states would not have to rely entirely on self-help; instead, they could count on others coming to their aid, even when the other states' security was not in jeopardy. However, altruism is not the key issue for structural realists; under anarchy, the more immediate concern is the extent of opposing states' current and future malign intentions; states cannot count on others being benign, let alone altruistic.

13. For example, Christopher Layne, "The Unipolar Illusion: Why New Great Powers Will Rise," *International Security*, Vol. 17, No. 4 (Spring 1993), p. 11, argues: "Because it is anarchic, the international political system is a self-help system in which states' foremost concern must be with survival. In an anarchic system, states must provide for their own security and they face many real or apparent threats. International politics is thus a competitive realm." In his critique of structural realism, Alexander Wendt, "Anarchy is What States Make of It: The Social Construction of Power Politics," *International Organization*, Vol. 46, No. 2 (Spring 1992), p. 392, argues: "The self-help corollary to anarchy does enormous work in neorealism, generating the inherently competitive dynamics of the security dilemma and collective action problem." See also *ibid.*, p. 396. Waltz appears to agree that self-help leads to competition: "In self-help systems, the pressures of competition weigh more heavily than ideological preferences or internal political pressures." Waltz, "Reflections on *Theory of International Politics*," p. 329; see also the quotation previously cited in fn. 2.

14. Waltz, *Theory of International Politics*, p. 105.

15. Waltz, *Theory of International Politics*, p. 105; Grieco, *Cooperation Among Nations*, p. 45.

16. John J. Mearsheimer, "Back to the Future: Instability in Europe After the Cold War," *International Security*, Vol. 15, No. 1 (Summer 1990), p. 12.

17. For example, Mearsheimer, "Back to the Future," p. 12, argues "there is little room for trust among states because a state may be unable to recover if its trust is betrayed."

states must rely on their own means; because states must avoid reductions in their capabilities and often desire military advantages; and because, even if interested in avoiding a race, states must insure against falling behind if the adversary cheats on agreements. In its most succinct version, the standard argument sees the search for security that flows from anarchy as sufficient to explain competition: "realists argue that states are preoccupied with their security and power; *by consequence*, states are predisposed toward conflict and competition."¹⁸ Cooperation between adversaries, although not impossible, will be rare and limited to areas of at best secondary importance.

This conclusion is implicit in Waltz's focus on arms competition and alliance formation. In broad terms, states can choose from three approaches for acquiring and maintaining the military capabilities required to meet their security needs: building arms, gaining allies, and reaching arms control agreements.¹⁹ In principle, the approaches could be equally important. Waltz acknowledges that some cooperation (i.e., arms control) is possible,²⁰ but he then excludes cooperation with adversaries from the basic alternatives available to states in a self-help system:

States, or those who act for them, try in more or less sensible ways to use the means available in order to achieve the ends in view. Those means fall into two categories: internal efforts (moves to increase economic capability, to increase military strength, to develop clever strategies) and external efforts (moves to strengthen and enlarge one's own alliance or to weaken and shrink an opposing one).²¹

Contingent Realism

Although widely accepted as an accurate statement of structural realism, the standard structural-realist argument is deeply flawed. A more complete and

18. Grieco, *Cooperation Among Nations*, p. 4 (emphasis added).

19. "Arms control" is used here to refer to the full range of reciprocated restraint in the deployment, operation, and monitoring of forces; it is not restricted to formal agreements. On this broader definition see Thomas C. Schelling and Morton H. Halperin, *Strategy and Arms Control* (New York: Twentieth Century Fund, 1961), pp. 2–5; on the relative strengths of formal agreements and tacit bargaining, see George W. Downs, David M. Rocke, and Randolph M. Siverson, "Arms Control and Cooperation," in Oye, ed., *Cooperation Under Anarchy*.

20. Waltz, *Theory of International Politics*, pp. 115–116; also, Waltz, "A Response to My Critics," p. 336.

21. Waltz, *Theory of International Politics*, p. 118; see also Waltz, "The Origins of War in Neorealist Theory," in Robert I. Rotberg and Theodore K. Rabb, eds., *The Origin and Prevention of Major Wars* (Cambridge: Cambridge University Press, 1989), p. 43: "Their individual intentions aside, collectively their actions yield arms races and alliances."

balanced assessment, while starting from the same structural-realist assumptions, leads to quite different conclusions. Under a wide range of conditions, cooperation should be a country's preferred option; significantly, two or more countries could simultaneously reach this conclusion, thereby making security cooperation feasible. The following discussion also demonstrates that under other conditions structural realism does not identify a clear preference for competition versus cooperation.

My contingent-realist analysis develops three lines of argument. First, it eliminates the unwarranted bias toward competition that exists in the standard argument. Second, to capture more faithfully the logic that flows from structural realism's basic assumptions, contingent realism focuses on military capabilities—the ability to perform military missions—instead of on power.²² This is accomplished by more fully integrating the security dilemma into structural realism. Third, contingent realism recognizes that the rational-actor assumptions that form the foundation of structural realism allow states to use military policy to communicate information about their motives. As a result, states seeking security should see benefits in cooperative policies that can communicate benign motives.

ELIMINATING THE "COMPETITION" BIAS

The standard argument focuses on the risks of cooperation; by underplaying and overlooking the risks of competition, it contains an unwarranted bias toward competition. The bias is the result of several mistakes. First, although the standard argument equates self-help with pursuit of competitive policies, in fact cooperative policies are an important type of self-help. For example, an adversary will engage in reciprocal restraint only if arms control promises to provide it with greater security than the competitive alternatives; this is possible only if the adversary believes that an arms race would be risky. Consequently, a country gets an adversary to cooperate by relying on its own resources—through self-help—since the country's ability to engage in an

22. To avoid confusion, I stress that the term "military capabilities" refers to the capability to perform military missions. Some authors use "military capabilities" to refer to military forces, that is, as a measure of the forces a country has deployed, not as a measure of the ability of forces to perform missions against an adversary's forces. As an example of the former use, Waltz explains that "capabilities are attributes of units [states]" and he includes "military strength" among the components of overall capability; Waltz, *Theory of International Politics*, pp. 98, 131. The distinction is very important because a state's ability to perform military missions is not determined by the size, type, and quality of its own military forces or resources, but by how these resources compare with and would fight against the adversary's forces.

arms race is a central condition for its adversary's belief that arms racing is risky, and thus for its willingness to cooperate. Thus, by itself, self-help tells us essentially nothing about whether states should prefer cooperation or competition.

Second, although the standard argument is correct in maintaining that the desire to avoid losses of capability and to gain military advantages can force states to compete, it is also true that this desire can lead states to cooperate. If military advantages are extremely valuable, then military disadvantages can be extremely dangerous. Therefore, when uncertain about the outcome of an arms race, which it would like to win, a risk-averse state could prefer an arms control agreement that accepted the current military status quo to gambling on prevailing in the arms race.²³ In addition, countries can prefer cooperation even when they are sure that they would not lose the arms race. For example, a country concerned about maintaining its military capabilities could prefer arms control when an arms race would result in advances in weapons technology that, when deployed by both countries, would have the unfortunate effect of leaving both countries more vulnerable to attack. And a country could prefer arms control when equal increases in the size of forces might decrease, not increase, its ability to defend itself.²⁴ The central message of modern arms control theory is that under certain conditions *both* countries could prefer these kinds of cooperation.²⁵

Third, although it is correct in stating that uncertainty about the adversary's motives creates reasons for a state to compete, the standard argument fails to recognize that uncertainty about motives also creates powerful reasons for states to cooperate. Each faces uncertainty about the other's motives; such

23. Doubts about the outcome of the race could reflect uncertainties about which country is wealthier, better able to extract resources for military purposes, or better able to develop and exploit military technologies.

24. Moreover, the choice of arms racing over cooperation must compare arms racing not only to the military status quo but also to the possibility that reductions from the status quo might improve capabilities. Of course, the choice between arms racing, arms control and allies will also be influenced by domestic factors. For example, a country might prefer to avoid an arms race, which would not reduce its security, simply to avoid the economic costs of further arming. On domestic factors in the choice between arming and allies, see James D. Morrow, "Arms Versus Allies: Tradeoffs in the Search For Security," *International Organization*, Vol. 47, No. 2 (Spring 1993), pp. 207-233.

25. See Schelling and Halperin, *Strategy and Arms Control*; and Donald G. Brennan, ed., *Arms Control, Disarmament and National Security* (New York: George Braziller, 1961). Thomas C. Schelling, "A Framework for the Evaluation of Arms-Control Proposals," *Daedalus*, Vol. 104, No. 3 (Summer 1975), pp. 187-200, explores the implications of a country's preferences for an arms race, an unmatched unilateral buildup, or the military status quo.

uncertainty is dangerous because it can fuel insecurity, which structural realism identifies as the key source of international conflict. This generates two reasons for a state to cooperate. Even if cooperation leaves the adversary's uncertainty about a state's motives unchanged, cooperation is valuable if it reduces the adversary's insecurity by reducing the military threat it faces. Moreover, cooperation is valuable if it can reduce the adversary's uncertainty, convincing it that the first state is motivated more by insecurity than by greed; this would further reduce the probability of conflict caused by an opponent's insecurity. The benefits of competition, specifically gaining military advantages, must be weighed against these benefits of cooperation. This tradeoff lies at the core of the security dilemma, is a central component of structural realism, and cannot be generally resolved in favor of competition.

In sum, eliminating the bias in the standard structural-realist argument shows that states face a variety of countervailing pressures for cooperation as well as competition. Nothing in the basic structural-realist argument resolves these tradeoffs in general in favor of competition. The standard argument stresses only the risks of cooperation, but both cooperation and competition can be risky. Launching an arms buildup can make the adversary more insecure and, therefore, harder to deter. Pursuing military advantages forgoes the possibility of avoiding an arms race in which the state could fall temporarily or permanently behind. When the risks of competition exceed the risks of cooperation, states should direct their self-help efforts toward achieving cooperation. Thus, contingent realism makes it clear that we need to replace essentially unconditional predictions of competition with conditional predictions of when states should cooperate and when they should compete.

SHIFTING THE FOCUS FROM POWER TO MILITARY CAPABILITIES: BRINGING IN CONSIDERATIONS OF OFFENSE AND DEFENSE

A security-seeking state that is comparing competition and cooperation must confront two fundamental questions. First, which will contribute more to its military capabilities for deterring attack, and for defending if deterrence fails? Second, appreciating the pressures created by anarchy and insecurity, the state should ask which approach is best for avoiding capabilities that threaten others' abilities to defend and deter, while not undermining its military capabilities? The tension that can exist between these two objectives lies at the core of the security dilemma.

WHY REFORMULATION IS NECESSARY. According to the standard structural-realist argument, states evaluate their ability to achieve security in terms of

power.²⁶ Great powers are defined in terms of aggregate resources, including size of population, economic and industrial assets, and military assets. Power is defined in terms of the distribution of these resources among the states in the system. States seeking security endeavor to maintain their position in the system, and therefore they seek to maintain their relative resource rankings.²⁷

This formulation is problematic because, as noted above, security-seeking states should assess their military requirements in terms of their ability to perform necessary military missions and to forgo the ability to perform certain other missions. Considerations of power do influence the answers to these questions, but they only begin to tell the story. For example, under certain conditions, two equally powerful states might have good prospects for defending against each other, while under other conditions their prospects for defending successfully could be relatively poor.

To shift from a structural theory based on power to one based on military capabilities and strategy, we need to include the dimensions of the security dilemma—the offense-defense balance and offense-defense distinguishability—as key variables. The offense-defense balance determines how much military-mission capability a country can get from its power; more specifically, for a country with a given amount of power, including the offense-defense balance in our analysis improves our ability to evaluate the country's prospects for defending itself. The offense-defense balance can be defined in terms of the investment in forces that support offensive missions that an opponent must make to offset a defender's investment in forces that support defensive missions. Defense enjoys a larger advantage when the required investment in offense is larger. The offense-defense balance is the ratio of the cost of the offensive forces to the cost of the defensive forces.²⁸

26. We need to be clear on whether power is a "relational concept" defined in terms of the ability to influence another's actions, or a "property concept," something that can be defined and measured without reference to other countries. See David A. Baldwin, *Economic Statecraft* (Princeton, N.J.: Princeton University Press, 1985), esp. pp. 18–24. I am using "power" as a relational concept, which is consistent with Waltz, who defines power in terms of the *distribution* of capabilities (by which he means resources) in *Theory of International Politics*, pp. 98, 192. However, "power" is often used to refer to a state's resources, in which case assessments of influence need to be cast in terms of relative power.

27. Waltz, *Theory of International Politics*, pp. 131, 98, 192, and 126; Grieco, *Cooperation Among Nations*, pp. 10, 39–40. What I am referring to as resources, Waltz refers to as capabilities; see note 22 for why I avoid using "capabilities."

28. Robert Jervis, "Cooperation Under the Security Dilemma," *World Politics*, Vol. 30, No. 2 (January 1978), p. 188; on the variety of definitions of the offense-defense balance and potential problems that this creates see Jack S. Levy, "The Offense/Defense Balance of Military Technology: A Theoretical and Historical Analysis," *International Studies Quarterly*, Vol. 28, No. 2 (Spring 1990), pp. 222–230.

Therefore, the defender's power (which is a function of the ratio of its aggregate resources to the adversary's aggregate resources) multiplied by the offense-defense balance tells us much more about the defender's prospects for maintaining effective defensive capabilities than does considering power alone. Put slightly differently, the offense-defense balance provides information about the ratio of resources required by a country to maintain the military capabilities that are necessary for deterrence and defense. As the advantage of defense grows, the ratio of resources required by the defender decreases.

Including offense-defense distinguishability in our analysis enables us to consider whether states can choose to convert their power into different types of military capability, specifically, offensive or defensive-mission capability. When offense and defense are completely distinguishable, the forces that support offensive missions do not support defensive missions, and vice versa; when offense and defense are not at all distinguishable, the forces that support offensive missions can be used as effectively in defensive missions. Therefore, the extent to which military power can be disaggregated, making offense and defense distinguishable, is important for answering a key question—whether defenders can avoid having offensive-mission capabilities while maintaining defensive ones.

These offense-defense variables depend on a variety of factors, significantly including the nature of military technology and geography.²⁹ Integrating them into a structural-realist analysis enables us to shift from a *balance-of-power* theory to a *military-capabilities* theory, specifically a theory cast in terms of countries' abilities to perform military missions.³⁰ This transformation constitutes an important advance because security is much more closely correlated with mission capabilities than with power.

Some implications of variation in these two key dimensions of the security dilemma have been explored previously.³¹ Moreover, some analysts have sug-

29. Other factors that may influence the overall offense-defense balance include the cumulativeness of resources and strategic beliefs, in particular, states' beliefs about others' propensity to balance versus bandwagon. See, for example, Ted Hopf, "Polarity, the Offense-Defense Balance and War," *American Political Science Review*, Vol. 85, No. 2 (June 1991), pp. 475–494; and Jack Snyder, *Myths of Empire: Domestic Politics and International Ambition* (Ithaca, N.Y.: Cornell University Press, 1991).

30. I say "capabilities" here instead of "balance of capabilities" because states should care most about their capabilities for performing necessary missions, not about relative capabilities or a balance in capabilities. For example, a state that has high confidence in its ability to defend may not care about whether its potential adversary has even greater confidence in its ability to defend; security does not depend on a balance of capabilities. The key qualification arises when an "imbalance" in capabilities would leave one state more vulnerable to an arms race.

31. See John H. Herz, "Idealist Internationalism and the Security Dilemma," *World Politics*, Vol. 2, No. 2 (January 1950), pp. 157–180; George Quester, *Offense and Defense in the International System* (New York: John Wiley & Sons, 1977); Jervis, "Cooperation Under the Security Dilemma," pp. 167–

gested the need to combine security-dilemma considerations with overall power to generate predictions about state behavior. They have not, however, explored all of the implications for the predictions of structural realism, especially regarding security cooperation between adversaries.³² Two basic points should be emphasized.

First, the basic argument of structural realism is not altered by using the dimensions of the security dilemma to shift from a focus on power to a focus on military capabilities. Indeed, to capture the central logic of the structural-realist argument requires that we assess how much and what types of military capability a state can produce with its power, since security-seekers should evaluate the international environment and their policy options in terms of military capabilities. Bringing in offense-defense variables is not optional, but necessary. Specifying the theory primarily in terms of power has distorted the insights that should flow deductively from structural realism's assumptions. Contingent realism eliminates this distortion.

Second, explicitly including the dimensions of the security dilemma as variables increases the ability of a structural theory to explain variations in states' choices between competitive and cooperative options for acquiring necessary military capabilities.³³ In contrast, Waltz's formulation focuses on a single variable—the degree of polarity—and explores its implications for the probability of war.³⁴ However, the preceding arguments suggest that states' choices

214; Stephen W. Van Evera, "Causes of War" (Ph.D. dissertation, University of California, Berkeley, 1984), esp. chap. 3; and Glaser, "Political Consequences of Military Strategy." Important criticisms of offense-defense arguments include Levy, "The Offense/Defense Balance of Military Technology: A Theoretical and Historical Analysis," pp. 137–168; and Jonathan Shimshoni, "Technology, Military Advantage and World War I," *International Security*, Vol. 15, No. 3 (Winter 1990/91), pp. 187–215.

32. However, Snyder makes an argument similar to the one I am presenting here in *Myths of Empire*, pp. 11–12 and 21–26, although he focuses on the question of expansion and suggests that defense usually has the overall advantage, largely because of states' propensity to balance. See also Sean Lynn-Jones, "The Implications of Security Dilemma Theory as a Theory of International Politics" (unpublished memo, September 1993). Others who have combined offense-defense considerations with structural-realist logic include Barry R. Posen, *The Sources of Military Doctrine* (Ithaca, N.Y.: Cornell University Press, 1984); Thomas J. Christensen and Jack Snyder, "Chain Gangs and Passed Bucks: Predicting Alliance Patterns in Multipolarity," *International Organization*, Vol. 44, No. 1 (Spring 1990), pp. 137–168; and Stephen M. Walt, *The Origins of Alliances* (Ithaca, N.Y.: Cornell University Press, 1987).

33. Other variables also matter in assessing capabilities: for example, the level of uncertainty about key variables, including the forces the adversary has deployed and the rate at which it could build additional forces, and the offense-defense balance. In addition, if states suffer evaluative biases, then this type of theory will still be inadequate for explaining behavior. Thus, for example, Christensen and Snyder, "Chain Gangs and Passed Bucks," include the quality of states' perceptions as an additional variable.

34. Waltz, *Theory of International Politics*, esp. chaps. 5 and 8.

between arms racing and arms control could vary substantially even when the degree of polarity does not vary, for example, within a bipolar system.

To appreciate the central role of variations in the severity of the security dilemma in structural-realist theory, consider the implications of anarchy if there were no security dilemma. States that were seeking only security could deploy adequate military capabilities without threatening other states. Moreover, uncertainty about motives would be reduced, if not eliminated, since security-seekers would not need offensive capabilities. Insecurity could be virtually eliminated.³⁵ Competition would arise only if one or more major powers were motivated by greed, rather than security.

IMPLICATIONS OF VARIATION IN THE DIMENSIONS OF THE SECURITY DILEMMA. Under what conditions should security-seeking states find cooperative policies to be desirable and feasible?³⁶ The types of policies that states can choose from depend on whether the forces required to support offensive strategies are distinguishable from those required to support defensive strategies. If they are distinguishable, then states can choose to build offense, defense, or both; they can also engage in arms control to limit offensive forces, defensive forces, or both. Given these choices, three approaches for gaining security are especially interesting: cooperation via arms control; unilateral defense, that is, deploying

35. Jervis makes this point in "Cooperation Under the Security Dilemma," p. 187, and provides qualifications. Waltz notes that, as a result of their situation, states face a security dilemma; he thereby gives it standing as part of a systemic explanation. See, for example, Waltz, *Theory of International Politics*, pp. 186–187; and Waltz, "The Origins of War in Neorealist Theory," pp. 41–42. However, he says little about the implications of variations in its severity. Waltz also argues that changes in military technology, including nuclear weapons, are a unit-level change. Waltz, "Reflections on *Theory of International Politics*," in Keohane, *Neorealism and Its Critics*, p. 327; and Waltz, "The Origins of War in Neorealist Theory," pp. 50–51. This seems problematic, however, since these changes influence the security dilemma, which is a systemic variable. This problem is noted by Joseph S. Nye, Jr., "Neorealism and Neoliberalism," *World Politics*, Vol. 40, No. 2 (January 1988), p. 243; and Daniel Deudney, "Dividing Realism: Structural Realism versus Security Materialism on Nuclear Security and Proliferation," *Security Studies*, Vol. 2, No. 3/4 (Spring/Summer 1993), pp. 13–14.

36. The following discussion assumes that states motivated primarily by security would prefer situations in which all countries lack effective offensive capabilities to situations in which all countries have effective offensive capabilities. However, pure security seekers might see some benefits in offensive capabilities under a variety of circumstances. For example, offense might contribute to deterrence by providing the capability to credibly threaten a punishing counteroffensive, might enhance the country's ability to defend its territory by providing the capability to regain lost territory, and might enable a declining state to insure its security by launching a preventive war. These benefits would have to be weighed against the dangers of increasing the adversary's insecurity. In addition, given the choice of both states having or both lacking offense, each state needs to consider the dangers posed by an increase in the adversary's offensive capability. On factors that influence this choice see Stephen Van Evera, "Offense, Defense, and Strategy"; Posen, *The Sources of Military Doctrine*, pp. 67–71; and Glaser, "Political Consequences of Military Strategy."

defensive forces independent of the strategy one's adversary chooses; and arms racing.³⁷ On the other hand, if offense and defense are indistinguishable, the basic choice facing states is whether to build larger forces, and risk generating an arms race, or to pursue arms control that reduces or caps the size of their forces.³⁸

Arms control can be especially useful when the forces that support offensive missions can be distinguished from forces that support defensive missions.³⁹ If they can be distinguished, then agreements can restrict offensive capabilities by limiting specific types of forces; both countries will have better defensive capabilities and appear less threatening than if they had both deployed offensive forces.

Whether arms control is the preferred policy will vary with the offense-defense balance. When defense has a large advantage, arms control will be largely unnecessary. Countries can instead pursue unilateral defense, choosing to deploy defensive forces independent of whether their adversaries do. Even if one country decides to pursue offense, the competition should be mild due to the advantage of the defense. Two countries motivated primarily by security are both likely to choose unilateral defense, resulting in even less intense military competition.

In contrast, if offense has an advantage over defense, arms control has far more to contribute. Limiting offensive weapons while allowing defensive ones would establish a military status quo in which both countries are better able to defend themselves and in which first-strike incentives are smaller than if the countries invested primarily in offensive forces.⁴⁰ Arms control would likely be necessary to avoid this emphasis on offensive forces and on the arms race that could ensue, since both countries would find it difficult, technically or economically, to counter the adversary's offense with defense. Beyond improving the military status quo, arms control could help avoid some of the

37. Unilateral defense has much in common with cooperative policies in that it does not threaten the adversary's security, and usually will not generate threatening reactions from an adversary motivated primarily by security. However, pursuit of unilateral defense is not cooperation because the defender can productively pursue unilateral defense without coordinating with the adversary. Unilateral defensive policies therefore reflect a situation of harmony, not cooperation; see Keohane, *After Hegemony*, pp. 51–55.

38. To simplify the discussion, I do not address qualitative arms control that limits technological innovation.

39. Robert Jervis, "Security Regimes," *International Organization*, Vol. 36, No. 2 (Spring 1982), p. 362, comments on some of the following points.

40. On the dangers of offense see Stephen Van Evera, "The Cult of the Offensive and the Origins of the First World War," *International Security*, Vol. 9, No. 1 (Summer 1984), pp. 58–107.

"dynamic" risks that an arms race itself could generate. When defense does not have the advantage, falling temporarily behind in a race, which creates a "window" of disadvantage, becomes more dangerous.⁴¹

This case for arms control is not entirely clear-cut, however, because countries face an increasingly severe tradeoff as the advantage of offense increases. This is because cheating poses a greater danger: as the advantage of offense grows, a given amount of cheating would provide a larger advantage and, therefore, allowing the adversary to gain a headstart in a renewed arms race is more dangerous. This makes it more difficult to monitor an agreement satisfactorily, which makes it harder for arms control to increase the states' security.

Therefore, in addition to the clear benefits that arms control could provide with regard to the military status quo, states must compare the dynamic risks of arms control and arms racing. When offense and defense are distinguishable, countries can reduce the dangers of cheating, and therefore the requirements for monitoring, by allowing large defensive forces while banning offensive ones, creating a defensive barrier to cheating. However, there is no general resolution of the tradeoff between these dynamic considerations; it will depend on the specifics of monitoring capabilities and the rates at which countries can break out of agreements, as well as the effectiveness of a defensive barrier.⁴² Nevertheless, because arms control can definitely improve the military status quo, states should be inclined to prefer arms control.

When the forces required for offensive and defensive missions are not distinguishable, arms control is less clearly useful. Agreements that limit the size of forces may leave offensive and defensive capabilities essentially unchanged, in which case they would have little effect on a country's ability to deter.⁴³ In contrast to the case in which offense and defense are distinguishable, arms control cannot promise to improve the military status quo. However, this observation applies equally to arms racing: competition that increases the size of the countries' forces may not increase their deterrent capabilities. Thus, when

41. On windows see Van Evera, "Causes of War," esp. chap. 2; and Charles L. Glaser, *Analyzing Strategic Nuclear Policy* (Princeton, N.J.: Princeton University Press, 1990), pp. 150–155.

42. A defensive barrier increases the time required to gain an offensive advantage, but does not necessarily reduce the benefits of cheating. However, if there are uncertainties about relative rearmament rates, then defensive barriers would increase uncertainty about whether breaking out of an agreement will provide military advantages, which could contribute to deterrence. See Thomas C. Schelling, *Arms and Influence* (New Haven, Conn.: Yale University Press, 1966), pp. 248–259; and Glaser, *Analyzing Strategic Nuclear Policy*, pp. 178–179.

43. This depends on whether the offense-defense balance varies with the size of deployed forces. To see that it can, consider the deterrence requirements of nuclear forces, or force-to-space requirements of conventional forces designed to defeat breakthrough battles.

offense and defense are indistinguishable, there is no general conclusion about whether states should prefer arms control or arms racing. To analyze specific cases, states would have to perform net assessments of the variation in mission capability as a function of force size.⁴⁴

Here again, the offense-defense balance matters. When defense has a large advantage, countries will find that arms control is largely unnecessary for avoiding competition. Because large unmatched increases in forces are required to gain significant military advantages, military competition should be mild and countries should enjoy high levels of security.⁴⁵ When offense has the advantage, arms control will be necessary for avoiding arms races, but will be harder to achieve and riskier than in the case in which offense and defense are distinguishable. Reaching agreement on the forces that will be permitted will be harder because, as noted above, limits are less likely to improve military capabilities and small differences in force size may be more important. Agreements will be riskier than in the case in which offense and defense are distinguishable because large defensive forces cannot be deployed as a hedge against cheating.

In sum, adding offense-defense variables does not shift the basic emphasis of structural theories, but instead eliminates distortions that result when the theory is cast primarily in terms of power. Considering not just power, but also how much and what types of military capability a state can produce with its power, is essential for understanding the pressures and opportunities that countries face when seeking security in an anarchic system. Given this formulation, a country's concern about its military capabilities should lead it to reject competitive policies under a range of conditions. In fact, contrary to the standard structural-realist analysis, arms racing is only clearly preferred to less competitive policies under rather narrow conditions: when offense has the advantage and is indistinguishable from defense, and when the risks of being cheated exceed the risks of arms racing.

INCORPORATING MOTIVES AND INTENTIONS: MILITARY POLICY AND SIGNALING

A state seeking security should be concerned about whether its adversary understands that its motivations are benign. Uncertainty about the state's motives, or even worse, the incorrect belief that the state is motivated by greed

44. However, even when larger forces are desirable, it is unclear that states should prefer truly competitive policies. One alternative is simply to coordinate increases in force size up to but not above a level at which both countries believe their deterrent capabilities would be enhanced.

45. See Malcolm W. Hoag, "On Stability in Deterrent Races," *World Politics*, Vol. 13, No. 4 (July 1961), pp. 505-527.

rather than security concerns, will increase the adversary's insecurity, which in turn will reduce the state's own security. Thus, structural realism suggests that states should be very interested in demonstrating that their motives are benign. The problem, according to the standard formulation, is that states acting within the constraints imposed by the international structure cannot communicate information about motives;⁴⁶ this type of information is seen as available only at the unit level.

Here again, however, the conventional wisdom is flawed. The rational actors posited by structural realism can under certain conditions communicate information about their motives by manipulating their military policies.⁴⁷

Because greedy states have an incentive to misrepresent their motives, a pure security seeker can communicate information about its motives only by adopting a policy that is less costly for it than it would be for a greedy state.⁴⁸ A greedy state would like to mislead its adversaries into believing that it is interested only in security, since its adversaries would then be more likely to pursue policies that leave them vulnerable, enabling the greedy state to meet its expansionist objectives. However, when the policies that indicate that a state is not greedy are more costly for greedy states than for pure security seekers, greedy states are less likely to adopt them. Consequently, by adopting such a policy a state can communicate information about which type of state it is, that is, about its motives.

States can try to communicate their benign intentions via three types of military policies: arms control, unilateral defense, and unilateral restraint.⁴⁹ Agreeing to limit offensive capabilities, when offense has the advantage, can shift the adversary's assessment of the state's motives. Although a greedy state might accept this arms control agreement, because limits on its adversary's offense would increase its security, the agreement is costly for a greedy state because it reduces its prospects for expansion. Thus, although both states that are pure security-seekers and states that are motivated by greed as well as

46. This view plays a central role in Wendt, "Anarchy is What States Make of It," pp. 391 and 392.

47. For formal treatments that focus on this possibility see George W. Downs and David M. Rocke, *Tacit Bargaining, Arms Races, and Arms Control* (Ann Arbor: University of Michigan Press, 1990), chap. 4; and Andrew Kydd, "The Security Dilemma, Game Theory, and WWI," paper presented at the 1993 annual meeting of the American Political Science Association. See also Robert Jervis, *The Logic of Images in International Relations* (Princeton, N.J.: Princeton University Press, 1970); and Jervis, "Cooperation Under the Security Dilemma."

48. On "costly signals," see James Dana Fearon, "Threats to Use Force: Costly Signals and Bargaining in International Crises" (Ph.D. dissertation, University of California, Berkeley, 1992).

49. See also Glaser, "Political Consequences of Military Strategy."

security might accept such an agreement, the costs of agreement are higher for the greedy state; moreover, the greedier the state was, the less likely it would be to accept the agreement. Consequently, although accepting the arms agreement should not entirely convince the adversary that it does not face a greedy state, it does nevertheless provide valuable information. By comparison, agreeing to limit offense when defense has the advantage provides less information, since an arms race is less likely to make expansion possible. Consequently, a greedy state would find such an agreement less costly, narrowing the cost-differential between greedy and non-greedy states, and thus limiting the information conveyed by such a policy.

Agreeing to limit the size of forces when offense and defense are indistinguishable can also communicate information about motives. Assuming that both countries have some chance of gaining an offensive military advantage in the race, the costs of accepting limits on force size will be greater for greedier states. The clearest signal will come from a state that has good prospects for winning the race, but nevertheless agrees to some form of parity.

Under certain conditions, a country may be able to communicate more effectively with unilateral defensive policies than with arms control. When offense has the advantage, a country that decides to meet its military requirements with defensive means will have to make larger investments in military forces than if it had chosen the offensive route. Compared to the arms control approach, this state will have indicated not only its willingness to forgo offensive capabilities, but also a willingness to invest greater resources to send this message.⁵⁰

Finally, a country can try to communicate benign motives by employing unilateral restraint—that is, by reducing its military capability below the level it believes would otherwise be necessary for deterrence and defense.⁵¹ This should send a clear message for two reasons: the state has reduced its offensive capability, which a greedy state would be less likely to do; and the state has incurred some risk, due to the shortfall in military capabilities, which the adversary could interpret as a further indication of the value the state places on improving relations. Of course, this security risk will make states reluctant to adopt an ambitious policy of unilateral restraint. Consequently, states are

50. Of course, if its adversary also shifts to a defensive policy, the cost of sustaining the defensive policy will be similar to the costs under an arms control agreement.

51. The uses of unilateral restraint are emphasized by Charles E. Osgood, *An Alternative to War or Surrender* (Urbana: University of Illinois, 1962). In *Tacit Bargaining, Arms Races and Arms Control*, pp. 41–51, Downs and Rocke assess Osgood's arguments.

likely to turn to unilateral restraint only when other options are precluded, e.g., when unilateral defense is impossible because offense and defense are indistinguishable, or when it is unaffordable, because offense has a large advantage over defense, or when they conclude that an especially dramatic gesture is necessary.

In short, the essentially rational actors posited by structural realism will under certain conditions be able to use cooperative or other unthreatening military policies to improve understanding of their motives. For states motivated primarily by security, such opportunities will be especially attractive when cooperative policies can also enhance their military capabilities. By comparison, when communication of benign motives requires a state to reduce necessary military capabilities, states face a much more difficult choice, especially since they must worry not only about deterring, but also about defending if deterrence fails.

The standard structural-realist argument overlooks the possibility of clarifying motives. Although uncertainty about the adversary's motives can sometimes call for competitive policies, the adversary's uncertainty about the state's motives can call for the opposite. A balanced assessment of alternative approaches must weigh these potentially countervailing pressures, as well as the possibility of acquiring improved military mission capabilities via cooperative means.

Flaws in the Standard Structural-realist Counter-arguments

Three major arguments are commonly used in support of the standard structural-realist argument, and could be used to counter the overall thrust of contingent realism. However, each argument suffers serious flaws or limitations; none weakens contingent realism.

"STATES TRY TO MAXIMIZE RELATIVE POWER, WHICH CREATES A ZERO-SUM SITUATION THAT MAKES COOPERATION DIFFICULT"

Although the claim that states try to maximize relative power has been rejected by some prominent structural realists, most notably Waltz,⁵² it has been presented forcefully by others. For example, John Mearsheimer argues that "states seek to survive under anarchy by maximizing their power relative to other

52. Waltz, "Theory of International Politics," p. 118, 126, and 127; and Waltz, "Reflections on *Theory of International Politics*," in Keohane, *Neorealism and its Critics*, p. 334. See also Robert Gilpin, *War and Change in International Politics* (Cambridge: Cambridge University Press, 1981), esp. pp. 86–88.

states, in order to maintain the means for self-defense."⁵³ If states try to maximize relative power, international relations will be highly competitive, since states will then "seek opportunities to weaken potential adversaries and improve their relative position."⁵⁴ Adversaries attempting to maximize their relative power face a zero-sum situation—increases in one state's relative power necessarily result in decreases in the other's relative power. Cooperative policies will be rare because they preempt the possibility of achieving advantages in relative power.

The key to assessing this claim is to recognize that, for structural realists, conclusions about maximizing power are conclusions about means, not ends. Structural realism assumes that, in an anarchic system, security is the end to which states will give priority. States may pursue other goals, but structural realism does not assume that they do. Consequently, showing that structural realism predicts that states try to maximize relative power requires demonstrating that doing so is the best way for states to gain security.

Three arguments suggest that pursuing increases in relative power is not always the best way to increase security. First, the claim in favor of maximizing relative power overlooks the security dilemma: a state that increased its relative power might nevertheless decrease its security because its increased relative power could make its adversary less secure, which could in turn increase the value its adversary places on expansion. War could become more likely, since any deterrent value of increased relative power might be outweighed by the increased benefits that a security-seeking adversary would see in expansion. Consequently, a country could reasonably conclude that accepting rough parity in military capabilities would provide greater security than maximizing its relative power. Notwithstanding the claim that states try to maximize power, structural realism leaves this question wide open.⁵⁵

53. Mearsheimer, "Back to the Future," p. 12. See also Fareed Zakaria, "Realism and Domestic Politics: A Review Essay," *International Security*, Vol. 17, No. 1 (Summer 1992), pp. 193–194. In this argument, "power" is being used as a property concept, not a relational concept; see footnote 26. Although I prefer the relational use, in this section I use relative power to maintain consistency with the quotations.

54. Mearsheimer, "Back to the Future," p. 12.

55. Factors important in resolving this tradeoff include: 1) the extent of increases in relative power: military advantages that are so overwhelming that they clearly deny the adversary any chance of victory probably reduce the probability of war, whereas smaller military advantages that leave some doubt about the adversary's prospects for victory might increase the probability of war; 2) the offense-defense balance, as discussed above; 3) the adversary's motives: military advantages will be less valuable against states motivated primarily by insecurity and more valuable against states motivated primarily by greed; and 4) the quality of the adversary's evaluative capabilities, which influences the extent of insecurity that launching an arms buildup or arms race would generate.

Second, trying to maximize power could increase the probability of losing an arms race. Even a country that would prefer to win an arms race—that is, that would prefer superiority to parity—might choose cooperation over arms racing to avoid the risk of losing the race.

Third, by failing to distinguish between offensive and defensive potential, the claim that states try to maximize relative power disregards the fact that maximizing relative power may not maximize the military capabilities that a country needs for defense and deterrence. Consider the case in which, to maximize its power, a country must compete in the deployment of offensive capabilities, and its alternative is to accept parity in defensive capabilities. The offensive race could decrease the winner's security by reducing its ability to defend against attack and by increasing crisis instability. Thus, even setting aside dangers that could result from decreasing the adversary's security and losing a race, maximizing power could decrease one's own security.

In short, states motivated primarily by security should not as a general rule try to maximize their relative power. Proponents of the relative-power-maximization argument sometimes try to defend their claim by adding the qualification that states maximize relative power when they can. This qualification is actually quite significant, suggesting that the claim is about what states want, not about how they behave. If so, their claim is potentially quite misleading, since constraints on state behavior can create a large gap between what a state would like to achieve and what it actually tries to achieve. Moreover, the qualification is inadequate because it does not deal with the first and third arguments presented in this section. Therefore, analyses that start from the claim that states try to maximize relative power exaggerate the extent to which structural realism predicts that international politics will be highly competitive.

**"STATES' CONCERN OVER RELATIVE GAINS MAKES SECURITY COOPERATION
ESPECIALLY DIFFICULT"**

Structural realists believe that states must be concerned not only about whether cooperation will provide them with gains, but also with how these gains will be distributed.⁵⁶ If cooperation enables a state's adversary to gain more, the adversary may be able to convert this advantage into a capability for effectively coercing the state or, in extreme cases, defeating it in war. As a result, states

56. Waltz, *Theory of International Politics*, pp. 105, 175; Grieco, *Cooperation Among Nations*; Grieco, "Anarchy and the Limits of Cooperation: A Realist Critique of the Newest Liberal Institutionalism," *International Organization*, Vol. 42, No. 3 (Summer 1988), pp. 485–507.

must be concerned about relative gains, that is, about which state gains more from cooperation. States may conclude that the danger of relative losses exceeds the benefit of absolute gains, making cooperation undesirable. Relative-gains problems are generally believed to be more severe in the security realm than in the economic realm, thereby making security cooperation especially difficult.⁵⁷

The following arguments, however, show that under a wide range of conditions, states interested in security cooperation should not be constrained by a relative-gains problem.⁵⁸

THE RELATIVE-GAINS PROBLEM IS NOT ABOUT RELATIVE MILITARY ASSETS. The key to understanding relative gains in the security realm is to frame the issue correctly. We first must distinguish the instruments of policy from the ends of policy, that is, the value the policy produces. In the security realm, military assets are instruments of policy, while security is the end. In the economic realm, tariffs and other barriers to trade are instruments of policy, while wealth is the end.⁵⁹ A policy provides a state with "gains" when it increases what the state values, not when it increases the instruments the state has available or employs.

Consider the tradeoff posed by the relative-gains problem. In describing states' concern for relative gains, Waltz argues that states "are compelled to ask not 'Will both of us gain?' but 'Who will gain more?'"⁶⁰ The first question focuses on absolute gains, the second on relative gains. The implication is that if only absolute gains mattered, then states would need to answer only the first question to determine whether cooperation was desirable. Desirability would

57. For example, Grieco, *Cooperation Among Nations*, p. 46, argues that, "a state's sensitivity to gaps in gains is also likely to be greater if a cooperative venture involves security matters than economic well-being"; see also *ibid.*, p. 14. This view of the conventional wisdom is also described by Robert Powell, "Absolute and Relative Gains in International Relations Theory," *American Political Science Review*, Vol. 85, No. 4 (December 1991), p. 1303.

58. Moreover, they also suggest that concern about relative gains will be less constraining in security cooperation, specifically in arms control, than in economic cooperation.

59. For the sake of contrast, I am using "security realm" to refer to policies that influence the size and type of forces, and "economic realm" to refer to policies that influence the type and severity of trade barriers. I do not mean to imply that policies in the economic realm lack security implications and vice versa. Thus, these statements include important simplifications: they exaggerate the extent to which manipulation of instruments in one realm produces only one type of value. For example, policies in the economic realm can generate changes in relative wealth, which can in turn have security implications; moreover, cooperation in the security realm can have implications for future relative wealth. I address the implications below.

60. Waltz, p. 105. A state really only needs to ask "will I gain?" to determine whether cooperation is desirable; however, it may need to ask "will both of us gain?" to assess whether cooperation is feasible.

be determined by "gains," which must therefore refer to the value produced by cooperation.⁶¹

This formulation helps us correct a common mistake: analysts argue that states care a great deal about relative changes in military assets, and then conclude that countries are highly sensitive to relative gains.⁶² However, although states do care about relative changes in military assets, this concern is not due to a relative-gains problem. A state evaluating the impact of cooperation on relative force size is comparing changes in instruments, not changes in the achievement of ends. This does not reflect a relative-gains problem, since states are concerned with relative gains when they compare relative changes in their achievement of things they value, not when they compare the instruments employed. The analogous but perhaps more obvious mistake in the economic realm would be to evaluate relative gains by comparing the extent to which trade barriers were loosened instead of comparing the economic benefits that this loosening would generate. This error is rarely made in economic analysis.

Consequently, although I agree with proponents of the flawed formulation that states care about relative military assets, I explain this concern in a different, more straightforward way. Correctly formulated, in the security realm the "absolute gains" from cooperation refer to an increase in security.⁶³ When cooperation would result in a relative loss in military assets, and when this loss reduces mission capability and security, the state will refuse to cooperate.⁶⁴

61. We can reach the same conclusion by considering the evolution of the debate over absolute and relative gains. Grieco, "Anarchy and the Limits of Cooperation" argued that neoliberals focused on absolute gains in the repeated prisoner's dilemmas, while overlooking relative gains in establishing the preference orderings in their two-by-two games. Because preferences in these games are defined across outcomes produced by cooperation and defection, "absolute gains" must refer to the value produced by policies, not to increases in the means employed.

62. This formulation also helps to clarify a closely related point of confusion: the first two arguments of this section—(1) that states maximize relative power and (2) that states are constrained by concern about relative gains—are sometimes thought to be the same argument. However, the first argument focuses on states' choices regarding policies that manipulate means—the instruments that can produce security—whereas the second argument focuses on states' concern about relative achievement of value.

63. Absolute gain could also refer to economic savings, if the arms control agreement enables the country to reduce investment in military forces. However, although saving money is one of the three classic objectives of arms control, security is usually the priority goal of cooperation. On the classic objectives see Schelling and Halperin, *Strategy and Arms Control*, p. 2. For a dissenting view on the role of saving money see Bernard Brodie, "On the Objectives of Arms Control," *International Security*, Vol. 1, No. 1 (Summer 1976), pp. 17–36.

64. Three points are worth noting briefly: (1) as discussed below, losses in relative military assets might not reduce the state's security if they increase the adversary's security; (2) a state's sensitivity to relative losses in military assets will depend on the offense-defense balance; (3) a state's military capability could increase, even if it suffers a relative loss in military assets, if the offense-defense balance varies with force size.

However, this refusal would reflect the failure of cooperation to increase security, that is, to provide absolute gains, not the state's concern over relative gains.⁶⁵

In short, although the relative-gains problem is often apparently viewed in terms of concern over relative gains in military assets, this is the wrong way to formulate the issue. If there is a relative-gains problem in the security realm, it must lie elsewhere. The two possibilities, discussed below, are relative gains in security and relative gains in wealth resulting from security cooperation. However, exploration of these areas casts serious doubt on whether relative-gains concerns are severe in the security realm and suggests further that states will usually not be constrained by them.

RELATIVE SECURITY GAINS AND COMPARISONS OF SECURITY. Since the goal of cooperation is to increase security, relative-gains logic suggests that we explore whether concern over the distribution of security gains should inhibit cooperation. A country is concerned about relative gains in security if cooperation would increase its adversary's security more than its own, and if this relative loss in security would in turn reduce its own security. If we narrowly equate security with military capability, then this situation could arise if an arms control agreement increased both countries' denial capabilities, but not equally.

However, following security-dilemma logic, all else being equal, increases in the adversary's security often increase one's own security because a more secure adversary has smaller incentives for pursuing an expansionist foreign policy, and therefore will pose a smaller threat. This argument does not depend on whether the increase in the adversary's security exceeds or trails the increase in the defender's security, because the change in the adversary's motives reflects its absolute security, not a relative measure of its security compared to the defender's.

Objections and qualifications to this argument focus on two types of cases. First, when facing an adversary that is motivated by greed, as well as security, increasing the adversary's security could increase its willingness to pursue its expansionist objectives. This danger could result from cooperation that attempted to increase both countries' security by reducing both countries' offensive capabilities. The defender's denial capability would be enhanced, but its ability to deter via punishment would likely be reduced, since mutual reduc-

65. One possible counter to this argument is that mission capability, and therefore, security are themselves relative, not absolute measures. This is incorrect. Although a country's ability to perform military missions depends on how its forces compare to the adversary's, we measure mission capability in absolute terms. For example, an estimate of the probability that a country can defeat an invasion is an absolute measure.

tions in offense would reduce the defender's counteroffensive capability. An adversary that was especially impressed by the risks posed by punishment capabilities might conclude that the deterrent value of the defender's military capabilities had been reduced.⁶⁶

Although important, the issue raised by this case is not about relative gains, but rather about whether cooperation that reduces both countries' offensive capabilities would provide the defender with absolute gains in security. If this cooperation reduces the defender's ability to deter, then the defender would not achieve an absolute gain in security, thus making cooperation undesirable. The problem is not that the adversary gains more security, but rather that the defender does not gain.

The second type of case comes closer to presenting the defender with a relative-gains problem. In these cases, the countries have conflicts of interest that lie beyond their primary security interests, that is, beyond their concern for protecting their homelands and possibly their major allies. Relative gains in security could influence countries' abilities to prevail in these secondary conflicts, if the advantaged country is willing to risk major war to prevail. A country's credibility in this competition in risk-taking will depend on the costs of major war. Therefore, cooperation that provides a country with relative gains in security by reducing the costs of major war could advantage that country in these secondary disputes. Nevertheless, the country that suffers a relative loss in security could still favor cooperation, since its primary security interests would be better protected.

In short, contrary to the problem identified by the logic of the relative-gains problem, if cooperation increases a country's security, then increases in the adversary's security are usually desirable, whether or not they exceed increases in the defender's security. In the security realm, instead of a relative-gains problem, we often have a mutual-gains benefit.

RELATIVE ECONOMIC SAVINGS AND ECONOMIC GROWTH. The second line of argument shifts the focus of the relative-gains argument from comparisons of security gains to comparisons of economic growth that are made possible by

66. On the value of counteroffensive capabilities for deterrence, see Samuel P. Huntington, "Conventional Deterrence and Conventional Retaliation in Europe," *International Security*, Vol. 8, No. 3 (Winter 1983/84), pp. 32-56; and Barry R. Posen, "Crisis Stability and Conventional Arms Control," *Daedalus*, Vol. 120, No. 1 (Winter 1991), pp. 217-232. The overall effect on the defender's prospects for deterrence would then depend on weighing countervailing factors: even a greedy adversary would be easier to deter, because increasing its security would reduce its interest in expansion; the defender, however, would be left with a less effective mix of deterrent capabilities.

security cooperation. This argument traces the danger in security cooperation through relative increases in the adversary's wealth, which the adversary can eventually convert into superior military forces. More specifically, when security cooperation saves the adversary greater resources than it saves the defender, the adversary will be able to redirect greater resources into future security competition, which will enable it eventually to pose a greater security threat than if cooperation had never occurred.

Although this argument appears to hinge on differences in savings, in fact it hinges on the relationship between reduced defense spending and economic growth. Assume that both countries reserve their savings for a future arms race. If the agreement breaks down, the country that saved more cannot compete more effectively than if an agreement had never been reached, since it has only the resources it would have invested earlier. The agreement defers the arms race, but does not advantage the country that saves more. Consequently, savings can have security implications only if they generate economic growth. In this case, the country that saves more can achieve relative gains in GNP. If the agreement then breaks down, the countries' abilities to engage in an arms race would have changed.

The problem with this line of argument is that studies have not established a strong relationship between defense spending and economic growth.⁶⁷ The basic concern is that defense spending crowds out private investment, which would otherwise contribute more to economic growth. However, there is no agreement on whether even U.S. defense spending during the Cold War slowed the growth of the American economy.⁶⁸ Moreover, if the country that would save less from an arms agreement were nevertheless worried about the long-term growth implications, it could adopt a variety of economic policies that would reduce the risks.⁶⁹

67. Aaron L. Friedberg, "The Political Economy of American Strategy," *World Politics*, Vol. 41, No. 3 (April 1989), pp. 395-405; Charles A. Kupchan, "Empire, Military Power, and Economic Decline," *International Security*, Vol. 13, No. 4 (Summer 1989), pp. 40-47; and Steve Chan, "The Impact of Defense Spending on Economic Performance: A Survey of Evidence and Problems," *Orbis*, Vol. 29, No. 2 (Summer 1985), pp. 403-434.

68. For opposing views see Kenneth A. Oye, "Beyond Postwar Order and New World Order," in Kenneth A. Oye, Robert J. Lieber, and Donald Rothchild, *Eagle in a New World* (New York: HarperCollins, 1992), pp. 7-11; David Gold, *The Impact of Defense Spending on Investment, Productivity and Economic Growth* (Washington, D.C.: Defense Budget Project, 1990) and Friedberg, "The Political Economy of American Strategy," pp. 398-405.

69. These could include policies that would encourage savings and investment. See, for example, Friedberg, "The Political Economy of American Strategy," p. 400.

The feasibility of such policies depends on the size of the differential in saved defense spending: the smaller the relative loss in savings, the easier it is to compensate by revising domestic economic policy. Consequently, it is significant that an arms agreement can rarely promise to save a significant percentage of GNP. An agreement that saved the United States one percent of GNP per year would have to be quite dramatic.⁷⁰ An agreement that resulted in a difference in savings of this magnitude would have to be at least as dramatic and highly asymmetric in its effect on savings, which is unlikely.

In sum, although it is analytically sound to focus on the possibility that security cooperation could generate relative gains in economic growth, it appears that the dangers posed by this possibility should rarely, if ever, be a major barrier to security cooperation. This should be especially true for states that give priority to security, since they should be more willing to adjust domestic economic policies if necessary to gain the immediate security benefits of cooperation.

FACTORS THAT WOULD INFLUENCE THE SECURITY IMPLICATIONS OF RELATIVE ECONOMIC GAINS. In cases in which security cooperation would generate differential economic growth, three additional considerations influence whether the risks would outweigh the defender's direct gains in security, thereby making security cooperation undesirable. The first consideration applies only to security cooperation, while the latter two apply to economic cooperation as well. First, the beneficial effects of the adversary's increased security make its increased relative economic strength less threatening, since it would be less inclined to use this economic potential for security-driven expansion. Thus, the defender should find relative economic losses produced by security cooperation somewhat less threatening than comparable relative losses produced by economic cooperation.

Second, the magnitude of relative gains influences the potential security threat. Small relative gains, compared to GNP, would rarely pose a major threat. If cooperation breaks down, the disadvantaged country would be able to offset any increased military threat made possible by growth in the adversary's GNP by increasing the percentage of GNP that it spends on defense. Thus, when the adversary's relative economic gains are small, the defender risks a loss of prosperity, but not of security. If the agreement (while it holds) provides large security gains, risking this loss would usually be warranted.

70. For example, during much of the Cold War the United States spent approximately one percent of its GNP on nuclear forces; an agreement to ban nuclear weapons might therefore have saved approximately this much per year.

Third, the offense-defense balance influences the security implications of relative economic gains.⁷¹ Relative economic gains matter less as the advantage of defense grows, because acquiring effective offensive capabilities requires the adversary to make increasingly disproportionate investments in military forces. Thus, when defense has a large advantage over offense, the possibility of relative gains should do little to inhibit economic or security cooperation.⁷² Consequently, countries that possess large nuclear arsenals and that rely heavily on nuclear deterrence for their security should not be inhibited from security or economic cooperation by security-related relative-gains constraints, since nuclear weapons create a very large advantage for the defense.⁷³

These arguments suggest that under most conditions countries should focus on the absolute security gains offered by security cooperation, since these gains would rarely be jeopardized by relative economic gains. Exceptions are most likely when gains in relative economic growth would be significant in terms of overall national wealth and when the offense-defense balance favors offense.

"STATES ARE COMPETITIVE BECAUSE THE POSSIBILITY OF CHEATING MAKES COOPERATION TOO RISKY; INSTITUTIONS CANNOT SOLVE THE PROBLEM"

The third broad argument, that states will not engage in extensive security cooperation focuses on the danger posed by the adversary's ability to cheat on arms control agreements (whether formal or tacit). The possibility of cheating is important only for cases in which cooperation, assuming it holds, would increase the country's security, and therefore is desirable. Thus, the implications of cheating matter only after the preceding standard structural-realist arguments have been rejected.

The standard structural-realist argument notes that since under anarchy there is no authority that can enforce agreements, states will cheat when doing so serves their interests. The possibility of cheating means that a country's true choice may not be between successful arms control and arms racing, but

71. A second structural factor that can influence the implications of relative gains is the number of major states in the system. See Duncan Snidal, "Relative Gains and the Pattern of International Cooperation," *American Political Science Review*, Vol. 85, No. 3 (September 1991), pp. 701-726.

72. Powell, "Absolute and Relative Gains in International Relations Theory," pp. 1303-1320, reaches a similar conclusion, but has cast it in terms of the cost of fighting, not the offense-defense balance. See also Helen Milner, "International Theories of Cooperation Among Nations: Strengths and Weaknesses," *World Politics*, Vol. 44, No. 3 (April 1992), pp. 483-484. Waltz, *Theory of International Politics*, p. 195, suggests this logic but does not spell it out.

73. For similar points, see Kenneth N. Waltz, "The Emerging Structure of International Politics," *International Security*, Vol. 18, No. 2 (Fall 1993), p. 74. Layne, "The Unipolar Illusion," pp. 44-45, appears to disagree.

instead between risking being left behind when the adversary cheats and racing from the start to insure that the adversary fails to gain a lead. The standard structural-realist argument emphasizes the dangers of being cheated and suggests that this will usually prevent significant cooperation, especially security cooperation, since states are especially reluctant to risk shortfalls in military capability.⁷⁴

We have already seen that contingent realism rejects cheating as a dominating influence. Correcting the bias in the standard argument requires, among other things, emphasizing the risks of arms racing, as well as the risks of arms control, and specifically of cheating; this correction creates a balance that is missing in the standard argument. In addition, exploring the implications of incorporating the security dilemma into structural realism showed that the risks of cheating, and therefore its implications for cooperation, vary with offense-defense considerations. Thus, contingent realism recognizes that the possibility of cheating matters, but proceeds to focus on the conditions under which major powers are likely to find that, when all factors are considered, cooperation remains desirable. The following subsection draws on two bodies of literature that help to elaborate the overall thrust of this analysis.

ARMS CONTROL THEORY. The literature on modern arms control theory recognizes the danger posed by the adversary's cheating.⁷⁵ But, as Schelling and Halperin argue, the risks of cheating must be weighed against the benefits the agreement would provide, assuming it holds. They argue that the danger of cheating depends on: the probability of detecting violations of a given size; the strategic implications of a given degree of cheating, which depends upon the level and type of forces allowed by the agreement; and the ability to respond to violations by joining the renewed arms race.⁷⁶

To reduce the risks of cooperation, a formal arms control agreement could include provisions for monitoring that insure the ability to react before the advantage of cheating becomes too large, that is, to ensure that the benefits of

74. This view of the role of cheating in making security cooperation more difficult than economic cooperation is supported by important articles in cooperation theory; for example, Robert Jervis, "Security Regimes," in Stephen Krasner, ed., *International Regimes* (Ithaca, N.Y.: Cornell University Press, 1983); and Charles Lipson, "International Cooperation in Economic and Security Affairs," *World Politics*, Vol. 37, No. 1 (October 1984), pp. 1-23, esp. 12-18. Both articles do, however, point to conditions that increase the probability of security cooperation.

75. See Schelling and Halperin, *Strategy and Arms Control*, esp. 67-74, 91-106; see also Abram Chayes, "An Inquiry Into the Working of Arms Control Agreements," *Harvard Law Review*, Vol. 85, No. 5 (March 1972), pp. 905-969, esp. 945-961; and James A. Schear, "Verification, Compliance, and Arms Control: The Dynamics of the Domestic Debate," in Lynn Eden and Steven E. Miller, eds., *Nuclear Arguments* (Ithaca, N.Y.: Cornell University Press, 1989).

76. Schelling and Halperin, *Strategy and Arms Control*, pp. 67-74.

taking the first step in the arms race are not too large. If, however, the countries' independent national monitoring capabilities already provide information that makes the benefits of cheating small, deals to accept the military status quo may not require formal agreement, but can instead be accomplished by unilateral statements that a state plans to build only if the adversary builds. Schelling and Halperin conclude that "it cannot be assumed that an agreement that leaves some possibility of cheating is necessarily unacceptable or that cheating would necessarily result in strategically important gains."⁷⁷

Although this line of argument was well established by the early 1960s, the standard structural-realist argument neither incorporates it nor seriously disputes it. The burden to confront these conclusions lies with the structural-realists, since none of the essential elements of arms control theory run counter to structural realism's basic assumptions. Some critics will fall back on self-help as an argument, but, as we have seen, cooperation is an important type of self-help, and this includes cooperation in monitoring agreements. Moreover, as argued below, the types of institutions that might be required to make arms control desirable are not precluded by structural realism.

COOPERATION THEORY. Support for contingent realism also comes from the literature that uses game theory to explore cooperation under anarchy.⁷⁸ Cooperation theory provides insights that parallel those offered by arms control and offense-defense theories, and emphasizes the importance of each countries' beliefs about its adversary's preferences. A simple model of the choice between an arms control agreement and an arms race assumes that if an agreement is reached and cheating is then detected, the arms race begins and is not halted again by another agreement.⁷⁹ Given this assumption, the country comparing the value of the arms agreement and the risks of being cheated faces four possible outcomes: the agreement prevails (CC); the adversary cheats, leaving the country one step behind in the ensuing arms race (CD); an equal arms race (DD); or, the country cheats, gaining a one step lead in the arms race (DC).⁸⁰

77. Schelling and Halperin, *Strategy and Arms Control*, p. 69.

78. See citations in fn. 5; also Schelling, "A Framework for the Evaluation of Arms-Control Proposals."

79. More complex assumptions would allow for reestablishing an agreement at any point during the ensuing race. Although renegotiation would be possible, the simplified assumption seems to do an adequate job of capturing the options that states would consider in joining and breaking out of a major arms control agreement. Relaxing this simplifying assumption opens up the possibility in iterated-game models of tit-for-tat type strategies, which play a central role in the literature on cooperation under anarchy, but not in this discussion.

80. "C" stands for cooperation, which in this example means abiding by the agreement; "D" stands for defection, which in this example means cheating on the agreement. CC refers to the outcome in which both countries cooperate; DD refers to the outcome in which both countries defect; and DC and CD refer to outcomes in which one country cooperates and the other defects.

A country is concerned with the implications of cheating only if it prefers the arms agreement to the equal arms race, $CC > DD$.⁸¹ If in addition, the country prefers the arms agreement to an arms race in which it gets a one-step lead ($CC > DC$), and if its adversary has the same preference ordering, then the countries face a "stag hunt."⁸²

Unlike the prisoner's dilemma, in a stag hunt it can be individually rational for two countries to cooperate.⁸³ However, cooperation is not assured if the countries are unsure of each other's preference orderings. For example, a country with stag-hunt preferences believing that it faces a country with prisoner's-dilemma preferences should defect. A country that is unsure about its adversary's preferences, and therefore unsure about whether the adversary will abide by the arms agreement, should consider the magnitude of the differences between its payoffs.⁸⁴ This is when the magnitude of the danger posed by cheating comes into play.

To determine when the risks of cooperation are "too large," the defender compares an arms race in which it starts one step behind (CD) to both an arms race started on equal footing (DD) and to the arms agreement (CC). The country's willingness to risk cooperation grows as: (1) the difference between falling behind by a step and running an equal arms race (CD-DD) decreases; and (2) the difference between the arms control agreement and the equal arms race (CC-DD) increases. As discussed in the arms control and security dilemma literatures, the difference between CD and DD depends on the forces allowed by the agreement, the offense-defense balance, and the quality of monitoring and reaction capabilities. For example, improving the country's ability to monitor an agreement reduces the difference between the adversary getting a lead and starting the race on equal footing, that is, it reduces CD-DD, thereby making cooperation more desirable.

To translate this argument into the kind of model that is commonly used in cooperation theory, we can envision the arms control-arms race choice as a

81. Standard structural-realist arguments argue that this condition is not fulfilled. For example, the argument that cooperation theory is flawed because it fails to take into account countries' concerns about relative gains amounts to saying that for one country $DD > CC$.

82. This also includes the reasonable assumption that $DC > DD > CD$. For a discussion of how a stag hunt compares to other games where cooperation is necessary for states to achieve mutual gains, see Kenneth A. Oye, "Explaining Cooperation Under Anarchy: Hypotheses and Strategies," in Oye, *Cooperation Under Anarchy*, pp. 6-9.

83. For a discussion of when competition will nevertheless occur in a stag hunt, see Downs, Rocke, and Siverson, "Arms Races and Arms Control," pp. 133-137.

84. The country must also worry about whether its adversary correctly understands its own preferences, since misunderstanding could lead a country that would otherwise cooperate to defect.

series of decisions made over time; each decision constitutes a single play of a game, which is then repeated.⁸⁵ The simplifying assumption used above—that once cheating is detected the arms race begins and is not halted again by another agreement—translates into a model in which each country's strategy is to always defect after its adversary's first defection. The prospects for cooperation depend on the countries' preferences in the game. Cooperation should occur if the countries believe they are playing stag hunt. However, cooperation can also be possible if the countries believe they are playing prisoner's dilemma, since, given their strategy for dealing with defection, the overall game that results with iteration can be a stag hunt.⁸⁶ Thus, a way to get the stag hunt discussed in the previous paragraphs is from an iterated prisoner's dilemma played under certain conditions.

In sum, the arguments presented in the arms control literature and later in the cooperation theory literature make it clear that whether the dangers of cheating more than offset the potential benefits of arms control depends on a variety of specific factors, including the terms of the agreement and the countries' abilities to monitor it and to respond to breakout. Thus, according to contingent realism, although the possibility of cheating could make cooperation undesirable under certain conditions, under other conditions arms control would remain preferable to arms racing.

INSTITUTIONS. Contingent realism does not establish an important role for institutions. This clarification is necessary because influential cooperation theorists have emphasized the importance of institutions and regimes in making

85. However, the assumption of this type of model, that the payoffs do not change over time, can be problematic for certain arms agreements and races. For example, in an agreement that establishes low levels of forces, a given amount of cheating in the first play of the game could have dramatically different implications than cheating of the same magnitude once the renewed arms race has continued through many plays. In addition, because a war could stop the repetition of the game, a model that includes the possibility of war after each play of the game might capture more of what we care about. The probability of war after each move would depend on the countries' military capabilities at that stage of the race, thereby reflecting the cumulative nature of the arms race. Powell, "Absolute and Relative Gains in International Relations Theory" develops this type of model for cooperation on trade issues. This type of model would be unnecessary, however, if states' preferences for each outcome incorporate their assessment of the probability of war as an element of their security.

86. On this possibility and complications see David M. Kreps, *A Course in Microeconomic Theory* (Princeton, N.J.: Princeton University Press, 1990), pp. 503–515. Whether it is a stag hunt or a prisoners' dilemma depends on the cost of being cheated in a single play and on the country's discount rate. The intuition is as follows: assuming a prisoner's dilemma for each iteration of the game, although a country can do better than mutual cooperation by cheating on the first move, it does less well than mutual cooperation on each following move. If the first move is not valued much more than future moves (that is, if the discount rate is sufficiently low), then eventually the costs suffered in all following moves will outweigh the gains of taking advantage in the first move. In effect, the prospect of restarting and prosecuting the race is sufficient to deter initial cheating.

cooperation feasible.⁸⁷ In contrast, contingent realism leaves open the question of whether institutions will play a role in making cooperation possible.⁸⁸ Although the prospects for cooperation vary with the quality of information about cheating, whether states need to cooperate to make this information available varies greatly with the specific case. For example, the invention of satellites made available information that was critical for strategic arms agreements, but required little cooperation. Moreover, even when cooperation is required, *ad hoc* agreements, which would not by themselves count as institutions,⁸⁹ could provide the necessary information.

Further, the type of institutions in question—those that provide information and reduce transaction costs—do not pose a problem for structural realism. Nothing about the roles performed by this type of institution conflicts with structural realism's basic assumptions. States remain the key actors, and anarchy remains unchanged; from this perspective the role played by these institutions is modest. If institutions of this type would make cooperation desirable, then structural realism predicts that states would create them for essentially the same reason that under certain conditions they should pursue advances in technology or increases in force size: these policies would enhance their military capabilities. The more ambitious purposes of institutions—for example, changing states' motives from self-interest to altruism, instilling confidence in benign shifts in motives, or eliminating anarchy by granting tremendous control to an international authority—appear to violate structural realism's core assumptions or its basic insights. But the debate between neorealists and neoinstitutionalists is not primarily over these more ambitious institutions. Therefore, if there is really anything to disagree over, this debate needs to be refocused.

87. Key works include Keohane, *After Hegemony*; Robert Axelrod and Robert O. Keohane, "Achieving Cooperation under Anarchy: Strategies and Institutions," in Oye, *Cooperation Under Anarchy*; and Krasner, ed., *International Regimes*. The relationship between the literatures on regimes and institutions and that on structural realism is complex, because although their assumptions are not logically inconsistent, their connotations are different. See Stephen D. Krasner, "Global Communications and National Power: Life on the Pareto Frontier," *World Politics*, Vol. 43, No. 3 (April 1991), pp. 360–362, who explains that, "the connotation of a research program suggests which questions are most important, what kind of evidence should be gathered, and, often tacitly, which issues should be ignored."

88. Keohane seems to waver on this issue, sometimes arguing only that institutions help make cooperation possible, while elsewhere suggesting the much stronger position that cooperation is possible only when institutions are present. For example, *After Hegemony*, p. 245: "Institutions are necessary, even on these restrictive premises, in order to achieve *state purposes*"; see also pp. 13, 78, and 245–247.

89. On the distinction between *ad hoc* agreements and institutions see Keohane, *After Hegemony*, pp. 51–54.

Contingent realism helps us to understand the confusion. The standard structural-realist argument predicted less cooperation than structural realism should have, leaving a gap that was filled by institutionalist arguments, which purported to diverge from structural realism.⁹⁰ In effect, contingent realism reclaims much of the territory that the standard argument gave to neoinstitutionalists.

However, more is at issue than deciding which arguments belong to which theories, because contingent realism identifies the possibility of extensive cooperation without focusing on institutions. This is not because structural realism finds that institutions do not matter. Rather, contingent realism sees institutions as the product of the same factors—states' interests and the constraints imposed by the system—that influence whether states should cooperate. Consequently, it sees institutions not as having much explanatory power of their own, but instead as part of what is being explained. Structural realism can, therefore, provide a partial foundation for a theory of international institutions.

Implications for Structural-realist Arguments

Contingent realism has a number of implications for the study and application of structural theories. First, because contingent realism predicts cooperation under certain conditions and competition under others, a structural-realist case against cooperation must demonstrate that the conditions necessary for cooperation have not occurred or will not occur in the future. This empirical assessment should be a key component of the argument explaining the prevalence of international competition. However, the standard structural-realist case about the competitive nature of international politics has not been built on this type of evidence.⁹¹ These arguments are therefore incomplete; whether their conclusions are nevertheless correct remains an open question.

90. For example, Robert Keohane, "Institutionalist Theory and the Realist Challenge After the Cold War," in Baldwin, *Neorealism and Neoinstitutionalism*, p. 277, states that "institutionalism accepts the assumptions of realism about state motivation and lack of common enforcement power in world politics, but argues that *where common interests exist*, realism is too pessimistic about the prospects for cooperation and the role of institutions."

91. Nevertheless, the debate over the competitive policies that preceded World War I can be read from this perspective with Scott D. Sagan, "1914 Revisited: Allies, Offense, and Instability," *International Security*, Vol. 11, No. 2 (Fall 1986), pp. 151–176, arguing the greater explanatory power of structural explanations, and Van Evera, "The Cult of the Offensive and the Origins of the First World War," and Jack Snyder, *The Ideology of the Offensive: Military Decision Making and the Disasters of 1914* (Ithaca, N.Y.: Cornell University Press, 1984), emphasizing the shortcomings.

Second, development of an improved structural-realist baseline improves our ability to explore the value of alternative explanations for competitive and cooperative policies.⁹² For example, since contingent realism predicts cooperation in certain cases, alternative and complementary explanations for cooperation—for example, institutions and regimes—could become less compelling. On the other hand, in cases where contingent realism predicts extensive cooperation but little occurs, other theories that explain competition become more important. A variety of important possibilities have received extensive attention—for example, that greedy motives, in addition to insecurity, make cooperation less likely if not impossible, and that a variety of individual and state-level misperceptions could lead countries to pursue undesirable competition.⁹³ Our ability to compare the explanatory strength of these theories depends on having established a structural-realist baseline that explains cooperation, as well as competition, and the conditions under which each is predicted.

Third, because contingent realism identifies countervailing pressures, it will, at least sometimes, not clearly prescribe either competitive or cooperative policies. In these cases, other levels of analysis will necessarily play a more important role in explaining state behavior. Structural pressures will bound the possibilities, while leaving states with substantial choice between more cooperative and more competitive approaches. Although the levels-of-analysis debate is often viewed as a competition between different levels of explanation, this argument suggests that they are often necessarily complementary. A related point focuses on implications for policy analysis: when structural arguments do not provide clear guidance, the choice between cooperative and competitive policies could hinge on the anticipated effects of various policy options on the opponent's domestic politics.⁹⁴

Fourth, contrary to what appears to be the conventional wisdom, structural realism, properly understood, has more trouble explaining the competitive military policies the superpowers pursued during the latter half of the Cold War than it does explaining the less competitive policies that have followed it.

92. Noting the importance of a "rationalist baseline," although focusing on different issues, is Fearon, "Threats to Use Force," chap. 2.

93. On individual misperceptions see Jervis, *Perception and Misperception in International Politics*; on national-level explanations see Snyder, *Myths of Empire*, and Van Evera, "Causes of War."

94. On the interaction between international policy and domestic politics see Peter Gourevitch, "The Second Image Reversed: The International Sources of Domestic Politics," *International Organization*, Vol. 32, No. 4 (Autumn 1978); Jack Snyder, "International Leverage on Soviet Domestic Change," *World Politics*, Vol. 42, No. 1 (October 1989), pp. 1–30; and Glaser, "Political Consequences of Military Strategy," pp. 519–525.

Because structural realism is commonly understood to predict highly competitive international relations, the end of the Cold War was interpreted as a severe defeat for structural-realist theories and as a boost for unit-level, country-specific theories. For the same reason, some analysts argued that even the limited cooperation that did occur during the Cold War could not easily be explained by structural realism.⁹⁵ Others argued that the limited contribution of arms control to slowing the superpowers' military buildups and reducing the probability of war provides support for the standard structural-realist claim that cooperation can play only a marginal role in major powers' security policies.⁹⁶

However, contingent realism suggests that it is the competition that occurred during the latter half of the Cold War that poses the more serious challenge to structural realism properly understood. The security dilemma facing the United States and Soviet Union was greatly reduced, if not entirely eliminated, by the superpowers' acquisition of assured destruction capabilities, which appeared virtually certain to occur by the mid-1960s at the latest: the superpowers' deployment of large survivable nuclear arsenals established clear defense-dominance, and the technology of nuclear weapon delivery systems and various types of offensive counterforce provided the opportunity to distinguish offense and defense.⁹⁷ At the same time, bipolarity reduced the complexity of the arms control agreements that were required to slow competition. Under these conditions, instead of a marginal role, contingent realism predicts a major role for arms control or other non-competitive policies. The nuclear arms race should have ground to a halt and the full spectrum of the most threatening nuclear forces should have been limited either by arms control agreements or unilaterally. Thus, rather than providing support, the continuing military competition cuts against structural realism and must be explained by other theories.

In addition, the U.S. need to protect Western Europe should have been seriously questioned, if not terminated, since the United States would have been able to protect its homeland against a conventional attack by a European

95. For example, Weber, "Realism, Detente and Nuclear Weapons."

96. See, for example, John J. Mearsheimer, "Correspondence: Back to the Future, Part II: International Relations Theory and Post-Cold War Europe" *International Security*, Vol. 15, No. 2 (Fall 1990), p. 197, footnote 6; in disagreeing with Mearsheimer on this point I do not intend to endorse the position he is arguing against—that institutions necessarily play a major role in security cooperation.

97. This conclusion depends on judgments about U.S. requirements for counterforce to extend deterrence and on implications for the security dilemma facing the United States. See Glaser, *Analyzing Strategic Nuclear Policy*, pp. 94–99, 207–256.

hegemon.⁹⁸ Likewise, the Soviet need to control Eastern Europe should have been greatly reduced or eliminated, since the Soviet Union would have been able to deter a Western invasion without using Eastern Europe as a security buffer. Thus, it is the ending of the Cold War rather than the latter half of the Cold War that is in many ways easier for structural realism to explain.⁹⁹

A fifth implication of contingent realism is that, contrary to the standard interpretation, structural-realist analysis offers generally optimistic predictions about the future of conflict between Europe's major powers. For example, because states pursue security, not advantages in relative power, structural realism does not predict that the West will try to take advantage of current Russian weakness. This is fortunate because military competition and a lack of economic cooperation would risk an increase in future threats to Western security: Russia already has large nuclear forces and is likely eventually to regain economic strength and with it the wherewithal to maintain large modern conventional forces. Competitive Western policies designed to keep Russia down are likely to be counterproductive, leaving Russia with enormous military capability, while signaling that the West is a threat to Russian economic and political well-being. By contrast, the cooperative policies the West is now pursuing—providing economic support, continuing with arms control instead of launching an arms race, and coordinating on foreign policy—hold better prospects for advancing its long-term security interests.

In addition, contingent realism finds that security-driven concern over relative economic gains should not damage trading relations among Western Europe's major powers, and between the United States and these countries, and therefore should not be a source of political tension. The large defensive advantages provided by nuclear weapons should dwarf any security risk that might otherwise result from advantages in relative economic growth. This is especially true since Germany is the focus of fears about disproportionate economic growth, but the other major Western powers have nuclear weapons.

Furthermore, this analysis suggests that the dangers of a shift to multipolarity in Europe have been exaggerated because offense-defense considerations have not been adequately integrated with polarity arguments. Many of the dangers that can be generated by multipolarity do not arise when defense has

98. Robert J. Art, "A Defensible Defense: America's Grand Strategy After the Cold War," *International Security*, Vol. 15, No. 4 (Spring 1991), pp. 11–23; Charles L. Glaser and George W. Downs, "Defense Policy: U.S. Role in Europe and Nuclear Strategy," in Oye, Lieber, and Rothchild, *Eagle in a New World*, pp. 72–78.

99. For elements of such an argument, see Daniel Deudney and G. John Ikenberry, "The International Sources of Soviet Change," *International Security*, Vol. 16, No. 3 (Winter 1991/92), pp. 74–118.

a large advantage.¹⁰⁰ uncertainties about whether allies will meet their commitments matter less because countries can maintain adequate deterrent capabilities on their own; increases in the miscalculation of capabilities will be smaller because capabilities are less sensitive to differences in the size and quality of forces; and the ability of major powers to gain military superiority by ganging up against other major powers is greatly reduced if not eliminated.¹⁰¹ Because nuclear weapons provide very large advantages for the defense, a multipolar Europe can largely avoid these problems.

Finally, this analysis also indicates a likely source of tension. Current nuclear powers will face conflicting pressures if other major or intermediate powers—most obviously, Germany and Ukraine—decide they need nuclear weapons. On the one hand, structural arguments hold that the nuclear powers should welcome the security that nuclear weapons can provide to other major powers. On the other hand, the acquisition of nuclear capabilities will reduce the ability of current nuclear powers to deter conventional attacks, or at least their confidence in their abilities,¹⁰² and might increase the damage they would suffer if war occurs. At least initially, therefore, proliferation is likely to be an unwelcome change and to strain relations in Europe. Fortunately, there is a readily available solution for avoiding these strains in the case of Germany. Preserving NATO, and thereby U.S. security guarantees to Germany, should essentially eliminate Germany's need for nuclear weapons.¹⁰³ Unfortunately, there is no comparable solution for Ukraine's security requirements.¹⁰⁴

In closing, contingent realism paints a picture that diverges dramatically from that offered by the standard structural-realist argument. Instead of a strong propensity toward security competition, we find that states' choices

100. Even without including the offense-defense balance, the overall deductive case against multipolarity is mixed; see Stephen Van Evera, "Primed for Peace: Europe After the Cold War," *International Security*, Vol. 15, No. 3 (Winter 1990/91), pp. 33–40. For a different challenge to the explanatory value of polarity arguments see Hopf, "Polarity, the Offense-Defense Balance and War."

101. Mearsheimer, "Back to the Future," notes these points but does not fully integrate them into his predictions about the shift to multipolarity; Waltz, "The Emerging Structure of International Politics," p. 74, agrees that nuclear weapons transform the implications of multipolarity.

102. The argument here follows the logic of the stability-instability paradox. There is, however, a sound argument that nuclear powers should not be very worried about their ability to deter; see Robert Jervis, *The Meaning of the Nuclear Revolution* (Ithaca, N.Y.: Cornell University Press, 1989), pp. 19–22.

103. I present the case for NATO in Glaser, "Why NATO is Still Best: Future Security Arrangements for Europe," *International Security*, Vol. 18, No. 1 (Summer 1993), pp. 5–50.

104. For competing views on Ukrainian proliferation see John J. Mearsheimer, "The Case for a Ukrainian Nuclear Deterrent," and Steven E. Miller, "The Case Against a Ukrainian Nuclear Deterrent," both in *Foreign Affairs*, Vol. 72, No. 3 (Summer 1993), pp. 50–66 and 67–80.

between cooperation and competition are highly conditional, with no general preference for competition. This conclusion flows from the same assumptions that are employed in the standard structural-realist analysis. However, by eliminating the bias in that analysis, integrating offense-defense considerations to determine how much and what types of military capability countries can generate from their power, and explaining how military policies can signal valuable information about motives, contingent realism corrects a variety of shortcomings. It provides a set of conditional structural-realist predictions that improve our ability to explore past cooperation and competition, are necessary for assessing competing explanations, and provide better guidance for designing future policies.

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