Anarchy in international relations theory: the neorealist–neoliberal debate
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Two of the most influential contemporary approaches to international relations theory are neorealism and neoliberalism. The debate between these two approaches has dominated much of international relations theory for the last decade. It is now commonplace for an article about some aspect of international relations theory to begin by locating itself in terms of this debate. These two approaches and the debate between them have failed to contribute as much as they might have to international relations theory. These approaches suffer from serious internal weaknesses and limitations that the neorealist–neoliberal debate often has tended to obscure rather than to clarify. Once we have exposed and clarified these weaknesses and limitations, we will be able to see several important directions for future theoretical work.

Two books, *Neorealism and Its Critics* and *Neorealism and Neoliberalism: The Contemporary Debate*, make significant contributions to this debate. The former offered a wide-ranging critique of neorealism when it was published in 1986. The latter, which has just been published, is more narrowly focused. It takes up where some of the critiques in *Neorealism and Its Critics* left off. A review of these two complementary volumes affords an excellent opportunity to begin to identify some of the weaknesses and limitations that the neorealist–neoliberal debate frequently has obscured.

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In this review, I discuss four broad avenues of criticism that these volumes take in evaluating neorealism and specifically Kenneth Waltz’s formulation of it.¹ The first three avenues are the origins of states’ preferences, the agent-structure problem, and Waltz’s specific definition of political structure. These criticisms generally do not challenge the logical coherence of neorealism. They focus instead on the limitations of the theory. The first two center on what neorealism takes for granted, e.g., preferences and intersubjective meanings and understandings. The third criticism finds Waltz’s definition of structure too confining. The fourth avenue of criticism challenges the internal logic of neorealism directly. It argues that conclusions claimed to follow from the assumptions of neorealism actually do not. The neorealist–neoliberal debate lies along this fourth avenue.

Three issues lie at the center of the neorealist–neoliberal debate. In reviewing these issues, I try to bring important implicit assumptions to the fore and show that those assumptions account for many of the important differences between the two theories. Moreover, many of the differences that have been thought to be significant, such as the difference between relative and absolute gains, are not. The first issue at the heart of the debate is the meaning and implications of anarchy. Although the notion of anarchy has served as a central organizing concept for much of international relations theory, the emphasis on anarchy is misplaced. What have often been taken to be the implications of anarchy do not really follow from the assumption of anarchy. Rather, these implications result from other implicit and unarticulated assumptions about the states’ strategic environment.

The second central issue is the problem of absolute and relative gains. I argue that the controversy surrounding this problem generally has mistaken effects for causes and that this mistake has handicapped analysis of the problem of international cooperation. More specifically, I try to demonstrate that the international relations literature generally holds, if at times only implicitly so, that the extent to which a state is concerned about relative gains depends on its strategic environment, for example, the offense–defense balance and the intensity of the security dilemma. But if this is the case, then the degree to which a state is concerned about relative gains is part of the outcome to be explained: it is an effect and not a cause. The extent to which a state is concerned about relative gains, therefore, does not explain the level of international cooperation. This realization should refocus our attention on what determines the degree of a state’s concern about relative gains.

The third issue is the tension between coordination and distribution. There are often many ways to realize the joint gains from cooperation, and these alternatives often lead to different distributions of those gains. Thus, the potential for joint gains usually creates distributional disputes that tend to impede cooperation. Although these distributional concerns only recently have

begun to receive attention in the debate between neorealism and neoliberalism, they hold the promise of clarifying some of the questions that actually do divide these two approaches.

Neorealism and the structural approach

Much of the neorealist–neoliberal debate can be seen as a reaction to Waltz’s Theory of International Politics and a response to those reactions. A brief discussion of two of that book’s primary objectives is essential to understanding the debate. One objective was to reiterate, reinforce, and refine a line of argument Waltz began in Man, the State, and War. There, he had underscored the importance of third-image explanations. First-image explanations locate the causes of international outcomes, say the cause of war, “in the nature and behavior of men. Wars result from selfishness, from misdirected aggressive impulses, from stupidity.” Second-image explanations locate causes in the internal structure of the state. Imperialism, for example, results from a particular internal economic structure like capitalism; similarly, international peace results from a particular form of government like democracy. Appealing to Rousseau’s stag hunt and alluding to the then recent development of game theory, Waltz argued that first- and second-image explanations were insufficient. In a situation entailing strategic interdependence, such as that of the great powers, an actor’s optimal strategy depends on the other actors’ strategies. If, therefore, we want to explain what the actors will do, then, in addition to looking at the attributes of the actors, we must also look to the constraints that define the strategic setting in which the actors interact. The third image locates causes “within the state system.”

A simple example from microeconomic theory illustrates the potential importance of third-image explanations. The price is higher and the output is lower in a monopolized market than in a competitive one. But first- and second-image accounts, which Waltz collectively calls reductive explanations in Theory of International Politics, do not explain these differences. In both markets, the attributes of the actors, which are firms in this case, are identical: every firm tries to maximize its profits and consequently produces the level of output at which marginal cost equals marginal revenue. What accounts for the variation in price and output between these markets is not variation in the attributes of the units but variation in the environments or market structures in which they act. This is the essence of the third image.

4. Ibid., p. 16.
5. Ibid., pp. 80–164.
7. Ibid., p. 12.
It is important to emphasize two points about the division of explanations into reductive and systemic accounts. The first is an assumption inherent in this division: namely, that we can usefully conceive of the actors or units in a system as separate and distinct from the constraints that define the strategic setting in which the units interact. The second important point is the kind of conceptual experiment and explanation that naturally follows from this division. Once a system has been decomposed into units and constraints, it is natural to ask one of two questions; or, to put it differently, it is natural to consider two types of thought experiment. First, how would some aspect of the units’ behavior, say the probability of starting a war, vary if we conceptually change some attributes of the units while holding the constraints constant? What, for example, would happen to the probability of war if a state’s form of government were democratic rather than authoritarian? Fixing constraints and varying units’ attributes comprise the essential conceptual experiment underlying reductive explanations. Second, how would behavior change if the attributes of the units remained constant and the constraints were changed? What, for example, would happen to the probability of war if the attributes of the units were unchanged but the distribution of power changed from bipolarity to multipolarity? Fixing the units’ attributes and varying the constraints facing the units comprise the fundamental conceptual experiment underlying systemic explanations.

After emphasizing the general importance of third-image or systemic explanations, Waltz turns to a second objective in *Theory of International Politics*. He sees structure as a “set of constraining conditions.” But states may be constrained by many things—like the distribution of power, the nature of military technology, or the state’s comparative economic advantage. A second goal for Waltz is to specify a restricted set of constraints that provide a way of conceiving of a political system and then to demonstrate the power of this formulation by showing that it tells “us a small number of big and important things.” He restricts this set to three elements, defining a political structure in terms of its ordering principle, the distribution of the units’ capabilities, and the functional differentiation or nondifferentiation of the units.

Two criteria seem to have guided the selection of these elements and this definition of political structure. The first is pragmatic. This definition appeared to lead to interesting insights, which, of course, is the goal of all positive theories. The second criterion is less general and reflected a trade-off. Waltz tried to define political structure so that “it would show us a purely positional picture.” The advantage of a positional picture is that many systems can be seen as similar regardless of the particular substantive context in which the units interact. “Structure, properly defined, is transposable.” Thus, firms

10. Ibid., pp. 79–101.
12. Ibid.
facing a high risk of bankruptcy in an oligopolistic market may be seen to be in an anarchical, self-help system in much the same way that states facing a high risk of war in the international system are in an anarchical, self-help system.\textsuperscript{13} If, therefore, anarchy implies certain behavior, such as the tendency for balances of power to form, then we would expect to see this behavior obtain "whether the system is composed of tribes, nations, oligopolistic firms, or street gangs."\textsuperscript{14} The potential advantage of a spare definition of a political structure is that it may help us see similarities in what initially appeared to be very different domains. The potential disadvantage of this spare definition is that if the three dimensions Waltz uses to characterize systems do not sufficiently constrain the units' interaction, then units in similar systems may not interact in similar ways. If this is the case, then we shall have to look elsewhere for explanations of these variations. Recognizing this trade-off, Waltz opts for a spare definition.

\textbf{Four avenues of criticism}

Structural theories decompose a system into units and constraints. This decomposition makes these theories vulnerable to two broad avenues of criticism. The first criticism accepts this decomposition but stresses the need for a theory of preference formation to supplement the structural theory. Because the units' preferences are exogenously specified in a structural theory, we need a theory that explains their origins. The second avenue rejects this decomposition. It emphasizes the agent–structure problem, arguing that agents and structure are inseparable. In addition to these first two broad avenues of criticism, any particular structural theory, like Waltz's formulation of neorealism, is also subject to a third and fourth avenue of criticism. The third focuses on and questions the specific definition of structure employed in the theory. The fourth questions whether the conclusions claimed to follow from the theory do indeed follow.

\textit{Preferences are given exogenously}

The first avenue of criticism centers on preferences. Structural approaches take the units' preferences as given. That is, these preferences are exogenously specified. They become inputs into the analysis rather than the subject of analysis. This may be an important weakness of the structural approach. As Robert Jervis cautions, "By taking preferences as given, we beg what may be the most important question on how they were formed. . . . Economic theory treats tastes and preferences as exogenous. Analysis is therefore facilitated, but

\textsuperscript{13} Waltz, \textit{Theory of International Politics}, pp. 105 and 111.
\textsuperscript{14} The quotation is from p. 37 of Kenneth Waltz, "Realist Thought and Neorealist Theory," \textit{Journal of International Affairs} 44 (Spring/Summer 1990), pp. 21–37.
at the cost of drawing attention away from areas that may contain much of the explanatory ‘action’ in which we are interested.”

The first step in assessing the force of the criticism that structural approaches lack a theory of preferences is to clarify the criticism by distinguishing two types of preferences. The first type is preferences over outcomes; the second is preferences over actions or policies. To differentiate these two types, consider a game in payoff-matrix form. The cells in the matrix correspond to potential outcomes. The utilities that appear in each cell in the matrix represent the players’ preferences over these potential outcomes. That is, a player’s utilities reflect its preference ranking of the possible outcomes. Given its preferences over outcomes and its beliefs about what the other players are doing, a player can rank its potential actions from most to least preferred. In a two-person game, for example, the row player can rank its actions from best to worst given its payoffs and its beliefs about what the column player is doing. This induced ranking defines a player’s preferences over actions.

Structural theories do not try to explain preferences of one type but do try to explain preferences of the other type. Structural theories take the units’ preferences over possible outcomes as given and, consequently, lack a theory of preferences over outcomes. But structural theories try to make predictions about the units’ preferred actions by combining assumptions about the units’ preferences over outcomes with other assumptions about the structural constraints facing the units. In this sense, structural theories claim to be a theory of preferences over actions. Game theory, for example, is a theory of preferences over actions. It attempts to predict the units’ optimal actions based on their preferences over outcomes and the strategic setting in which they interact. Similarly, Waltz’s formulation of neorealism takes the units’ preferences as given. “In a microtheory, whether of international politics or of economics, the motivation of the actors is assumed rather than realistically described.” In particular, Waltz assumes “that states seek to ensure their survival” and then attempts to predict the units’ actions, albeit in a very general way, on the basis of this assumption about the units’ preferences and other assumptions about the political structure in which the units interact.

The two types of preferences are frequently conflated. For example, after noting that “economic theory takes tastes and preferences as exogenous” and warning that we may be begging the most important questions by doing so, Jervis discusses some of the sources of these tastes and preferences over outcomes. These sources include transnational forces, ideologies, beliefs,

16. The distinction between preferences over outcomes and over actions is useful, but it should not be pushed too hard. An outcome in one game may be seen as a policy choice in a larger game.
17. Waltz, Theory of International Politics, p. 91.
18. The quotation is drawn from ibid.
experience, and knowledge.  

He also sees realism as a source or theory of preferences over outcomes, saying, "Sometimes we can deduce preferences from the structure of the system, as Realism suggests. But even a structural theory of international politics as powerful as Waltz's has trouble producing precise deductions." Jervis confounds the two types of preferences here. He correctly observes that economic theory takes preferences over outcomes as given but then treats neorealism, which is a theory of preferences over actions, as a theory of preferences over outcomes. Robert Keohane similarly conflates the two types of preferences when he intends to criticize neorealism as a weak theory of behavior (that is, a weak theory of preferences over actions) but describes neorealism as a weak theory of preferences over outcomes.

Conflating the two types of preferences has at least two negative effects. The first is to suggest that we cannot use structural or game-theoretic approaches, which take preferences as given, to study the effects on preferences of changes in beliefs, experience, or knowledge. This suggestion is simply wrong if what we want to study is how changes in these factors affect preferences over actions or policies. Indeed, one of the primary uses of incomplete-information models is to study how interaction affects players' beliefs and, through these beliefs, their preferred actions. Andrew Kydd, for example, develops an interesting incomplete-information model of arms races that he uses to study Jervis's spiral model of escalation. The basic issue in Kydd's game is whether a state will change from preferring not to arm to preferring to arm because it interprets another state's arms increase as a sign of hostility rather than of insecurity. Kydd uses this model to study the circumstances in which two states that have no hostile intent might arm and eventually go to war because they fear that the other is hostile. The formal study of dynamic interactions and the learning and signaling inherent in them is at an early stage in international relations theory. Many legitimate criticisms can be made of this work. But the claim that this work has nothing to say about learning and changes in preferences (over

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20. Ibid., p. 325.
21. Robert Keohane, "Theory of World Politics," in Keohane, Neorealism and Its Critics, pp. 175–76. One factor contributing to this conflation may be that both Jervis and Keohane focus primarily on the prisoners' dilemma. There is no strategic interdependence in a one-shot prisoners' dilemma: a player always does strictly better by playing D rather than C regardless of what the other player does. In cases in which a player's optimal action is independent of what others do, a theory of preferences over outcomes also serves as a theory of preferences over actions. The distinction between the two types of preferences is meaningful only if the game entails a situation of strategic interdependence in which a player's optimal strategy depends on what it believes others will do.
24. For an excellent review of some of the limitations of this approach, see David Kreps, Game Theory and Economic Modelling (New York: Oxford University Press, 1990).
actions) because it takes preferences (over outcomes) as given is not one of these criticisms.

The second negative effect of conflating the two types of preferences is that doing so confounds two objections to structural approaches that need to be evaluated separately. The first objection is that these approaches take the units’ preferences as given. The second is that these approaches offer at best very weak theories of preferences over actions and at worst misleading theories. As will be seen, the first objection is not very important to the neorealist–neoliberal debate, while the second objection lies at the heart of it.

The significance of taking the units’ preferences as given in a theory or model depends very much on the theory or model and the purposes for which it has been constructed. In some models of nuclear crisis bargaining, for example, there are only three outcomes: a state prevails in the crisis, it backs down but avoids a nuclear exchange, or the crisis ends in nuclear war.25 Preferences over these outcomes are exogenously given in these models, but it would seem bizarre not to assume that a state prefers the first outcome to the second and the second to the third. Many situations, however, are much more complicated and what to assume about preferences over outcomes is not obvious. It is not clear, for example, what to assume about a state’s preferences over possible trade arrangements. Here the work of Jeffry Frieden, Peter Gourevitch, Peter Katzenstein, David Lake, Helen Milner, Ronald Rogowski, and others in developing an understanding of the origins of preferences is very important.26 Similarly, a state’s preferences over potential national security arrangements, for example, possible arms control agreements, may not be obvious, and theories may be needed to explain these preferences.27

That neorealism takes the units’ preferences as given is of little consequence for the neorealist–neoliberal debate. As will be developed more fully below, this debate largely focuses on the likelihood of cooperation in anarchy and on the role of institutions in facilitating cooperation. Neorealism maintains that cooperation will be difficult in an anarchic system composed of units that prefer survival over extinction. Neoliberalism questions this conclusion but not the


assumption that units are minimally motivated to survive. Indeed, it would seem bizarre not to assume that units prefer survival over extinction. Thus, the criticism that these preferences are specified exogenously is unimportant to the debate about the likelihood of cooperation in anarchy. The potentially important criticism is that the conclusions claimed to follow from neorealism’s spare assumption about units’ preferences and about the political structure in which these units interact actually do not follow. This is the fourth avenue of criticism, which will be discussed below.

The inseparability of agents and structure

The structural approach decomposes a system into units and the constraints facing them. The second avenue of criticism denies the separability of agents and structure. Drawing on structurationist theories in sociology, Alexander Wendt argues that agents and structure are “mutually constitutive yet ontologically distinct entities. Each is in some sense an effect of the other; they are ‘co-determined.’”

If agents and structure were conceptually inseparable, two consequences would follow. First, the two conceptual experiments underlying the structural approach from which this approach derives its explanatory power would become problematic. We would no longer be able to study the constraining effects of structure by theoretically holding the units and their preferences constant while varying the structure in which they interact. If units and structure are inseparable so that each is at least partly the effect of the other, then variation in the structure will also change the units.

Second, challenging the separability of units and structure makes the units an object of inquiry and directs our attention to systemic change and transformation. If units and structure are mutually constitutive, then it is natural to ask, How do they evolve, and How do they interact over time? Thinking of the units as being endogenous shifts our attention away from a positional model to what David Dessler calls a transformational model. In a positional model like Waltz’s formulation of neorealism, “structure is an environment in which action takes place. Structure means the ‘setting’ or ‘context’ in which action unfolds.” Structure is, in other words, a set of constraints. In a transformational theory, “structure is a medium of activity that in principle can be altered through activity.” Structure shapes action and is shaped by action. The goal, therefore, of a transformational theory is to explain how structure and agent interact. To do this, Robert Cox, Dessler, John

30. Ibid., p. 461.
Ruggie, Wendt, and others have emphasized identities, interests, rules, roles, and intersubjective understandings and meanings.\textsuperscript{31}

As with the first avenue of criticism, the force of the second avenue depends very much on the particular theory or model being criticized. Cox's distinction between problem-solving theories and critical theories is helpful here.\textsuperscript{32} The former uses the ceteris paribus assumption to restrict the statement of a specific problem "to a limited number of variables which are amenable to a relatively close and precise examination."\textsuperscript{33} Among the many things that problem-solving theories may exclude by taking them as given and unproblematic are intersubjective understandings and expectations. The ceteris paribus assumption effectively freezes and thereby assumes away the interaction of units and structure.

It seems entirely appropriate to assume away this interaction in a problem-solving theory as long as the applicability or domain of the theory is understood to be bounded by the ceteris paribus assumption. Structurationists rightly argue that intersubjective understandings are part of what is being taken as given or unproblematic in this assumption. If these understandings and meanings differ significantly from those presumed in the ceteris paribus assumption, then theories predicated on that assumption may be of little use. Of course, the ceteris paribus conditions—be they about interests and identities or about the many other factors left out of a specific theory—are never strictly satisfied. We do not know a priori whether differences in interests and identities or in the other excluded factors are important. The best we can do is try to determine the domain of applicability of problem-solving theories by using them in different settings. Powerful theories will work in a large domain because the excluded factors subsumed in the ceteris paribus assumption generally are insignificant. Weak theories will have a very limited domain. The sociological approach makes a serious and important criticism and contribution in stressing the importance of intersubjective meanings and understandings and the interaction between agents and structure.

The sociological approach stresses the inseparability of units and structure. But it is important not to identify this criticism with this particular approach. A second line of research is also predicated on the interaction of units and structure or, more precisely, the interaction of states and the international structure. The essence of Gourevitch's second-image-reversed argument is that


\textsuperscript{32} Cox, "Social Forces, States, and World Orders," p. 208.

\textsuperscript{33} Ibid., p. 208.
the international structure shapes domestic institutions and states’ preferences: states and structure interact.

This second form of the criticism that agents and structure are inseparable is important for two reasons. First, it shows that the agent–structure problem may arise even in rationalist approaches that take interests and identities as given and assume that the units act in their own narrow self-interest. Second, the existing literature illustrates a way of trying to deal with this form of the agent–structure problem. The potential solution is to redefine the units in the system. Rather than treating states as unitary actors, states are decomposed into more basic units. The hope here is that we will be able to separate these more basic units from the constraints facing them.

To illustrate this approach to dealing with the interaction of states and the international structure, consider Rogowski’s work on the effects of international trade on domestic political alignments and states’ preferences. At the risk of doing the subtlety of his analysis grave injustice, Rogowski decomposes a country into three groups or units: landowners, capitalists, and labor. A state’s preferences emerge through competition among these units. Moreover, anything that significantly affects the terms of international trade shifts the distribution of domestic political power among the units. For example, technological or political changes, like the advent of railroads and steamships or the rise of British hegemony, reduce the cost or risk of international trade. These changes favor and enrich domestic groups that benefit from greater trade. By assumption, benefited groups become more powerful and the state’s preferences generally become more reflective of the preferences of these favored groups.

Rogowski’s analysis illustrates a rationalist version of the agent–structure problem or, more accurately, the state–structure problem. Capital, land, and labor in Rogowski’s argument are acting in their own material self-interest. Changing intersubjective meanings and understandings are not at issue here. Nevertheless, we cannot decompose the international system into units and structure if we treat states as the units. For example, a change in the international system, like the rise of British hegemony, that reduces the risk and therefore increases the expected return to international trade will also

34. Rogowski, *Commerce and Coalitions.*

35. Rogowski readily acknowledges that he is making assumptions about the domestic political process and does not have a theory of the state. He also emphasizes that although changes in the terms of trade may make some domestic groups more powerful, they still may lose in the domestic political struggle (ibid., pp. 4–5). The power of Rogowski’s analysis, of course, lies in its ability to identify the groups that will benefit from greater trade and the domestic cleavages that greater trade will tend to create. Appealing to the Stolper–Samuelson theorem, Rogowski argues that greater trade favors the domestic group that controls the relatively abundant factor. So, for example, land was abundant and capital and labor were scarce in the United States in the latter part of the nineteenth century, while labor was abundant and capital and land were relatively scarce in Germany. Accordingly, agriculture in the United States and labor in Germany should have supported greater openness, while capital and labor in the United States and capital and land in Germany should have united in support of protectionism (pp. 3–20).
tend to change states’ preferences. States and structure are interdependent; each is in part an effect of the other.

This brief illustration also suggests a way of trying to deal with this version of the agent–structure problem: namely, to decompose the system into different units that hopefully can be separated from the structure constraining them. In effect, we enlarge the game by trying to break what we previously took to be a unitary actor, namely the state, into more basic units. Of course, enlarging the game to include the interaction between domestic and international politics makes any analysis much more difficult. Needless to say, an approach to dealing with the inseparability of states and structure is not a theory of their interaction. Much important work remains to be done on the interaction of states and structure.

In sum, theories that take intersubjective meanings and understandings as given assume away one form of agent–structure interaction. Structural theories that take the state to be a unitary actor also assume away a rationalist form of agent–structure interaction. These theoretical simplifications may be appropriate for some questions and not for others. We need to do more to identify those domains in which this interaction can be disregarded and those in which it cannot.

Waltz’s definition of structure

The first and second avenues of criticism are directed at the structural approach in general. The third and fourth avenues of criticism apply more specifically to neorealism and to Waltz’s particular formulation of it. The third criticism focuses on Waltz’s spare definition of structure and generally argues that other elements be included in the description of a system’s structure.

Waltz defined a political structure by its ordering principle, the distribution of capabilities, and the functional differentiation or nondifferentiation of the units. This definition thus implies that the nuclear revolution in military technology is a unit-level change and not a structural change. Joseph Nye finds it “particularly odd to see nuclear technology described as a unit characteristic.” He and Keohane argue that such factors as “the intensity of international interdependence or the degree of institutionalization of international rules do not vary from one state to another on the basis of their internal characteristics . . . and are therefore not unit-level factors.” They conclude

36. Clearly this approach does nothing to address the important concerns raised in the sociological approach to the agent–structure problem.
that "making the unit level the dumping ground for all unexplained variance is an impediment to the development of theory."\textsuperscript{41}

It is clear why Waltz would not want to include military technology in his definition of structure. Recall that one of his goals in fashioning his definition was to give a purely positional picture of a system so the notion of structure would be transposable from one substantive context to another. One can readily transpose the idea of the distribution of capabilities from the international system where states are the units to, for example, an oligopolistic market where firms are the actors. But what is the analogue to having a secure, second-strike force for a firm in an oligopoly? Including military technology in the definition of structure would seem to make the concept less transposable. Of course, greater transposability comes at a cost. Waltz's theory cannot account for variations in outcomes like the probability of war that may be due to the nuclear revolution. To understand those effects, we have to look to other theories.

Although it is evident why Waltz would not want to include dimensions like military technology in his notion of structure given his goal of transposability, why should the distribution of capabilities across states "be included in the definition and not other characteristics of states that could be cast in distributional terms?"\textsuperscript{42} The answer seems to be a pragmatic one. Waltz believes that state "behavior varies more with differences of power than with differences in ideology, in internal structure of property relations, or in governmental form."\textsuperscript{43} That is, Waltz believes that a definition of structure based on the distribution of capabilities rather than on the distribution of something else seems more likely to have greater explanatory power.\textsuperscript{44} In evaluating the theory based on this definition, part of what is being evaluated is the usefulness of focusing on the distribution of capabilities.

Notwithstanding the prevalence of criticisms of Waltz's spare definition of structure, there is often a certain hollowness to debates about the proper definition of structure. Surely the effects of, say, the nuclear revolution on international politics do not depend on whether we attach the appellation "structural" or "unit-level" to this change. Putting a high value on transposability, Waltz opted for a definition that made the concept of structure more readily transposable. Other theorists working on other questions may value transposability less and may define structure differently. The important issue, however, is not whether the consequences of the nuclear revolution, different forms of property relations, varying degrees of institutionalization, or changes

\textit{Organization} 41 (Autumn 1987), pp. 725–53, and especially p. 746, from which the quotation is drawn.

41. Ibid.
43. Ibid.
in other sets of constraints are called “structural” or something else. The issue is to develop theories that explain these consequences.\textsuperscript{45} When we debate what to call these changes rather than develop and test theories about the consequences of these changes, we appear to believe that the name implies the consequences.

Neorealism and its implications

The neorealist–neoliberal debate develops primarily along the fourth avenue of criticism. This criticism questions the conclusions claimed to follow from Waltz’s assumptions and those of neorealism more generally. Neorealism, for example, claims that international institutions play a minimal role in shaping international politics and that the prospects for cooperation in anarchy are bleak.\textsuperscript{46} Neoliberalism questions these claims in two ways. First, it challenges the logical coherence of the neorealist argument by trying to show that there is a mistake in the logic. Second, neoliberalism argues that the explanatory power of neorealism is weak when compared to neoliberalism. I trace the development of this criticism and the neorealist–neoliberal debate in the remainder of this section. I examine three major disputes in the debate in the next section.

In his contribution to Neorealism and Its Critics, Keohane surveys the neorealist research program and questions its predictive power.\textsuperscript{47} He then describes what a “modified structural research program” would look like. It would “pay much more attention to the roles of institutions and rules than does Structural Realism. Indeed, a structural interpretation of the emergence of international rules and procedures, and of obedience to them by states, is one of the rewards that could be expected from this modified structural research program.”\textsuperscript{48}

Keohane challenges neorealism more directly and develops an institutional approach more fully in his work, After Hegemony.\textsuperscript{49} The central question is, “Under what conditions can independent countries cooperate in the world political economy?”\textsuperscript{50} Can, for example, states cooperate in the absence of a hegemon? Keohane begins his analysis of this question “with Realist insights about the role of power. . . . [Keohane’s] central arguments draw more on the Institutionalist tradition, arguing that cooperation can under some conditions develop on the basis of complementary interests and that institutions, broadly defined, affect the patterns of cooperation that emerge.”\textsuperscript{51} In short, institutions

\textsuperscript{45} For a recent effort to do this, see ibid.
\textsuperscript{47} Keohane, “Theory of World Politics.”
\textsuperscript{48} Ibid., p. 194.
\textsuperscript{50} Ibid., p. 9.
\textsuperscript{51} Ibid., p. 9.
may be a significant factor in promoting international cooperation in ways that neorealism has failed to appreciate.

Keohane challenged both the logical coherence and the explanatory power of neorealism. Attacking the logic, Keohane writes, "I propose to show, on the basis of their own assumptions, that the characteristic pessimism of Realism does not follow. I seek to demonstrate that Realist assumptions about world politics are consistent with the formation of institutionalized arrangements, containing rules and principles, which promote cooperation."52 In sum, Keohane intends to start with the same set of core assumptions that neorealism does and then show that cooperation is compatible with these assumptions.

Keohane attempts this demonstration in the context of the repeated prisoners' dilemma. There are two steps to the demonstration. The first is to argue that the repeated prisoners' dilemma is a reasonable model for the international system envisioned in neorealism, that is, that this model is compatible with realism's central assumptions about the international system. Although he does not develop this point at length, Keohane claims, "Not all situations in world politics or international political economy take the form of Prisoner's Dilemma, but many do."53 As further support for the claim that the repeated prisoners' dilemma is generally seen to be compatible with realism's basic assumptions, he might also have referred to Jervis's belief that this game is an appropriate model for studying the security dilemma.54 The second step in Keohane's argument is to appeal to the Folk theorem, which shows that the mutually cooperative outcome can occur in equilibrium in an infinitely repeated prisoners' dilemma if the actors do not discount the future too much.55 These two steps taken together imply that cooperation is compatible with realism.

Writing in 1983, Keohane believed his neoliberal institutional approach would prove to have greater explanatory power than neorealism. But, a definitive test of his institutional approach was not yet possible because the world was "only just entering the posthegemonic era."56 It was too soon to test the explanatory power of an argument that predicted that international institutions and cooperation would persist despite the absence of a hegemon. Instead of a test, Keohane offered a "plausibility probe" of his institutional approach in the cases of international trade, finance, and petroleum.57

One can envision two general types of response to Keohane's neoliberal challenge to neorealism. The first addresses Keohane's challenge to the logic of

52. Ibid., p. 67.
53. Ibid., p. 68.
neorealism's analysis of the problem of international cooperation. This response would show that Keohane had really not based his argument on the same set of core assumptions that neorealism does. If this were the case, then Keohane's argument that neorealism's conclusions about the prospects of international cooperation do not follow from its assumptions would be invalid. If, more specifically, the repeated prisoners' dilemma is incompatible with neorealism's core assumptions about the international system, then showing that cooperation in this game is possible would say nothing about what follows from neorealism's assumptions.

The second type of response is more empirical. It would say that neorealism never claimed that international cooperation was logically incompatible with neorealism's assumptions. So, showing that cooperation is possible given these assumptions does not contradict neorealism. The real question is how much international cooperation exists and whether neorealism or neoliberalism does a better job of accounting for the observed pattern of international cooperation. This response would then go on to compare the relative explanatory power of these two approaches.

Joseph Grieco developed both types of response to the institutionalist challenge. He argued that Keohane had not started with the same assumptions neorealism does. In using the repeated prisoners' dilemma, Keohane implicitly had assumed that states try to maximize their absolute gains. According to Grieco, however, neorealism requires a state's utility function to reflect a concern for relative gains. Consequently, Keohane does not "show, on the basis of their [realists'] own assumptions, that the characteristic pessimism of Realism does not follow," as he claimed. In Cooperation Among Nations, Grieco tried to assess the relative explanatory power of neorealism and institutionalism. He considers the case of negotiations over nontariff barriers during the Tokyo Round of the General Agreement on Tariffs and Trade, a case that he believes poses a hard test for realism, and concludes that realism explains this case better than does institutionalism. The latest round of the debate between realism and liberalism was now fully engaged.

David Baldwin brings a number of previously published contributions to this debate together in Neorealism and Neoliberalism. Baldwin provides an

60. Keohane, After Hegemony, p. 67.
61. See Nye, "Neorealism and Neoliberalism," and the references cited therein for an introduction to earlier rounds of this debate.
62. These contributions are: Robert Axelrod and Robert Keohane, "Achieving Cooperation
overview of the debate, and Grieco and Keohane offer their reflections and appraisals of the debate in new essays. This volume complements and extends some of the lines of analysis developed in Neorealism and Its Critics. Neorealism and Its Critics includes both internal and external critiques of neorealism. The former share neorealism’s problem-solving approach, while the latter adopt a critical approach. The scope of Neorealism and Neoliberalism is narrower, more focused, and wholly internal. All of the contributions exemplify the problem-solving approach and address various facets of the neorealist–neoliberal debate. Three issues have dominated this debate, and an assessment of it requires an examination of each.

At issue

The three issues at the center of neorealist–neoliberal debate are the meaning and implications of anarchy, the problem of absolute and relative gains, and the tension between cooperation and distribution. In what follows, I make three points about these issues. First, although anarchy is often taken to be a fundamental organizing concept in international relations theory, the emphasis on anarchy is misplaced. What have often been taken to be the implications of anarchy do not really follow from that assumption. Rather, these implications result from other implicit and unarticulated assumptions about states’ strategic environment. Second, the controversy over the problem of absolute and relative gains generally has mistaken effects for causes in its analysis of the prospects for international cooperation. Finally, although the debate only recently has begun to consider distributional concerns, the analysis of these concerns may help to clarify the differences that do divide neorealism and institutionalism.

The meaning and implications of anarchy

Much of the neorealist–neoliberal debate centers on the meaning and implications of anarchy. According to Grieco, neorealism entails five proposi-


63. For an example of the former, see Keohane, “Theory of World Politics”; for one of the latter, see Richard Ashley, “The Poverty of Neorealism,” in Keohane, Neorealism and Its Critics, pp. 255–300; and Cox, “Social Forces, States, and World Orders.”
tions. He defines the last three of these as “Third, international anarchy is the principle force shaping the motives and actions of states. Fourth, states in anarchy are preoccupied with power and security, are predisposed towards conflict and competition, and often fail to cooperate even in the face of common interests. Finally, international institutions affect the prospects for cooperation only marginally.”64 The point of departure for Keohane’s analysis in *After Hegemony* was to use the prisoners’ dilemma to show that anarchy did not imply a lack of cooperation. Grieco responded by arguing that Keohane’s model was misspecified because he neglected states’ concerns for relative gains. Duncan Snidal then tried to show that anarchy does not imply a lack of cooperation even if states are concerned with relative gains.65

A review of the neorealist–neoliberal debate about the meaning and implications of anarchy shows that our continuing emphasis on anarchy is misplaced. Many of the purported implications of anarchy may be more usefully traced to other assumptions about the constraints facing the units. This suggests that we should focus less attention on anarchy and much more attention on characterizing the strategic settings in which the units interact.

In reviewing the debate about anarchy, it is necessary to begin by distinguishing between two formulations of anarchy. The first is that anarchy means the “lack of a common government” that can enforce agreements among the states or more generally among the units.66 Robert Art and Jervis together explain that “international politics takes place in an arena that has no central governing body. No agency exists above individual states with authority and power to make laws and settle disputes. States can make commitments and treaties, but no sovereign power ensures compliance and punishes deviations. This—the absence of a supreme power—is what is meant by the anarchic environment of international politics.”67

It is important to emphasize that this formulation of anarchy says nothing about the means the units have at their disposal as they try to further their ends. It says only that no higher authority exists that can prevent them from using the means they have. Thus, for Waltz, firms facing a high risk of bankruptcy may be in an anarchic self-help system even though the means available to them to further their interests, like cutting prices or forming alliances to distribute the

costs of research and development, have nothing to do with the use of military force, which is one of the means available to states in the international system.68

One advantage of defining anarchy without reference to the means available to the units is that it makes the concept of anarchy readily transposable to different substantive domains. As discussed above, Waltz weighed this advantage heavily in constructing his formulation of structure, so it is hardly surprising that he would adopt this first definition of anarchy. But he certainly is not alone, as Milner's survey of different concepts of anarchy shows.69

The second notion of anarchy refers to the means available to the units. In "Coordination and Collaboration," Arthur Stein begins by observing that many international relations scholars use anarchy to describe "the classic characterization of international politics as relations between sovereign entities dedicated to their own self-preservation, ultimately able to depend only on themselves, and prepared to use force."70 In effect, this second formulation adds another dimension to the lack of a central authority: namely, that one of the means available to the units is the use of force.

The addition of this second dimension has two consequences. First, it makes the transposability of the concept of anarchy more problematic. What, for example, is the analogue to using force for a firm facing a high risk of bankruptcy? If there is no analogue, then a group of firms facing a high risk of bankruptcy would not form an anarchic system according to this definition. If we want to argue that there is an analogue, what are the criteria for establishing that one of the means open to a firm is analogous to a state's ability to resort to force? Of course, a definition of anarchy that reduces its transposability may have compensating advantages. Whether these potential advantages outweigh the disadvantage of a less transposable definition will be discussed below.

Second, adding another dimension raises important questions for international relations theory. Do the patterns of behavior generally associated with anarchic systems, such as the tendencies for balances of power to form and—at least for neorealists—the limited prospects for international cooperation, result from the lack of a central authority? Or, are these patterns more heavily influenced by implicit and unarticulated assumptions about, say, the nature of military force that are subsumed in the second definition of anarchy?

Two arguments suggest that our emphasis on anarchy has been misplaced if by anarchy we mean the lack of a central authority. These arguments suggest that conclusions often claimed to follow from the absence of a central authority do not. These conclusions require other supporting assumptions. The first argument is really an empirical observation. Keohane notes in his assessment of the debate between neorealism and neoliberalism that the modern state

68. Waltz, Theory of International Politics, pp. 105 and 111.
69. Milner, "The Assumption of Anarchy in International Relations Theory."
system, conventionally dated from 1648, has always been anarchic in the sense that it lacked a common government.\textsuperscript{71} Thus, anarchy, while perhaps a necessary condition, is certainly not sufficient to explain any of the variation in international politics during the modern era. In particular, anarchy cannot account for whatever variation in the level of international cooperation and institutionalization there has been.

The second argument is more theoretical and begins with a recent attempt to formalize the classic guns-versus-butter problem.\textsuperscript{72} To summarize the model, there are two states. In each period a state must decide how much of its output to consume, how much to allocate to its military sector, and whether or not to attack the other state. Each state's utility is the discounted sum of its consumption in each period. As long as neither state attacks, the game continues. If a state attacks at some time, the game effectively ends in one of two ways. Either one state or the other will prevail by conquering the other. The odds that a state will prevail are simply the ratio of its military allocation to the other state's military allocation. The fact that a state's probability of victory depends on its military allocation creates a trade-off between current and expected future consumption. The more a state consumes today, the smaller its military allocation, and the higher the probability of defeat. Because defeat means a loss of future consumption, consuming more today reduces expected future consumption. The formal analysis of the game determines each state's equilibrium level of consumption and military spending that balances this trade-off.

The guns-versus-butter model shows that our emphasis on anarchy is misplaced. Neorealism expects balance-of-power politics to prevail whenever the system is anarchic and the units want to survive.\textsuperscript{73} The guns-versus-butter model indicates that this expectation is too broad. Whether or not the states balance in the model depends on an assumption about military technology. Generalizing beyond this model, whether units balance or not depends as much on other features defining the strategic situation in which they interact as it does on the presence of anarchy.

To see that balancing depends on underlying assumptions about military technology, note that the guns-versus-butter game presumes a conventional military technology in which the probability of victory or defeat depends on the relative sizes of the opposing military forces. Given this stylized assumption about military technology, the states balance against each other in the way we would expect the units to do in an anarchic system.\textsuperscript{74} Now suppose that

\textsuperscript{71} Keohane, "Institutionalist Theory and the Realist Challenge After the Cold War."
\textsuperscript{72} Robert Powell, "Guns, Butter, and Anarchy," \textit{American Political Science Review} 87 (March 1993), pp. 115–32. The present discussion extends some of the observations made in that essay (see pp. 126–27).
\textsuperscript{73} Waltz, \textit{Theory of International Politics}, p. 121.
\textsuperscript{74} External balancing through alliances is impossible when there are only two states. Rather, the states engage in internal balancing. For a discussion of internal and external balancing, see Waltz, \textit{Theory of International Politics}, p. 168.
the states’ strategic setting is different. Formalizing and stylizing the nuclear revolution in military technology, assume that there is, to use Bernard Brodie’s term, an absolute weapon.75 The probability of victory no longer depends on the relative size of the states’ military forces. Rather, once both states have attained secure second-strike forces, war is certain to take a toll far higher than any potential gain. If we solve the model based on this assumption about military technology, the states will spend enough to acquire second-strike forces. But they will not spend more even if the other state does. There is no balancing here even though the system remains anarchic and the units still seek to survive.76 The first notion of anarchy, albeit very transposable, does not imply balancing.

The guns-versus-butter model, like many models, makes many stark simplifications and, accordingly, must be used cautiously. On the plus side, models, in part because of these simplifications, let us vary one factor while holding everything else constant. Models thereby permit us to isolate the effects of different factors in ways that historical cases rarely do. When we use the guns-versus-butter model to isolate the effects of anarchy, we find that conclusions claimed to follow from the assumption of anarchy depend at least as much on other unarticulated assumptions about the units’ strategic environment.

The first definition of anarchy is in some sense too transposable, while the second definition is not transposable enough. As we have seen, if defined as the absence of a central authority, anarchy encompasses systems in which states do and do not balance. Conversely, if we define anarchy by adding the notion of the potential use of force to the lack of a central authority, we find the transposability of the concept to be greatly limited, even if units generally will balance in such a system. The disadvantages of this very limited notion of anarchy are quite high. In particular, this notion does not apply to systems in which the use of force is for all intents and purposes not at issue. Even if neorealism’s expectations about anarchic systems in which the use of force is a serious potential concern are correct, the arguments underlying these expectations cannot be transposed to systems in which the use of force among units is not at issue. Neorealist expectations about these systems may of course still prove to be correct, but they lack theoretical foundations.


The absence of a definition that is less transposable than the first and more transposable than the second poses an important problem for international relations theory after the cold war. The problem is evident in some recent efforts to use neorealism’s analysis of anarchy and the problem of absolute and relative gains to outline the post–cold war contours of international politics. The neorealist analysis argues that states will start competing and balancing over economic issues after the cold war much as they competed and balanced over security issues during the cold war. Samuel Huntington, for example, bases his assessment of the continued importance of U.S. primacy on a neorealist analysis. Yet, he and others also believe that the prospects of “military conflict between major states is unlikely.” The discussion of transposability shows that neither definition of anarchy provides adequate theoretical support for the neorealist analysis of international politics if the use of force is not a relevant concern. The first notion of anarchy can be transposed readily to a system in which the use of force is not at issue. But as we have seen, this definition does not support the neorealist claims that anarchy implies balance-of-power politics. The second notion of anarchy, while it may imply balancing when force is at issue, cannot be transposed to a domain in which force is presumed not to be at issue.

Huntington, believing that the politics of international economics is more like a system with conventional military technology, argues for the importance of international primacy. Jervis, believing that the politics of international economics is more like a system with an absolute weapon, questions the importance of international primacy. In either case, the neorealist–neoliberal debate’s emphasis on the lack of a central authority is misplaced. As Charles Lipson puts it in his contribution to the Baldwin volume, “The idea of anarchy is, in a sense, the Rosetta stone of international relations... But what was once a blinding insight—profound and evocative—has ossified and become blinding in the other sense of the word—limiting and obscuring.” We need to develop a more careful specification of the strategic settings in which units interact if we are to be able to explain the pattern of their interactions. Characterizing this structure is an important open question for international relations theory.

The problem of absolute and relative gains

The second major issue at the center of the debate between neorealism and institutionalism is the problem of absolute and relative gains. In what follows, I


79. For a different view, see Waltz, “The Emerging Structure of International Politics,” especially p. 74.


first briefly summarize some aspects of the debate about this problem. Then I argue that in a narrower methodological sense this debate reflects a basic misunderstanding of the role of models. More broadly, the debate surrounding absolute and relative gains generally has mistaken effects for causes and, therefore, contributed little to the analysis of the problem of international cooperation. Once we separate causes from effects, we again see the need to focus our attention on a more elaborate characterization of the strategic settings confronting states.

To review the debate, neorealism assumes that states are concerned with relative gains. For Waltz, “states that feel insecure must ask how the gain will be divided. They are compelled to ask not ‘Will both of us gain?’ but ‘Who will gain more?’”82 In mounting his institutional challenge in *After Hegemony*, Keohane assumes that states are trying to maximize their absolute gains, that is, the states’ preferences “are based on their assessments of their own welfare, not that of others.”83 He then analyzes the problem of cooperation in terms of the repeated prisoners’ dilemma. Grieco in turn criticizes Keohane’s assumption that states attempt to maximize their absolute gains. Grieco asserts that “realism expects a state’s utility function to incorporate *two distinct terms*. It needs to include the state’s individual payoff . . . reflecting the realist view that states are motivated by absolute gains. Yet it must also include a term integrating both the states’ individual payoff . . . and the partner’s payoff . . . in such a way that gaps favoring the state add to its utility while, more importantly, gaps favoring the partner detract from it.”84 In sum, the debate about absolute and relative gains became a debate about what to assume about states’ utility functions.

The key to understanding this debate is to distinguish between two possibilities. The first is that a state’s concern or, more precisely, the degree of its concern for relative gains is the product of the strategic environment in which the state finds itself. If so, then the degree of concern is likely to vary as the environment, say the intensity of the security dilemma, varies. In this case, the strategic setting facing the state induces a concern for relative gains. The second possibility is that a state’s degree of concern does not vary and is the same regardless of its environment.

Both neorealism and neoliberalism appear to agree that this concern is induced. Grieco, for example, believes that a state’s sensitivity to relative gains “will be a function of, and will vary in response to, at least six factors.”85 These include the fungibility of power across issues, the length of the shadow of the future, and whether the relative gains or losses occur over military or economic matters.86 Neoliberalism also assumes that the degree of concern varies. Indeed, Keohane emphasizes that both neorealism and neoliberalism presume

86. Ibid., pp. 610–11.
that the concern for relative gains is conditional in his appraisal of the neorealist–neoliberal debate.87

Two important implications follow from the conclusion that the degree of a state's concern for relative gains is conditional and varies from situation to situation. The first is that the debate about what to assume about a state's preferences or utility function is largely irrelevant and reflects a basic misunderstanding of the role of models. We can formally induce a concern for relative gains in two ways. First, we can explicitly represent the constraints that lead to this concern in the model. This is the approach I followed in analyzing the absolute and relative gains problem.88 I assumed that states were trying to maximize their absolute gains. But the strategic setting in which they were attempting to do so induced a concern for relative gains. The second way to induce a concern for relative gains is to represent this concern in the state's utility function. When done in this way, the model is in effect a reduced form for some more complicated and unspecified model in which the strategic constraints would induce this concern. Grieco's analysis may be seen as an attempt to work with a reduced form. Rather than specifying a model that explicitly represents the six factors he believes induce a concern for relative gains, he abbreviates the influences of these factors through his specification of the states' utility functions.89

Which approach to modeling a state's concern is better? I do not believe there is an a priori answer to this question. Models are tools and asking which approach is better is akin to asking whether a hammer or a saw is better. The answer depends on whether the task at hand is driving nails or cutting wood. One advantage of a reduced form is that it is likely to be simpler and easier to use analytically. A disadvantage is that as long as the more complicated underlying model remains unspecified, we cannot analyze the purported link between the constraints that are believed to induce a concern and the realization of this concern. The link thus remains problematic. Whether the balance of advantages and disadvantages favors an approach based on a reduced form or on a more explicit structural form depends on the model as a whole and on the substantive problem. Thus, debates about what to assume about preferences cannot be resolved without reference to an overall evaluation of the entire model and the substantive problem being modeled. By focusing solely on what to assume about preferences and not evaluating this

88. Powell, "Absolute and Relative Gains in International Relations Theory."
89. See Grieco, "Anarchy and the Limits of Cooperation," as well as his "Realist Theory and the Problem of International Cooperation," and Cooperation Among Nations. Although Grieco's model may be seen as a reduced form, it is not clear that he sees it as such. His assertion that a state's utility function must incorporate a term reflecting its concern for absolute gains and one reflecting its concern for relative gains may be true of a particular model, but it does not hold for all models. His apparent claim that it is true for all models suggests that he does not interpret his model as a reduced form.
assumption in the overall context of the entire model, the neorealist–neoliberal debate about states’ preferences seems largely irrelevant. It reflects a basic misunderstanding of the role of models.

A second important implication follows from the conclusion that the degree of a state’s concern for relative gains depends on, or is a function of, its strategic environment. This dependency means that the concern for relative gains is part of the outcome and not part of the explanation. A concern for relative gains is an effect and not a cause. We cannot explain the presence or absence of international cooperation because of the presence or absence of significant concerns for relative gains. Cooperation and concern for relative gains may co-vary, but one does not cause the other. The causes for both are the underlying features of the states’ strategic environment that jointly induce a concern for relative gains and thereby make cooperation difficult.

Existing work in international relations theory has to varying degrees recognized first that relative gains concerns do not explain the level of cooperation and second the need to look to the underlying strategic environment. Lipson, for example, tries to relate differences in the strategic environments inherent in military and economic issues to differences in states’ discount factors and, through the differences in those discount factors, to the likelihood of international cooperation in military and economic affairs. Jervis explicitly recognizes this need: “The conditions under which states seek to maximize their relative as opposed to their absolute gains need more exploration.”

A possible explanation of the concern for relative gains might at first seem to be anarchy: a lack of a central authority leads to balancing and a concern for relative gains. This answer, however, fails for at least two reasons. Anarchy has been a constant feature of the modern international system. It cannot therefore account for variation in the degree of a state’s concern for absolute gains. And, as we have seen above, anarchy does not imply balancing.

As emphasized above, models often must be judged in light of the problem they are designed to address. If we want to study the problem of international cooperation and its relation to concerns for relative gains, modeling that concern in terms of state preferences seems likely to prove a poor approach. The reduced form would be leaving implicit and unspecified precisely what we want to know more about, i.e., the link from the states’ strategic environment to their concern for relative gains and the prospects for cooperation. Trying to make this link more explicit by elaborating a state’s strategic setting and the connection between this setting and the induced concern for relative gains seems likely to prove a more fruitful approach. As in our discussion of anarchy, we are led to the need to focus our attention on a more sophisticated characterization of the strategic situations confronting the units.

91. Jervis, “Realism, Game Theory, and Cooperation.”
In sum, the debate surrounding the problem of absolute and relative gains has betrayed a fundamental methodological misunderstanding of the role of models. The debate has also mistaken effects for causes. Unfortunately, the methodological misunderstanding has reinforced the substantive mistake. By focusing on what to assume about states' preferences, the debate has made it more difficult to correct the mistake of seeing effects as causes. In a reduced form in which the concern for relative gains is represented in the states' utility functions, the degree of this concern is formally an independent variable. Thus, it is easy to imagine holding everything else constant and asking how changes in the degree of this concern would affect cooperation. The difficulty is, of course, that if the degree of concern is really an effect, then one cannot hold everything else constant while varying this concern. Although formally independent in the reduced form, the degree of this concern is substantively dependent. The reduced form thus masks this dependence and makes it more difficult to correct the mistake of seeing effects as causes. Once we separate effects from causes, we also appreciate the need for a more careful specification of the units' strategic setting.

Coordination and distribution

The debate between neorealism and neoliberalism recently has focused on a third issue. A central contention of the neoliberal approach is that institutions matter. In particular, they can help states cooperate: "institutions, broadly defined, affect the patterns of cooperation that emerge." 92 In analyzing how institutions matter, Keohane emphasizes market failures and explains that institutions can help independent actors overcome these failures by providing information and reducing transactions costs. 93 In short, institutions may make it possible to realize joint gains and move out toward the Pareto frontier. But there are often many ways to realize these gains, with some ways giving a larger share to one state and other ways giving a larger share to another state. "There are," as Stephen Krasner observes in his contribution to the Baldwin volume, "many points along the Pareto frontier." 94 These multiple ways of achieving the joint gains from cooperation can create conflicts over how those gains will be distributed. As Geoffrey Garrett observes of the Single European Act, "the EC [European Community] members shared the common goal of increasing the competitiveness of European goods and services in global markets. It is apparent, however, that there were also substantial differences in national preferences within this broad rubric." 95 Reflecting on the debate, Keohane

93. Ibid., p. 246.
FIGURE 1. Distributional conflicts: $U_1 =$ the utility of state 1 ($S_1$); $U_2 =$ the utility of state 2 ($S_2$); $Q =$ status quo; $A_1$ through $A_4$ = possible agreements along the Pareto frontier

now believes that he underemphasized “distributive issues and the complexities they create for international cooperation” in After Hegemony. 96 I will suggest that a careful analysis of the tension between cooperation and distribution can illuminate the debate between neorealism and neoliberalism by clarifying some of the differences that actually do divide these two approaches.

The distributive problem arises because there are many ways to divide the cooperative gains. Figure 1 illustrates this problem when two states, $S_1$ and $S_2$, are trying to cooperate. $S_1$’s utility is measured along the horizontal axis, and $S_2$’s utility is measured along the vertical axis. $Q$ is the status quo. $A_1$ through $A_4$ are possible agreements that lie along the Pareto frontier. Both $A_2$ and $A_3$ lie on the Pareto frontier and are Pareto-superior to $Q$; i.e., both $S_1$ and $S_2$ prefer $A_2$ to $Q$ and $A_3$ to $Q$. $A_2$ and $A_3$ are different ways of realizing the joint gains from cooperation. But, $S_1$ prefers $A_2$ to $A_3$ because $A_2$ yields a higher utility. Similarly, $S_2$ prefers $A_3$. Thus, there is a distributive conflict over $A_2$ and $A_3$. More generally, $S_1$ prefers agreements closer to $A_1$ and $S_2$ prefers agreements closer to $A_4$.

Krasner recently has used these distributional issues to challenge the neoliberal approach. 97 The thrust of Krasner’s criticism is that “the nature of institutional arrangements is better explained by the distribution of national

power capabilities than by efforts to solve problems of market failure. In terms of Figure 1, the more powerful $S_j$, the greater will be its share of the joint gain and the closer the agreement will be to $A_j$.

Viewing the question of whether institutions matter in terms of distributional issues helps refine and clarify that question. If cooperation can take many different forms and these alternative forms have distributional consequences, then the arrangements themselves can become the object of negotiation. Indeed, given the absence of a supranational authority, the states cannot bind themselves to any particular initial institutional arrangement and corresponding allocation of cooperative benefits. The institutional structure is always subject to renegotiation if a state believes it worthwhile.

The perpetual possibility of renegotiation raises an important dynamic question that must be separated from a more static issue. That is, institutions might matter in either or both a static and a dynamic way. The static way that institutions might matter is that they might be a means of overcoming market failures or, more generally, of realizing joint gains from cooperation. As a means to an end, the structure of the institution becomes something to be explained. In his explanation of institutional structure, Keohane emphasizes monitoring and reducing uncertainty. In emphasizing these factors, he is trying to explain how institutions can serve as a means to achieving the joint gains from cooperation. Krasner focuses on another aspect of the explanation of institutional structure. He argues that the actual institutional arrangement that will emerge from the set of potential institutional arrangements that fulfill the functions Keohane describes will tend to reflect the desires of the more powerful actors. Thus, Keohane's and Krasner's analyses of the static issue complement each other.

There is also a second, more dynamic way that institutions may matter. If institutions do matter in this second sense, then they would be part of an explanation and not part of the outcome to be explained. Figure 1 can be used to illustrate this second way. Suppose that at some time $t_0$ two states are at $Q$. Both states want to move out to the Pareto frontier. To this end, they create an institution that reduces transaction costs and uncertainty in the way Keohane describes. In this way the institution is a means to the end of realizing the joint gains of cooperation. But there are also distributional conflicts, so both states also use their political power to shape the institutional arrangements in order to obtain a larger share of the joint gains. Assume that $S_j$ is more powerful and, as Krasner argues, the institution through which the states realize the joint gains will give $S_j$ a larger share of the benefits. In particular, suppose the arrangement moves them from $Q$ to $A_2$. At $A_2$, $S_j$ receives a larger share of the joint gains, which reflects its greater power. $A_2$ thus reflects Keohane's and Krasner's complementary analyses of the static dimension of the way that institutions may matter.

To examine the dynamic aspect, suppose further that at some later time, say \( t_1 \), the balance of power has shifted in favor of \( S_2 \). Indeed, assume that if the institution created at time \( t_0 \) did not exist and that the states were trying to create an institution de novo at \( t_0 \), then \( S_2 \)'s greater power would mean that the institution that would be created would move the states from \( Q \) to \( A_3 \). At \( A_3 \), \( S_2 \) obtains more of the gains, presumably reflecting its greater power.

But the states are not creating a new institution at \( t_1 \), for they created an institution at \( t_0 \) that moved them from \( Q \) to \( A_2 \). How does the fact that an institution already exists at \( t_1 \), when the states must deal with a new distribution of power, affect the institutional arrangements and distribution of benefits that will be devised at that time? There are two possibilities.

First, the institutional arrangements existing at \( t_0 \) are irrelevant. Institutions adjust smoothly so that the distribution of benefits always reflects the underlying distribution of power. In terms of Figure 1, the states will be at \( A_3 \) at \( t_1 \) regardless of the existence of an institution at \( t_0 \). In brief, history does not matter.

The second possibility is that the institutional arrangements that exist at \( t_0 \) affect those that prevail at \( t_1 \). To illustrate this possibility, let \( A \) in Figure 1 denote the arrangements and associated distribution of benefits that exist at \( t_1 \) given the arrangements existing at \( t_0 \). Then \( A \) will in general differ from \( A_3 \), which is what would have prevailed had there been no preexisting institution or if institutions adjusted smoothly. Intuitively, the farther \( A \) is from \( A_3 \), the more current arrangements are shaped by past arrangements.\(^{99}\) A more concise way of describing this second way that institutions may matter is that history matters.\(^{100}\) In terms of Figure 1, the neoliberal claim that institutional history matters in international relations means that \( A \) will often be very different from \( A_3 \). Moreover, the fact that the states originally cooperated means that cooperation is less likely to collapse and \( A \) is more likely to lie on the Pareto frontier. Cooperation will often continue in the face of a change in the underlying distribution of power.

The possibility that institutions may not adjust smoothly and that the existing institutional arrangements and distribution of benefits may not reflect the underlying distribution of power is a recurrent theme in international politics. Robert Gilpin, for example, sees this as the cause of hegemonic war. A hegemon establishes an international order and associated distribution of benefits that favors the hegemon. Over time, the hegemon's relative power declines because of uneven economic growth, and the existing order and distribution of benefits no longer reflect the distribution of power. This sets the

\(^{99}\) To simplify matters, I have assumed that institutions are efficient in that they move the states out to the Pareto frontier. Of course, institutions need not be efficient. For a discussion of institutions and efficiency, see Douglass North, *Institutions, Institutional Change, and Economic Performance* (New York: Cambridge University Press, 1990).

\(^{100}\) North analyzes the problem of institutional change and stability in ibid.
scene for another hegemonic conflict. Similarly, a disparity between the distributions of benefits and power is inherent in Krasner’s metaphor of tectonic plates. When regimes are first created, they generally reflect the underlying distribution of power. But the pressure to change the regime builds over time as the distribution of power changes. In the tectonic plate metaphor, this pressure does not lead to a smooth adjustment. Rather, the pressure grows until it is suddenly relieved in an earthquake in which the regime alters in a way that realigns it with the distribution of power.

In the neorealist–neoliberal debate, Keohane generally emphasizes market failures, transaction costs, uncertainty, information, and institutions as important means of cooperation. But he also argues that international institutional history matters. Once institutions or regimes are established, actors behave in ways that, whether deliberately or not, make it costly to change the regime or build a new one. Thus, even if the original distribution of power underlying the regime shifts, the now more powerful states will not change the regime unless the distribution of power has shifted to such an extent that the benefits of a new regime, which would reflect the new distribution of power, outweigh the cost of changing the existing regime. The cost of changing or constructing new regimes thus gives existing regimes some resilience to shifts in the balance of power. “The high costs of regime-building help existing regimes persist.”

In contrast, Krasner argues that regimes and institutions do not matter at least in the case of global communications:

In recent years distributional questions have precipitated conflict over the allocation of the radio spectrum and over international telecommunications. The outcome of these disputes has been determined primarily by the relative bargaining power of the states involved. *Whereas previous institutional choices had not imposed much constraint, new interests and power capabilities conferred by new technologies have led to new institutional arrangements.*

This is not to say that institutional arrangements were ever irrelevant: indeed, they were necessary to resolve coordination problems and to establish stability. Without regimes all parties would have been worse off. There are, however, many points along the Pareto frontier: the nature of institutional arrangements is better explained by the distribution of national power capabilities than by efforts to solve problems of market failure.

In brief, institutions may serve as a means of achieving the joint gains of cooperation. But institutional history does not matter. Previous institutional

choices do not constrain or significantly affect the future institutional arrangements and the future distribution of benefits.

The neorealist–neoliberal debate leaves us with contrasting claims about the importance of institutional history. These claims in turn pose two questions for future research. First, do institutions or regimes actually adjust smoothly to changes in the distribution of power. Does institutional history matter? Second, what factors affect the stability or rigidity of a regime or institution and the rates at which it adjusts? In particular, are there factors in the international environment that make international regimes and institutions less stable than, for example, the institution of the medieval law merchant, the Declaration of Rights and associated institutional changes following the Glorious Revolution in England, or the current efforts to establish constitutional governments in Russia and Eastern Europe?105 Douglass North and others offer many examples in which institutional history seems to be profoundly important.106 We need a better understanding of the conditions under which institutional history matters and the extent to which the international system satisfies these conditions. Work on these questions holds the promise of a more unified understanding of institutions and cooperation.

Before this work can be done, however, two obstacles must be overcome. First, we need a way of measuring or assessing the constraining effects of institutions. Figure 1 helps us visualize the issue, but much more than a visualization is required. Second, we need more powerful theories that make more specific claims about the extent to which institutions shape future decisions and actions than neorealism or neoliberalism presently does.

Conclusion

Although the neorealist–neoliberal debate sometimes has obscured as much as it has clarified, this debate has forced us to examine the foundations of some of our most influential theories of international politics more carefully. This is an important contribution. Such examinations deepen our understanding of these theories by clarifying their strengths and weaknesses. These clarifications in turn may suggest important directions for future work and ultimately lead to better theories with greater explanatory power.

As we have seen, both neorealism and neoliberalism see the effects of anarchy and the degree of concern about relative gains to be conditional. The


task ahead is to specify these conditions more precisely. We must also explain more satisfactorily how these conditions lead to particular outcomes like balancing behavior and a concern for relative gains. Grieco makes a useful start in this direction by identifying six factors that may affect the degree of a state's concern for relative gains.\textsuperscript{107} The next step is to develop a more explicit characterization of the strategic settings that yield outcomes like balancing and relative-gains concerns.

When we look beyond the narrowness of the neorealist–neoliberal debate about anarchy and the relative-gains problem, we see that this debate has focused our attention on a very broad and important set of issues. These are the absence of central authority, the potential for joint or cooperative gains, the distributional conflict these potential gains engender, and the roles of coercion and institutions in realizing and allocating these joint gains. This nexus of issues also lies at the heart of the expanding literatures on constitutional design, governing the commons, and state formation.\textsuperscript{108} That a core of common issues underlies these seemingly disparate substantive concerns makes it possible to imagine moving beyond what has become a rather sterile debate between neorealism and neoliberalism in a way that draws on and contributes to these other literatures.


\textsuperscript{108} See, for example, Barry Weingast, "Constitutions as Governance Structures," \textit{Journal of Institutional and Theoretical Economics} 149 (March 1993), pp. 286–311; Elinor Ostrom, \textit{Governing the Commons} (New York: Cambridge University Press, 1990); and Tilly, \textit{Capital and Coercion}.