Nested Politics:
A New Systemic Theory of IR

Bear F. Braumoeller
Associate Professor
Harvard University

Weatherhead Center for International Affairs
1033 Cambridge Street #316B
Cambridge, MA 02138

bfbraum@fas.harvard.edu*

Abstract

This paper attempts to capture the behavior of agents (states), and the effects of international systemic structure, and the relationship of each to the other in a systemic, dynamic theory of international politics. The "nested politics" model describes how three layers of political authority—individual autonomy nested within state hierarchy nested within international anarchy—constitute an engine for both changes in state behavior and changes in the distributions that constitute the structure of the international system. This paper discusses the model and examines its logical implications for existing explanations of Great Power behavior.

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The principal issue with which I shall be concerned in this paper is that of connecting a notion of human interaction with structural explanation in social analysis. The making of such a connection, I shall argue, demands the following: a theory of the human agent, or of the subject; an account of the conditions and consequences of action; and an interpretation of 'structure' as somehow embroiled in both those conditions and consequences. (Giddens 1979, 49)

Introduction

This paper proposes a systemic, dynamic theory of international politics. By "systemic," I mean that the theory explains the behavior of countries—or, in the argot of political scientists, "states"—as integral parts of a larger system of states, just as astronomers explain the behavior of planets as integral parts of solar systems. The underlying assumption, in politics as in astronomy, is that the behavior of one of the units cannot be understood without reference to the influence of the rest of the units that make up the system.[1] This is relatively new, and, I would argue, quite interesting: systemic theories of international politics are comparatively rare, due in part to their complexity, and I argue below that their full potential has yet to be realized.

Part of the difficulty inherent in creating a systemic theory of anything is the need to explain both the impact of agents on their environment and, simultaneously, the impact of the environment on those agents. This has come to be known as the "agent-structure debate," though "dilemma" might be a more appropriate term: few scholars argue that either agents or structures *should* be systematically ignored, only that they must be given the inability of theorists to connect them.

In order to resolve this dilemma, the theory is dynamic, meaning simply that time is an explicit part of the theory. It may seem that time should be part of *any* explanation of international politics, since anything that happens takes time, but most explanations simply do not worry much about it: they tend to focus on events that occur fairly quickly and assume that time will not play a substantial role, and for the most part that assumption is a reasonable one. In this case, however, partly because of the need to understand the reciprocal causal relationship between actors and their contexts, the dimension of time is important.

The result is what I call the "nested politics" model—"nested" because the three layers of political authority (individual sovereignty, domestic hierarchy, and international anarchy) are nested within one another like the dolls in a Russian *matryoshka,* and their relationship to one another drives the most important outcomes in the international system.

[1] Some political scientists, and not a few policymakers, are given to describing the international system in pre-Copernican terms—i.e., by portraying one of the planets as the center of the system around which all others revolve.

Systemic Traditions

The main advantage to thinking systemically about the problems of international relations is that the international system actually *is* a system, and it acts like one.[2] In international affairs, two-party interactions are very often colored by the possibility of third-party involvement, three-party interactions must take into account the possibility of fourth-party involvement, and so on up the line. The systemic nature of international politics creates analytical problems that are difficult to resolve at best and intractable at worst. States and dyads cannot be neatly excised from the context that prompts their actions and analyzed in isolation from one another; moreover, the sum of a series of such analyses will fail to capture the essence of the whole system. Actions appropriate in a dyadic or triadic context may not be appropriate in a systemic one, and in a system actions may produce outcomes that can only be understood in the context of the larger picture. In short, no amount of sophistry, deft weilding of assumptions, or outright hand-waving can provide an adequate substitute for actually including the entire system in the analysis.[3]

Unfortunately, although much international relations scholarship has been couched in the language of systems theory, few of the tools of the latter have actually been brought to bear on the problems of analysis. For this reason, systemic thinking has yet to realize its fullest potential. A review of the international relations literature on systems and systemic theories reveals two broad traditions, each of which seems for the most part to be uninterested in the other. This fact is a regrettable, as each contains some elements that could compensate for some of the shortcomings of the other.

The first broad systemic tradition in international relations theory consists primarily of research by scholars with strong backgrounds in mathematics or computer science and often a familiarity with systems theory as it is applied to other disciplines who have an interest in applying it to the study of international relations. Perhaps due to their role in politics in the nuclear age, physicists seem particularly prone to import mathematical skills to the study of politics, often on issues like arms races.[4] The first and most extreme form of this kind of sys-

[2] As the concept of a system will be very important to this endeavor, it merits explicit definition. Hedley Bull and Adam Watson define a system as a situation in which "the behaviour of each [actor] is a necessary factor in the calculations of the others." (1984, 1) Anthony Giddens, quoting Amitai Etzioni, defines a social system as "a relationship in which changes in one or more component parts initiate changes in other component parts, and these changes, in turn, produce changes in the parts in which the original changes occurred." (1979, 73) The system of states, or at least that of Great Powers, surely counts as a system by these criteria.

[3] Quite a few other characteristics, such as nonlinearity, equifinality, and the omnipresence of unintended results, have been attributed to systems; for a thorough discussion see Jervis (1997, ch. 2), and for a brief summary see e.g. Schweller (1998, 7-8). I do not consider them to be especially compelling justifications for taking a systemic approach, however, for two reasons: one, they are hardly unique to systems, so systems don't raise problems in those regards that haven't already been raised elsewhere, and two, they have been dealt with in a much more satisfactory way already than have the analytical problems outlined above.

[4] See e.g. Saperstein (1999).

temic theory is general systems theory, a paradigm outlined in a series of lectures by Ludwig von Bertalanffy at the University of Chicago prior to World War II but popularized only after the war.[5] General systems theory was based on the premise that one can demonstrate similarities, or "isomorphisms," between the international system (or various national political systems) and entirely different kinds of systems, such as biological or physical ones. The work of Lewis Fry Richardson, a physicist and meteorologist who applied his skills to a voluminous attempt to gain a better understanding of the sources of deadly quarrels, is perhaps the most thorough and detailed application of this approach.[6] Although its adherents believed that it held the keys to nothing less than a general theory of international conflict, applications of general systems theory to international relations theory exhibited dangerous tendencies to obsess over analogies of questionable utility. Researchers who demonstrated the existence of such analogies often had a difficult time answering a single, devastating question: "So what?" Assessments of general system theory's promise for the study of politics faded fairly quickly after its inception.[7] With rare exception, this variant of systems theory did not survive the 1970s.[8]

Most of the later research in this tradition has abandoned the idea of isomorphisms and seeks to understand the international system as a system—but in its own terms. Two broad traditions have followed general systems theory: equation-based modeling (EBM) and agent-based modeling (ABM). Both have proven to be remarkably versatile tools for understanding the behavior of political systems. EBMs have been devised to model everything from the global system as a whole down to political dynamics at the sub-state level. Global models[9] have to a large extent fallen into disfavor following the publication of *The Limits to Growth* (Meadows et al. 1972), a spectacular book that promised abrupt global catastrophe early in the 21st century if present population, industrialization, and pollution trends continued unchecked. Subsequent criticism,[10] which focused on the sensitivity of the *Limits* model's conclusions to minor changes in the assumptions and perturbations in the parameters, alerted researchers to the fact that the uncertainty of one's conclusions grows exponentially with the number of assumptions. Perhaps as a result, emphasis in EBMs in international relations has shifted away from all-encompassing global models that include large numbers of densely interrelated variables and toward a more

[5] Bertalanffy (1969) is the seminal discussion.

[6] Richardson (1960).

[7] See Stephens (1972) for a discussion of the American literature and Blauberg, Sadovsky, and Yudin (1977) for a Soviet assessment. The Soviet view is noteworthy in that dialectical materialism would seem, on the surface, to be particularly amenable to a systems approach; the authors' assessment of its promise is qualified at best.

[8] McClelland (1966) is an interesting early discussion of general systems theory and international relations research; see also Harty and Modell (1991) for a retrospective.

[9] By "global models" I refer to research such as the Simulated International Processes (SIP) project, initiated at Northwestern University by Harold Guetzkow (Guetzkow and Valadez 1981), and Stuart Bremer's Simulated International Processor (SIPER) and GLOBUS projects (Bremer 1977; Bremer 1987).

[10] See e.g. Cole, Freeman, Jahoda, and Pavitt (1973).

narrow focus on the variables and relationships of interest.[11]

Athough EBMs such as Richardson's famous arms race model had been possible, at least in theory, since the invention of calculus in the mid-to-late 1600s, the spread of ABMs had to wait for intensive computing power.[12] The most prominent product of the ABM agenda to date was also one of the first: Robert Axelrod's *The Evolution of Cooperation* (1984) derived impressively general conclusions about the origins of cooperation from computer tournaments. Since that time ABMs have attracted a substantial following, though they remain underutilized in the study of international systems.[13]

The second systemic tradition in international relations theory is most famously exemplified by Kenneth Waltz's *Theory of International Politics* (1979), though it can arguably be dated at least to Morton Kaplan's *System and Process in International Politics* (1957).[14] It consists largely of scholars with strong international relations backgrounds who have applied language and concepts from general systems theory to the study of politics, both at the national and the international level.[15]

Unfortunately, as Barry Buzan, Charles Jones, and Richard Little point out in their 1993 discussion of Waltz's book, what passes for systemic theory in this tradition is often structural rather than systemic, meaning that it stops at the level of the structure of the international system.[16] Clearly, international politics is unique, or nearly so, in that it takes place in an anarchic realm—one in which states must interact outside of the scope of formal and regular political authority. To make this point and to explore its implications in isolation, however, is to miss a critical fact: that the politics that takes place in this anarchic realm is first and foremost the interaction of states that are themselves organized political units, and that differences in the form of states' domestic political structures can be responsible for striking differences in how they engage in international politics. To stop there, however, is to miss an equally critical fact: that politics, by its nature, is a system that establishes the means by which we as citizens pursue our goals. Systemic theories incorporate the entirety of the system; structural theories focus only on the uppermost layer and "bracket" (that is, ignore) the rest.[17]

[11] See Gillespie, Zinnes, Tahim, Schrodt, and Rubison (1977), Li and Thompson (1978), Muncaster and Zinnes (1983), Zinnes and Muncaster (1988), and Wolfson, Puri, and Martelli (1992) for examples.

[12] There is one exception to this generalization: Thomas Schelling's "neighborhood model" (1978) demonstrated that surprising conclusions could be derived from ABMs using nothing but pennies, dimes, and a chessboard.

[13] For a thorough review of recent literature see Cederman (2001).

[14] Waltz would undoubtedly argue against such an assertion; he refers to his predecessors collectively as "[s]tudents of international politics who claim to follow a systems approach" (Waltz 1979, 58).

[15] Other prominent works that could be cited as examples of the latter include Jervis (1997), Knorr and Verba (1961), Rosecrance (1963), Deutsch and Singer (1964), Keohane (1984), Buzan, Jones, and Little (1993), and Wendt (1999).

[16] The distinction between system and structure will be clarified below; for the moment, think of a system as being made up of both actors (or agents) and the distribution of whatever it is that defines their relationship to one another (structure).

[17] Quite a few theories that currently pass as systemic fail to establish reciprocal theoretical

Moreover, as mentioned before, theories that fall into this category are notoriously imprecise. Waltz himself writes that "[m]ost theories of international politics are so imprecise that expectations of outcomes cannot be stated in ways that would make falsification possible" (1979, 13), but his version of balance of power theory derives the expectation that "balances of power recurrently form" (124) from the premises that states in an anarchical system "are unitary actors who, at a minimum, seek their own preservation and, at a maximum, drive for universal domination." (118) It is not at all clear how the prediction follows from these premises. In fact, later in the paper I will argue that it does *not* follow.

Although students of international relations have adopted the forms of systems theories by paying lip service to concepts like feedback and equilibrium, they eschew the substance by failing to specify their theories in such a way that those concepts can be meaningfully applied. Their work remains, as Weltman (1973) rather colorfully put it, an exercise in "metaphoric hypertrophy." Despite the fact that the application of mathematics to international systems was a major growth industry in the 1960s and 1970s, for example, Waltz seems either ignorant or disdainful of the entire literature, which is glaringly omitted from his *magnum opus.* Although systems theory and cybernetics are not slighted *in the abstract*—indeed, Waltz credits a handful of authors on those topics (fn., p. 40) with having influenced his thinking about a systemic theory of international politics—, the authors who have actually applied them to the study of international politics are almost entirely ignored, despite the fact that Waltz is clearly not unaware of some of their other research. Karl Deutsch's work with J. David Singer on the subject of multipolarity is mentioned in passing, but his work on cybernetics, feedback loops, and equilibria in political systems is ignored.[18] Stuart Bremer's work with J. David Singer and John Stuckey on capabilities, uncertainty and war is discussed, but Bremer's research involving simulated international systems—prominently published not two years before Waltz's own book—is unmentioned, despite its obvious relevance.[19] Even after the passage of two decades, Waltz's most prominent systemic critic and most outspoken realist successor[20] seem no more eager than he to engage the work of those who have applied the tools of systems theory to the analysis of inter-

linkages between the structure of the system and the states that comprise it. Gilpin (1981) and Organski and Kugler (1980) are illustrative: the former explains the sources of economic boom and stagnation in individual states, setting the stage nicely for an understanding of systemic change, while the latter describes how state preferences are translated into action *given* an existing distribution of power in the system. (The problems inherent in ignoring one level or the other will be taken up in detail in the next section.) Moreover, hypothesized linkages between the two levels typically take little account of any of the detailed theoretical knowledge that has been gleaned about either (but for an exception see Pollins and Schweller 1999). It is also not uncommon to see a theory described as "systemic" simply because it incorporates variables from the structural level (e.g., Bueno de Mesquita and Lalman 1988).

[18] Deutsch and Singer (1964); Deutsch (1966), Deutsch (1978).

[19] Singer, Bremer, and Stuckey (1972); Bremer (1977), Bremer and Mihalka (1977). Bremer and Mihalka, for example, conclude that "if political entities act according to the dictates of 'realism,' the consequence for the vast majority is extinction, not survival." (326)

[20] Wendt (1999) and Mearsheimer (2001), respectively.

national systems.

To be fair, the latter group rarely engages the former on their own terms. Although systems approaches are flexible enough to be applied to phenomena as diverse as "turtles, termites, and traffic jams,"[21] the number of attempts to apply it to existing systemic theories of international politics is remarkably small. Even Axelrod, whose work is foundational in the study of international institutions, rarely addresses realism (institutionalism's *bête noire*) directly. Those works in the EBM or ABM tradition that do specifically address mainstream arguments are a remarkably small subset of their respective literatures.[22]

As a result of this intellectual segregation, mainstream theorizing about the international *system,* though it is open to influences from sociology and macroeconomics, remains little influenced by *actual systems theory,* or even by international relations research that is informed by it. This is an unfortunate fact, because dynamic systems theory holds forth the possibility of resolving one of the thorniest problems facing systems theory in international relations: the relationship between agents and structures.

The Agent-Structure Debate

Is it true, as Thomas Carlyle wrote in 1841, that "the history of the world is but the biography of great men"? Or is it the case, as Karl Marx claimed a decade later, that people make history, but not under circumstances of their own choosing?[23] This question—whether to focus on people or on their circumstances when explaining political events—is among the most fundamental issues in the study of politics. It has come to be known as the "agent-structure debate," and it is a critical problem in systemic theories of international relations because systems consist of both agents and structures, each of which has an impact on the other.

Structure

First, we must understand the meaning of the word "structure." Philip Cerny, who examines structure and agency in considerable depth, defines structure as "the pattern of constraints and opportunities for action and choice."[24] Though succinct, this definition is one step removed from the one that we seek, because it conflates an explanation of what structures *do* (constrain, provide opportunities) with an explanation of what they *are* (patterns). If they are to have a

[21] Resnick (1994).

[22] Such works include Cusack and Stoll (1990), Wolfson, Puri, and Martelli (1992), and Cederman (1997).

[23] Carlyle's quote is *verbatim,* from his *Heroes and Hero-Worship;* Marx's aphorism has been distilled by time, which has done it a considerable kindness. The actual quote, from *The Eighteenth Brumaire of Louis Napoleon,* is far less succinct: "Men make their own history, but they do not make it as they please; they do not make it under self-selected circumstances, but under circumstances existing already, given and transmitted from the past."

[24] 1990, 4.

causal role in the theory, this role must not already be assumed in the definition. Unfortunately, separating the two leaves us with "patterns," which is not very enlightening. Anthony Giddens conceives of structure as the "rules and resources, recursively implicated in the reproduction of social systems." Again, focusing on what structure is rather than what it does leaves us with "rules and resources," where rules are understood as things that "generate—or are the medium of the production and reproduction of—practices."[25]

An examination of existing structural theories helps to flesh out the definition a bit. Theda Skocpol's examination of social revolutions was highly critical of previous studies for their lack of appreciation of the role of structural factors. In particular, according to Skocpol, international structure (the state's position in the world economy and its level of development, as well as international military balances) and internal structure (the organizational and coercive capacity of the state) are critical factors in the revolutions that she studies.[26] Douglass C. North's seminal discussion of the role of economic structure and historical change is admirably succinct on the question of what constitutes structure: property rights, which give rise to the rules and regulations that govern society and the enforcement structures and norms that underpin them.[27] Peter Hall's discussion of institutions suggests yet another understanding: they are "the formal rules, compliance procedures, and standard operating practices that structure the relationship between individuals in various units of the polity and economy."[28] In the introduction to a volume of essays on historical institutionalism, Kathleen Thelen and Sven Steinmo survey a remarkable array of structural factors, from property rights to economic interest groups to party systems.[29]

What do these structural elements have in common, other than their purported effects (which, for the reasons just mentioned, are impermissible as part of the definition)? Remarkably little, save that they tend to be *distributions* of something: distributions of authority or resources, in the form of property rights or political rights or organizational capacity or coercive power or norms within society, for example. Granted, there are some structural concepts that are difficult to understand in purely distributional terms. However, many of these are

[25] 1979, 64, 67. Elsewhere, Giddens offers a different definition of rules as "techniques or generalizable procedures applied in the enactment/reproduction of social practices." (Giddens 1984, 21) He likens rules to mathematical formulae—though he hastens to add that "I do not mean to say that social life can be reduced to a set of mathematical principles" (20). By this reading, Giddens' conception of rules may come closer to the structures of the differential equations used later in the paper to model the international system; conceived of in this sense, that aspect of structure is not only exogenous but constant in the theory presented here. This is in keeping with established practice in international relations theory; few actors in game-theoretic models, for example, are allowed to alter the structure of the game tree that defines their available options.

[26] Skocpol (1979). On critiques of previous studies see pp. 14-24; discussions of international and internal structures can be found *passim* and are summarized especially on pp. 22-24 and 284-287.

[27] North (1981, 17-18).

[28] Hall (1986, 19).

[29] Steinmo and Thelen (1992).

either intentionally general formulations which, when applied in concrete terms, are often distributional in nature ("patterns of relationships") or are one step removed from a structural element that is distributional ("standard operating practices").

If we move to the more rarified air of the international realm, the distributional nature of structure becomes more readily apparent. Historically, pride of place must go to a particular distribution: the balance of power, or more precisely, the distribution of realized military capabilities across the most powerful states in the system.[30] This distribution has been the focus of students of international politics for centuries.[31] They assert that, in some very important ways, although they often disagree on which ones, politics in a system of many Great Powers is fundamentally different than politics in a system of few. While systematic differences in, say, the likelihood of war across different systems have been difficult to tease out,[32] the general assertion that politics is dramatically different in multipolar than in bipolar systems is hard to deny. Surely German Chancellor Otto von Bismarck's legendary political maneuvers would have been far more difficult in the bipolar 1970s than they were in the multipolar 1870s: one Great Power in a world of two can hardly play its potential enemies off of one another.

As to the issue of which distribution(s) will constitute the most important element of the structure of the system, the only safe generalization seems to be that security politics have typically been greatly influenced by the distribution of any characteristic deemed important by the main actors. As Alexander

[30] "Realized" capabilities are those that are actual rather than potential: soldiers rather than citizens, tanks and planes rather than iron and steel, and so on. Capabilities that have yet to be realized will be referred to as "latent." "Balance" is a notoriously ambiguous word, meaning both "distribution" and "rough equality." I will use it in the latter sense, as "distribution" is a perfectly good word—but the reader should be warned that this convention is not widely observed, and in most work on the balance of power the meaning of the word "balance" must be inferred from the context in which it is used. Ernst Haas' 1953 paper on the subject of the balance of power is quite illuminating.

[31] The most prominent works written from this systemic perspective include Waltz (1979) and Kaplan (1957); explaining polarity as outcome is Rosecrance (1963). For a general discussion see Butterfield (1966); for a remarkably lucid exposition and critique see Claude (1962). Wagner (1986) and Niou, Ordeshook, and Rose (1989) provide a foundation for the balance of power grounded in game theory. Deutsch and Singer (1964) provide a theoretical discussion of the advantages of a system of many powers rather than a system of few. Gulick (1955) is the classic historical discussion of the balance of power—although Schroeder (1994) provides a convincing and thorough argument that balance-of-power politics did not survive the Napoleonic Wars; and Healy and Stein (1973) attempts to provide formal empirical structure with which to evaluate the proposition. Gilpin (1981) and Organski and Kugler (1980), though they depict serial unipolarity rather than a constant tendency toward multipolar balance, nevertheless emphasize the distribution of capabilities in the system—that is, they focus on *the* balance of power without claiming that *a* balance of power exists.

[32] Contrast, for example, the findings of Organski and Kugler (1980) and Mansfield (1988) with those of Thompson (1986) and Spiezio (1990) regarding the relationship between unipolarity and war: the former studies find unipolar systems to be more warlike than other sorts, while the latter two find them to be less so. There has historically been difficulty in assessing the relative merits of bipolar vs. multipolar systems because the correlation between bipolarity and the existence of nuclear weapons has been nearly perfect, making their effects difficult to disentangle. Hopf (1991) is a remarkably creative attempt to circumvent this problem.

Wendt (1999) has argued, the distribution of ideas can define an international system. One need look back no farther than the Cold War to find a distribution of ideologies that provided the context for Great Power politics for nearly half a century. Raymond Aron emphasizes the causal importance of the distribution of values and principles across the international system, a quantity that he sums up succinctly with his concept of "heterogeneous" and "homogeneous" systems.[33] Karl Deutsch's international system consists primarily of communications and interaction flows; their distribution is thought to be indicative of the presence or absence of political community.[34] Immanuel Wallerstein's understanding of history is based on the distribution (in particular, the degree of centralization) of both economic and political capacity in the international system; only a discontinuity between the two, he argued, permitted the growth of capitalism.[35] Kalevi Holsti surveyed over 300 years of Great Power conflicts and found the sources of Great Power conflicts to have been quite diverse: the list includes the distribution of territory, strategic territory, state boundaries, national or religious or ethnic groups (within or across borders), commercial resources, ideology, and so on.[36] More recently, distributions of a wide range of phenomena, from temperate climate to natural resources to culture and religion, have been implicated as primary motivating causes of group or state behavior.[37] It seems that few distributions can be ruled out *a priori* as relevant elements of the structure of the international system: when, for example, the Great Powers decided in the early 17^{th} century that possession of nutmeg was critically important, its distribution became a vital issue that touched off the Spice Wars and resulted, ultimately, in the Dutch cession of Manhattan to the British.[38]

This, then, constitutes the understanding of structure that will be used hereinafter: systemic distributions of quantities deemed important by the states in the system.

The Nature of the Problem

The agent-structure debate could be resolved quite easily if the structure were outside of the agents' control. In this regard, it is important to note that all structures are not alike: some are less easily changed than others. At the extreme, agents may have little or no control over the structure of the system of which they are a part. The theory of natural selection is a good example.

[33] "I call homogeneous systems those in which the states belong to the same type, obey the same conception of policy. I call heterogeneous, on the other hand, those systems in which the states are organized according to different principles and appeal to contradictory values." (Aron 1966, 100, emphasis removed)

[34] Deutsch (1966). Similarly, David Easton's research on the international system emphasized the distribution of political interactions, i.e., those relevant to a society's "authoritative allocation of values" (Easton 1965, 25). For an intriguing application of Deutsch's work on interaction flows see Nierop (1994).

[35] And, somewhat confusingly, was permitted by it; Wallerstein (1979).

[36] Holsti (1991).

[37] See Diamond (1997); Homer-Dixon (1994) and Klare (2001); and Huntington (1996), respectively.

[38] See Milton (2000).

Structures are immutable contexts, and the agents must adapt to them or perish. The agents themselves have no control over the harsh climates, mountain terrain, parched soil, etc., to which they must adapt. Under these circumstances, we really only need to understand the effects of structures on agents, because agents *can't* have any effect on structures.

In the international system, by contrast, structure is the result of purposive action by the agents: they exert control over it, though it may not conform to their wishes. Because the international system is a system of this kind, we cannot ignore either the effects of the agents or those of the structure. We must attempt to describe, in Giddens' words, "the ways in which that system, via the application of generative rules and resources, and in the context of unintended outcomes, is produced and reproduced in interaction."[39] The easy way out is unavailable to us.

Given that people have an effect on the contexts within which they interact and those contexts in turn have an effect on people, the problem is that focusing on one of these two effects typically forces the theorist to de-emphasize the other.[40] Without explaining how both of these processes occur and unfold over time, no systemic theory can be complete. Unfortunately, doing so has proven to be extremely difficult. Faced with this dilemma, political scientists have done what it is perhaps in the nature of academics to do: they have taken sides.

On one side, researchers focus on the actions of states and statesmen (the agents) and downplay or ignore the circumstances in which they find themselves.[41] A surfeit of studies that fit this description can be found in the political science literature; they focus on characteristics of decisionmakers, the behavioral implications of the internal characteristics of states, and so on. At the same time, the proliferation of data-gathering endeavors like the Correlates of War project, the Polity project, etc., which focus on national and sub-national attributes has ensured an emphasis on actors rather than contexts in the quantitative international relations literature.[42]

Another group of scholars, however, has chosen to seek the source of history not within those entities but rather in the environment within which they in-

[39] 1979, 66.

[40] For "focusing on" one might reasonably read "implicitly or explicitly asserting the ontological priority of." See Wendt (1987) and Dessler (1989) for review and discussion of the debate. Waltz views his theory as being entirely structural, in that the distribution of capabilities within the system influences outcomes and an individual state's foreign policy is irrelevant. Dessler's 1989 critique of Waltz's theory, simply put, is precisely the reverse: all of the action is the result of purposive state activity, and that that activity presupposes the existence of the system—the context within which action takes place.

[41] For a recent argument in favor of focusing on the role of statesmen in history, see Byman and Pollack (2001). The emphasis on dispositional rather than situational factors as causes of behavior is not entirely surprising; research (e.g. Rosenberg and Wolfsfeld 1977) suggests that, while actors tend to explain their actions in situational terms, observers tend to explain them in dispositional ones, and academics tend overwhelmingly to be observers of rather than participants in the political process.

[42] For example, Geller and Singer (1998), a volume devoted to a review of statistical studies of the sources of war, devotes two pages to studies that examine the effects of changes in distributions of capabilities across the system (pp. 121-122).

teract (structure). Neorealism, an extension of the classical political realism[43] of such authors as Hans Morgenthau and George Kennan, is the most prominent example: its proponents argue that the most important determinant of the behavior of states is not their internal nature but their external environment, in particular, the distribution of power in the international system. Neoliberals have also chosen to focus on the environment within which states interact but have emphasized different aspects of it—the distribution of authority in the form of international political institutions,[44] the role of economic processes and information flows, and so forth. Still other scholars, whose collective theoretical breadth defies any common label save "ideationalists," have focused on the social structure of the international system, that is, the distribution of ideas that comprises the identities of the states within it.[45]

Few approaches attempt to combine structure and agency in a manner that reflects both the contribution of both to political outcomes and the ability of each to influence the other. Rational choice theory[46] does not inherently contain any role for structure beyond the rather minimal sense implied by the interaction of the agents (what Wendt calls "micro-structure," or interaction structure).[49]

[43] There is an unavoidable element of propaganda in the use of the term "realist." For one thing, it leaves one's opponents with an unpalatable array of possible names for their own intellectual movement (the "un-realists," perhaps?) In this regard it resembles the masterful appropriation of the name *Bolsheviki*—"those in the majority"—by a ragtag band of Russian political extremists. (In their defense, they actually *were* a majority of the Russian Social Democratic Party at the time of its schism in 1903—a majority by, perhaps, five individuals, out of a total of 55 or so.) In any case, realism has come to connote little more than a generic commitment to power as the primary cause of international events. Realists are often accused of pessimism, largely due to their unwillingness to believe that the grim world of power politics can be transcended by human intelligence or virtue.

[44] "Institution" is a broad term meant to encompass any of a number of multi-state deliberative entities that both result from and facilitate cooperation. The North Atlantic Treaty Organization and the United Nations are prominent examples; the International Telecommunications Union is a less prominent but more venerable one.

[45] Here see esp. Wendt (1999, ch. 6).

[46] Rational choice theory, which (confusingly enough) is almost entirely a methodology rather than a theory,[47] has its roots in the economics literature but has become quite popular in political science due, I think, to its impressive analytical rigor and ability to produce intriguing and often counterintuitive conclusions. In general, the method involves describing the actors in a given situation, their possible actions and the associated outcomes, the actors' utility functions (which imply some utility or disutility for each possible outcome), and what each of the actors knows and doesn't know about the situation. Rational choice theory is of no help in specifying what each of these elements will consist of, just as statistical methods like linear regression are of no help in specifying which variables should be included in a test. In both cases, this is the role of theory. (Absent realist theory, for example, Robert Powell could only have written a book entitled *In the Shadow of.*)[48] Once the elements have been specified, however, rational choice theory helps us to predict what the outcome of the situation will be, assuming that each of the actors maximizes his or her utility function subject to the constraints imposed by the structure of the game, the likely actions of other players, etc. (utility maximization is the only theoretical component of rational choice theory).

[49] Wendt (1999, 147-150). It should be apparent from the above discussion that these "micro-structures," the contexts that arise from the mere fact that states interact, are conceptually unrelated to the structure of the international system described above (which more or less corresponds to Wendt's idea of "macro-structure.") Two states that are aware of one another's incentives may be unable to trust one another even though each could benefit from

In fact, rational choice theory's ability to explain similar behavior in such diverse structural settings as the U.S. Senate and the trenches of World War I is often seen as a major strength.[50] Modeling the influence of agents on structures, or vice-versa, though possible in principle, is underexplored: in fact, both the agents and the structural setting of their interaction are typically assumed to remain constant for the duration of the game. Moreover, rational choice theory predicts behavior "in equilibrium," that is, when no actor has an incentive to act differently; but changes in agents and structures imply that equilibration, not equilibrium, may be the phenomenon of interest in systemic theories, and therefore quite a bit of out-of-equilibrium behavior may be observed.[51]

As a result, as Richard Little has put it,

> explanations in the social sciences... frequently operate at one of two extremes. At one extreme, human beings are seen to be free agents with the power to maintain or transform the social systems in which they operate. At the other extreme, it is assumed that human beings are caught in the grip of social structures which they did not create and over which they have no control.[52]

In the realm of international politics, two of the best-known works of the last quarter century serve to illustrate the extremes of this continuum. At one end, Alexander Wendt (1999) describes an international political realm in which agents and "micro-structures" constitute one another, but neither determines structural outcomes like distributions of power within the system. Agents interact, and their interaction changes the nature of their relationship to one another, but ultimately the structure of the system remains *sui generis*.[53]

At the other, Kenneth Waltz (1979) has elaborated a theory of international politics in which structures "limit and mold agents and agencies and point them in ways that tend toward a common quality of outcomes even though the efforts and aims of agents and agencies vary." (74) Agents play virtually no role, either in determining their own fates (except within the narrow limits afforded them by the harsh dictates of the system) or in transforming any aspect of the system within which they act.

Neither of these positions is truly satisfactory. The unavoidable truth is that each perspective, structural and agentic, tells part of the story. The proper response to Carlyle and Marx can be formulated quite succinctly: History con-

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cooperation; that is the effect of micro-structure. The distribution of capabilities in the system may prompt weak states to work harder than strong ones to improve their relative positions; that is the effect of structure.

[50] Axelrod (1984). Some recent research has modeled the impact of changes in domestic institutional structure, typically either as changes in payoffs or as changes in the options available to players, though research in this vein remains "in its infancy." (Rogowski 1999, 135).

[51] The main exception to this generalization is evolutionary game theory; see Weibull (2002) for an introduction.

[52] Buzan, Jones, and Little (1993, 103).

[53] The author himself makes these points; see Wendt (1999, 48-50, 365-66).

strains those who make it.[54] Today's decisions take place in an environment shaped by yesterday's actions, and the results of today's decisions provide the environment for tomorrow's. The interaction of states produces an international systemic context, or structure, and that structure subsequently defines the limits within which leaders must work as well as the opportunities that are open to them.

Explaining how this process of action and reaction drives the politics of international security is the goal of the next section.

Nested Politics

The basic explanation is straightforward and, I hope, relatively uncontroversial. First, I argue that each state's constituency—those citizens capable, by virtue of the state's form of government, of exerting selection pressure on the leadership[55]—has a *worldview* that determines its goals in the security arena. Some constituencies are power-maximizers who seek empire; others seek security through trade or the spread of a sympathetic ideology; still others are free-traders who seek to lower trade barriers. In any case, those goals will determine how the state's constituency will react to the condition of the international system at a given time. Imperialists without empire will demand action; by contrast, ideologues whose belief system has taken over the world or free-traders in a world devoid of trade barriers will demand little or none. In short, worldviews determine interests, the combination of interests and the state of the system determine preferences, and preferences determine the magnitude of the demands for action that are placed on the leadership by its constituency.[56]

Next, the demands of the constituency are aggregated by the state's political system. Again, this should be a relatively uncontroversial statement: the aggregation of preferences is a large part of what states are designed to do. The process of aggregation often results in a process of distortion as well, so that the preferences of the few (or the one) can come to outweigh the preferences of the many, but this need not be the case. The details of this process of aggregation vary from one state to the next; nevertheless, it can be shown that under a relatively unrestrictive set of assumptions policy will be driven toward the ideal point of the average voter.

[54] For "history," one might just as reasonably substitute "politics," for the history discussed herein is the history *of* politics.

[55] A rough synonym, "selectorate," is a political science neologism spawned, presumably, by the absence of a word to denote the "electorate" in systems that lack elections.

[56] Milner (1997, 15, fn. 4) contains a remarkably clear and concise discussion of interests and preferences, with which I almost agree. Milner writes that "actors' interests represent their fundamental goals, which change little. The interests of economic actors involve maximizing income, whereas those of political actors largely concern maximizing the chances of retaining political office. ... Preferences refer to the specific policy choice that actors believe will maximize either their income or chances of reelection. ... Interests are the stable foundation on which actors' preferences over policy shift as their situation and the policy area vary. Preferences are a variable; interests are not." I would argue that both preferences and interests are variables, but that preferences tend to change more quickly and more often than interests.

Next, political leaders receive their constituencies' demands and act on them, and their actions have repercussions in the international system. Because leaders usually hope to retain office for themselves or for their parties, they typically stray little from the path laid out by their constituencies (although they do try to influence the direction of that path). Their ability to implement the policies favored by their constituencies is limited by two things: the latent capabilities of the state, or the raw resources that the state's leaders can bring to bear, and the actions of the leaders of other states whose goals conflict with their own.

Finally, the actions of the various states change the condition of the international system: in the previous examples, they might produce a shift in the distribution of power, the spread of an ideology, or a reduction in trade barriers. Because the result of the states' actions may make the citizens of some states more satisfied and the citizens of other states less satisfied than they had been previously, a change in the condition of the international system has an impact on the desires of each state's citizenry—and the cycle begins anew.

The theory in its most basic form makes no assumptions whatsoever regarding the status of its building blocks or about their relationship to one another beyond what you have just read.[57] The details follow. The intuition and motivation for each of the three main parts of the model is included in the next three subsections; the model is formalized in the subsequent section, after which some of its implications are derived and discussed.

Citizen

The first element of the theory is the individual citizen. Such citizens, I argue, possess worldviews,[58] variously described as their "belief system," the "prism" through which they views the international system, their "paradigm," "security paradigm," or "foreign policy paradigm."[59] Worldviews can also be thought of as the clusters of *issues* that matter to citizens, or as the *spheres* of international politics that are relevant to them.[60]

[57] All of the basic elements of the model are taken to be variables whose values are measured rather than assumed. Frieden (1999) makes the case for deducing preferences from theory. Kimura and Welch (1998) argue that preferences, at least the ones that they examine, are idiosyncratic—they cannot be deduced from theory. They should therefore be measured, and "international relations theory should seek patterns and generalizations not among the inputs of state behavior, but in the ways in which states process those inputs." (214) I take something of a middle ground: preferences (or, in my case, worldviews) should be deduced from theory when possible, but the extent to which it is possible to do so cannot be determined without either invoking a Friedmanesque "as-if" clause and measuring whether behavior is consistent with posited preferences (Friedman 1953) or actually measuring the preferences themselves. I am more comfortable with the latter.

[58] Fans of the term *"realpolitik"* may prefer the pleasant symmetry of *"weltanschauung,"* à la Bialer (1986, 264).

[59] Holsti (1962); Perkins (1993, 15), Ulam (1974, 347); Zubok and Pleshakov (1996, 4); Nation (1992, xiii); and Checkel (1997), respectively.

[60] I use the terms "issue" and "sphere" almost interchangeably; both refer to characteristics of the constituent units of a system that are deemed relevant to one another by virtue of their fundamental nature. The military sphere, for example, involves the military capabilities (characteristics) of the states (units) within the international system, which are relevant to

The concept, as this list suggests, has appeared in the world politics literature in many forms, though each has slightly different connotations. The school most prominently associated with worldviews, perhaps, is social constructivism, which emphasizes the intersubjective nature of reality and therefore relies heavily on an understanding of the worldviews of individuals and states.[61] A considerable and diverse array of scholars interested in the power of ideas have also evinced considerable interest in the causal role of worldviews, without necessarily overtly aligning themselves with the constructivist camp.[62] Finally, to the extent that worldviews influence policy preferences (as I will soon argue they do), they could be claimed as a subset of liberalism.[63]

Most definitions involve constituent elements (generally norms, ideas, perceptions), their relationship to one another (as in beliefs about causal mechanisms), and their relationship to decision makers (as the means by which goals are defined, problems are pinpointed, and the proper means for solving problems and achieving goals are delimited).[64]

My conceptualization of a worldview encompasses only some of these elements. By a "worldview" I intend to connote the set of structured ideas that determine a) the dimensions of the international system that are deemed relevant to a state's security policy, b) the emphasis that is put on each of those dimensions, and c) the ideal state of the world along each dimension.[65] Citizens' need to restrict the dimensions along which they view the system exists because of the wealth of information that is potentially available about other countries: population, wealth, military strength, ideology, ethnic makeup, official language(s), religion, geographic area, average temperature and rainfall, collective tastes in arts and literature, fashion, etiquette. Only some of these

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one another by virtue of their nature (as vehicles for the projection of, or defense against, physical force outside of the boundaries of the state).

[61] Here see, *inter alia,* the essays in Chafetz, Spirtas, and Frankel (1999), Katzenstein (1996), and Ruggie (1998), as well as Doty (1993), Erikson (1968), Hopf (2002), Johnston (1995), Laitin (1998), Richter (1996), and Wendt (1999); for a review see Checkel (1998).

[62] One might quite reasonably categorize Axelrod (1976) as a tacit constructivist, especially given the evolution of cognitive mapping evinced in Johnston, previous footnote. Students of belief systems, such as Chittick, Billingsley, and Travis (1995), Converse (1964), Holmes (1985), Holsti (1979), Huntington (1993), Jervis (1970), McCloskey (1967), Murray (1996), Schneider (1983), Wittkopf (1990), and Zimmerman (1969), also qualify. If the category can be stretched to include anyone who demonstrates a generic commitment to the power of ideas, adherents become legion.

[63] Here see Moravcsik (1997); for a relevant application, Kimura and Welch (1998); and for an argument that liberalism and constructivism are indistinct, Sterling-Folker (2000).

[64] My formulation draws on all of the above sources, but most directly on Checkel (1997), who defines a foreign policy paradigm as "an interpretive framework of ideas and norms that specifies the nature of the problems decision makers face, the goals of policy, and the sorts of instruments that should be used to attain them." (p. 103)

[65] Goldstein and Keohane (1993) break beliefs down into three types: world views, principled beliefs, and causal beliefs. World views are the broad ideas which make up the fabric of a society, while principled beliefs are normative ideas and causal beliefs are, quite simply, beliefs about causation. My definition of a worldview, in contrast to theirs, encompasses the latter two types. For example, a classical *realpolitik* worldview also contains principled beliefs (military security of the state is the primary value to be upheld) and causal beliefs (imbalances of power increase the probability of war, which in turn threatens the security of the state).

dimensions are generally thought to be relevant to security policy, and citizens of different states may come to different conclusions about which are and which aren't.

Regardless of one's position on the question of which issues predominate, however, all general explanations of international relations must assume that *some* issues matter and some do not; no theory could be tractable otherwise. Which issues actually *do* matter is a factual question, however, and I will deal with it as such rather than join one theoretical camp or another.

Whichever dimensions are emphasized, a worldview provides citizens with a means of simplifying and interpreting international relations by giving them a lens through which to view other states and identify the salient divisions among them. International relations will then be understandable primarily as relations among states differentiated by such attributes as military capabilities, control of the means of production, democracy, religion, ethnicity, or, more broadly, culture.[66] These "issue dimensions" play a large role in interpreting actions: bombing one group of people might be more justified than bombing another to the same citizenry, largely because the targets of the first bombing were perceived as a threat, were doing something odious, or were simply living their lives in a manner which was *de facto* unacceptable. Hence, the Irish Republican Army feels justified in bombing the British, though not (say) the French.

Citizens rarely develop an interest in an issue dimension without deciding, in the process, that the world would be a better place if it could be nudged toward a particular point along that dimension. Few citizens who focused on the Cold War clash between democracy and communism, for example, were indifferent between the two: most could tell you what the system would look like if they had their way. The most-preferred state of the world along a given issue-dimension for any citizen is called that citizen's *ideal point.*

The collection of such ideal points, weighted by relevance, constitute the state's interests. To a state driven by an offensive-realist worldview,[67] increasing the state's military capabilities relative to those of other states is in its interest; an ideologically-driven communist state's interests consist of changing the correlation of forces in favor of world socialism.[68]

[66]Scholarly research often mirrors these ideological predilections, suggesting that, even if scholars themselves don't view the world in these ways, they believe that a substantial proportion of humanity does; see Lenin (1939), Russett (1993), Hero (1973), Said (1977), and Huntington (1996), respectively, for examples. Broader models based on attribute-distance have been viewed, perhaps justifiably, with considerable skepticism since Wright (1942), but more recent applications (Altfield 1984; Axelrod and Bennett 1993) have shown more sophistication and promise.

[67]The distinction between offensive and defensive realists will be discussed in detail below.

[68]It is worth noting that this conceptualization of interests accords with that of theorists but clashes with that of many policy makers. To the latter group, "the national interest" is often used to refer to a minimalist set of goals consistent with defensive realism—i.e., defense of the homeland in the short term, prevention of developments abroad that might present a threat to the homeland in the longer term, and minimization of loss of life. The contrast can be highlighted by considering the general case of humanitarian interventions, which would be based on the nation's interests according to academics if the impetus to engage in them stemmed from the worldview that motivates the state's foreign policy activity, but which would not be in the national interest according to policy makers because humanitarian crises

The present status of the world along the dimensions emphasized by the citizenry's worldview, relative to its ideal points, determine citizens' preferences.[69] The farther the present system is from the state's ideal point, the greater the citizenry's level of dissatisfaction,[70] and the greater its desire for action to redress the present situation. There is a rarely noted but very important dynamic element to this relationship over time: to the extent that the state succeeds in getting what its citizens want, demand for further action is reduced. Those states wishing only to "make the world safe for democracy" could, absent the threat of backsliding, largely pack up and go home once they had accomplished their goal. Few states are afforded this luxury, however, because the system typically contains at least one more sufficiently capable actor whose goals conflict with those of the state in question.

State

The manner by which the ideational predispositions of the citizenry of a state coalesce into something that might be called the state's collective preference is a matter of considerable debate. Rarely since the disappearance of the Greek *agora* have demands been expressed directly by the citizenry, and the process of preference aggregation—one of the most fundamental functions of any political system—must be understood as well. This is the traditional redoubt of public choice theorists.

The conclusions reached by public choice theory are famously grim. The Marquis de Condorcet (1785) was among the first to point out that three voters (or groups) facing policy options A, B, and C and possessing preference orderings $A > B > C$, $B > C > A$, and $C > A > B$ could not be said to have a single collective preference: any option forwarded can be defeated by another option that is preferred by two of the three voters. Kenneth Arrow (1951) generalized this point by demonstrating that, under a fairly innocuous set of assumptions,[71] *no* system of preference aggregation other than dictatorship—in which one per-

pose no threat to the nation and intervention risks lives.

[69] The assertion that preferences follow from interests is widely but not universally accepted. Kratochwil (1982, 5-6), for example, argues that "we can think of cases in which it makes sense to distinguish carefully something wanted or desired—like sitting down in a snowstorm due to exhaustion—from the interest involved—not doing so because of the danger of freezing to death." It seems to me that there are actually two interests here (rest and survival) and two preferences that stem from them (sitting and not), and that the latter simply outweighs the former. See Keeney and Raiffa (1993) for a discussion of multiple preferences that would accommodate such an example.

[70] Following the conventions of expected utility theory, disutility is actually a function of the square of the distance between the ideal point and the existing state of the world.

[71] Roughly, they are as follows: 1) The number of alternatives must be at least three; 2) any set of individual orderings should be possible, and the system of preference aggregation should be able to specify a social ordering for any set of individual orderings [collective rationality]; 3) if all individuals prefer A to B, then the resulting social preference ordering should include a preference for A over B [the weak Pareto criterion]; and 4) if A is universally preferred to B, then changing the order of any additional alternatives should have no effect on the collective preference for A over B [the irrelevance of independent alternatives].

son's preferences determine society's—can avoid this conundrum.[72] Worse, as Charles Plott (1967) suggested and Richard McKelvey (1976) demonstrated, in a majority-rule contest in the absence of an "undominated point" (a policy that cannot be defeated by any other), any policy at all can be reached by constructing a sequence of proposals, each of which is preferred to its predecessor by a majority of the voters. When politics involves more than a single issue dimension, politicians can garner support from shortsighted voters by finding an "issue niche"—a narrow range of policies that a majority of voters will find (barely) preferable to the alternative that has been proposed.

The unfortunate implication of McKelvey's insight for students of politics is that predicting the relationship of preferences to policy from first principles becomes a very tricky business. Duncan Black's (1958) claim that the preference of the state along a given issue dimension reduces to the preference of the median voter no longer holds when multiple dimensions come into play.

This conclusion, however, is premised on a very brittle set of assumptions about the behavior of voters (or, more accurately, about the perceptions of leaders regarding the behavior of voters). Constituents are assumed to know precisely where each candidate stands on each issue and how much utility they would receive if that stance were translated into policy; moreover, they are assumed to support the candidate whose stance provides a greater expected utility with probability 1. The candidates are assumed to know that they will do so.

It is more realistic to argue that uncertainty exists, both on the part of the constituency about the benefits of the candidates' platforms and on the part of the candidates about the behavior of their constituents. Constituents may be ill-informed; candidates might not be able to count on their support even if they were because they may be incorporating idiosyncratic factors into their decision calculus. The assumptions adopted in the nested politics model reflect this uncertainty. Constituents are assumed to support a candidate with a probability that increases as the candidate's platform's utility to them increases and decreases as the candidate's opponent's platform's utility to them increases. In short, this means that, as the attractiveness of Smith's policies increase, the probability that I will vote for Smith increases as well. I may not be likely to support Smith over Jones even if Smith's policies would be better for me—perhaps I am not perfectly informed about their policies; perhaps I have watched the debates and Smith just strikes me as a simpering fool—but as the difference between Smith's policies and Jones' increases from my point of view, so too will the probability that I will vote for Smith.[74]

[72] It is worth emphasizing that the implications of Arrow's insight are not as horrific as they might at first seem. Arrow did not argue that democratic government was inherently dysfunctional, or that dictatorship is desirable; rather, the proof demonstrates that in every form of government other than pure dictatorship the *possibility* of deadlock is unavoidable. To offer a trivial counterexample, if three groups' preferences must be aggregated and all have preference orderings $A > B > C$, aggregation in a democratic system is easy. In fact, out of all of the permutations possible in the context of the three-voter, three-issue example offered by Condorcet, only 5.6% lack a majority winner.[73]

[74] This is a very "vanilla" probabilistic voting model, meant to apply to a wide range of

Under these conditions, it becomes possible to say something more concrete about the relationship of leaders' policies to their constituents' preferences. The uncertainty surrounding constituents' behavior smooths out the relationship between candidates' positions on the issues and the support that they receive, making it impossible for leaders to find "issue niches" that afford a temporary advantage. Instead, a single optimal position emerges.[75] Under the relatively general assumptions described above, this position is the one that maximizes the mean of the constituents' utilities.[76]

It is important to bear in mind that a constituency can place "demands" on the leadership without ever uttering a word. Just as the course of a lightning bolt is determined entirely by tiny differences in resistance among the countless air molecules that surround it, a constituency that makes no actual policy demands whatsoever but merely reacts to policies as they are enacted (or debated) guides politics along the path of least resistance. Although this form of passive compellance is most apparent in democracies in the modern age of near-instantaneous public opinion polls, it is an inherent feature of government, however large or small the constituency.[77] The worldviews of constituencies shape the policies of elites, not by any direct form of coercion, but passively—by virtue of the fact that satisfying one's constituency also happens to be the best way to get into office and stay there.

To sum up the theory so far: Each constituent's tacit demands are based on a comparison of his or her own ideal point to the present condition of the international system along his or her own favored dimension(s). The utility of a foreign policy action to a constituent is calculated as a weighted average of its benefits in whichever spheres are emphasized by that constituent's worldview. The preferences of the individual citizens are then aggregated and passed along to the leadership. Because the leadership wishes to maximize its support, it

states. Quite a few additional nuances, such as interest groups, ideology of voters, etc., have been added to explain the features of different electoral systems (see Persson and Tabellini (2002) for examples), but the basic model seems most well-suited to describing features common to political systems in general.

[75] As it happens, this position is the one that is optimal for the entire community—at least by the standards of Jeremy Bentham, who wrote in Chapter 1 of *Principles of Morals and Legislation* (1823) that "[t]he interest of the community then is... the sum of the interests of the several members who compose it."

[76] Mueller (1989, 199-202).

[77] John Zaller (1992) has developed a model of opinion formation in which elites are drawn from subpopulations with different ideological predispositions, specialize in policy formulation, and send "messages" in the form of policy statements back to the public via the media. These messages, when received, resonate most strongly in citizens with sympathetic predispositions. Voter opinion is therefore seen as a function of attentiveness, predispositions, and the strength of the message (as well as of any events in the international arena that happen to make one issue or another particularly salient). To win elections, candidates must adopt clusters of policies that resonate as strongly as possible with the subpopulation that constitutes their base of support. These themes are elaborated throughout the book and are neatly captured in Zaller's "Parable of Purple Land" (pp. 311-312). The model is essentially a simple version of a spatial theory of voting in which the population's preferences in issue-space are bimodal and candidates are drawn to the modes. A vast literature exists on this subject; for a review and an excellent example see Enelow and Hinich (1984).

implements a policy designed to produce the greatest good for the greatest number, which implies a policy close to the mean along every issue dimension.

Making allowances for differences in domestic institutional structure, a process very similar to this one takes place in all political systems. That said, however, the particulars of this process vary greatly from one state to another, and not all citizens are capable of influencing leaders: a constituency is merely that segment of the citizenry that exerts selection pressure on the leadership. One of the functions of the state is to determine how the constituency is defined; variation in the domestic structure of the state can enfranchise different groups of citizens to different degrees.

System

Finally, once a state's collective preferences have coalesced and the constituency has issued a demand for action on the part of the leadership, leaders must choose a level of foreign policy activity for the state. While positions on domestic economic matters often boil down to taking a stand on the question of how much should be given to (or taken from) whom, in the case of foreign affairs leaders must choose how active the state will be in pursuing the constituents' *desiderata*—how hard to work to maintain the balance of power, perhaps, or how much effort to expend in fomenting revolution abroad. Inactivity on the part of leaders in the face of demands for action will be penalized because it will be viewed as neglectful of the national interest. Activity in excess of that demanded by the constituency will be penalized because it will be viewed as a diversion of resources away from more important tasks.[78] The leadership is assumed to be free to take whatever level of action it chooses, though the extent to which leaders' actions are effective is limited both by the potential capabilities of the state and by the actions taken by the leaders of other states. This is the essence of the realist paradigm in international politics: states utilize their power in order to get what they want, to the extent that they can.

A situation of this sort—one in which a continuum of possible strategies exists and leaders must choose a level of activity that will result in a division of the system that maximizes their payoffs subject to the constraints imposed by the behavior of other leaders—is referred to generically as a "bargaining problem," in deference to its roots in economics, though the moniker is certainly appropriate to the kinds of secret negotiations in smoke-filled rooms that the word "*realpolitik*" conjures up. The idea is that multiple actors know one another's preferences and capabilities and, with or without actual collusion, they have to arrive at a state of the world in which no one has an incentive to change his or her behavior. A classic example is that of a duopoly in which two firms must choose a level of production of a particular good without producing too much and eliminating demand. One very straightforward way to solve a problem of this sort is to find a Cournot-Nash equilibrium that will describe both

[78] Examples in the American context abound; for a recent example see Gholz, Press, and Sapolsky (1997).

equilibrium levels of activity and distribution of realized capabilities.[79]

The problem with such a model as a description of reality is that it describes equilibria but not how those equilibria are achieved, starting from initial conditions. If the system were to reach equilibrium immediately and that equilibrium were to adjust itself instantaneously to any perturbation, the Cournot-Nash bargaining solution would be a perfectly serviceable tool for understanding the outcomes of such bargaining situations at the international level. Unfortunately, adjustment to changes, either in worldviews (and hence preferences) or in capabilities, can take years to accomplish, and in that time other changes occur that often require further adjustments, and while those adjustments are taking place, still more changes occur—and so on, and so on. States spend most of their time out of equilibrium. Because bargaining solutions like the Cournot-Nash model tell us where states are going but not how they get there, and because much of history consists of getting there, we need a model of the process by which they arrive at an equilibrium, not just a description of the equilibrium itself.[80]

Here, leaders adjust the state's level of foreign policy activity at any given moment to mirror the level of activity demanded by the constituency. The net result of the actions of the leaders of all states is a change in the status of the system. Once that change has occurred, the cycle of activity begins anew: the state's citizenry observes the system through the prism of its worldview, it makes demands on its leaders, those demands are aggregated, leaders act on them, those actions collectively have an impact on the status of the system, and so on. Citizens do not consciously equilibrate; that is, they make no detailed calculations about the results of their states' actions in combination with the actions of other states. They merely respond in a very straightforward way to the stimuli provided by the system by demanding action in proportion to their dissatisfaction. This model of how states act tells us how they get to equilibrium and how they should be expected to act when they are not there.

What exactly is meant here by "activity"? Simply this: A state is active in direct proportion to the extent to which it converts capabilities into power in the realm of international security. Activity in general denotes the expenditure of resources in pursuit of bringing about change in the international arena. Resources may be real or promised, the latter merely being a conditional version of the former (a defensive alliance, for example, is an expenditure of military resources conditional on an attack on one of the member countries). This definition avoids some of the difficulties mentioned above—by avoiding specific references to alliances, for example, it avoids miscategorizing unilateralist states as inactive.

The definition also points to a distinction between latent and realized capa-

[79] See Rasmusen (1989, 76-78) for a clear discussion of the Cournot-Nash equilibrium concept.

[80] Advocates of the Nash bargaining solution will nevertheless be pleased to know that the variant of the model that permits no joint gains produces results, in the long run, that are equivalent to the results of an asymmetric Nash bargaining model, which—as Binmore (1998, 126-128) shows—is also the solution to the Rubinstein bargaining model (Rubinstein 1982) as the response time grows vanishingly small.

bilities that must be kept in mind if the rest of the theory is to be conceptually coherent. One of the ways in which a state can have an impact on the system, as mentioned above, is by arming itself unilaterally, thereby increasing its realized capabilities—weaponry, transportation capabilities, intelligence resources, and so on. Its ability to do so is determined by its latent capabilities—the human, material, and technological resources that can be devoted to the task. Latent and realized capabilities must be distinguished from one another both in order to avoid tautology and because they play different roles in the theory: realized capabilities alter the balance of power in the system at large, whereas latent capabilities determine the impact of a state's action on the status of the international system.

The effects of a state's foreign policy activity will tend to mirror the blend of issues that constitutes its worldview. Ideological states will act to promote their favored ideology abroad; *realpolitik* states will work to disrupt strong (and therefore potentially dangerous) coalitions; and so forth. The actions of a mostly-ideological state might nevertheless have some *realpolitik* impact: its primary goal might be to reproduce its ideology abroad, but if its worldview is at least somewhat informed by power-politics concerns it will tend to a lesser degree to enact policies that enhance its military security.

Despite the fact that leaders have a strong incentive to act as their constituencies demand, and despite the fact that many of them are in control of sufficient resources to bring about whatever changes their constituency desires, states rarely achieve their goals: few ever reach their constituency's ideal point, whether that be hegemony, religious or ideological unification, or what have you. Most are doomed to some degree of frustration by virtue of the fact that other states with other worldviews also exist and are also attempting to exert their own influence over the international system. The results can range from minor and occasional conflicts of interest to sustained competition to war.

The Model

In order to derive the implications of the basic nested politics model, I now turn to the task of formalizing it.

In a world of N Great Powers $(1, \ldots n, \ldots N)$ and M issue dimensions, or spheres of interest $(1, \ldots m, \ldots M)$, let a_n denote the level of activity of state n and s_{nm} denote state n's share of the system's resources in sphere m. s and a are the state variables. Also let c_{nm} represent a frequency distribution of constituency ideal points for state n on dimension m, and let $\nu_n(\cdot)$ represent state n's preference aggregation function. ω_{nm} represents the salience of issue-area m to the constituency of n—in other words, the degree to which changes in the distribution of goods relevant to issue m are deemed relevant to the national security of n. Finally, π_n represents the latent capabilities of state n, or its ability to convert actions into outcomes (scaled to $0 \leq \pi_n \leq 1$).

Of these, only $\nu_n(\cdot)$ is relatively complex. Debates have played out in the public choice literature for decades regarding how preferences can be aggregated

without running the risk of deadlock or cycling, and many reasonable answers have been offered for specific legislatures or categories of legislatures, but few can reasonably be applied to governments as diverse as Reagan's America and Tsarist Russia. The most reasonable general representation, described in the previous sections, is one in which constituents support leaders with increasing probability as policies approach the constituents' ideal points, ideal points along one dimension are unrelated to ideal points along another, and leaders act to maximize their support.[81]

Under those conditions, and assuming that probability distribution functions are continuous and strictly concave, the leader's governance problem becomes the maximization of $\sum_{i=1}^{I} p_i$, where p_i is the probability that constituent i will support the leader. In the most generic case, that in which constituents are equally weighted,[82] $\sum_{i=1}^{I} p_i$ is maximized at $\bar{c}_{nm}$, and because ideal points along one dimension are unrelated to ideal points along another, $\nu_n(c_{nm}) = \bar{c}_{nm}\ \forall m$, and $\nu_n(c_n) = \bar{c}_n$: the aggregated preferences of the constituency of n collapse to the multidimensional mean.[83]

According to the theory, the constituency's worldview in state n determines both c_{nm} and ω_{nm}. Domestic politics determines both the size and nature of the subset of the citizenry that is defined as the constituency and the particulars of the preference aggregation function (e.g., the weight vector $\boldsymbol{w}$). The state's available (or latent) power resources determine π_n. These variables determine the values of s_{nm} and a_n in equilibrium in the following manner:

s_{nm} constitutes the "state of the world": it contains all of the information at a given time about the distributions of power, ideology, and anything else that matters to the major states. ω_{nm} determines the extent to which dimension m matters to state n, and $\nu_n(c_{nm})$ determines state n's collective "ideal point" along dimension m. Constituents demand action from the leadership in proportion to the extent that m matters to n *and* that the state of the world diverges from their collective ideal point. The former relationship is linear; in the latter case, the distance from the state of the world to the citizenry's ideal point is squared to reflect a quadratic loss function.[84] Leaders maximize their

[81] The assumption of probabilistic support, rather than a deterministic model in which constituents support A over B with certainty if and only if their expected utility under A exceeds their expected utility under B, is fairly easy to justify in real-world terms. Constituents might be somewhat ignorant of the expected utilities of leaders' policies for them, or those policies might contain elements not captured by the model.

[82] If all constituents are not weighted equally—if, for example, a skewed electoral system gives more weight to some votes than to others—, the problem becomes the maximization of $\sum_{i=1}^{I} w_i p_i$, where w_i represents the weight accorded to constituent i. Similarly, if constituent 1 is more sensitive than constituent 2 to changes in policy, 1's preferences will carry more weight in determining the resultant policy than will 2's (Mueller 1989, 199-202).

[83] For a detailed explication see Persson and Tabellini (2002, ch. 3).

[84] The effects of squaring this quantity merit a brief footnote. The point of doing so, here as elsewhere, is mathematical convenience: in this case, it prevents a from becoming a continuum ranging from extreme activity to extreme "negative activity" and makes a single, general model much easier to write down, aiding transparency considerably. It also generally compresses levels of state activity toward the bottom of the scale (relative to a model in which distances are not squared) and slows convergence to equilibrium, neither of which is especially troublesome.

domestic support by acting to satisfy their constituency. The demands of their constituency are based on the distance between the collective ideal point and the status of the system, or $\nu_n(c_{nm}) - s_{nm}$, and the emphasis placed on that dimension of reality by the state's worldview, or ω_{nm}. Therefore, the action taken by the leadership is described by

$$a_{n(t+1)} = \sum_m \omega_{nm(t)}[\nu_{n(t)}(c_{nm(t)}) - s_{nm(t)}]^2 \quad (1)$$

To illustrate this process, imagine that state i's constituency is focused on two dimensions of the international system, the military (or *realpolitik*) and the economic spheres, and is considerably more interested in the latter than in the former ($\omega_{ir} = 0.25$, $\omega_{ie} = 0.75$). In the economic sphere, where 0 represents complete autarky and 1 represents completely open markets worldwide, opinion in i is divided: a large group enjoys the benefits of free trade and would prefer quite a bit of it, but a smaller group dislikes the deleterious effects of globalization and would prefer to close national markets to all but the barest necessities. In the *realpolitik* sphere, however, the majority believe that more power is unconditionally better and would therefore be happiest if i were to achieve hegemony. These constituency preferences could be represented by a bimodal c_{ie} distribution—perhaps with modes at 0.2 and 0.8—and a c_{ir} distribution where the constituents are clustered at 1. At present, the state is not especially close to either of its ideal points: global trade openness is only at about 20%, the state possesses 15% of the realized military capabilities in the system, and its allies possess a mere 5%. To determine the demand for activity on the part of the leadership we need only multiply weights by the distance between ideal points and the current status of the system and sum across dimensions, so:

$$\begin{aligned} a_{i(t+1)} &= \sum_m \omega_{im(t)}[\nu_{i(t)}(c_{im(t)}) - s_{m(t)}]^2 \\ &= \omega_{ie(t)}[\nu_{i(t)}(c_{ie(t)}) - s_{e(t)}]^2 + \omega_{ir(t)}[\nu_{i(t)}(c_{ir(t)}) - s_{r(t)}]^2 \\ &= (0.75 \times 0.16) + (0.25 \times 0.64) \\ &= 0.28 \end{aligned}$$

Finally, we need to calculate the instantaneous rate of growth (or decrease) in the state's activity in order to characterize this as a dynamic system. This is done simply by subtracting the existing level of demand from the right-hand side of the equation:

On the other hand, it makes the model's general equilibria *substantially* more complex and entirely devoid of intuitive appeal—hence the reliance on simulations throughout rather than analytic solutions. In the end, though, it seems to me that the best case that can be made for a quadratic loss function is empirical accuracy: citizens' responses to threats are often too moderate when the threat is small and disproportionately extreme when the threat is large.

$$\dot{a}_i \quad = \quad \sum_m \omega_{im}[\nu_i(c_{im}) - s_m]^2 - a_i \tag{2}$$

(where $\dot{a}_i \equiv \dot{a}_{i(t)} \equiv a_{i(t+1)} - a_{i(t)}$ and the time subscripts are dropped for notational convenience).

Next, how should we model the impact of the state's actions on the international system? Two issues are paramount. The first has to do with the relation of the existing elements of the model to changes in the system. State activity should produce change in the system, in proportion to the level of activity. That level must be weighted by its latent capabilities, however; otherwise, actions taken by Switzerland will have the same impact as actions taken by the United States. Moreover, the impact of the state's activity should reflect the emphasis placed on the different dimensions of the system by that state's worldview.

The second issue has to do with whether joint gains are possible in a given issue-area. If they are, then state ideal points in that issue-area can typically be represented as points along a continuum, from (say) very low levels of global armaments to very high levels. If such a continuum ranged from zero to one,[85] the current state of the world were 0.8, and two Great Powers had ideal points at 0.3 and 0.6, they could realize joint gains by working together for global disarmament—at least until the state of the world reached 0.6, at which point no further joint gains could be realized.

On the other hand, if no joint gains can be had at all, it becomes impossible to model the ideal points of more than two states on a single dimension. Any pair of states in which at least one state's ideal point is not at either extreme could gain by moving the status quo toward the most proximate ideal point. If all three ideal points are at the extremes, at least two states must have the same ideal point and would therefore realize joint gains no matter what. These two possibilities exhaust the universe of possibilities. In a no-joint-gains situation, therefore, multiple systemic state variables are called for, one per actor, to reflect that actor's "share of the pie."

Those two principles lead to equations of two general forms, the first of which permits joint gains, the second of which does not. For a single state n and a single systemic dimension m,

$$\dot{s}_m \quad = \quad \pi_n \omega_{nm} a_n [\nu_n(c_{nm}) - s_m] \tag{3}$$

Modeling multiple systemic dimensions follows in a straightforward way. For two dimensions, say, the economic and *realpolitik* spheres, the equations would be

[85] Leave aside the difficulty of assigning concrete numbers to actual states of the world, which I grant would be considerable in this case; the numbers are meant only to illustrate the larger point about unidimensionality and joint gains.

$$\dot{s}_e = \pi_i \omega_{ie} a_i [\nu_i(c_{ie}) - s_e] \quad (4)$$

$$\dot{s}_r = \pi_i \omega_{ir} a_i [\nu_i(c_{ir}) - s_r] \quad (5)$$

Expanding to two states, i and j, when joint gains can be realized can be done by modifying the equations of motion so:

$$\dot{s}_e = \pi_i \omega_{ie} a_i [\nu_i(c_{ie}) - s_e] + \pi_j \omega_{je} a_j [\nu_j(c_{je}) - s_e] \quad (6)$$

$$\dot{s}_r = \pi_i \omega_{ir} a_i [\nu_i(c_{ir}) - s_r] + \pi_j \omega_{jr} a_j [\nu_j(c_{jr}) - s_r] \quad (7)$$

In this way, the impact of the actions of all of the states in the system on all of the dimensions deemed relevant by each can be modeled.

The case in which no joint gains can be realized is best illustrated by adding an additional state, k, and breaking the state of the system down into multiple equations, one for each state. If we attempt to model the *realpolitik* sphere, appropriately, as an issue area in which no joint gains are possible, the equations of motion would look something like this:

$$\dot{s}_{ir} = \pi_i \omega_{ir} a_i (1 - s_{ir}) - \frac{\pi_j}{N-1} \omega_{jr} a_j (1 - s_{jr}) - \frac{\pi_k}{N-1} \omega_{kr} a_k (1 - s_{kr}) \quad (8)$$

$$\dot{s}_{jr} = \pi_j \omega_{jr} a_j (1 - s_{jr}) - \frac{\pi_i}{N-1} \omega_{ir} a_i (1 - s_{ir}) - \frac{\pi_k}{N-1} \omega_{kr} a_k (1 - s_{kr}) \quad (9)$$

$$\dot{s}_{kr} = \pi_k \omega_{kr} a_k (1 - s_{kr}) - \frac{\pi_i}{N-1} \omega_{ir} a_i (1 - s_{ir}) - \frac{\pi_j}{N-1} \omega_{jr} a_j (1 - s_{jr}) \quad (10)$$

Note the subtraction of the effects of j's and k's activity from i's portion of the *realpolitik* sphere, and of its from theirs. This device ensures, assuming that the various s_{nr} sum to unity when the simulation begins, that they will continue to do so. The division of each player's capabilities by the number of its opponents $(N-1)$ indicates that each state's attention is divided equally among its potential foes—a reflection of the realist maxim that no one can be trusted in an anarchic world.

Modifications of this assumption are, of course, possible. A more sophisticated assumption, broadly consistent with balance of power theory, would be that states focus their energies against other states in direct proportion to their relative (realized) capabilities:

$$\dot{s}_{ir} = \pi_i \omega_{ir} a_i (1 - s_{ir}) - \frac{s_{ir}}{s_{ir} + s_{kr}} \pi_j \omega_{jr} a_j (1 - s_{jr}) - \frac{s_{ir}}{s_{ir} + s_{jr}} \pi_k \omega_{kr} a_k (1 - s_{kr})$$

$$\dot{s}_{jr} = \pi_j \omega_{jr} a_j (1 - s_{jr}) - \frac{s_{jr}}{s_{jr} + s_{kr}} \pi_i \omega_{ir} a_i (1 - s_{ir}) - \frac{s_{jr}}{s_{ir} + s_{jr}} \pi_k \omega_{kr} a_k (1 - s_{kr})$$

$$\dot{s}_{kr} \quad = \quad \pi_k \omega_{kr} a_k (1 - s_{kr}) - \frac{s_{kr}}{s_{jr} + s_{kr}} \pi_i \omega_{ir} a_i (1 - s_{ir}) - \frac{s_{kr}}{s_{ir} + s_{kr}} \pi_j \omega_{jr} a_j (1 - s_{jr})$$

Here, for example, the second term in the first equation tells us that j looks at the collective slice of the "pie" that j and k share ($s_{jr} + s_{kr}$) and directs its energies toward j in direct proportion to the share of that slice that j alone controls. If i controls 20%, j 20%, and k 60% of the realized capabilities in the system, therefore, i would expend 75% of its energy ($\frac{60}{20+60}$) to transferring resources from k to itself and the remaining 25% to sapping j's capabilities. This assumption informs the *realpolitik* analyses in the paper, although the results do not depend on it.

General Hypotheses

The general model just described suggests a variety of comparative statics results. Individually, the actor-level and structural-level equations offer insights into the short-term effects of changes in the model parameters; when combined, they offer additional insights into the implications of such changes as they play out through the system.

Actor-Level Hypotheses

H_{A1}: *If a state's ideal point shifts away from the systemic status quo along any dimension, its level of activity will increase.*

This is a straightforward inference: Imagine that a state is interested in the distribution of guns and the distribution of butter, and that in both spheres it has somewhat less of each good than it would prefer. If that state's constituency begins to demand an even greater quantity of either guns or butter, the result will be an increase in activity designed to improve its standing. Similarly, a shift in the state's ideal point *toward* the status quo would result in a decrease in its level of activity, as the perceived need for action to redress the status quo will decrease.

H_{A2}: *If the status quo of a given systemic distribution shifts away from a state's ideal point, its level of activity will increase.*

Either a decrease in a state's share of guns or a decrease in its share of butter will result in an increased in activity designed to offset the loss. Similarly, an increase in the state's share would result in a decrease in activity, again because the perceived need for action to redress the status quo will decrease.

H_{A3}: *If a state's worldview changes to emphasize one dimension and de-emphasize another, its level of activity will increase if the status quo is farther from its ideal point in the newly emphasized sphere than it was in the de-emphasized one.*

In this case, imagine that a state that is mostly interested in guns suddenly develops a much more intense interest in butter. Its level of activity would increase if it is initially farther from its ideal point in butter than in guns, because its change in worldview makes it more disadvantaged in the area that it cares more about. The converse is also true: if the state's ideal point is initially closer to the status quo in the newly-emphasized sphere than it was in the previously-emphasized sphere, the change will leave it more satisfied and therefore less in need of activity to redress the status quo.

Structural Hypotheses

H_{St1}: *An increase in a state's level of activity will improve its positions*[86] *along whatever dimensions interest it.*

It seems almost trivial to emphasize it, but action produces results: an increase in activity aimed at procuring guns should improve the state's standing in the global distribution of guns.

H_{St2}: *A change in a state's worldview to increase its emphasis on one good will improve its position in newly-emphasized dimensions and worsen its position in newly-deemphasized ones, as long as other states are even minimally interested in the latter.*

Here, an increase in a state's interest in butter will mean that a greater fraction of its activity will be devoted to procuring butter, and therefore, that it will improve its overall position in the international distribution of butter and worsen its overall position in the international distribution of guns. The caveat is that, if no other states are even remotely interested in guns, no one will push for change in the distribution of guns, and the state's share should remain constant.

H_{St3}: *A change in a state's ideal point away from the status quo along a given dimension will result in a shift in the status quo in the same direction.*

This result is derived directly from the model and comports with the logic of bargaining: If one state prefers x, the other prefers y, and the result of their negotiation is a bargain struck at $\frac{x+y}{2}$, changing either x or y will change the resulting bargain.

H_{St4}: *A decrease in a state's latent capabilities will worsen its position in any sphere in which another state is even minimally interested.*

Again, this point is straightforward: When the resources needed to maintain the systemic distribution of goods are diminished, the state's ability to defend those resources decreases, and so does its share.

[86] By "improving the state's position" I mean moving the status quo toward its ideal point, when joint gains can be realized, or increasing its share of the systemic distribution of goods, when they cannot.

Systemic Hypotheses

Systemic hypotheses are, by their nature, more convoluted and therefore more difficult to discuss. In order to convey their essence more effectively, I adopt some new terminology with very specific meanings. In a sphere in which joint gains are possible, a **sympathetic state** is a state whose ideal point lies on the same side of the status quo as one's own; therefore, in the area bounded by the sympathetic state's ideal point and the status quo point, joint gains are possible. An **antagonistic state** is a state whose ideal point lies on the other side of the status quo from one's own. In a sphere in which joint gains are not possible, all states are antagonistic states.

It should be emphasized that these terms have *nothing to do* with the level of amity or hostility that characterizes the relationship between the states.

H_{Sys1}: *A decrease in a state's latent capabilities will result in a worsening of its position in all spheres that interest it and a corresponding increase in its level of activity.*

This conclusion follows from H_{St4} and H_{A2}, with the caveats noted there. It is explored in more depth below.

H_{Sys2}: *A decrease in a state's latent capabilities will result in a "joint loss" on the part of sympathetic states and a net gain on the part of antagonistic states. Sympathetic states will therefore increase their levels of activity; antagonistic states will decrease it.*

This conclusion also follows from H_{St4} and H_{A2}. To illustrate: Imagine that states i, j, and k are all interested in both guns and butter, but in the case of guns the issue is how they are distributed whereas in the case of butter the issue is how much is produced—i wants 10 million tons a year, j wants 20 million, and k wants 70 million. As a result, 33 million tons are produced. If i is abruptly weakened, the expectation is that the equilibrium quantity produced would increase, to (say) 40 million tons per year. This constitutes a joint loss for i and j, who find the resulting status quo to be farther from their ideal points than before, and a gain for k. As a result, both i and j feel the need to increase their activity in an attempt to alter the new status quo, but k is less compelled to act and therefore decreases its level of activity. In the guns sphere, however, the world is zero-sum—i's loss is inherently j's and k's gain—so j and k both act like net gainers by decreasing their levels of activity.

H_{Sys3}: *A shift in a state's worldview that produces greater systemic homogeneity will produce increased levels of activity on the part of other states, with the exception of sympathetic states in the newly emphasized sphere and antagonistic states in the de-emphasized sphere.*

A shift in a state's emphasis toward butter and away from guns implies that more of its activity is devoted to obtaining butter and less is devoted to obtaining guns. It will therefore improve its position in the former and

worsen it in the latter (H_{St2}). Sympathetic states in the butter sphere and antagonistic states in the guns sphere will gain and will therefore see less reason to push toward their goals; other states will lose and will therefore see more reason to do so (H_{A2}).

H_{Sys4}: *When joint gains are not possible, heterogeneous systems will experience lower levels of activity and more lopsided distributions of goods, ceteris paribus, than homogeneous systems.*

This is really a special case of H_{Sys4}. If one state's worldview heavily emphasizes guns and another's emphasizes butter, the first state will end up with most of the guns and the second will end up with most of the butter (H_{St2}). Both will be largely satisfied and, seeing little reason to try to change the status quo, will engage in relatively little activity (H_{A2}).

H_{Sys5}: *A shift in a state's ideal point away from the status quo along a given dimension will produce a shift in the status quo toward the new ideal point, which in turn will produce an increase in the levels of activity of antagonistic states and a decrease in the levels of activity of sympathetic states.*

This result follows from four of the above hypotheses. In this scenario the state will increase its level of activity (H_{A1}), thereby shifting the status quo toward its ideal point (H_{Str1}). Independent of its increase in activity, the change in its bargaining position will produce a change in the status quo toward its ideal point (H_{Str3}). The result will be an increase in the activity of antagonistic states and a decrease in the activity of sympathetic ones (H_{A2}).

In the next section, simulations are utilized both to illustrate how these hypotheses might play out in practice and how the logic of the model speaks to the predictions of existing theories of international politics.

Simulated Worlds

The model elaborated above is useful in two ways. First, it is broad and flexible enough that many other theories of international politics can be thought of as special cases of this one: realism, for example, posits a worldview focused exclusively on relative power (although different realisms disagree on how much power is optimal). We can therefore use the model to derive and compare the implications of different theories. Second, to the extent that the model's predictions are borne out by the historical record, the model will do what theories are supposed to do—provide us with a simplified but accurate "roadmap" to explain the interactions of the Great Powers. The latter part of this study is ongoing at this point, so the focus here will be on the first of these two applications.

Offensive vs. Defensive Realism and the Balance of Power

Offensive realists argue that states seek hegemony at every opportunity; their ideal state of the world is one in which they achieve hegemony, a condition in which no other single state can seriously mount a military challenge against them. In short, states seek to maximize security by maximizing power. Defensive realists, on the other hand, recognize the danger of security spirals and therefore argue that states seek to maximize security by achieving an optimal level of power, one that ensures their safety without threatening their neighbors.

What is at stake in this argument? If we were able to "re-run" the world under both offensive and defensive realist assumptions, how would the differences in states' aspirations alter outcomes within the system? Is hegemony more or less likely in one kind of system than in another? What level of realized capabilities must a state achieve in order to maintain a hegemonic position over time in each system?

We can determine the answers to all of these questions by establishing an artificial system of Great Powers—three, for the sake of illustration, but as long as there are more than two the number doesn't matter—that are roughly equal in capabilities and have similar domestic politics and *realpolitik* worldviews.[87] We can then determine, via simulation, how they would behave under offensive-realist assumptions and compare those results to those of a different simulation in which they behave according to defensive-realist assumptions. By altering the states' ideal points in terms of military capabilities, we can determine what difference the power-maximizer vs. power-satisficer debate really makes.

We can get some very interesting results out of what seem like a fairly spare

[87] To be specific, the system of equations is

$$
\begin{aligned}
\dot{a}_i &= \omega_{ir}[\nu_i(c_{ir}) - s_{ir}]^2 - a_i \\
\dot{a}_j &= \omega_{jr}[\nu_j(c_{jr}) - s_{jr}]^2 - a_j \\
\dot{a}_k &= \omega_{kr}[\nu_k(c_{kr}) - s_{kr}]^2 - a_k \\
\dot{s}_{ir} &= \pi_i\omega_{ir}a_i[\nu_i(c_{ir}) - s_{ir}) - \frac{s_{ir}}{s_{ir}+s_{kr}}\pi_j\omega_{jr}a_j[\nu_j(c_{jr}) - s_{jr}] - \frac{s_{ir}}{s_{ir}+s_{jr}}\pi_k\omega_{kr}a_k[\nu_k(c_{kr}) - s_{kr}] \\
\dot{s}_{jr} &= \pi_j\omega_{jr}a_j[\nu_j(c_{jr}) - s_{jr}] - \frac{s_{jr}}{s_{jr}+s_{kr}}\pi_i\omega_{ir}a_i[\nu_i(c_{ir}) - s_{ir}] - \frac{s_{jr}}{s_{ir}+s_{jr}}\pi_k\omega_{kr}a_k[\nu_k(c_{kr}) - s_{kr}] \\
\dot{s}_{kr} &= \pi_k\omega_{kr}a_k[\nu_k(c_{kr}) - s_{kr}] - \frac{s_{kr}}{s_{jr}+s_{kr}}\pi_i\omega_{ir}a_i[\nu_i(c_{ir}) - s_{ir}] - \frac{s_{kr}}{s_{ir}+s_{kr}}\pi_j\omega_{jr}a_j[\nu_j(c_{jr}) - s_{jr}]
\end{aligned}
$$

The assumptions derived from offensive realism are that all worldviews focus exclusively on the *realpolitik* sphere ($\omega_{nr} = 1$, for $n = \{i, j, k\}$) and all states seek to dominate the system ($\nu_n(c_{nr}) = 1$). I also assume that, when seeking to enhance their own security, states seek to undermine the security of other states in direct proportion to those states' current share of realized capabilities; hence $\frac{s_{ir}}{s_{ir}+s_{kr}}\pi_j$ and similar weights, as discussed in the previous section. This is not an overt assumption of either variant of realism, but it is consistent with both: powerful states, *ceteris paribus*, constitute more of a threat, so one should seek to undermine them to a greater degree. I should emphasize that this assumption is *not* critical to the results; in fact, dropping it makes no difference at all. It merely adds some strategic sophistication to the *realpolitik* variant of the theory in an attempt to be fair to its proponents. Finally, to simulate a world in which latent capabilities are roughly equal, π_n is set to 0.33 for all actors.

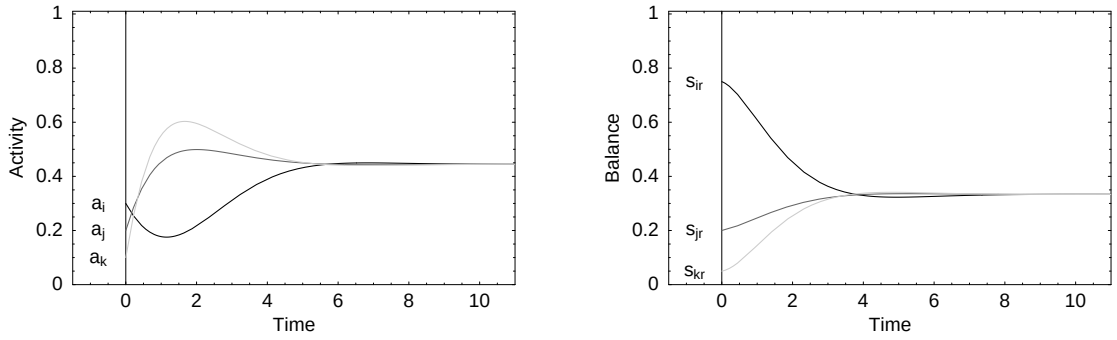

Figure 1: Levels of activity and distribution of capabilities under offensive-realist assumptions.

set of assumptions. If we start with the kind of system described by offensive realists, we find that the initial distribution of realized capabilities doesn't matter in the least to the outcome: in equilibrium, the realized capabilities of all actors will be the same. *No* initial level of realized capabilities will ever suffice to ensure hegemony. In the terms in which I have defined it here, a balance of power will result, regardless of how unequal the actors' capabilities might be to begin with. This explains the curious paradox of offensive realism: although all states seek hegemony, few if any ever achieve it (Mearsheimer 2001, 40-41).

In fact, it is precisely *because* all states seek hegemony that none manages to achieve it. An example of how this outcome occurs is provided in Figure 1. The illustration involves three actors, called i, j, and k, though the result holds for any number of actors. The symbols a_i–a_k refer to the level of activity of each of these actors, while s_{ir}–s_{kr} refer to the share of realized capabilities in the possession of each actor as a fraction of all of the resources in the system.

At the beginning of the simulation, all of the actors are fairly inactive. As far as the distribution of realized capabilities is concerned, i has the lion's share (70%), while j and k are in relatively bad shape (25% and 5%, respectively). Because their shares of latent power are equal, it would be reasonable to say that i is overextended: its share of realized capabilities well exceeds its share of latent capabilities. The question of how these states arrived at this initial point, while a reasonable one to consider if these numbers were to appear in reality, is rather beside the point here: the goal is to demonstrate that even if the numbers stray to ridiculous extremes, the workings of the nested politics model will push them back toward a balanced equilibrium state.

Initially, the citizens of j and k, which are most severely disadvantaged by the initial distribution of power, increase their demands for activity dramatically, and their leaders comply. i, quite satisfied, first decreases but then increases its level of activity once j and k begin to swing the balance in their direction. Because i is *more* satisfied than j and k, however, its level of activity does not increase as quickly as does theirs, and they focus most of their attention on

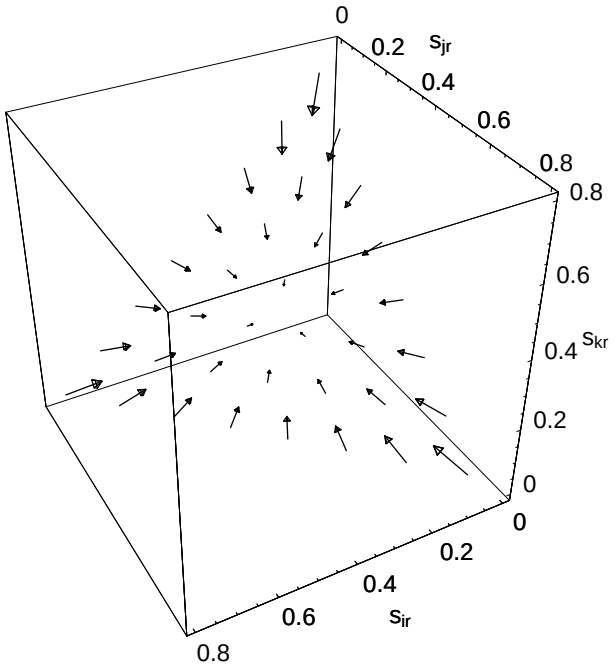

Figure 2: A phase portrait of s_{ir}, s_{jr}, and s_{kr}, demonstrating that a balance of power will eventually be reached regardless of the initial distribution of realized capabilities.

working to undermine i's position.

These facts prove to be i's undoing. Because j and k push harder to increase their share of realized capabilities than i does, their shares increase, mostly at i's expense: i's share of realized capabilities plummets quite abruptly, j's picks up a bit, and k's jumps up almost as abruptly as i's drops.

The end result of all of this jockeying is an *equilibrium condition* (that is, a condition in which no variable changes from one time period to the next, or a flat line on the graph) that can be characterized as a perfect balance of power: the states' realized capabilities are perfectly equal. None of the states manages to achieve hegemony over the rest, not even i—though it had by far the best running start. This result occurs because the demands of the citizenry for security were significantly greater in j and k than they were in i. As a result, even though i worked hard to maintain its position, j and k worked even harder to undermine it. In the end, the citizens' demands for security evened out only when a balance of power was achieved.

The situation depicted in Figure 1 is no fluke: the strong tendency of the system will be toward a balance of power, regardless of the initial distribution or of perturbations that occur along the way.[88] Figure 2 is a *phase portrait,* a useful

[88]This is obviously not true for sufficiently large perturbations—say, some process that

tool for understanding the behavior of dynamic systems like this one. The field of arrows indicates how both variables will change from a given starting point: the arrowhead and the angle of the arrow indicate the direction of motion, and the length of the arrow indicates speed. The arrows get shorter as the system approaches equilibrium. The phase portrait demonstrates that, regardless of the starting point, the system converges to a balance of power. In this case, as in Figure 1, each state retains one-third of the system's resources in equilibrium.[89]

In other words, as Herbert Butterfield eloquently put it,

> the whole order in Europe was a kind of terrestrial counterpart of the Newtonian system of astronomy. All the various bodies, the greater and lesser powers, were poised against one another, each exerting a kind of gravitational pull on all the rest—and the pull of each would be proportionate to its mass.... When one of these bodies increased in mass, therefore—when, for some reason, France for example had an undue accession of strength—the rest could recover an equilibrium only by regrouping themselves, like sets of ballet dancers, making a necessary rectification in the distances, and producing new combinations. (Butterfield 1966, 132)

The existence of a balance of power does not mean, however, that the states settled down into a benign state of indifference toward one another—far from it. Their levels of activity are high, indicating that the constituency in each state is greatly dissatisfied with the status quo and is pressing the leadership to do something about it. This is likely to be a world in which alliances are made regularly, crises are initiated, wars are launched, and so on, all in the hopes of altering the balance of power. Those hopes, ultimately, will be in vain, as any perturbation in the balance will be remedied by the actions of the states most disadvantaged by it.

What happens if we create a defensive-realist world instead? The result is far less cutthroat security competition—in equilibrium, states are far less active than they are under offensive-realist assumptions—but one in which a balance of power still comes about regardless of the initial distribution of realized capabilities.

Figure 3 illustrates this process. Here, I have changed only the assumption that describes how much power each state's constituency wants.[90] Under offensive realist assumptions, more is always better. Here, each state would be happiest with half of the power in the system: less would compromise security, and more would constitute an unacceptable threat to the other states.

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allots a random percentage of the observed capabilities to one of the actors at the beginning of each period—but no theory is robust to perturbations of that magnitude.

[89]The vector field is a plane because the various s_{nr} sum to unity. In order to create a graph like this, one must make assumptions about the values of the other variables. Here, the values from Figure 1 are used. Assuming different values does not alter the equilibrium values, which are unique, at least on the (0,1) interval; it merely makes the illustration more difficult to interpret.

[90]That is, the model is precisely the same as the one presented in Footnote 87, save that $\nu_n(c_{nr}) = 0.5$, rather than 1, for $n = \{i, j, k\}$.

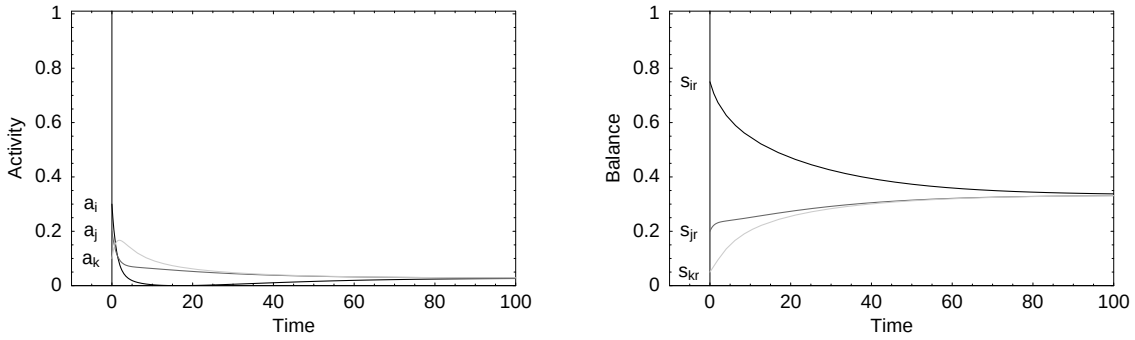

Figure 3: Levels of activity and distribution of capabilities under defensive-realist assumptions.

As we can see, the activity levels of the states are quite different than they are in Figure 1—all three states are so nearly satisfied that they engage in little security-related activity. In the end, all three states settle on a fairly low level of activity, resulting from the fact that their citizens are only modestly dissatisfied with the status quo. Wars may still occur, of course, but this world should not be the bloodthirsty "war of all against all" that the offensive realists envision.

Interestingly, however, the two worlds are the same in one critical respect: a balance of power results, and it results in almost precisely the same way. It takes considerably longer to come about, a reflection of the decreased intensity of the citizens' demands, but it comes about all the same. This result, like the previous one, occurs regardless of the initial distribution of capabilities; a phase portrait (omitted) shows much the same pattern as Figure 2. In short, in a realist world, whether offensive or defensive, "balances of power recurrently form" (Waltz 1979, 124).

Balance of Power: Two Additional Assumptions

The results relating realist theories to a balance of power all incorporated two premises: that the degree of "offensiveness" or "defensiveness" is the same for all states, and that the latent capabilities of the Great Powers in the system are more or less equal. Absent these two assumptions, it becomes clear that the balance-of-power result, which has been strikingly robust so far, disintegrates.

We can see how this takes place in Figure 4. This graph depicts a situation precisely the same as that depicted in Figure 1, the only exception being that the states' ideal points have been allowed to vary: i is an offensive-realist state that seeks universal domination, k is a defensive-realist state that seeks only a fraction of the power in the system, and j is somewhere between the two.[91]

[91]To be precise, $\nu_n(c_{nr})$ is set in such a way that i desires the entire system, j would be happiest with 70% of it, and k would be happiest with 40%.

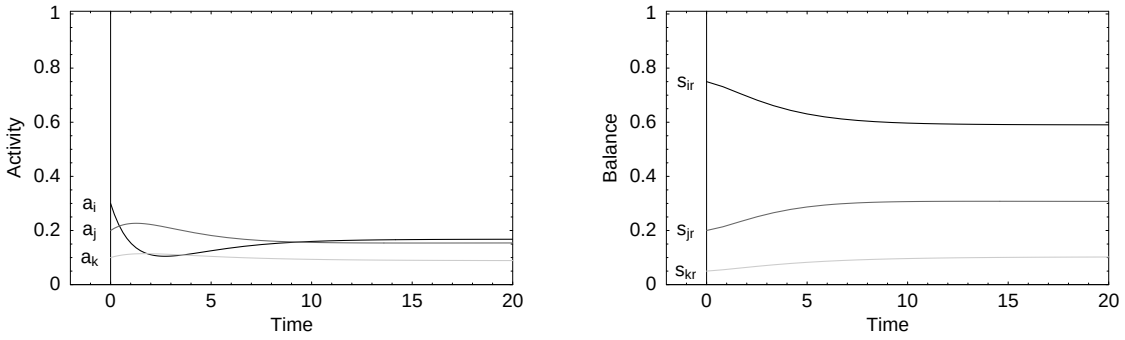

Figure 4: Levels of activity and distribution of capabilities, same latent capabilities, different ideal points.

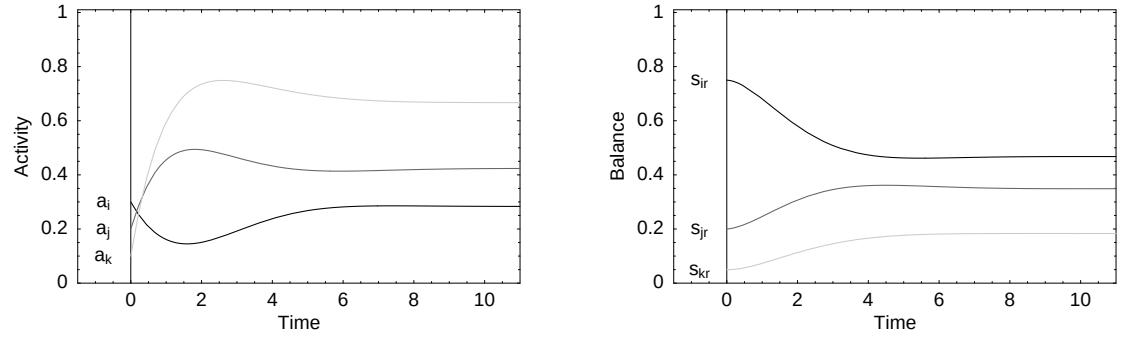

Figure 5: Levels of activity and distribution of capabilities under offensive-realist assumptions, with variation in latent capabilities.

As one might anticipate, their shares of the system in equilibrium reflect their desires: offensive-realist states end up with bigger slices of the pie.

What this means is that Waltz's assumption that states can seek anything from self-preservation to world domination does *not* ensure that a balance of power will result from their interaction. It must also be the case that the states in question at any given point in time *seek the same thing.* All may seek self-preservation, and a balance will result; all may seek world domination, and a balance will result; but if some seek one and some seek the other, all bets are off.[92]

Similarly, Figure 5 reflects a situation that is precisely the same as the offensive-realist world depicted in Figure 1, save that the latent capabilities

[92]Technically, one class of situations constitute an exception to this generalization: if weaker states are highly ambitious (that is, are more offensive-realist in their outlooks) and stronger states are less ambitious, the two factors could cancel one another out exactly and produce a balance of power.

of the actors have been allowed to vary. To be specific, unlike the previous three-way split, i has 60% of the latent power resources in the system, j has 30%, and k has 10%. The result in equilibrium is far from a balance of power. As the graph suggests, i is able to garner enough power to secure for itself a place as systemic hegemon: j and k together cannot match its realized capabilities. Their predilection for sapping i's resources when possible rather than one another's ensures that i's realized capabilities don't quite match its latent capabilities, but nevertheless latent power plays a critical role in determining realized power.

What this means is that it is difficult to understand how, in a world in which the main theoretical assumptions of offensive realism are accurate, states with very large amounts of latent power could fail to possess correspondingly large amounts of realized power. Latent power should be translated into realized power, period—but as realists themselves admit, it often is not. To take a single example, Mearsheimer (2001, 71) calculates that the United Kingdom possessed 70% of the total latent power resources of Europe in 1850. A purely realist version of this model would predict that the British share of Europe's military might should have reached roughly 63%, but as Mearsheimer himself admits, it clearly came nowhere near doing so.[93]

A Balance of Power Does Not Imply Realism

At first blush this statement may seem to be obviously true: pointing out that realism implies a balance of power, observing a balance of power, and concluding that realism provides an accurate description of politics is a classic example of the fallacy of affirming the consequent. This fallacy takes the form "If A then B; B; therefore A." Any number of simple examples illustrate the problem: if a 747 is a bird (A) then it will fly (B); it flies (B); therefore it is a bird (A). The conclusion in an argument of this form simply does not follow from the premises and the evidence.

Still, this particular fallacy is problematic only to the extent that other causes could bring about the effect in question. If, for example, birds were the only things in the universe that could fly, then flight would be an accurate indicator of birdhood. It is therefore incumbent upon the critic to demonstrate

[93]Mearsheimer's realist explanation for Britain's unexpectedly low levels of military might throughout the mid-1800s is based on two factors: diminishing marginal returns to military expenditures and the "stopping power of water"—the efficacy of the sea as a barrier to combat. The former explanation is hardly consistent with the assertion (p. 34) that "[e]ven when a great power achieves a distinct military advantage over its rivals, it continues looking for chances to gain more power. The pursuit of power stops only when hegemony is achieved." The latter is logically precarious in two ways. First, if a state seeks the ability to dominate others and needs to project power in order to do so—witness, e.g., the Crimean War—, why wouldn't a sea barrier create an incentive to build even *greater* military forces needed to overcome it? Second, it is not even clear that the sea serves as an effective barrier: as the modern shipping industry has demonstrated, large bodies of water can function as exceptionally cost-effective conveyer belts. Why they would hinder rather than help a state's war efforts is unclear. Certainly, to take but a single example, General MacArthur took tremendous advantage of the mobility afforded to him by the sea in the famous Inchon invasion of September 1950.

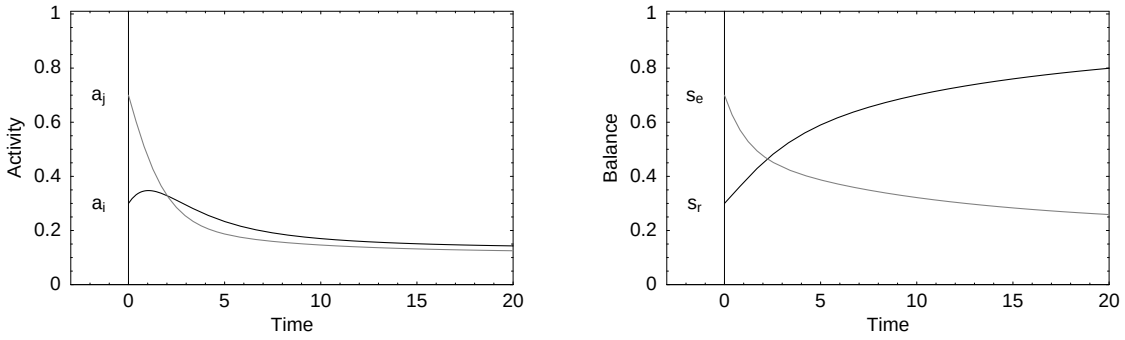

Figure 6: A two-state, two-sphere world, different worldviews

that the effect in question could be produced by other causes—that is, that the balance of power is plausibly the result of the interactions of states that do not behave according to realist assumptions. In this section and the next, I will describe two such scenarios.

First of all, one of the more interesting results to come out of the model is the fact that balances of power should occur in a world of Great Powers[94] whenever two conditions are met: all states' constituencies are at least slightly interested in relative capabilities, no matter how slight that interest may be; and the extent to which states' constituencies emphasize relative capabilities is equal across states. (The latter assumption is met when a system is, in Aron's terms, "homogeneous," though this is a special case: the assumption is met whenever emphasis on relative capabilities is equal across states, regardless of those states' other values.) These points, taken together, imply that a balance of power can occur even in a world in which all of the states in the system are *almost entirely disinterested* in maintaining it.

To illustrate this process, I have simulated two different worlds and illustrated the outcome of each in Figures 6 and 7. They are the same in many regards: each contains (for the sake of simplicity) two major states; those states are roughly equal in terms of latent capabilities; the constituencies of those states have worldviews that emphasize two spheres—the *realpolitik* sphere of relative military capabilities and an economic sphere of wealth and trade; and the constituencies' ideal points are diametrically opposed along both of those dimensions (both, say, want military hegemony and exclusive access to third-party markets).[95] The only difference between the two is the weight that the

[94] Assuming, again, rough equality of latent capabilities.

[95] The relevant equations are

$$\begin{aligned}
\dot{a}_i &= \omega_{ie}[\nu_i(c_{ie}) - s_e]^2 + \omega_{ir}[\nu_i(c_{ir}) - s_r]^2 - a_i \\
\dot{a}_j &= \omega_{je}[\nu_j(c_{je}) - s_e]^2 + \omega_{jr}[\nu_j(c_{jr}) - s_r]^2 - a_j \\
\dot{s}_e &= \pi_i\omega_{ie}a_i[\nu_i(c_{ie}) - s_e] - \pi_j\omega_{je}a_j[\nu_j(c_{je}) - s_e] \\
\dot{s}_r &= \pi_i\omega_{ir}a_i[\nu_i(c_{ir}) - s_r] - \pi_j\omega_{jr}a_j[\nu_j(c_{jr}) - s_r]
\end{aligned}$$

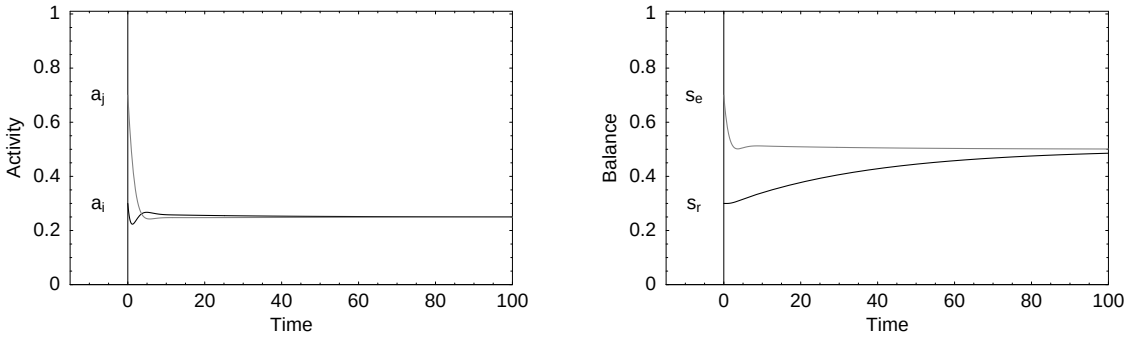

Figure 7: A two-state, two-sphere world, similar worldviews

citizens of the two countries give to each sphere.

In Figure 6, i is a classic *realpolitik* state that nevertheless devotes 20% of its activity to economic matters, and j is what Richard Rosecrance (1986) calls a "trading state," one that almost exclusively emphasizes economics rather than *realpolitik* concerns in its foreign policy (in this case, j devotes only 10% of its activity to matters of defense).[96] As one might expect, the *realpolitik* sphere shifts in i's favor and the economic sphere shifts in j's favor at the onset; in equilibrium, each state dominates the sphere that it considers to be most important.

In Figure 7, by contrast, both i and j are trading states; they spend the vast majority of their time competing over markets, and each devotes only 10% of its time and energy to matters relating to defense.[97] As we can see, the economic sphere polarizes rather quickly, and the result is an even division of available markets. The more unexpected result is that the *realpolitik* sphere, too, polarizes, though it does so more slowly because the states are expending less effort in altering it. In equilibrium, the *realpolitik* sphere, too, is evenly split.

In the end, two trading states have achieved a balance of power despite having had virtually no interest in doing so, simply because the amount of attention that they devote to accruing realized capabilities is the same.[98]

Another way in which states can achieve a balance of power is via socialization. If two states' worldviews converge over time, the result will be an equal emphasis on capabilities, similar ideal points, and therefore a balance of power.

, where s_r and s_e represent the *realpolitik* and economic spheres, respectively. The system is one in which joint gains are impossible, but because there are only two actors the system equations can without loss of generality be represented as two single dimensions with ideal points at either end. In this case i's ideal point is set to 1 and j's to 0. Again, latent capabilities are assumed to be equal.

[96] $\omega_{ir} = 0.8$, $\omega_{ie} = 0.2$, $\omega_{jr} = 0.1$, $\omega_{ir} = 0.9$.

[97] $\omega_{ir} = \omega_{jr} = 0.1$; $\omega_{ie} = \omega_{je} = 0.9$.

[98] As the previous discussion suggests, the fact that their latent capabilities are equal is relevant as well.

The next section examines this possibility.

Constructivism and the Balance of Power

Another way in which a balance of power might arise is via the international socialization effects posited by constructivist scholars of international relations. Wendt (1999, 170), for example, points to socialization as the process by which identities and interests are formed; Klotz (1995), who highlights the role of international norms in the definition of American interests in South Africa, notes that "[c]onstructivist theory... claims that agents and structures reconstitute each other in an iterative process" (478). What this implies, in terms of the nested politics model, is that the worldviews of states converge over time. The dynamic model described herein provides the perfect opportunity to flesh out the implications of such a process. One of them, surprisingly, is a balance of power.

The constructivist claim about socialization leads to two claims about what I have called a state's worldview. The first claim is that, over time, state interaction leads states to emphasize the same dimensions of the international system to the same degree.[99] The second claim is that ideal points along those dimensions will converge over time. If both of these processes actually occur, as long as any single Great Power cares at all about military competition at the onset of the process, the result should be an equal distribution of realized capabilities.

I have illustrated this process in Figure 8. The world depicted in this graph is precisely the same as the one on the left-hand side of Figure 6, with one exception: at time 12, a process of socialization begins in which the emphases that the two states place on the different dimensions of the system start to

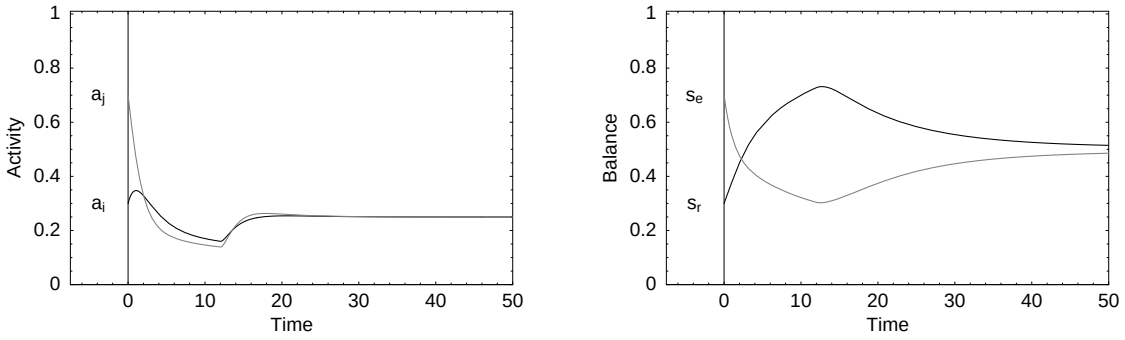

Figure 8: Constructing a balance of power

change. Over time, each state's worldview becomes more like the other's.[100]

As the states' worldviews change, their constituencies come to emphasize the same desiderata in the demands that they place on the leadership. The leadership, in turn, complies by increasing its level of activity and changing the thrust of its policies to capture more of its constituency's newly-relevant resources.

[99] Wendt (1999, 324-335). In fact, such a process is posited by Waltz as well, but not as a result of mere socialization: "Competition produces a tendency toward the sameness of the competitors" (1979, 127).

[100] I model the constructivist notion that the international system socializes its actors by starting with the equations from Footnote 95 and making worldviews into state variables rather than parameters and having them converge over time, in the following manner:

$$\begin{aligned}
\dot{\omega}_{ie} &= \frac{\omega_{ie} + \omega_{je}}{2} - \omega_{ie} \\
\dot{\omega}_{je} &= \frac{\omega_{ie} + \omega_{je}}{2} - \omega_{je} \\
\dot{\omega}_{ir} &= \frac{\omega_{ir} + \omega_{jr}}{2} - \omega_{ir} \\
\dot{\omega}_{jr} &= \frac{\omega_{ir} + \omega_{jr}}{2} - \omega_{jr}
\end{aligned}$$

These equations produce path-dependent equilibria that can only be expressed in terms of the values of the variables at time 0:

$$\begin{aligned}
\omega^*_{ie} = \omega^*_{je} &= \frac{\omega_{ie(0)} + \omega_{je(0)}}{2} \\
\omega^*_{ir} = \omega^*_{jr} &= \frac{\omega_{ir(0)} + \omega_{jr(0)}}{2}
\end{aligned}$$

The process of socialization seems quite abrupt—the distributions of power and markets shift dramatically once socialization has begun. By time 17, i's and j's worldviews have converged, and by time 25 they have achieved perfect balance in both the economic and *realpolitik* spheres. The results were produced by a model that assumes fairly intense socialization processes. The degree of intensity could be modified, but this is merely an illustration, and the time units are arbitrary in any event.

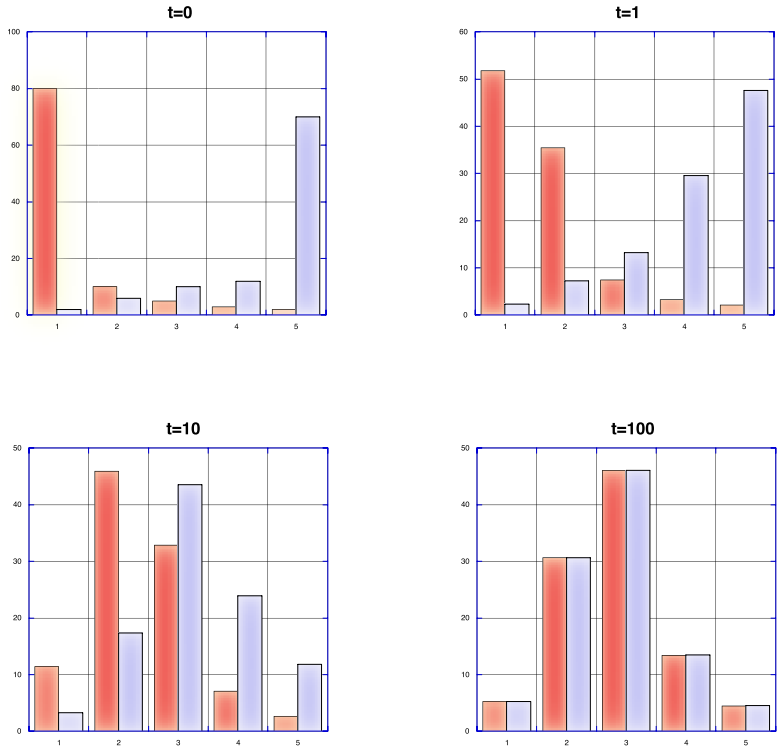

Figure 9: Simulated Markov process describing effects of socialization on distributions of ideal points for constituencies in two states i and j

It could also be argued that the effects of socialization will also change the ideal points of the states' constituencies. If we relax the assumption that c_{nm} is constant across states but retain the assumption of a constant preference aggregation function $\nu_n(\cdot)$, it is fairly straightforward to specify a Markov process that describes transitions from one preference "state" to another in such a way that the various c_n converge to a common frequency distribution in precisely the same manner that the ω_n converge to a common scalar in the equations above. To see this point, imagine five preference states, each corresponding to possession of an ideal point in a given fifth of the unit interval. Specify that citizens of n compare the relative frequencies of their own state and adjacent states across countries. (Denote the frequency of state p in country n as f_{cnp} and the frequency of adjacent states as f_{cnq}.) Citizens of n are socialized when they are drawn away from their existing states and toward adjacent preference states that are more popular in other states than they are in n. A reasonable transition rule for two states i and j would then be:

$$\dot{f}_{cip} = \sum_{q}(1 - \frac{f_{cip}}{f_{cjp}}) - (1 - \frac{f_{ciq}}{f_{cjq}}) \quad (11)$$

Under those circumstances, as Figure 9 illustrates, the frequency distributions c_{nm} of the various actors also converge.

If (as one might reasonably argue) socialization implies homogeneity of both of these elements of states' worldviews in the long run, little will remain to differentiate them save their latent material capabilities. Under those circumstances, as Figures 1 and 5 demonstrate, increasing homogeneity of latent capabilities implies increasing balance of realized capabilities—that is, a balance of power. Among Great Powers, who by virtue of their status as Great Powers possess latent capabilities far closer to one another's than to those of other states, the result will be a tendency toward balance.

In short, the socialization process posited by constructivists should produce homogeneity of worldviews, which is likely to produce at least an approximate balance of power among Great Powers.

A State's Internal Characteristics Contribute To, But Do Not Determine, Its Level of Activity

Another interesting point to come out of this explanation is that we cannot know, *a priori,* whether a state will be internationalist or isolationist based only on an understanding of its internal characteristics. We must understand the rest of the states in the system before we can make any kind of prediction. Without that information, we have no idea how compatible or conflictual the state's goals are with those of other states or what its capabilities are relative to theirs, and those factors are critical determinants of how much effort it will have to exert to compete with them for resources.

To illustrate this point, we need only compare the left-hand graphs of Figures 1 and 5. These two graphs could reflect what happens when state k's latent capabilities, in absolute terms, are held constant but the latent capabilities of i and j are allowed to vary substantially. The level of k's activity depends, not on its own capabilities in isolation, but on its capabilities relative to those of the others. The same point could obviously be made with regard to the other parameters in the model.

The nested politics model emphasizes the fact that a knowledge of the interests and capabilities of *all* of the relevant actors within a system, not just those of a single actor, are crucial to any explanation of any single state's level of involvement in the system. Understanding the debates that have taken place from time to time about America's role in the world, therefore, requires an understanding both of America and of the world. Despite the straightforward nature of the story, this idea runs contrary to a wide range of scholarship on the sources of internationalism and isolationism.[101]

[101] Such diverse scholars as Lenin (1939), Williams (1972), Cohen (1987), and Snyder (1991)

Increases (Decreases) in Power Cannot Explain Increases (Decreases) in Activity

For the reasons discussed in the previous section, the effects of a change in one of a state's characteristics on its level of activity are for the most part hard to predict. A shift toward a more ideological worldview could result in an increase or decrease in a state's level of activity, depending on the worldviews of the rest of the states in the system. This basic interdependence is one of the most basic lessons of systems theory: simply put, everything depends on everything else.

Surprisingly enough, that lesson does *not* apply to the one characteristic emphasized most often by systemic theorists: power. Holding all other characteristics constant, increases in a state's latent power will lead to decreases in its level of activity, and decreases in a state's latent power will lead to increases in its level of activity. Period. This result does not depend on the distribution of capabilities in the system, the net capabilities of all of the other states in the system, the worldviews of the actors, or anything else.

The mathematical intuition is straightforward. Return to the simple system of two states and two spheres (*realpolitik* and economic) described in Footnote 95. In equilibrium, i's and j's activities are affected directly by ω, $\nu(c)$, and s. The equilibrium value of s is affected by π, ω, and a. The point here is that changes in equilibrium values of a are unconditionally negatively related to changes in values of π, but that that statement is not true of other parameters.

The point can easily be illustrated graphically. Plotting the partial derivatives—or simply substituting candidate values into the equations—demonstrates that the effect of an increase in π_i is without exception a decrease in a_i, while the effect of an increase in ω_{ie} or ω_{ir} (which, remember, sum to unity, so an increase in one is a decrease in the other) depend on the value of ω_{je} and ω_{jr}. This point is demonstrated in Figure 10. The curved surfaces in the two graphs represent $\frac{\partial a_i}{\partial \pi_i}$ (left) and $\frac{\partial a_i}{\partial \omega_{ir}}$ (right). We can see that an increase in capabilities has a

assert that internationalism is a result of what Doyle (1986) refers to as "metropolitan" forces—internal coalitions that push for greater international involvement, generally to protect their own interests (in the American and British cases, usually investments, or potential investments). In a similar vein, Roeder (1984) and Volgy and Schwartz (1994) point to domestic institutional factors that blunt a state's responsiveness to events in the international system. Nincic (1996) relates isolationism to domestic conditions, such as unemployment and inflation. Wittkopf (1990), Holsti (1979), Hero (1973), Klingberg (1983), McCloskey (1967), and Zaller (1992) suggest that isolationism is plausibly a function of a disparate range of attitudinal dispositions and sociodemographic characteristics.

Nevertheless, the theory is in some ways consistent with existing explanations of isolationism. Often isolationism is portrayed as a form of "alienation" from international politics—a perfectly reasonable description of a state with a worldview that differs radically from those of the other main players. Leon Trotsky's famous statement of his intent, upon taking the office of commisar for foreign affairs of the new Soviet Union, to "issue a few revolutionary declarations to the peoples and then shut up the joint [the Foreign Office]" (Craig and George 1983, 88), reflected the Bolsheviks' alienation from standard European power politics. Waltz (1979, 128) interprets this as a declaration that Russia was simply opting out of the power-politics game. A similar aversion to, even moral distaste for, power politics is a thread that ties together many explanations of American noninvolvement in European affairs (see, e.g., Perkins 1993, 16).

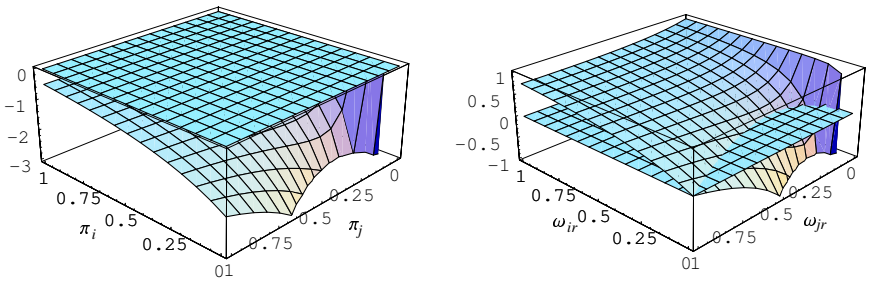

Figure 10: $\frac{\partial a_i}{\partial \pi_i}$ (left) and $\frac{\partial a_i}{\partial \omega_{ir}}$ (right), in relation to zero (horizontal plane).

strictly negative impact on levels of activity by noting that the $\frac{\partial a_i}{\partial \pi_i}$ surface does not break the plane at $\frac{\partial a_i}{\partial \pi_i} = 0$. On the other hand, a change in worldviews may increase or decrease levels of activity: the surface representing $\frac{\partial a_i}{\partial \omega_{ir}}$ is positive at some points and negative at others.[102]

The substantive implication of this apparently arcane mathematical point is that some outcomes—increases in activity as a result of increases in power, or decreases in activity as a result of decreases in power—are logically denied to realists. In the realist variant of the theory, such outcomes make no sense. If they are to be claimed as successes for realism, something must be added to the microfoundations of this theory that explains them; relative capabilities alone cannot.

This result makes arguments like William Wohlforth's (1993) regarding the end of the Cold War difficult to support. Wohlforth argues that the Cold War ended, in part, because the Soviets' perceptions of their relative capabilities declined sharply; states "may have a multitude of reasons to compete, but one necessary condition is their perception that they have the capabilities to do so." (252) The nested politics model suggests that states that fall behind *must* fight harder to keep up. Wohlforth also argues (e.g., 268-272) that, in my terms, a change in fundamental worldviews played a major role in the end of the Cold War and an outcome of that nature *could* follow logically from the basic assumptions of the model, but that does not alter the fact that, all else equal, a decrease in capabilities should lead to an increase, not a decrease, in competitive security activity.

Conclusion

The goal of this paper was to outline a systemic theory of international politics—one that overcomes the inherent difficulty of modeling the behavior of structures and agents and the impact of each on the other. It did so, first, by establishing reciprocal theoretical linkages between agents and structures, and second, by

[102]The surfaces were calculated by setting all variables other than π and ω equal to 1—a convenience that does not alter the substantive result.

codifying those linkages in a dynamic model consisting of a series of differential equations. This relatively spare model of international interactions has provided a surprisingly broad set of analytic insights into state and system behavior. Its conclusions provide support for the structural realist assertion that balances of power recurrently form, and it has demonstrated that that conclusion is remarkably robust both to perturbations and to changes in assumptions about whether states are offensive or defensive realists. It has also demonstrated that balances of power are *not* especially robust to changes in assumptions about the similarity of ideal points and rough equality of latent, or unrealized, power across actors. It has provided a way to evaluate the effects of the international socialization process described by constructivists and has demonstrated that that process, too, should lead to a balance of power—surely a novel claim (and probably one that will be distasteful to many constructivists). Finally, it has provided some insights about the foreign policy behavior of individual states, demonstrating that purely domestic explanations of isolationist or internationalist behavior are inherently incomplete and arguing that the effects of changes in latent capabilities on state behavior are fixed and do not depend on the characteristics of other states. In all, the theoretical implications of the model suggest quite strongly that empirical investigation (now underway) is warranted.

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