

THE PROBLEM OF SCIENTIFIC PROGRESS AND MAJOR SCHOOLS OF THOUGHT IN CONTEMPORARY INTERNATIONAL POLITICS THEORY

HUN JOO PARK*

This article represents a preliminary attempt at evaluating major theories of or approaches to international relations. It bases its assessment of the state of international relations theorizing primarily on Laudan's pragmatic synthesis of competing ways of measuring scientific progress. In so doing, it not only clarifies the key variables of, their causal connections within, and thus the strengths and weaknesses of each of the major theoretical works, but also unravels the central underlying, if not entirely value-free, assumptions of those purported theories.

1. INTRODUCTION

One of the central historical and philosophical problems in assessing scientific progress in the study of international politics is the problem of fact/value distinction. Normative commitments or assumptions are often considered to be the nemesis of scientific rigor in social sciences. Yet, it is impossible to keep values completely out of intellectual endeavor in general and international politics theory in particular.

Nonetheless, the pervasiveness of values in scientific undertaking does not mean that all normative assumptions are of equal value. At a minimum, a distinction must be made between science and ideology. In essence, scientific work with value assumptions is open to self-criticism and revision, as it is constantly confronted with theoretical and empirical challenges from within scientific community, while ideology as a dogma is not. Scientific theory has to demonstrate continuously its problem-solving capacity in competition with rival theories.

This essay adopts such a problem-solving approach to scientific inquiry, and employs Laudan's position on how to assess scientific progress, a pragmatist in the ongoing debate among the competing schools in the philosophy of science.¹ Specifically, this paper utilizes Laudan's pragmatic synthesis of ways of thinking about scientific progress in evaluating classical realist (Morgenthau), structural realist (Waltz), neo-liberal institutionalist (primarily Keohane), structurationist (Wendt and Dessler), world-systems

*Assistant Professor, KDI School of International Policy and Management, Korea.

*This article was written in the spring of 1992 and has collected a lot of dust since then, as the author's research focus shifted to comparative political economy. He hopes that its publication, albeit belated, generates criticisms and suggestions from a wider circle of scholars, and thereby helps to contribute to the intellectual discourse of the discipline.

¹Larry Laudan's *Science and Relativism: Some Key Controversies in the Philosophy of Science*, (Chicago: The University of Chicago Press, 1990) is an excellent dialogue between the 4 rival schools of the philosophy of science: relativist such as Feyerabend and arguably Kuhn; realist such as Popper and Lakatos; positivist such as Carnap; and pragmatist such as Laudan. See also Laudan, *Progress and Its Problems: Toward a Theory of Scientific Growth*, (Berkeley, The University of California Press, 1977), especially Chapters 3 and 4.

(Wallerstein), and cognitive/learning (Haas) theories or approaches to the discipline of international politics. And this paper is designed to be only a *preliminary* effort at that.

2. LAUDAN'S STANDARD OF SCIENTIFIC PROGRESS

Like Kuhn² and Lakatos,³ Laudan views science as entirely a problem-solving activity. Laudan shares with Kuhn and Lakatos, as opposed to classical justificationists, neo-classical justificationists, or dogmatic falsificationists, in positing that scientific progress occurs not by repeated overthrow of theories with the help of empirical data, but by competition between rival theories. *And no falsification takes place before the emergence of a better theory.*

But Laudan sides with Lakatos in rejecting Kuhn's "theoretical monism" in favor of "theoretical pluralism." Laudan allows and argues for the historical importance of the co-existence of competing "paradigms," "research programmes," or more preferably, "research traditions."⁴ Further, in sharp contrast to Kuhn, Laudan suggests that scientific revolutions are neither necessarily progressive nor so revolutionary, and that Kuhn's paradigm or "normal science" is not so normal either.⁵

Lakatos conception of scientific progress or "sophisticated methodological falsificationism" insists that in order for a theory to constitute a "progressive problemshift," it must not only entail all the corroborated content of its predecessor, but also have excess empirical content over its predecessor.⁶ Lakatos also argues that "*two theories can only be in the same research programme if one of the two entails the other.*"⁷ Laudan rejects both of those claims, and agrees with Kuhn in pointing out that Lakatos's requirements for progress are rarely satisfied in the history of science. In fact, "there are usually problem losses as well as problem gains associated with the replacement of any older theory by a newer one."⁸ This essay therefore uses the terms paradigms, research programs, and research traditions interchangeably — without accepting Kuhn's theoretical monism in his use of paradigm and without Lakatos's entailment requirement in his use of research program.

While Laudan maintains that scientific progress is not a result of competition between theory and empirical observation or experiment, he does not ignore empirical data. Yes, science is indeed about problem-solving. Laudan's point here is only that the central purpose of problem-solving approach to science is to produce increasingly *reliable* theories, where the notion of reliability is defined in terms of the capability of

²Thomas S. Kuhn, *The Structure of Scientific Revolutions*, (Chicago: The University of Chicago Press, 1962).

³Imre Lakatos, "Falsification and the Methodology of Scientific Research Programmes," in Imre Lakatos and Alan Musgrave, eds., *Criticism and the Growth of Knowledge*, (Cambridge: Cambridge University Press, 1970).

⁴Laudan, *Progress and Its Problems*, op. cit., pp. 74-75.

⁵Ibid., pp. 134-138.

⁶Lakatos, op. cit., pp. 116-119.

⁷Laudan, *Progress*, op. cit., p. 77. (Emphasis not mine.)

⁸Ibid., pp. 147-150.

theories to stand up to increasingly robust and probative empirical tests.⁹

Hence, Laudan prefers a well-tested theory to an ill-tested one, even if the former is less able than the latter to solve a preferred problem on hand.¹⁰ The rationale is as follows:

If a theory has been well tested, and passes all those tests, then it is an acceptable theory — by which I mean simply a theory likely to stand up well to subsequent tests and applications. And that judgement holds *even if the theory fails to address some of our favorite problems*. By contrast, if a theory appears to solve some of our favorite problems but has thus far not yet passed any demanding tests, then the theory is unacceptable because we have no reason to believe that it will be a useful guide in our future interactions with nature.¹¹

As Laudan stresses, however, the theory of choice should be preferred only to its *known* rivals, and not regarded as superior to all possible contenders.¹² Further, the fact that the theory in question has passed tests more impressively than any of its known rivals does not mean it is the “truth” or “the real world.” After all, we have no way of knowing the truthfulness of scientific theories.

Having summarized Laudan’s view of scientific progress, one caveat is in order. Since Laudan argues that assessment of scientific progress is inherently comparative, the existence of rival *theories* is a prerequisite for Laudan’s standard of progress. Yet, the question of what a theory is is by no means a totally consensual matter in the field of international politics. In fact, to assess properly the extent to which scientific progress has been made by the six major theories and approaches to international politics, a clear conceptualization of what a theory is constitutes more basic and no less important a criterion. I rely on Waltz’s discussion for this.¹³

This paper then necessarily focuses on theoretical assumptions, or “negative heuristic” in Lakatos conception of research program. As is well known, Lakatos’s research program consists of its negative heuristic or “hard core” (a set of underlying assumptions that are central to the research program) and its positive heuristic (a set of suggestions on the auxiliary hypotheses that form a “protective belt” around the core to deal with the anomalies of the research program). In terms of theoretical assumptions, classical realism, structural realism, neo-liberal institutionalism, and structurationism can be categorized under the structural realist research program, within which they are though

⁹Laudan, *Science and Relativism*, op. cit., p. 19. I do not in this paper attempt to test the expectations or hypotheses inferred from all of the six competing schools of thought in international politics theory that are under review here. I subject only those of Waltz’s structural realist theory to some hard tests. I do not apply demanding tests to the other five schools of thought, not only because it is a rather short paper for such an undertaking, but because, as this paper will argue, Waltz’s theory is the only genuine theory of international politics precise enough to make such tests worthwhile.

¹⁰Ibid., pp. 28-29.

¹¹Ibid., p. 30. (Emphasis not mine.)

¹²Ibid., p. 143.

¹³“A theory is a picture, mentally formed, of a bounded realm or domain of activity. A theory is a depiction of the organization of a domain and of the connections among its parts.” It explains laws. Its construction requires simplification, as well as “theoretical notions,” which are concepts or assumptions. And isolation of “a realm is a precondition to developing a theory that will explain what goes on within it.” See Kenneth N. Waltz, *Theory of International Politics*, (Reading: Addison-Wesley, 1979), Chapter 1.

competing schools of thought, whereas the world systems theory and the cognitive/learning approach represent two rival research programs.

3. CLASSICAL REALIST APPROACH

In *Politics Among Nations*, Morgenthau “purports to present a theory of international politics.”¹⁴ He does establish the realm of “politics as an autonomous sphere of action and understanding apart from other spheres, such as economics (understood in terms of interest defined as wealth), ethics, aesthetics, or religion.”¹⁵ But as Waltz argues, Morgenthau’s work remains a classical realist approach to the study of international politics, as it fails to develop further his concept of “autonomy of the political sphere” and apply it to international politics.¹⁶ Morgenthau deals with central concepts and issues, lays down theoretical assumptions or negative heuristic of what he calls “political realism,” but presents no theory of international politics.

Morgenthau focuses on the state as the central, rational actor in international politics. Also central to his analysis is the concept of power in terms of which national interest is defined. According to Morgenthau, international politics “like all politics, is a struggle for power,” and “power is always the immediate aim.”¹⁷ For him, the struggle for power stems from two fundamental sources: the inherent human lust for power, and the security dilemma in the international environment of anarchy.

There is no real way out of the security dilemma, according to Morgenthau. But he argues that the national interest is the principle which can guide foreign policy making in the anarchical international politics. The duty to follow the national interest is an overarching moral principle which overrules all other moral ideals. Put differently, states in their pursuit of national interest are governed by a different morality from the morality of individuals in their personal relationships. Morgenthau posits that all states at a minimum seek survival and at a maximum universal domination.

Morgenthau uses four distinct meanings of the term balance of power in his work: 1) as a policy aimed at a certain state of affairs; 2) as an actual state of affairs; 3) as an approximately equal distribution of power; and 4) as any distribution of power. Clearly, Morgenthau does not view the international environment as a “system” in Waltzian sense. Nor does he have any sense of Waltz’s conception of “structure.” Thus, while balance of power for Waltz is a recurrent system outcome, balance of power for Morgenthau is a rule and a guide to prudent foreign policy making. Morgenthau focuses on the techniques through which states can achieve a balance of power: internal and external means.¹⁸

It is interesting to note however that according to Morgenthau, there is a prerequisite condition before the balance of power can preserve international peace. He argues so because of the three main weaknesses that he identifies of the balance of power: 1) its

¹⁴Hans J. Morgenthau, *Politics Among Nations: The Struggle for Power and Peace*, 3rd ed., (New York: Alfred A. Knopf, 1960), p. 3.

¹⁵Ibid., p. 5.

¹⁶Waltz, “Realist Thought and Neorealist Theory,” *Journal of International Affairs*, (1989), p.26.

¹⁷Morgenthau, *Politics*, op. cit., p. 27.

¹⁸Ibid., Chapter 12. Internal means consist of building up armaments, whereas external means consist of alliances.

uncertainty because no totally reliable way of evaluating, measuring, and comparing power is available; 2) its unreality because nation-states seek to have at least a margin of safety to compensate for the uncertainty by aiming “not at a balance — that is, equality — of power, but at superiority of power in their own behalf;” 3) its inadequacy because “the fuel that keeps the motor of the balance of power moving is the intellectual and moral foundation of Western civilization.”¹⁹

Thus, while Morgenthau stresses that “international politics cannot be reduced to legal rules and institutions,”²⁰ he also argues that in order to maintain international peace, there has to be *first* the international consensus on which the balance of power can be formed. Says Morgenthau:

Before the balance of power could impose its restraints upon the power aspirations of nations through the mechanical interplay of opposing forces, the competing nations had first to restrain themselves by accepting the system of the balance of power as the common framework of their endeavors...It is *this consensus*...that kept in check the limitless desire for power, potentially inherent, as we know, in all imperialisms, and prevented it from becoming a political actuality. Where such a consensus no longer exists or has become weak and in no longer sure of itself,...the balance of power is incapable of fulfilling its functions for international stability and national independence.²¹

In any event, Morgenthau falls short of constructing a theory of international politics. It is Waltz’s structural realism that establishes the autonomy of international politics as a system with a precisely, deductively defined structure.²² Indeed, as it will soon be clear in our discussion of structural realism, classical realism is now defunct and subsumed under structural realism.

4. STRUCTURAL REALIST THEORY

Waltz’s structural theory of international politics demonstrates that causality flows not in one direction, from interacting states to international outcomes produced, but in two directions.²³ Both the level of interacting units and the structural level of international politics are causal forces. But before we discuss Waltz’s theory, let me be first explicit about the underlying assumptions of the theory. It should be noted here at the outset that Waltz emphasizes underlying assumptions, or theories for that matter, are not true or false; instead, they must be judged in terms of their utility in explanatory power.²⁴

Waltz chooses the state as the unit of his analysis for the same reason as micro-economic theorists choose the firm as their unit. International politics is assumed to be a Hobbesian world, in which the state of nature is a state of war. In this “self-help” system, states are all assumed to seek survival at minimum and world domination at maximum by means of internal (increasing military capability) and external (forming

¹⁹Ibid., Chapter 14.

²⁰Ibid., p. 17.

²¹Ibid., pp. 221-222. (My emphasis.)

²²Waltz’s “Realist Thought,” op. cit., is an excellent comparison between realist approach and structural realist theory.

²³Waltz, *Theory*, op. cit.

²⁴Waltz, *Theory*, op. cit., p. 6.

alliances) balancing.²⁵ But unlike classical realism, structural realism views power not as an end in itself but as a useful means. The ultimate concern of states is not for power but for security. More importantly, structural realism uses the concept of power as a defining characteristic of structure.²⁶

Waltz defines the structure as consisting of three components: the ordering principle (anarchy), the functional differentiation of units, and the distribution of capabilities.²⁷ Because of the above-discussed assumptions that states are survival-seeking egoists in the anarchic, self-help system, the functional differentiation of units are insignificant. Hence, Waltz does not look at the unit attributes or internal characteristics of the states in his structural explanation of international politics. Thus, the expected behavior of states can be inferred from their placement in the system. And only great powers count in this system, as in an oligopolistic market.

Waltz's balance of power theory is his theory of international politics. His theory leads us to expect a balance of power to prevail only if two or more states seek to survive in a self-help system.²⁸ To be precise, "The expectation is not that a balance, once achieved, will be maintained, but that balance, once disrupted, will be restored in one way or another."²⁹ According to Waltz, the mechanisms of socialization and competition promote balancing behavior. Socialization means unconscious conformity to established international practices, whereas competition means punishment for refusing to conform. But Waltz argues that balance of power is a recurrent system outcome and not a result of conscious state policies.³⁰ Regardless of unit intentions, not bandwagoning but balancing prevails in an anarchic system.

In short, Waltz's is a system-level causal theory of significant explanatory and broad predictive power, particularly in the military-security realm. But it would be a mistake to say that Waltz's neo-realist theory is purely deterministic and allows no room for human choice. In fact, states are free not to follow balancing behavior. The problem is only that if they so continue, they will not survive long enough to matter. Thus, Waltz's theory explains structural constraints and predict tendencies, while black boxing the states.

A systematic testing of Waltz's structural realist theory is beyond the scope of this paper. But let me briefly discuss some robust tests. From the structural theory of international politics follows the hypothesis that the foreign policies of states are explained by their placement or relative power in the international system. It leads one to expect, for instance, that the foreign policy behaviors of the United States and the Soviet Union should have shown striking similarities since World War II, because the two states have been similarly placed by their power during the period. And that has indeed been true, and as Waltz himself argues, their armament policies and their interventions abroad are two of the most revealing.³¹

²⁵Ibid., p. 118.

²⁶Waltz, "Realist Thought," *op. cit.*, pp. 34-36.

²⁷Waltz, *Theory*, *op. cit.*, p. 82. It goes without saying that a system, according to Waltz, consists of a structure and interacting units. Ibid., p. 79.

²⁸Ibid., p. 121.

²⁹Ibid., p. 128.

³⁰Ibid., p. 119.

³¹Their similar armament policies include the largest peace-time U.S. strategic and conventional military build-up in the early 1960s in the face of Khrushchev's major reduction in the conventional

The external behaviors of Germany and the Soviet Union during the inter-war period provides another hard test for Waltz's theory. It is so not only because the German and Soviet states were similarly placed in the international system, but because they both had strong reasons not to cooperate with each other. Germany was in a position of being restrained from engaging in power balancing by the Versailles Treaty, and the Soviet Union by its Leninist ideology. Yet, Waltz's balance of power theory leads one to expect — though broadly, and not precisely as to who balances with whom, and how — states to engage in balancing rather than bandwagoning behavior in a self-help system.

Both states became international pariahs in the aftermath of the First World War. Germany, an object of France's ferocious vengeance, was forced to pay enormous reparations, not have air and naval forces, limit drastically the size of its army. The Versailles settlement was to condemn Germany to far less than a great power status. The Western diplomatic recognition of the Soviet Union — let alone trade agreement — was slow in coming, as the Bolshevik regime was not only unwilling but also unable to accept the Western demands that it acknowledge the tsarist regime debts and compensate for the nationalized foreign direct investment. After having gone through the devastating Civil War, the Soviet Union was in economic shambles.

Clearly, the Bolshevik regime was outrightly opposed to traditional balance of power politics. But the Soviet Union desperately needed an ally to break out of isolation and to play off against other European powers, at least as much as Germany needed one. Thus, despite Leninist ideology, the conclusion of the Treaty of Rapallo between Germany and the Soviet Union on April 16, 1922 was dictated by systemic necessity. Of course the treaty provided further military gains for both sides:

Military bases in Russia were put at the disposal of the Reichswehr for trying out the advanced techniques and weapons prohibited it by the Versailles Treaty. German industry erected armaments factories in the Soviet Union the output of which was shared by the two countries... Germany thus laid the foundations for that rapid recovery of her military predominance which could not have been achieved in the few years separating the accession of Hitler and the outbreak of World War II without the previous decade of the Reichswehr's training, experimentation, etc., on Soviet soil. Russia gained the advantages of a sophisticated, up-to-date, modern armaments industry, something which would have been beyond her own resources to develop in the 1920s, and of course of instruction by the German specialists.³²

And when Germany reemerged as a threatening great power with Hitler's coming to power, the Leninist regime was once again engaged in power balancing by joining the League of Nations in 1934, by signing the Franco-Russian Treaty of Mutual Assistance in 1935, and by adopting the Popular Front policy at the sixth congress of the Comintern in 1935.³³ In short, the history of Soviet and German foreign policies during the inter-

forces, Brezhnev's quick following in such U.S. footsteps, and the convergence of their military doctrines toward war-fighting. And they justified their similar interventions abroad "in the name of international duty: interventionist liberalism in the one country, international communism in the other." For more details, see Waltz, "America as a Model for the World? A Foreign Policy Perspective," *PS: Political Science & Politics*, December 1991.

³²Adam B. Ulam, *Expansion and Coexistence: Soviet Foreign Policy 1917-73*, 2nd ed., (New York: Holt, Rinehart and Winston, Inc., 1974), p. 152.

³³Waltz's theory does not account for ideological forces that influence foreign policies. Leninism

war period largely confirms the expectation of Waltz's structural realist theory that states in the anarchical international system behave in such ways that result in recurrent formation of balance of power. One can go on with further tests, but for the purpose of this paper, I believe the point has been made clear enough.

5. NEO-LIBERAL INSTITUTIONALIST APPROACH

What Keohane labels Neo-liberal institutionalism is at best a pre-theoretical modification of structural realism.³⁴ Let me first deal with the underlying assumptions of neo-liberal institutionalism. The conditions of "complex interdependence" are as follows: 1) Unlike the realist research tradition in which military issues dominate, there is no hierarchy of issues; 2) Power is less fungible; 3) Multiple channels of contact characterize the unit-level interactions.

However, the modification is not really fundamental. For instance, although neo-liberal institutionalists focus upon multiple channels of contact at the unit-level, they cannot and do not ignore the state-centric nature of international politics. Nor do they disagree with structural realism that the anarchical international system, which implies neither a total lack of institutions nor perpetual war, has persisted over the centuries, despite the changes of the central political units, be they city states, empires, or nation-states. Rationality-centricity is modified to incorporate the concept of "bounded rationality." And while Waltz assumes that "relative gain is more important than absolute gain" in an anarchy,³⁵ neo-liberal institutionalists assume that states are primarily concerned with absolute gains. However, Waltz has pointed out it is nuclear weapons that has eliminated much of the relative and absolute gains problem among the great powers with second-strike capabilities, because none of them can turn economic gain into its strategic advantage and the disadvantage of the others.³⁶ Because neo-liberal institutionalists posit that power is less fungible, they focus not on overall power structure but on issue-specific power structure as outlined in *Power and Interdependence*. Put differently, March's force activation model rather than basic force model is their

or Nazism, according to Janos, was not a variant of modernizing regime but an anti-systemic movement of semi-peripheral nations trying to improve their lot not by climbing the existing ladder of international system but by destroying and reshaping it (Herbert Spencer's notion of military society). Andrew C. Janos, "Social Science, Communism, and the Dynamics of Political Change," *World Politics*, Vol. 44, No. 1, October 1991. Nor does Waltz's theory explain why the arms race between the United States and the Soviet Union continued, long after the two superpowers reached second-strike capabilities. But those do not matter. The structural realist theory does not purport to explain the "particularities" of foreign policies, but "regularities and repetitions" of international politics.

³⁴Under the rubric of neo-liberal institutionalism, I examine Robert O. Keohane and Joseph Nye, *Power and Interdependence: World Politics in Transition*, (Boston: Little, Brown, 1977), Keohane, *After Hegemony: Cooperation and Discord in the World Political Economy*, (Princeton: Princeton University Press, 1984), Keohane's critique of Waltz in Keohane, ed., *Neorealism and Its Critics*, (New York: Columbia University Press, 1986), and Keohane, *International Institutions and State Power*, (Boulder: Westview Press, 1989), specially Chapter 1.

³⁵Waltz, *Man, the State and War*, (New York: Columbia University Press, 1959), p. 198.

³⁶Waltz, "The Emerging Structure of International Politics," a paper presented at the annual meeting of the American Political Science Association, August 1990, San Francisco, California. Typescript.

conception of power.³⁷ But neo-liberal institutionalists do realize that military power is ultimate, even if not fungible.

Keohane insists that Waltz's structural realist theory, "because it is relatively simple and clear, can be modified progressively to attain closer correspondence with reality."³⁸ Similar criticism has often been made in economics theorizing as well. In fact, the "orthodox" economic theories or their assumptions have been perennially criticized for being "unrealistic," or descriptively inaccurate about the "real world." But as Friedman argues in his *Essays in Positive Economics*, "[c]omplete 'realism' is clearly unattainable, and the question whether a theory is realistic 'enough' can be settled only by seeing whether it yields predictions that are good enough for the purpose in hand or that are better than predictions from alternative theories."³⁹

Perhaps what Keohane is really trying to do is to *apply* Waltz's theory. Or despite Waltz's cogent warning that "[w]hat is omitted cannot be added without thoroughly reworking the theory and turning it into a different one,"⁴⁰ Keohane is attempting to expand the independent variable of structural realism to explain such questions as causes, variations, and effects of international regimes and institutions.

In his more recent work, Keohane has made a bold claim that neo-liberal institutionalism is "not simply an alternative to neorealism, but, in fact, claims to subsume it."⁴¹ It is true, for example, that the study of international regimes became popularized by Keohane and Nye's *Power and Interdependence*. But then again, to suggest that neo-liberal institutionalists have better solved certain favorite problems is not the same thing as to argue that their approach subsumes structural realist theory.

As we discussed earlier, a theory's ability to explain the very puzzles it was invented to explain is usually different from its ability to stand up to demanding tests. Reliability is the key in assessing scientific theories. In my view, Waltz's theory of international politics has not yet been matched by any genuine rival theory. Waltz's balance of power theory is a theory which has survived quite strenuous tests.

It may be worthwhile to discuss Keohane's *After Hegemony* here. Drawing on collective action approach, game approach,⁴² and theories of market failure, Keohane in this book

³⁷James G. March, "The Power of Power," in David Easton, ed., *Varieties of Political Theory*, (New York: Prentice-Hall, 1966).

³⁸Keohane, "Theory of World Politics: Structural Realism and Beyond," in Keohane, ed., *Neorealism*, op. cit., p. 191. Waltz responds to Keohane's assertion, and states that: "To achieve 'closeness of fit' would negate theory. A theory cannot fit the facts or correspond with the events it seeks to explain. The ultimate closeness of fit would be achieved by writing a finely detailed description of the world that interests us. Nevertheless, neorealism continues to be criticized for its omissions. A theory can be written only by leaving out most matters that are of practical interest. To believe that listing the omissions of a theory constitutes a valid criticism is to misconstrue the theoretical enterprise." "Realist Thought," op. cit., p. 31.

³⁹Milton Friedman, *Essays in Positive Economics*, (Chicago: The University of Chicago Press, 1953), p. 41.

⁴⁰Waltz, "Realist Thought," op. cit., p. 31.

⁴¹Keohane, *International Institutions*, op. cit., p. 15.

⁴²Like rational choice, public goods, and long cycle "theories," game approach (Axelrod, Oye, and Snidal) is not really an autonomous school of thought in international politics theorizing, but a methodology or a heuristic device. Kenneth Oye, "Explaining Cooperation Under Anarchy," *World Politics*, (October 1985), Robert Axelrod and R. Keohane, "Achieving Cooperation Under Anarchy," in *Ibid.*, and Duncan Snidal, "The Limits of Hegemonic Stability Theory," *International Organization*, (April 1985). The game approach is valuable in demonstrating deductive logic of strategic interaction

attempts to provide a functional theory of regime. His key argument here is to show that Realism's pessimism is unfounded. That is, at least among industrialized countries, international cooperation can occur and increase welfare, *even under* realist assumptions of power, self-interest, and rational egoism.

Regarding the question of why regimes are formed, Keohane distinguishes "demand" theory of regime from the hegemonic stability theory, which he calls a "supply" theory.⁴³ He criticizes the supply theory as too narrow, and argues that hegemon is neither necessary nor sufficient for regime creation and maintenance. But this functional theory is at least thus far of little help in explaining regime creation. International Energy Agency, the only one evidence Keohane has to support his theory of regime creation, is a very weak case at best.

Keohane's functional theory of regime offers no real predictions, but only post hoc explanations. Further, he confuses Mitrany, Haas, and Deutsch's use of functionalism by labeling his transaction cost approach as a functional one.⁴⁴ Keohane believes information and transaction costs are critical, and international regimes make it easier to reach multi — and bilateral agreements by reducing the costs. But the myriad of various negotiations that have taken place within the textile or whatever regime even after the creation of the regime seems to suggest that regimes may not reduce the

and thus revealing the conditions which enable cooperation and stability, but risks oversimplification of reality. Interactions rarely involve only 2 players with clear and not continuous choices of cooperate or defect. Also critical are the problems of theoretically determining preference structures and of capturing the dynamics of bargaining, which is precisely a strategy to restructure preference orderings. Further, signals are hardly unambiguous and invulnerable to distorted perceptions. And the domestic processes affecting payoff structures are often blackboxed as "exogenous."

⁴³It should be noted here that the hegemonic stability theory (Kindleberger, Gilpin, and Krasner) has been perhaps the most significant contribution of structural realism to the study of international political economy. This structural theory of regime, in essence, links regime creation and maintenance to a strong hegemon and regime decay and collapse to a declining hegemon. Charles Kindleberger, *The World in Depression*, (Berkeley: University of California Press, 1973), Robert Gilpin, *U.S. Power and the Multinational Corporation*, (New York: Basic Books, 1975), and Stephen D. Krasner, "State Power and the Structure of International Trade," *World Politics*, (April 1976).

The hegemonic stability theory has its own anomalies such as American unwillingness to lead in the inter-war period and what Krasner calls "lag" between hegemon's declining capabilities and regime collapse. Stephen D. Krasner, "Conclusion," in Krasner, ed., *International Regimes*, (Ithaca: Cornell University Press, 1983). Further, as Stein and McKeown have shown, it is not always clear on what hegemon actually do and why they do what they do. Arthur Stein, "The Hegemon's Dilemma," *International Organization*, (1984), and Timothy J. McKeown, "Hegemonic Stability Theory and 19th Century Tariff Levels in Europe," *International Organization*, (Winter 1983).

⁴⁴David Mitrany, *A Working Peace System*, (London: Royal Institute of International Affairs, 1943), his article in *International Affairs*, (1948), Ernst B. Haas, *Beyond the Nation-State*, (Stanford: Stanford University Press, 1964), and Karl W. Deutsch, et al., *Political Community and the North Atlantic Area*, (Princeton: Princeton University Press, 1957). They are concerned with the integration process of political communities. Central to their works is what Mitrany calls the doctrine of "ramification," or what Haas terms the concept of "spill-over," whereby the development of functional cooperation in technical and "non-controversial" sector spills over or leads to comparable behavior in other sectors, eventually absorbing the political field. But this school of thought has been under serious criticisms. Haas himself, for instance, criticized it for being inadequate in the "turbulent field" of international politics. The empirical reality has simply shown that the key to political integration is not functional cooperation in socio-economic sectors, but political will of nation-states. Haas, *The Obsolescence of Regional Integration Theory*, Research Series, No. 25, Institute of International Studies, University of California, Berkeley, 1975, and "Turbulent Fields and the Theory of Regional Integration," *International Organization*, (1976).

transaction costs all that much.

Moreover, the explanatory scope of Keohane's theory of regime — or of exploring the possibility of maintaining international cooperation in the absence of American hegemony — remains limited, as it is based only on the interstate relations among the advanced capitalist countries. One can argue that it is relatively uninteresting to explain "that the common interests of the leading capitalist states, bolstered by the effects of existing international regimes (mostly created during a period of American hegemony), are strong enough to make sustained cooperation possible, though not inevitable."⁴⁵ Keohane's theory does not explain harder cases like cooperation in North-South relations? Also problematic is his use of the term cooperation to connote even unequal, if not unilateral, adjustment made by weaker side — because of relative incapability or vulnerability. It goes without saying that the definition of regime, the dependent variable, is vague at best.⁴⁶

In short, neo-liberal institutionalists have yet to formulate a coherent theory. And if they are to construct a theory of international political economy, they will probably have to establish the autonomy of the realm of international political economy and possibly a rigorous definition of its structure — as opposed to a simply expanded version of Waltz's structure.

Meanwhile, neo-liberal institutionalists have attempted at bridging the second and Waltz's third-level analyses. A first is Nye's suggestion that what Waltz calls "process" such as changes in demography, technology, and transnational interactions be added to Waltz's definition of structure and thereby to systems analysis.⁴⁷ Nye contends that Waltz's structure is too static and parsimonious to explain the important changes in the system. Nye's injection of many more independent variables may increase the explanatory range of Waltz's theory. But again, as Waltz points out, Nye's expansion of Waltz's structure without reworking the theory is a poor way of theorizing — not to mention, bridging.

A second suggestion at bridging comes from Keohane and Ruggie,⁴⁸ who demand the linkage between unit — and structural-level changes. Keohane calls for a multidimensional approach that can account for change by incorporating both the second and third-level theories. (Building better theories of domestic politics, decision making, and information processing seems a prerequisite for this effort.) Ruggie similarly argues against black boxing the units, the agents of change in the system.

Waltz does not deny that purposeful unit actions can lead to structural change, nor the fact that structural change begins at the unit level; he only thinks it very rare a

⁴⁵Keohane, *After Hegemony*, op. cit., p. 43.

⁴⁶International regime is defined in Krasner edited volume *International Regimes* as a set of "implicit or explicit agreement on principles [beliefs about cause, effect, and rectitude], norms [standards of behavior defined in terms of rights and obligations], rules [specific prescriptions and proscriptions], and decision-making procedures [ways of making and implementing collective choices] around which actors' expectations converge in a given area of international relations." One may question, for instance, whether the agreement is implicit, explicit, or both. Especially controversial is the question of whether regimes are legally binding.

⁴⁷Joseph S. Nye, Jr., "Neorealism and Neoliberalism," *World Politics*, (January 1988).

⁴⁸Keohane, "Theory of World Politics: Structural Realism and Beyond," in Keohane, ed., *Neorealism*, op cit., and John Gerard Ruggie, "Continuity and Transformation in the World Polity: Toward a Neorealist Synthesis," in *Ibid*.

phenomenon.⁴⁹ The collapse of the Soviet Union and the resultant end of the bipolar world and the Cold War is a case in point. In such cases, Waltz's theory simply cannot help us make predictions, because his systemic theory necessarily leaves out the domestic politics factor.⁵⁰ Nonetheless, Waltz does not believe it worthwhile for his causal, structural theory to lose its deductive rigor by trying to capture the linkage between unit actions and systemic change. Instead, he advises us to understand structural constraints through his structural realist theory, and then go down a level of analysis to find out idiosyncratic foreign policies.

6. STRUCTURATIONIST APPROACH

Like some of the neo-liberal institutionalist works, structurationists, particularly Wendt and Dessler⁵¹ try to achieve some scientific progress in international politics theory by building a bridge between the second and Waltz's third levels of analysis. The agent-structure problem, to use the structurationist terminology, has indeed been one of the long standing philosophical questions, and it is part of the levels of analysis problem, which was pioneered by Waltz's *Man, the State and War*,⁵² and probably popularized by Singer's 1961 article.⁵³ Singer here argues that a theorist's choice between the national state and international system levels of analysis is important, and it necessarily involves a tradeoff between scientific rigor and empirical richness.

Carr most succinctly stated this dilemma in the study of international relations:

The complete realist, unconditionally accepting the causal sequence of events, deprives himself of the possibility of changing reality. The complete utopian, by rejecting the causal sequence, deprives himself of the possibility of understanding either the reality which he is seeking to change or the processes by which it can be changed. The characteristic vice of the utopian is naivety; of the realist, sterility.⁵⁴

⁴⁹According to Waltz, the presence of nuclear weapons is one rare unit-level phenomenon that has a significant systemic effect. But what is fascinating about the present period is the very reality of changing structure of international politics. With the collapse of the Soviet Union, the power of the United States is at present unmatched. But as reflected in the rising capabilities of Japan and Germany, the unipolar structure of international system will probably be a transitional one, and a multipolar world is in the making. While the multipolar world that lasted for three centuries prior to World War II was war-prone and less peaceful than the postwar bipolar world, albeit more stable in the sense that it survived major wars, the presence of nuclear weapons is expected to continue to simplify balancing in the emergent multipolar world. It is so because all that balancing requires in the nuclear world is to maintain second-strike forces. As Waltz emphasizes, nuclear weapons limit the use of force to a deterrent role and make alliances obsolete at the strategic level. Waltz, "The Emerging Structure of International Politics," *op. cit.*

⁵⁰See also John Lewis Gaddis, "International Relations Theory and the End of the Cold War," *International Security*, Vol. 17, No. 3, (Winter 1992/93).

⁵¹Alexander E. Wendt, "The agent-structure problem in international relations theory," in *International Organization*, (Summer 1987), and David Dessler, "What's at stake in the agent-structure debate?" in *International Organization*, (Summer 1989). Like structural realism, survival and security are the core concepts of structurationism.

⁵²Waltz, *Man, the State and War*, *op. cit.*

⁵³J. David Singer, "The Level-of-Analysis Problem in International Relations," *World Politics*, (October 1961).

⁵⁴Edward Hallett Carr, *The Twenty Years' Crisis, 1919-1939*, (New York: Harper & Row, 1964 [1939]), pp. 11-12.

In the short run, the causal, deterministic constraints seem all too powerful. But in the long run, the voluntaristic, creative spontaneity affects both behavior and constraints.

According to Wendt, structuration theory stands on the foundation of “scientific realism,” and is not a substantive but analytical theory in the sense that it provides a conceptual framework or “meta-theory” for thinking about real social systems. In his dissatisfaction with positivist ontologies, Wendt claims that structuration theory conceptualizes agents and structures as “mutually constitutive yet ontologically distinct entities...they are ‘co-determined.’”⁵⁵

Thus, Wendt calls for ascribing ontological status to unobservable entities like “deep” or “generative structures,” which are not reducible to observable ones but still “have observable effects or are manipulable by human agents.”⁵⁶ And in drawing its implications for international relations theorizing, Wendt suggests combining structural analysis (which explains the possible) and historical analysis (which explains the actual) into a “structural-historical” or “dialectical” analysis.⁵⁷

Dessler takes up where Wendt leaves off, and in fact does a better job in presenting the relevance of structuration theory to the study of international politics. Pointing to the inadequacy of Wendt’s dialectical analysis as a research alternative, Dessler provides the “transformational” model, an alternative ontology of international structure. In contrast to Waltz’s structure as constraining environment, Dessler’s structure consists of materials for action, “a set of materials that is ‘appropriated’ and ‘instantiated’ in action.”⁵⁸

Hence, structurationists believe that to carry out state action requires two instruments or media of action: rules and resources. Dessler’s key contention here is that while Waltz’s theory recognizes the importance of resources and presupposes the existence of unintentional rules, it ignores intentional rules as structural features of the system. Thus, Dessler recommends that research be directed to “developing an encompassing schema showing relations and connections between various types of rules.”⁵⁹

Whether this goal can be attained, or whether Dessler’s research proposal is any better way of bridging than Nye’s suggestion, is of course an open question. In the meantime, what Dessler proposes to study in the idiosyncratic structurationist language has in fact been studied by political scientists or international politics scholars all along, if under two separate frameworks. Structural realists study the effect of resources and unintentional rules on state behavior, and many students of international political economy study intentional rules, as embodied in international regimes and institutions. Again, the question is whether it is worthwhile to combine the two in a single theory at the expense of losing the explanatory and predictive power of Waltz’s causal, structural theory. The trade-off dilemma between rigor and richness persists. And Dessler’s injection of intentionality into the structure does end up losing Waltz’s deductive rigor.

⁵⁵Wendt, *op cit.*, p. 360. “Agents are inseparable from social structures in the sense that their action is possible only in virtue of those structures, and social structures cannot have causal significance except insofar as they are instantiated by agents. Social action, then, is ‘co-determined’ by the properties of both agents and social structures.” *Ibid.*, p. 365.

⁵⁶*Ibid.*, pp. 350-355.

⁵⁷*Ibid.*, pp. 362-364.

⁵⁸Dessler, *op cit.*, p. 452. Dessler likens his structure to language.

7. WORLD SYSTEMS THEORY

Wallerstein's *The Modern World System*⁶⁰ has been regarded by many as constituting a competing school of thought in international politics, while Waltz categorizes it as a reductionist theory. So let me deal with the theory here. Wallerstein's work has demonstrated that economic progress in one sector of the world-economy is the cause of political strain and decay in another, and that the international income inequality is the result of structural realities.

Thus the appropriate unit of analysis is not nation-state but totality, that is world-system with a single division of labor and multiple cultural systems.⁶¹ The core metaphor of the world systems theory is of course monopolistic market, as opposed to oligopolistic market in structural realism. And Wallerstein's core concepts are not survival, security, or power balance, but Marxist notions of domination and exploitation.

Wallerstein's world systems theory, which is presented in the second half of the book, particularly its division of the world-economy according to space into the three categories of core, periphery, and semi-periphery seems a powerful explanation, which can be applied in various ways. But what is really fascinating to me is Wallerstein's theory of change, as developed in his explanation of the shift from feudalism to capitalism in the first half of the book. In contrast to Wallerstein's theory of modern world system, which posits that the final demise of the capitalist world-economy will come only through the development of class consciousness and the resultant revolution of the periphery, his theory of change is dynamic, enabling us to think about any future world-economic system change. Why this disjuncture? My sense is that Wallerstein's methodological imperfection, or his inconsistent use or misuse of conjunctural history is what explains the disjuncture.

Feudal Europe, while not a world-system, was a "civilization," "a series of tiny economic nodules whose population and productivity were slowly increasing, and in which the legal mechanisms ensured that the bulk of the surplus went to landlords who had noble status and control of the juridical machinery."⁶² Although feudalism was not antithetical to trade, it "could only support a limited amount of long-distance trade as opposed to local trade. This was because long-distance trade was a trade in luxuries,

⁵⁹Ibid., p. 469.

⁶⁰Immanuel Wallerstein, *The Modern World System*, (New York and London: Academic Press, 1974). [Hereafter cited as *MWS*]

⁶¹It is interesting to note that according to Wallerstein, there are neither feudal nor socialist systems in this world, because there is and has been only one world-system since the sixteenth century, the capitalist world-economy. *MWS*, op cit., p. 390. This argument, however, according to Kenneth Waltz, "confuses theory with reality and identifies a model of a theory with the real world." *Theory*, op. cit., p. 38.

Here it may be helpful to draw at the outset a distinction between the world economy and a world-economy. The world economy is "an expression applied to the whole world." In contrast, a world-economy "only concerns a fragment of the world, an economically autonomous section of the planet able to provide for most of its own needs, a section to which its internal links and exchanges give a certain organic unity." See Fernand Braudel, *The Perspective of the World: Civilization and Capitalism, 15th-18th Century*, (New York: Harper and Row, 1984[1979]), pp. 21-22.

⁶²Wallerstein, *MWS*, op. cit., p. 18.

not in bulk goods.”⁶³ Out of this feudal system, the modern world system was born.

Wallerstein provides three major explanations for the crisis of feudalism: cyclical economic trends, a secular trend, and the climatological decline. As he puts it, “it was precisely the immense pressures of this conjuncture [of the three factors] that made possible the enormity of the social change. For what Europe was to develop and sustain now was a new form of surplus appropriation, a capitalist world-economy.”⁶⁴

But there seems to be some confusion in his explanations, for economic cycle and secular trend are two terms of the same kind, and climate is a different thing from the first two factors. To be specific, among the economic cycles of various time-spans, the secular trend is the longest unit of reference, a *coherent* long cycle of several centuries. On the other hand, climate is actually a kind of “social movements,” the combination of which forms the conjuncture or conjunctures.⁶⁵ Why is this clarification important?

It is because, as I mentioned earlier, the point brings up a bigger and more important question, that of Wallerstein’s epistemology or methodology. For those who do conjunctural history to study world-economy, there are indeed two models: spatial *and* temporal. It is important to use both the spatial and temporal models of world-economy, because as Braudel successfully demonstrates in his work, “several world-economies have succeeded in each other in the geographical expression that is Europe. Or rather the European world-economy has changed shape several times since the *thirteenth* century, displacing the core, rearranging the peripheries.”⁶⁶ Yet Wallerstein imperfectly or half-heartedly utilizes the temporal model in his account of the shift from feudalism to capitalism, and thus his explanation results in imperfection. And his non-use of it in his building of the theory of modern world system, as well as the impact of Wallerstein’s personal values on his book, explains why Wallerstein’s book contains the disjuncture.

According to Wallerstein, three things were essential to the establishment of the capitalist world-economy: an expansion of the geographical size of the world, the development of the variegated methods of labor control for different products and different zones of the world-economy, and the creation of relatively strong state machineries in the core-states of the capitalist world-economy. But the second and third aspects were in large part dependent upon the success of the first. Without the success of Portuguese explorers, “the European situation could well have collapsed into relative constant anarchy and further contraction.” “The territorial expansion of Europe hence was theoretically a key prerequisite to a solution for the ‘crisis of feudalism.’”⁶⁷

And historical accidents determined the rise of the core in the modern world

⁶³Ibid., p. 20.

⁶⁴Ibid., p. 37.

⁶⁵The “social movement” is defined as all the movements at work in a given society, including the economy, political life, demography, collective attitudes, preoccupations, crime, the different schools of art or literature, and even fashion. Braudel, *The Perspective of the World*, op cit., pp. 71-73.

⁶⁶Thus, despite Wallerstein’s fascination with the 16th century, Braudel agrees with Marx that European capitalism began in 13th-century Italy. Ibid., p. 70. (My emphasis.)

Incidentally, Braudel argues that one needs the longest temporal unit of analysis, the secular trend, in order to study the world-economy, “the greatest possible vibrating surface...that at all events creates the *uniformity* of prices over a huge area.” In his view, “the secular vibration, inexplicable without this huge but finite surface of the world-economy, opens, closes and opens once again the gates of the complex flow of the conjuncture.” Ibid., p. 83. (Emphasis not mine.)

⁶⁷Wallerstein, *MWS*, op cit., p. 38.

system. "Either eastern Europe would become the 'breadbasket' of western Europe or vice versa. Either solution would have served the 'need of the situation' in the conjuncture. The *slight* edge determined which of the two alternatives would prevail."⁶⁸ But why in the first place the slight differences between Western and Eastern Europe? Wallerstein answers this question and states that:

There is perhaps a single geopolitical explanation: the Turkish and Mongol-Tatar invasions of the late Middle Ages, which destroyed much, caused emigrations and various declines, and above all weakened the relative authority of the kings and great princes...Thus if, at a given moment in time, because of a series of factors at a previous time, one region has a *slight* edge over another in terms of one key factor, *and* there is a *conjuncture* of events which make this *slight* edge of central importance in terms of determining social action, then the slight edge is converted into a large disparity and the advantage holds even after the conjuncture has passed.⁶⁹

Wallerstein identifies two kinds of world-systems: world-empire and world-economy. The world-empire is a tribute-collecting imperial state, with China, Egypt, and Rome being such historical cases. The world-economy, in contrast, is without a common political structure, and capitalism has been the first and the only long-lasting world-economy since the sixteenth century (to Wallerstein). And the rise of the modern world system in the "long" sixteenth century resulted in a geographically differentiated division of labor.

The strong state played an important role in guaranteeing profits to private hands in the core, and thereby in turning a slight edge into a great disparity between the core and the periphery. Once the modern world system is in place, it acts like a structure limiting and confining the development possibilities of the periphery. Thus no matter what the validity of the argument, there is the clear causality: Drawn into the world-system, the periphery suffers from unequal exchange on the world market and is reduced to supplier of raw materials. In brief, the theory points to the parasitic coexistence of different modes of production from slavery to capitalism in the world-economy. Although Wallerstein admits that Eastern Europe's trade with the core was small, he argues that it is not the quantity of merchandise exported, but the rate of profit shared between the merchant middlemen and the landed proprietors that was critical.⁷⁰

However, the theory of unequal exchange is not sustainable, even if powerful a moral statement, since it is dependent upon the validity of Marx's labor theory of value. Only labor, the "ultimate" commodity, creates value and is exchanged for less than its utility to the capitalist.⁷¹ The labor theory of value clearly acquires the status of a political religion. Further, Wallerstein's world systems theory is unable to recognize the state as an autonomous actor. It is overly determined by the structure, and thus provides no room for possible bargaining strategies of the states in the periphery. The question is then how to account for the rise of Japan and the newly industrializing countries, especially those in East Asia. And perhaps most importantly, as Waltz points out, Wallerstein's world systems theory suffers from the fact that it "tries to explain

⁶⁸Ibid., p. 99. (Emphasis not mine.)

⁶⁹Ibid., pp. 97-98. (Emphasis not mine.)

⁷⁰Ibid., p. 305.

⁷¹Karl Marx, "Wage-Labour and Capital," in David McLellan, *Karl Marx: Selected Writings*, (Oxford: Oxford University Press, 1977), p. 257.

national and international politics by the effects 'the capitalist world-economy' has on them."⁷²

8. COGNITIVE/LEARNING APPROACH

Like neo-liberal institutionalists, Haas develops his cognitive/learning approach for the purpose of studying international regimes and institutions.⁷³ Although this approach is still in an early stage of development, like world systems theory, it is a distinctive rival paradigm or research tradition vis-a-vis structural realism. Like neo-liberal institutionalists, Haas opts for the concept of bounded rationality. But what is different about Haas's approach is that he posits just as power resources or relative capabilities are the critical independent variable in the structural realist theory or the hegemonic stability theory, consensual knowledge is the core concept in the cognitive approach.⁷⁴ He does not argue that consensual knowledge alone can always lead to cooperation, but he argues that it can help the major actors or states learn to reassess their interests, and thereby lead to a more stable regime.

Haas claims that his four cognitive styles lead to different types of issue linkage and regime. Thus, the pragmatic and analytic styles will result in stable regimes with more or less substantive issue linkage, which depends less on power and more on consensual knowledge than the eclectic or skeptic style.⁷⁵ To cognitivists, issue-areas are never simply given. Aggarwal notes in his synthesis that Haas's cognitive theory more successfully explains the development of meta-regime, while structural theories like the hegemonic stability theory more successfully explain that of regime.⁷⁶

Nonetheless, as Haggard and Simmons argue, Haas's cognitive/learning approach has yet to link clearly ideas and power.⁷⁷ And it needs to specify better in what issues and under what circumstances it is more plausible than other approaches or theories. Haas's recent article, "Collective Learning: Some Theoretical Speculations," and his book, *When Knowledge is Power*, seems to represent a progress in correcting those problems, as he elaborates and applies his approach to the study of foreign policy making and international organizations, respectively. Haas argues, for example, governmental learning becomes especially critical in a conjunctural situation of urgency, desirability, and feasibility of such learning. His approach is certainly neither structural

⁷²Theory, op. cit., p. 38.

⁷³Ernst Haas, "Why Collaborate? Issue Linkage and International Regimes," *World Politics*, (April 1980), "Collective Learning: Some Theoretical Speculations," in George W. Breslauer and Philip E. Tetlock, eds., *Learning in U.S. and Soviet Foreign Policy*, (Boulder: Westview Press, 1991), and *When Knowledge is Power: Three Models of Change in International Organizations*, (Berkeley: University of California Press, 1990).

⁷⁴Haas defines consensual knowledge as "the sum of technical information and of theories about that information which commands sufficient consensus at a given time among interested actors to serve as a guide to public policy designed to achieve some social goal." "Why Collaborate?" op. cit., pp. 367-368.

⁷⁵Ibid., pp. 379-385.

⁷⁶Vinod K. Aggarwal, *Liberal Protectionism: The International Politics of Organized Textile Trade*, (Berkeley: University of California Press, 1985).

⁷⁷Stephen Haggard and Beth Simmons, "Theories of International Regimes," *International Organization*, (Summer 1987).

nor idealistic.

To be sure, Haas does not ignore such structural realist insight as that conflict is the norm of the *anarchical* international politics. Clearly, Waltz does not argue that international cooperation is impossible, albeit difficult to sustain (e.g., most obviously, military alliances). It is thus not surprising that unlike other learning theorists like Tetlock,⁷⁸ Haas's definition of learning is highly restrictive, categorizing many of what Tetlock regards as learning under the rubric of adaptation.⁷⁹ In order for Haasian sense of learning to occur among policy makers, they must draw on the consensual knowledge of an "epistemic community." Hence, Haas finds that governmental learning is far more rare, if too much so, than governmental adaptation.

In any event, what it will take for Haasian cognitive/learning approach to develop fully into a genuine rival theory of international politics is an open question. As Haas himself admits, his effort thus far constitutes only an Weberian ideal-typical argument or a typology.⁸⁰ The fact that the recent Breslauer and Tetlock edited volume provides as many ways of thinking about learning as the number of authors reflects precisely that problem.

Haas offers his approach not as a rival but as a complement to other competing approaches or theories.⁸¹ That may indeed be the case, given Haas's highly exclusive definition of learning. However, I agree with Laudan in principle that as long as the theories in question are at least partially commensurable, even if genuinely different, research traditions, i.e., to the extent they address some common empirical phenomena, one can design tests to compare their contending hypotheses or expectations.⁸² For instance, although it may be premature to subject the cognitive/learning approach to demanding tests — as Haas's effort falls short of building a real theory, it would be interesting to evaluate the relative explanatory power of consensual knowledge or relative capability with respect to each other. But I must leave devising such tests for another occasion.

9. CONCLUSION

Normative commitments or assumptions are often considered to be the nemesis of scientific rigor in social sciences. Yet, is it possible to keep values completely out of intellectual endeavor in general and international relations theorizing in particular? The answer, I believe, is a no. Value assumptions and judgements, as distinguished from

⁷⁸Philip E. Tetlock, "Learning in U.S. and Soviet Foreign Policy: In Search of an Elusive Concept," in Breslauer and Tetlock, ed., *Learning*, op. cit.

⁷⁹Haas defines learning as "the process by which consensual knowledge is used to specify causal relationships in new ways so that the result affects the content of public policy. *When Knowledge is Power*, op. cit., p. 23. Adaptation implies behavior changes without questioning implicit theories, underlying values, or ultimate purpose of the organization or government, whereas learning implies behavior changes with redefinition or reassessment of its original beliefs, values, and ultimate purpose. Of course, Haas is talking not about individual learning but about governmental learning. "Collective Learning," op. cit.

⁸⁰*When Knowledge is Power*, op. cit., pp. 6-11.

⁸¹*Ibid.*, pp. 8-9.

⁸²Laudan, *Science and Relativism*, Chapter 5.

ideology, are an integral part of scientific thinking. It seems to me that science can only gain if its community is self-conscious and critical about the question.

Among the major theories or approaches of international relations that this essay has reviewed, Wallerstein's work is least willing to draw a fact/value distinction. Theory, however, is a social construction of reality; there is indeed no exception to this. A theorist's choice of what to explain and how to explain depends upon his or her perception and assumptions — even if the theorist is unconscious about it. For instance, Waltz remains explicit about maintaining the fact/value distinction, and he is surely self-conscious about not confusing theory with reality. As discussed earlier, he argues that theories, or underlying assumptions for that matter, are not true or false; instead, they must be judged in terms of their utility in explanatory power. Nevertheless, theoretical assumptions are hardly free from implicit, even if not explicit, values. How else can one explain why Waltz in his study chooses to emphasize international **politics**, instead of international **relations**? Why does he choose to black box the states and work at the systemic level only? Why does he choose to base his theory on Realist assumptions?

At any rate, let me by way of conclusion summarize the main findings of this study. I should like to point out that there is a problem in fully and strictly applying Laudan's view of scientific progress to contemporary international politics theory. While Laudan posits that the rivalry between competing theories is what produces scientific progress, and thus his concept of progress requires the existence of competing theories, the field of international politics at present, as we have discussed, has only one real theory, i.e. Waltz's structural realist one. Thus, it may well be the case that Laudan's criteria can only be used in a limited fashion in any assessment of our subject matter. This fact may be a reflection of the state of international politics theory.

Nevertheless, Laudan's standard enables us to assess the value of Waltz's theory of international politics as a reliable, well-tested theory. Of course, as Laudan points out, having identified a well-tested theory is not the same thing as concluding that the well-tested theory is the truth or superior to all possible rival theories. Rather, it means only that the theory in question "has passed tests more impressively than any of its known rivals, and that therefore it should be preferred to its known rivals."⁸³

Morgenthau's classical realism insightfully grapples with critical concepts, issues, and assumptions, but fails to develop a theory of international politics. He has no sense of Waltz's conception of international structure or system. While balance of power for Waltz is a recurrent system outcome, balance of power for Morgenthau is a foreign policy guide for the preservation of international peace. The classical realism, as we discussed earlier, has been subsumed under structural realism.

While Morgenthau fails to isolate theoretically the realm of international politics, Waltz succeeds in doing that, and his balance of power theory is a structural theory of international politics. It achieves scientific progress over classical realist approach, not only because it establishes the autonomy of the realm as a system, but because it is a reliable theory that impressively stands up to hard tests.

The emphasis of Neo-liberal institutionalism is on the effects of international regimes and institutions on state behavior, as well as causes and variations of them. But

⁸³Ibid., p. 143.

this approach is only a pre-theoretical modification of structural realism, if not an application of it. The attempt of neo-liberal institutionalists to achieve closer fit of theoretical assumptions with the “reality out there” stems from their confusion about the role of assumptions in theory building. Unfounded is Keohane’s claim that neo-liberal institutionalism subsumes structural realism. Neo-liberal institutionalists have yet to fashion a coherent theory of their own in the first place. And the establishment of the autonomy of the realm of international political economy with its precisely defined structure will probably be required for such theory building.

Structurationist approach constitutes an effort at bridging the second and Waltz’s third levels of analysis. But it is so far no more successful than neo-liberal institutionalist counterparts in bridging — not to mention, theorizing.

Wallerstein’s world systems theory represents the best among the neo-Marxist ones. It replaces the Durkheimian concept of division of labor within society with the division of labor within international economic system as the causes of political change and international income inequality. And Wallerstein’s spatial division of the world-economy seems quite provocative and stimulating a contribution. But Wallerstein’s theory of modern world system does suffer from being a reductionist one of attempting to explain international politics by looking at the capitalist world-economy. Nonetheless, it should be re-emphasized here that conjunctural history, as utilized — albeit imperfectly — in Wallerstein’s theory of change, is a promising, if intriguing, methodology of studying world-economy, although not an autonomous school of thought in international politics theory.

Like Wallerstein’s world systems theory, Haas’s cognitive/learning approach is a distinct paradigm or research tradition with its own theoretical assumptions. The importance of this approach may stem from the fact that states or their policy makers act not upon the “objective” facts of their situation, but upon their cognitive maps of the situation. But this approach thus far constitutes only a typology.

While the world systems theory and the cognitive/learning approach represent two competing research traditions, classical realism, structural realism, neo-liberal institutionalism, and structurationism are rival schools of thought within the structural realist research tradition. As I argued earlier, the theoretical assumptions of neo-liberal institutionalism do not fundamentally differ from those of structural realism. Nor do those of structurationism.

Among the six competing schools of thought examined in this essay, only Waltz’s structural realism accomplishes a theoretical breakthrough and develops a genuine theory of international politics. Waltz clearly conceptualizes structure, re-defines power, and succeeds in constructing a novel, scientific theory out of classical realist insights — albeit at the expense of leaving out the unit level of analysis. As I said, this is no little feat. As Waltz acknowledges it, however, the current state of international politics theory may indeed be that of economic theory in the latter half of the eighteenth century. This is where the discipline stands for the time being.