

## 10 The promise and potential pitfalls of post-modernism: the need for theory appraisal

Kuhn's analysis of the history of science helped sustain within philosophy of science a series of attacks on positivism and its view of science. This eventually emerged in a full-fledged "post-positivism" that sought to undercut the logical foundation of the attempt to apply the scientific method to the study of human behavior. This movement made a number of criticisms of social science including: the impossibility of a value-free, neutral, and objective science (Taylor 1985: ch. 2), the lack of an Archimedean point to build knowledge (Lapid 1989), and the absence of an independent database to test theories (Hawkesworth 1992). Post-positivism was superseded by an even more epistemologically radical post-modernism that sought to undercut not simply positivism and science, but all aspects of modern thinking, aspiration, practices, and institutions.

Both movements would raise philosophical questions about the paradigm evaluation conducted in the original text. Post-positivists would raise fundamental questions about the logical status of any attempt to appraise theories, let alone paradigms (see Lapid 1989). Post-modernists would see such appraisals as basically power plays, intended to silence and kill off dissident thinking. Yet, if criticism of the realist paradigm is to be taken seriously, it is necessary to have some sort of theory and paradigm appraisal. Post-modernism's claims can be so broad, however – involving a rejection of the entire Enlightenment – that a defense of theory appraisal entails a reconstruction of the very foundation of scientific inquiry. This chapter begins that reconstruction by elucidating the essential points that a reconstruction must accept from post-modernism and post-positivism and then goes on to show the need and justification for theory/paradigm appraisal and rejection.

More of an attitude than a position, post-modernism means different things in different fields. Within international relations, it has not fully arrived and may be abandoned in favor of a more critically reasoned post-structuralism before it has even gotten much of a foothold. Although there are many technical differences between post-structuralism and post-modernism, for the purpose of this essay, the main difference that will be the focus of analysis has to do with the question of relativism. Whereas post-structuralists, particularly those who are inspired by Foucault (1972), flirt with relativism, post-modernists, like Lyotard (1984) and Baudrillard (1990), embrace it. It is important to keep this distinction in mind, particularly in international relations inquiry where many of those who write in the post-structuralist vein are heavily influenced by critical theory and resist the charge of relativism. Despite these nuances, the use of post-modernism and post-structuralism promises to make important contributions to the field and to international relations theory specifically.

### The promise of post-modernism

I see five major insights that constitute the promise of post-modernism. All of these in one way or another involve freeing us from our conceptual jails, and for this there is much reason to celebrate (George and Campbell 1990). The so-called Third Debate (Lapid 1989) is not a dead end. Rather than jumping to conclusions and dismissing claims, this is an important time for listening. If that is done, not only will there be a great deal learned, but there may actually be some fresh air to breathe.

Nevertheless, these insights are not without potential pitfalls, so while I present them here as working assumptions, which when applied to existing international relations theory are apt to lead to some important contributions, this does not mean that I do not have reservations about each of the claims – and in some cases, as will be clear in the next section, rather severe reservations. For now, let it be said that one of the major pitfalls is that some of these insights, if followed to their logical outcomes and applied consistently, can easily become overgeneralizations that simply are not true. The claim that reality is a social construction is perhaps the most glaring example. Having made this caveat, I try to present in this section the case post-modernism is making that is most relevant for international relations theory and the scientific study of world politics.

The first contribution of post-modernism and the one that is on the verge of assassinating the Enlightenment deals with:

1. The arbitrary nature of modernity

To the children of the Enlightenment, modernity is the path of progress, perhaps even culminating in the perfection of humanity. To be modern is to be free from superstition, from ignorance, and from a set of institutions and ideas that shape destiny at birth. Even today "modernization," with its concomitant ideas of economic and political development, connote these sentiments. Beneath them is the firm belief that there exists an optimal way, and perhaps only one way to progress, and that reason, science, and technology will uncover that way.

Post-modernism denies the Enlightenment on two grounds. First, it denies the idea of progress, and in its stead, it places the idea of discontinuities. This is one of Foucault's (1972) major insights. History is not moving forward or backward. It lacks teleology, as well as evolution. Second, post-modernism not only denies the idea of progress, but rejects the notion that the purported end of the Enlightenment, the Modern, is the end of history, the perfection of humanity, or even a worthwhile goal. For the post-modernist, there is no optimal way of doing things. There are many ways, and one is not necessarily better than the other. Likewise, there is no one Truth (with either a capital T or small t) but many truths. Post-modernism tips off capitalism's mask of science and denies the claim of modern economics that there is but one way to solve the problem of food and shelter and that other forms of organizing economies will be less efficient or beneficial, if they "work" at all. At the same time, it denies Marxist claims that certain modes of production are appropriate to certain conditions of history. For the post-modernist, "nothing is written."

What this means is that modernity and its claims need not have been the products of history, although they were the products of Western European history. Modernity is not a model, it is simply an instance. Modernity was not inevitable, nor was it necessary. It is a project. Something else could equally well have occurred. Modernity is arbitrary, and may or may not have served as well as other projects.

More important than these insights themselves are the implications derived from them. Post-modernism not only insists that modernity is an ongoing project, but denies its benevolence. It stands in opposition

to the homogenizing role that modernization has played both within and between states. What it fears most is the bureaucratic/all seeing/scientific-investigating/liberal social-engineering/technology-wielding world reformer that will make everyone the same and drown all cultures in one global culture. It stands for the different, the dissenter, the non-conforming (Ashley and Walker 1990). To post-modernism, the ideas of economic and political development are just so many modernist conceits in a litany of conceits that have been imposed on the weak and the defeated. Modernity is not progress. It is not optimal. It is not superior. It is culturally and ethically arbitrary.

Once the illusions of the Enlightenment are stripped away, the modern era comes to an end and the post-modern era begins. Post-modernism, then, refers not only to a philosophical position, but to a historical era we have entered. Because of the ambiguity of the term, it is possible for post-structuralists to write about the post-modern without always embracing all of post-modernism (for an example, see the preface to Der Derian and Shapiro [1989]).

The second contribution of post-modernism is the realization that what exists in the world is:

2. Choice posing as Truth

This insight flows naturally from the first; for if it is the case that nothing is necessary (because historicist conditions or positivist causes do not determine things-as-they-are), then it follows that the arrangements that do exist were created by human beings either consciously or unconsciously. Such constructions were in fact choices that were made. How much freedom went into the choices is a matter for historical research, but they were choices in the sense that other arrangements could have been selected by struggles within history.

Human beings, however, have not been satisfied to call these outcomes choices that were contingent on preference, cultural biases, or political fights. Instead they have sought to cloak them as the outcome of metaphysical categories – God, Reason, or History. Rather than seeing things as arbitrary choices coming out of power and interests, the victors have justified their choices in terms of divine law, natural law, or scientific analysis. Even when choice is recognized, these warrants make any other choices sinful, unnatural and unreasonable, or unscientific. Such claims when seen in the context of Enlightenment beliefs about the inevitability of progress take on an added weight. The post-modernist denies all of this.

The third contribution, which is naturally derived from the second, is:

3. Reality is a social construction

If what exists is at one and the same time arbitrary and the product of human choice (at some level), then it follows that what exists must have been socially constructed by people. Reality is created and constructed by beliefs and behavior. Structures do in fact shape beliefs and behavior the way some positivists thought, but these structures are the product of human action. Reality is not God-given or Nature-given, but human-imposed. And some would add, *this* is an imposition.

Foucault (1972, 1977) is responsible for much of this contribution, but his thinking on this point fitted in nicely with other intellectual currents in hermeneutics, anthropology, and sociology (especially the work of Berger and Luckmann 1966). As a result, something of a wide consensus exists on this point, although thinkers arrive at it from very different starting positions. What can remain of positivist social science, however, if this point is accepted in its entirety?

Exploring how beliefs and social science in particular help construct reality leads to Peter Winch's (1965) idea of social science and the fourth contribution:

4. Language and conceptual frameworks are prone to self-fulfilling prophecies

Whenever ideas spread and people believe and act on them, then that part of the world portrayed by these ideas actually comes into being. In this way realities are constructed. As certain rules and norms are obeyed, institutionalized, and enforced through a variety of social control mechanisms, then a reality comes into existence. Since people often conform to such cultures, it is possible to have a science, like economics, that appears to predict and explain patterns accurately.

Because of this effect, social science cannot be entirely value free or neutral. Of course, it must be pointed out that when positivists argue in favor of a value-free, neutral, and objective science, they do not necessarily mean that values play no role in motivating research, and they certainly do not mean that science should have no impact on the lives of people. What they mean is something much narrower, and that is simply that a scientist should act as an impartial judge in terms of which specific theories and explanations are accepted, rather than as an advocate.

Nevertheless, scientific inquiry is not wholly value free because it helps build structures that support and nourish some lifestyles or forms of life and starve and kill other forms of life. Science is not simply a useful tool, but a practice that creates a mode of life that consciously destroys other ways of thinking and living.

This is even more evident in the social sciences. Modern economics, for example, is very supportive of capitalism in terms both of providing an ideological veneer and solving and researching real problems. The contemporary emphasis on rational choice can be read in this light. Rational choice is seen as a modernist conceit that makes choice pose as Truth. The extent to which rational-choice analysis can become a rigorous science will depend very much on the extent to which people or leaders accept its rules to guide their behavior. In doing so, they will not only create a reality but people who are "rationally-calculating individuals." Such a science succeeds in explaining more and more of the variance not because it is able to uncover the "causes" of behavior, but because it produces them.

Post-modernism directs us toward researching how language, conceptual frameworks, and paradigms shape the world. In international relations, one would clearly want to know how power politics and the realist paradigm socially constructed reality (see Vasquez 1993: chs. 1, 3). In democratic politics, one would want to explain how liberal social thought constructed reality. Objectivity, for example, which is generally seen as the absence of a point of view, is seen from the post-modernist perspective very much as a point of view and a pernicious point of view at that. To insist that everything must be seen from two or more sides makes all kinds of assumptions about truth, the way knowledge should be sought, lifestyle, and so on and so forth.

From the ideas of social construction and self-fulfilling prophecy, the fifth contribution of post-modernism follows:

5. The process of identification and the construction of identity is a form of power and an act of violation

Identity is probably one of the more intimate forms of social construction that is imposed on individuals. There can be no doubt from a post-modernist point of view that identity is a social construction. Why one identity rather than another? Who decides and with what consequences? Since identity is often associated with wars and/or persecution, not to mention privilege/victimization, what one's identity is can have profound influences. Who controls identity obviously

has profound influence over the destiny and life of an individual, group, or society. Because of this, it is an act of power. Because identity is typically not chosen (at best it can be rejected with pain and agony) — it is a violation of human freedom.

These five contributions of post-modernism cut across all inquiry, and their implications have had dramatic and sometimes long-lasting effects in certain disciplines, particularly literary criticism. In international relations and comparative politics, their implications have not been fully explored. Their potential impact on social thought is profound, particularly on the question of modernization and the creation of a new homogenizing world order. Already within international relations theory, the impact of the small band of scholars writing under the post-structuralist label has been significant. Scholars like Ashley (1987), Michael Shapiro (1981), Der Derian (1987), R. B. J. Walker (1993), David Campbell (1992), Jim George (1994), and Bradley Klein (1994), as well as feminist theorists like V. Spike Peterson (1992), Christine Sylvester (1994) and Ann Tickner (1992) have influenced how we think about international relations theory and have changed the terms we use to describe and conceptualize its project, as well as our understanding of international relations theory's past and its future (see also Der Derian and Shapiro 1989). These contributions provide the heart of what post-modernism has to offer international relations theory. As these insights are applied to specific areas, I would argue, contrary to Keohane (1988: 392), that a very rich research program can be expected.

### **The pitfalls**

Post-modernism places scientific inquiry across the social sciences in a crisis. There is a looming pitfall that Lapid (1989) and Pauline Rosenau (1992), among others, have pointed out, and this is the question of relativism. Within the philosophical writings of Jean-Francois Lyotard (1984) and Jean Baudrillard (1990) it is clearly evinced. For Lyotard (1984), the grand narratives shaped by the Enlightenment, including universalistic claims about freedom, rationality, and human rights, are just so many attempts to master and suppress differences. For Lyotard, specific communities supply their own meaning and truth for themselves, and any evaluation across communities is an act of power seeking to destroy differences. With

Baudrillard (1990), the idea of representing the world is entirely overturned and replaced with the notion that only simulation is possible, because there is no reality or truth to be represented; indeed the distinction between truth and falsity is blurred.

It should not be assumed, however, that the position of Lyotard and Baudrillard is necessarily embraced by international relations scholars working with post-modernism. While several have dealt with the question of relativism explicitly (see Campbell 1992: 5, 13–14; George and Campbell 1990; and Walker 1993: 74–76, 81ff.), it is fair to say that their position on the underlying epistemological issues is still in the process of being elaborated. Nevertheless, two points of consensus among post-modernists and post-structuralists in international relations exist. First is that the very question (or “problem”) of relativism only makes sense from a positivist, scientific, or objectivist perspective (Campbell 1992: 1; see also Ashley 1988). Second is that universal claims tend to smother differences and are hegemonic power plays (Campbell 1992: 5; Walker 1993: 74–79). These universal claims are profoundly arrogant and seek to silence, precisely at a time when what is most needed is an opening up inquiry.

Both of these points have a certain reasonableness, and clearly in the short term post-modernists must be permitted some presumptions to allow their inquiry to go forward. The concern here is with the logical outcomes of consistently applying the principles underlying this consensus. Thus, while the critique of positivism moves the scientific study of politics off center, it seems unfair to dismiss the questions of relativism and theory appraisal by stating that this is only a problem within the old framework. Of course, by definition, the problem of theory appraisal is a question raised by the scientific frame, but that does not mean that somehow this question is illegitimate or unworthy of discussion simply because it is tied to that framework.

Put another way, post-modernism seeks to open up inquiry and create a space for itself, but there is a danger (more potential and logical than actual given the structure of the discipline) that it could do so by silencing and dismissing other methodological approaches, particularly “positivist” ones.<sup>1</sup> Likewise, the charge that modernity consists of “universalist conceits” certainly reflects a reading with

<sup>1</sup> To a certain extent it is inevitable that post-modernism would dismiss approaches based on Enlightenment traditions because it dissolves their philosophical foundation.

which many would agree, especially as it deals with issues of the way in which life should be organized and with questions of ethics. This reading, however, like the five contributions listed in the previous section, consists of broad brushstrokes which, when applied across the board, seems to raise problems.

In this analysis, I will seek to address primarily the challenge and pitfalls posed by post-modernism to the questions of theory appraisal and scientific inquiry within international relations. The area of ethics and of meaning will be treated separately and only in outline form, if for no other reason than that of space, although I will note that my position on these questions is much closer to that of the post-modernists than those, like Habermas (1984, 1987), who have tried to resurrect the Enlightenment tradition.

The very attempt to separate aspects of empirical from normative inquiry, however, will raise post-positivist objections. Although one could argue that at the most fundamental level, the justification of science or any empirical inquiry will not be logically different from that of ethical inquiry (see Toulmin 1950), this does not mean that the specific criteria for accepting an empirical or ethical claim will be the same. The distinction between inquiry that seeks to explain why and how something occurs and inquiry that seeks to prescribe or comment action is useful for both logical and practical reasons.

At a logical level, since these two inquiries have different immediate purposes, they will use different criteria to accept or reject statements. Thus, normative inquiry will want to have some definition of the good, whereas empirical inquiry need not have this discussion in the same way. Since normative analysis involves several values in defining "good" and scientific analysis assumes that truth is the highest value, the criteria of practical/normative theory accept a variety of positions, approaches, and lifestyles as fairly adequate; whereas scientific criteria only accept the true. There is nothing necessarily wrong with this. In the areas of meaning, interpretation, and lifestyle, variety may be seen as an intrinsic good – a diversity many post-modernists celebrate. Nevertheless, at the normative level, criteria provide some basis for a reasonable discussion among alternatives.

In empirical matters, the commitment to truth applies more stringent criteria, especially that of accuracy, which makes rejection of theories more possible. Although the criteria make truth more of a process than an end product, the very idea of truth implies ultimately a single accurate explanation rather than a plethora of equally true

theories. The question of erroneous beliefs appears more amenable to settlement on the basis of an agreement on criteria that justify belief. Why it rains, why people get sick and die, or why they kill each other are questions whose answers must be evaluated by criteria that are different from criteria that address questions such as whether there is too much rain, whether people deserve to get sick and die, and why it is wrong for people to kill each other.

Two additional comments need to be made about separating empirical and normative analysis. First, the position given here – that the distinction between empirical and normative analysis is still useful because of the different criteria used to appraise statements – is very different from the position of early logical positivists, who argued that normative statements could not be verified and therefore were meaningless. Obviously *meaning* is not the same as the criteria used to accept a statement, and therefore the verificationist position was not valid on the grounds it was offered. Second, just because science may be motivated by value concerns and have normative effects, as noted earlier in the discussion of the fourth contribution of post-modernism, that does not mean that procedurally science cannot be objective in terms of how it treats evidence. Objectivity in this sense is a procedural norm maintaining that preferences about the truth or falsity of a proposition should not affect judgments about evidence or procedures in handling the evidence. Rules developed to support objectivity in this narrow sense enable science to avoid being ideological in the sense of supporting a theory because of political or economic interests.<sup>2</sup> Science, however, cannot avoid the pitfalls of being used for normative purposes, including class-based interests.

### **Reconstructing scientific inquiry after Enlightenment's fall**

It is the questioning of the possibility of a single accurate explanation and the abandonment of its desirability that makes post-modernism

<sup>2</sup> In international relations inquiry, much of the concern of critical theorists over the issue of political bias of quantitatively oriented scholars is misplaced, for it is not the case in the West that those who take a scientific (i.e., data-based) approach are the main advisors to foreign policy makers; traditionalists have occupied this role, and their exhorting of evidence has made them more prone to ideological influences.

so controversial and places theory appraisal and scientific inquiry in a crisis. There is no doubt that post-modernism along with a number of other post-positivist critiques have severely damaged the philosophical position of the scientific study of world politics. If that practice is to continue on some logical foundation, then it is essential that it be reconstructed on a new philosophical basis.

The spectre of relativism stemming from the post-modernist critique, and from constructivism in general, questions the legitimacy of the modernist conception of knowledge. Theory and science are not embodiments of truth from this view, but constructions of reality that are imposed arbitrarily as acts of power (Foucault 1980: 112-114, 131-133). For post-modernists, the role of the theorist should not be to invent and impose meaning, but to deconstruct and expose such impositions. In many ways, this kind of post-modernism is a logical outcome of the hermeneutic approach, which maintains that only the analysis of meaning is possible. The scientific project, which includes Marxism and critical theory as well as positivism, says more is possible, because while meaning may be imposed arbitrarily, there is more to be analyzed than the signification humans attribute to their experience. Indeed, such signification may not be the most important aspect shaping behavior and human life (see Bhaskar [1989: 2] and the discussion of structure in Buzan et al. [1993: 7-8]).

It is not an accident that post-modernism has had its most profound impact on literary theory. Literary theorists, after all, deal with fiction, so for them empirical truth is never really a concern; for them there is only metaphysical Truth or constructions of meaning (i.e., texts). There are no pre-given texts. There is no nature; there is no animal inheritance; there is no biology; there is no chemistry, no genetics. There are no human brains, but only creations of human minds and imagination. For them, humanity and its world are plastic - authorless - where every reader can make his/her own meaning.

This fundamental assumption, which underlies all constructivism, is post-modernism's one essentialist sin; it provides a universalistic understanding of human nature and acts as a grand narrative of history. This produces a fundamental self-contradiction that is post-modernism's logical refutation. For if everything is a social construction and nothing is permanently true, then how can post-modernism's view of the world and history as a set of constructions be anything but a social construction? And if it is a social construction, then in what sense can it be true? Indeed, if the post-modernist conception of

humanity is accurate, how could post-modernism's analysis conceivably be correct? And why would a post-modernist try to give an explanation of history and human cognition and behavior that was invariant across time? Let me suggest that the very foundation upon which post-modernism makes its appeal is in fact parasitic on an alternative epistemology and view of the world. The very charge of essentialism, which is post-modernism's warrant to dismiss philosophically any statement, is in fact an empirical question that is best answered through empirical research and not philosophical analysis. This opening provides a way of reconstructing scientific inquiry and addressing some of the post-positivist criticisms that have made positivist science so vulnerable.

The most basic question that needs to be addressed in any attempt to reconstruct the scientific project is whether one conception or framework is as good as any other, or put another way, whether there is any non-arbitrary way of distinguishing among concepts on the basis of (what science calls) their truth or falsity. Empirically, we know enough about the world to conclude that not every imaginative narrative can be imposed on the world. People make mistakes and recognize them as such and not simply as a change in beliefs. Utopian efforts are unable to be put into practice, even when the utopians have immense power. Schizophrenics live in a very real and meaningful world of their own making, but they are dysfunctional. Many theories fail to work in natural science and in the social world. The word "reality" refers to this resistance of the world to conform to every imaginable conception humans think up. We can imagine unicorns, even develop very coherent and meaningful texts about them. In a sense they are real in our lives, but they do not exist in the world, only in our imaginations. Likewise, we can develop worlds of witches, devils, angels, ghosts, and goblins, and these can be very real and dangerous, but as far as we know they do not exist in the world either. Humans are constantly creating social worlds, but only some can survive careful and rigorous scrutiny.

The differences between accuracy and error, reality and fiction, truth and falsity are in fact constructed by concepts. Concepts and words do construct a world around us; yet we need not be prisoners of this world. We are free to reject concepts on some basis other than whim or personal taste. Not all concepts or theories are equal; there are good reasons (and not just those of interest or convenience) for accepting some concepts and theories over others.

Of the various criticisms made by post-positivists,<sup>3</sup> there are two that question the possibility of rejecting concepts or theories on any scientific basis. The first looks at the empirical foundation for testing theories and argues that there are no independent facts, databases, or "reality" to test theories. The second looks at the process of making inferences about the adequacy of theories and argues that science is not based on logic, but on an act of power that imposes its criteria for determining truth on the culture.

The first area where some post-positivists believe science has not been reconstructed is in still holding on to the "naive" belief in "an independent database." Post-positivists rightly argue that facts do not simply exist in the world, but are the products of concepts, which in turn are a function of theories, or at least theoretical assumptions. It is argued, based on the work of Quine (1961) that facts are not independent of theories, and therefore cannot be used to test theories. Since theories create facts, facts can always be found to support theories. These post-positivist philosophical claims in and of themselves are not definitive, but they are often treated that way to dismiss empirical findings.

At first blush, this analysis, because it can be quite sophisticated, appears persuasive, but on further inspection it is at best paradoxical. While it is true that the way one sees the world and what constitutes its facts are a function of the concepts one employs, this does not mean that no observations or puzzles existed before the theory. Theories and concepts often follow observations and are meant to explain or account for a pattern. When this occurs, as it does quite frequently in international relations inquiry, "facts" clearly are independent of theory. In addition, it must be pointed out that even when facts are constituted by the introduction of new concepts that permit us to see these "facts" for the first time, theorists may not be so much interested in "facts" per se as they are in the relationships between "facts" (variables).

Post-positivists argue, however, that because concepts create facts, any operational definition derived from concepts does not create an independent database. All data are theory laden. Any good social scientist would agree with this, but the word "independent" means different things to each side in this situation. For the post-positivist

<sup>3</sup> See Hollis and Smith (1991) and Smith (1996) for an overview of criticisms by post-positivists and Nicholson (1983, 1996b) for a defense of empiricism.

critic, it seems to mean that any data set will always be biased in favor of the theory that informed its collection. The implication here is that datasets will always produce confirmation rather than falsification of an explanation or theory. As Hawkesworth (1992: 16-17) puts it:

... if what is taken to be the "world", what is understood in terms of "brute data" is itself theoretically constituted (indeed, constituted by the same theory that is undergoing the test), then no conclusive disproof of a theory is likely. For the independent evidence upon which falsification depends does not exist; the available evidence is preconstituted by the same theoretical presuppositions as the scientific theory under scrutiny...

This view is widely accepted by political philosophers, and I venture to say that one reason for this, is that they have never really tried to test a hypothesis that was incorrect. If in fact this presumption were true, we should have thousands of strong findings in international relations. Instead we have comparatively few! Data are not independent in the sense that they have no connection with concepts, but they are independent in the sense that they do not assure confirmation of theories. Databases can be considered independent if two competing explanations of the same behavior (i.e. set of observations) have the same chance of being rejected. We know this is often the case, because, in international relations (with the exception of a few areas of inquiry), the most frequent finding is the null finding (see above, ch. 7).

The second area where some post-positivists think scientific inquiry still needs further reconstructing and where their criticisms are much more telling has to do with science's epistemological foundation. The early logical positivists had hoped science and its method could be established on logic, so that its conclusions would be *compelling*. No such epistemology and logical solution has been established. The most recent effort to do so and the focus of much post-positivist criticism has been that of Popper (1959). He attempted to test scientific criteria for acceptance of beliefs on the principle of falsification.

However, as most are prepared to concede, Popper's efforts fall down because the principle of falsification, as well as the other standard criteria for rejecting theories, must be seen as *decision rules*, norms if you will, and not as logical conclusions compelling belief. From this view, science becomes a project for making decisions about belief according to fairly rigorous rules, norms, and definitions.

Establishing a consensus on rules becomes the basis for reconstructing science in a post-modern era.<sup>4</sup>

These rules and norms need not be seen as philosophically arbitrary because they are justified on the basis of good reasons. They also are not arbitrary at the practical level in that the rules they embody are applied to make appraisals in a rigorous manner that limits the intrusion of personal preferences. In this way, science can act as a self-correcting mechanism and is one of the few ways people have to save themselves from self-delusion. Although science is a language game, like all other language games in a culture, it can claim adherence over competing games because of its self-correcting mechanism and its ability to settle differences on empirical questions once its procedures are accepted. Ultimately, while science draws upon aspects of the correspondence and coherence theory of truth, it rests – as a final check – on the pragmatic theory of truth. Putting ideas to test and examining evidence are important strategies that should not be cavalierly discarded by those interested in political inquiry.

This conception of science concedes much to post-positivist criticisms, but it reconstructs the scientific project on firmer philosophical ground. In addition, it makes it clearer exactly what role science can play in society. Science, however, is more than just a tool, although it could be reduced to that. It must be conceded that at the very center of the scientific spirit are values and practices that make it a way of thinking; indeed it can be argued that they constitute a way of life. The commitment to truth and the search for truth as the highest values are more than just preferences – they are fundamental value commitments. Truth is not simply a semantic concept (Tarski 1949), but a value that guides inquiry. To say that truth is the prime value means that theories and beliefs should be accepted or rejected solely on the basis of their ability to be consistent with the evidence and not because their acceptance will have beneficial consequences, promote a particular economic or political interest, be consistent with preconceived revealed doctrine, or provide an enabling function that allows

a society to shape the world by controlling people and resources. These other considerations, one or more of which are often important criteria in ethics, religion or public policy for the acceptance of statements, are in competition with the scientific spirit. Even those who take an instrumental philosophy of science position (and prefer to speak of adequacy or utility rather than truth) still see that what I am calling "truth" is the central value commitment of the scientific project. Science insists that for empirical questions its value commitment to the search for truth must be taken as guiding, and its practices privileged as the best way of attaining knowledge. In non-empirical matters, it is willing to give way; i.e., it recognizes the legitimacy of using additional and sometimes other criteria for accepting or rejecting non-empirical statements.

Science then is an act of power in that it imposes its criteria for determining truth on the entire society. At a particular point in Western history, science emerged as a discourse that competed with other discourses and institutions for the control of language and belief in certain domains, and after a long struggle, which still continues in certain quarters, it won the battle. Although this was a political battle, this does not mean that there are not good reasons (both epistemological and practical) for choosing scientific criteria of truth over others in the questions science has demarked within its domain.

All of this does not mean that post-modernism's insights about the Enlightenment are ill-founded or incorrect. They stand and should make international relations theory more humble, more cautious about human learning and "progress," and more mindful of the corrupting nature of power. Nevertheless, building on the criticisms of logical positivism to establish a new rational foundation for science on the basis of decision rules makes it possible to avoid the abyss of relativism. To do so concedes to the critics that science is a system of conventions for decision-making and not an Archimedean fulcrum lifting us to irrefutable knowledge.

### **Overcoming relativism within scientific inquiry**

Efforts to overcome relativism center on the question of establishing criteria for theory appraisal. Within international relations, this has been seen as a crucial area of concern both because of post-positivism and because of the inter-paradigm debate on the adequacy of the realist paradigm (see Lapid 1989; Banks 1985a). While some have

<sup>4</sup> Reconstructing science on this ground is not very different from what Kuhn (1970a: 199) said when he maintained that nothing about his thesis on debates over theory choice implies "that there are no good reasons [for choosing one theory over another] . . . Nor does it even imply that the reasons for choice are different from those usually listed by philosophers of science: accuracy, simplicity, fruitfulness, and the like." This hardly sounds like the radical skeptic that anti-positivists want to make Kuhn out to be (see Spegele 1996: 46).

celebrated the idea of theoretical pluralism, the idea of building knowledge requires some appraisal of existing beliefs, explanations, theories, and paradigms. Since there are both empirical and normative theories in international relations, and since empirical and normative statements are accepted on the basis of different criteria, each type of theory needs its own set of criteria.

The criteria of adequacy for empirical theory presented here are based on the assumption that a good theory must be true. The criteria are justified on the basis of the argument that following and using them increases the probability that an empirical theory, research program, or paradigm that satisfies the criteria is less likely to be false than one that does. If one prefers not to accept a philosophically realist view of theories (see Nagel 1961: 117-118, 141-152, 196), then in more instrumental terms, a theory that satisfies these criteria can be said to be more promising for achieving and making progress toward the ultimate goal of science, which is the acquisition of knowledge.<sup>5</sup> There are six criteria (all of them standard in philosophy of science) relevant to international relations inquiry. "Good" empirical theories should be:

1. *accurate*
2. *falsifiable*
3. *capable of evincing great explanatory power*
4. *progressive as opposed to degenerating* in terms of their research program(s)
5. *consistent* with what is known in other areas
6. *appropriately parsimonious* and elegant.

I label these, respectively, the criteria of accuracy, falsifiability, explanatory power, progressivity, consistency, and parsimony.

A set of propositions is accepted as satisfying the *criterion of empirical accuracy* if they consistently pass a set of reasonable and valid tests. Although theories are never proven and science is open-ended, theories whose propositions have passed tests can be tentatively accepted as accurate (and true), or at least not inaccurate and false. Conversely, theories that consistently do not pass tests can be

<sup>5</sup> I confine this analysis to empirical theories that claim to be scientific, at least in some sense of that word. Since traditional realists, like Morgenthau (1960) and Carr (1939 [1964]) claim that, I do not exclude theories whose adherents have eschewed quantitative analysis from these criteria (nor would they take exception to these criteria).

regard as false or dismissed as no longer being useful guides to research. This is because if the purpose of scientific inquiry is to produce knowledge, then failure to produce strong and statistically significant associations is an indicator of the failure to produce knowledge.

The criterion of empirical accuracy was the main criterion employed in the original text (see above, ch. 7). Some, like Spegele (1996: 42-43), have sought to criticize my application of it in the original text, by arguing that "any richly-textured theory" cannot be refuted "by determining the empirical adequacy of single hypotheses" or "on a proposition-by-proposition basis . . ." Spegele seeks to deny the claim (that if a central proposition of a theory is found to be false, then the theory as it stands cannot be true) without showing that there is anything logically invalid with this inference. Even if one is willing to be more pragmatic than logical, it needs to be pointed out that in the original text, not one or several, but all of the then existing propositions that had been tested statistically were examined. These included numerous tests of propositions at the center of the paradigm. In addition, the few propositions that did pass tests were then evaluated in terms of their scientific importance. What Spegele (1996: 42-43) would prefer is a more holistic application and one that presumably examines evidence other than that produced by statistical analysis. The case studies in this second part of the volume are meant to meet that concern. Nevertheless, I believe it is a mistake, as well as highly risky, to dismiss an entire body of evidence and to continue to adhere to a theory as if that discrepant evidence does not matter. Theory appraisal will never be rigorous by adopting such a strategy.

Because testing is such an important step in determining whether a theory is true, Popper (1959) maintains that, in order for a set of statements to be considered a scientific theory, they must specify in advance (or at least at some point) what evidence will falsify them. If theories (or a set of statements) do not satisfy this *criterion of falsifiability*, then Popper (1959) would reject them as inadequate to begin with. When two theories have passed tests and are vying for the allegiance of the scientific community, the *criterion of explanatory power* maintains that the theory that resolves puzzles and anomalies that could not be explained before, and predicts or explains new phenomena, is superior.

This brief discussion should make it clear that the criteria work

most powerfully when seen in relation to each other. They should not be applied in a rigidly isolated manner. To say that one theory is better on one criterion but not on another in comparison with a competing theory is not as useful as comparing how the theories in question do on the entire set of criteria.

This is, particularly the case, since some criteria are more important than others. Thus, the first two are essential; if a theory is not accurate or falsifiable (in at least the broad sense of specifying at some point what evidence would lead the theorist to say the theory was inaccurate), it cannot be accepted regardless of how well it satisfies the other criteria. Having great explanatory power is of little use if the explanation turns out to be inaccurate or is non-falsifiable. Likewise, the case for *parsimony* is often given too much weight in international relations. Theories, as Craig Murphy (personal communication 1993) argues, should have an appropriate degree of complexity. They should not include all possible variables without regard for their relative potency; nor should they leave out important factors to keep the explanation simple. What is crucial is that theories be able to pass tests – first in principle and then in fact.<sup>6</sup>

A criterion that is of great relevance to the inter-paradigm debate is that research programs must be progressive rather than degenerative. This is the key criterion used by Lakatos (1970) to overcome some of the problems Kuhn (1970a) identified about paradigms and their alleged incommensurability (on the latter, see Scheffer 1967). Lakatos shows that while it is logically compelling for one valid test to falsify a theory, there is no logical reason to prohibit a reformulation of a theory on the basis of an almost infinite number of auxiliary hypotheses. Thus, while specific theories or explanations may be falsified, it is very difficult to falsify a research program with a single underlying theoretical perspective; i.e., what Kuhn would call a paradigm. Suffice it to say here that research programs that are always developing ad

<sup>6</sup> It is for this reason that one must reject Waltz's (1997a: 916) position that "success in explaining, not predicting, is the ultimate criterion of good theory." This cannot be the ultimate criterion for evaluating theories. Waltz (1997a) tries to make this point by defining "predicting" somewhat narrowly, so as to focus only on the future and not to include "retrodiction," but this is not how "positivists" usually define the term when speaking of testing. It makes no sense to explain patterns that do not exist. As will be demonstrated in the next chapter, this is precisely what Waltz (1979) did in claiming that one of the major patterns in international politics is that states balance. Both historical and data-based research seriously question this claim.

hoc propositions and/or having their theories reformulated or emended because they are not passing empirical tests should be considered as degenerating and not as progressing. Finally, good theories should not contradict what is known in other fields of knowledge. Assumptions about motivation or cognition in international relations should be consistent with what is known (as opposed to theorized) in psychology.

While such criteria will make theory appraisal rigorous, it is important that they not be applied too early in a theory's development so as to close off an avenue of inquiry prematurely. All in all, these criteria must be seen as goals toward which we should strive, with concerns being raised if theorists no longer seem able to move toward the goals with the explanations being developed.

In addition to empirical work, most of the history of international relations theory has had a strong normative component, and one would expect more significant work along these lines as the intellectual climate moves further away from positivist biases. While post-modernism and post-positivism has made space within international relations inquiry for normative analysis, such work has not been very rigorous, and if it is to gain more respect, it too must have criteria for appraisal.

Since the purpose of normative theory in international relations is to guide practice, it can be assessed in terms of the extent to which it provides an enabling function; that is, how well it guides practitioners. Throughout history most international relations theorizing has been devoted to this kind of *practical theory*. Practical theory can be appraised directly in terms of whether the theory actually provides information practitioners need to know and can use. A philosophy and theory of practice can also be tested indirectly by the policies and actions to which it gives rise. Practical theory, therefore, can be appraised both by looking at some of its intrinsic characteristics (e.g., the kinds of information it provides) and by the quality of policy prescriptions it produces. There are seven criteria of adequacy that can be applied to make such an appraisal. A "good" guide to practice must:

1. have a *good* purpose and consequences
2. be able to be implemented in *practice*
3. provide comparatively *complete* and precise advice as to what should be done

4. be *relevant* to the most difficult policy problems of the day
5. have *anticipated costs* (including moral costs) that are worth *anticipated benefits*
6. achieve *success* and avoid *failure*.

I label these, respectively, the criteria of goodness, practicability, completeness, relevance, anticipated utility, and success-failure. To this we can add a seventh, which is that:

7. the latent *empirical* theory of a practical theory must be scientifically sound.

I call the latter the criterion of empirical soundness. To the extent to which practical theory has an empirical domain, and almost all do, it can be evaluated by some of the scientific criteria of adequacy, especially accuracy. However, practical theory needs its own criteria to ensure that it is satisfactorily meeting its own purpose, which is different from that of scientific theory despite the narrowing of the philosophical differences between empirical and normative analyses.

The criterion of *goodness* is the most fundamental in that it is a prerequisite for the rest. The key is in defining "good," which can only be determined (or contested) by the larger ethical, religious, professional or organizational goals guiding the group (for example in foreign policy – the state or its competitors). One of the contributions of post-positivism and critical theory is to invite more discourse on this topic. What are and should be the purposes of foreign policy; what are the consequences of policy; and do the consequences live up to certain ethical or other social standards?

Goodness is only a prerequisite; ideas must be put into practice and that is very difficult given the constraints of the world. There is always a slippage between what philosophy and policy look like on paper and what they look like in practice. This gap between theory and practice (George and Smoke 1974: 503) provides a way of evaluating the adequacy of practical theory on the basis of the *criterion of practicability*. The criterion of practicability acknowledges that there are many fine theories but that they lose much when they are implemented; i.e., their most interesting aspects sometimes cannot be implemented.

Being able to implement a policy or practice a way of life is a way of testing a practical theory, but it is very costly. Discourse needs ways of evaluating new ideas before they are put into practice. The *criterion of*

*completeness* admirably satisfies this demand. The more precise and detailed the advice and recommendations offered by a practical theory, obviously the more useful it will be. The criterion of completeness recognizes that some theories, like the realist notion of national interest, provide general rules, but no advice as to how to apply the rule in a specific situation. Realism, for example, provides little guidance as to how to determine which option in a crisis is really in the national interest. Likewise, sometimes the best rational choice (before the fact) is not always clear. Although no general advice can be entirely complete, analysts must have some clear way of deriving guidance in a specific situation, if the theory is to be of any use. Theories that simply postulate "pursue the national interest" or "be rational" without providing a theory that will permit practitioners to determine what is the national interest or what is rational in a given situation are incomplete and flawed. They are too vague and are plagued by ambiguity.

A good practical theory, however, must do more than just provide detailed advice. An adequate practical theory must provide guidance on the most difficult policy dilemmas of the day. A theory that can do that is satisfying an important need and a theory that is unable to do so, is clearly *irrelevant*.

The *criterion of completeness* and the *criterion of relevance* are two ways in which a practical theory can be evaluated before it is put into practice. Another way in which it can be evaluated before it is tried is to examine its *anticipated costs*. Costs should be defined not only in material terms, but also in terms of intangible costs, such as moral costs, costs to the prevailing character and structure of a society, costs to internal and external relationships, as well as the general decision costs in adopting a new practice. These costs must then be compared with anticipated benefits and the probability of success. Many of the techniques of policy evaluation can be fitted into this *criterion of anticipated utility* so long as this is not done in a narrow technocratic manner, but within a broad humanistic perspective.

Nevertheless, there are real limits to the extent to which a practical theory can be evaluated before it is put into practice. Ultimately, practical theories tend to be judged by their *success* or *failure*. Jervis (1976: ch. 6) has shown that approaches to foreign policy are evaluated by whether they appear to succeed or fail. Nothing will discredit a foreign policy (and the practical theory underlying it) faster than a dramatic failure. Appeasement at Munich is the classic example.

Conversely, once a practical theory is in place, only a dramatic failure may lead to its displacement, even if all the other criteria have been flouted.

The critical test for practical theories is their ability to deal with the great political questions of the time. If the prevailing theory is associated with a great catastrophe, then it is replaced by the alternative theory best able to explain the failure and most likely to produce a modicum of success, if it is adopted. The mere association of ideas with a catastrophe, even if this association is coincidental, can bring about a theory's downfall. The result of using the *success-failure criterion*, as Jervis (1976: 281-282) points out, is often to learn the wrong or exaggerated lessons. In order for this powerful criterion to be a more adequate guide to theory appraisal, the standards for success and failure must be defined more precisely and the grounds for inference must be rigorously analyzed.

Finally, since a large component of practical theory is its latent (and sometimes explicit) empirical theory of how the world works, most of the criteria applied to scientific theory can be applied to the empirical aspects of the practical theory. Obviously, a practical theory that is based on a set of empirical assumptions and propositions that are found to be false or questionable is not as good a practical theory as one that is consistent with accepted knowledge. A practical theory that builds upon a weak empirical base is eventually bound to give advice that is *empirically unsound*.

### Conclusion

Post-modernism and post-positivism has placed the scientific study of world politics in a serious crisis. Many in the field take glee in this, for they believe it sounds the death knell for a form of analysis they never liked and which they found boring and difficult. They underestimate the extent to which a threat to scientific inquiry may also be a threat to much of what they do. Surely, a critique of all empiricism, let alone the entire Enlightenment, is not without severe implications for a variety of approaches within the field.

The criteria for appraising theory presented in this chapter can be used to place international relations inquiry, especially scientific inquiry, on a new foundation, answering some of the major criticisms of post-positivism and avoiding the potential relativism of post-modernism. This is important because one of the problems posed by

relativism is that it does not allow the field to address one of its major questions, a question in which post-structuralists seem keenly interested - namely, the adequacy of the realist paradigm. If the inter-paradigm debate is to be faced, there must be some criteria of adequacy that can be used to appraise theories and explanations, and, indirectly, paradigms.

For me, the real crisis in international relations inquiry is the absence in both empirical and normative analysis of serious, sustained, and rigorous theory appraisal. Post-modernism brings this crisis to a head. In both the scientific and practical realms, the inability to evaluate stultifies cumulation and learning and hampers research progress. The reasons for this lack of appraisal are twofold: first, the dearth of criteria; and second, the lack of discipline in applying what criteria there have been.

In my view, the main reason for the lack of cumulation has been that the set of theoretical approaches the scientific-oriented have been testing - realism - is probably wrong. In fact, one of the messages that scientific research has been persistently giving us is that the dominant realist paradigm is not providing a very fruitful and progressive guide to inquiry (see Part I: The Original Text, above). Part of the lack of rigor in the field is to dismiss all too quickly the method rather than the theory. What makes this a rather serious issue is that the main opponents of data-based work are often those most tied to realism and neorealism.

While some traditionalists were not slow to question the ability of scientific inquiry in international relations to find anything that was not trivial, they have not been able to show why a supposedly flawed method has had more success when it has tested hypotheses that have deviated from the realist research program than when it has tested hypotheses central to realism (see above, pp. 132-143, 151-152). If realists and neorealists are to be taken seriously, they must specify at some point precisely what criteria they will accept for rejecting their theory. The criteria I have offered would replace a casual approach to theory acceptance with a much more rigorous procedure.

Such rigor will be needed if we are to make any headway with the inter-paradigm debate. Lakatos and Kuhn point out that paradigms cannot be falsified by an application of what I have called the criterion of accuracy. This is because any decent theory that a dominant paradigm would have to have had to become dominant in the first place is going to be articulated along a number of lines. Part of the

reason realism has been extensively articulated, however, is that it is constantly being reformulated in the face of anomalies and discrepant findings. Realism's penchant for predicting contradictory things (and embodying contradictory propositions [often added to save the paradigm in light of discrepant evidence]) at times violates Popper's (1959) criterion of falsifiability, as well as Lakatos' (1970) concern about innumerable auxiliary propositions that lead to degenerating problemshifts.

Violation of this principle explains why realism lives on despite extensive criticism of its concepts, falsification of many of its hypotheses, and a lack of scientifically important findings. Only by utilizing all the criteria of adequacy in a systematic fashion and by shaping research in light of the theory appraisal's agenda can the inter-paradigm debate be resolved. The next chapter will begin this process by applying Lakatos' criterion that theory shifts must be progressive and not degenerating.

The debate on post-modernism need not lead to a dividing discipline and an acceptance of a relativism where there are many incommensurable empirical perspectives with no way of comparatively evaluating them for fear of silencing a voice. One can restore normative practical theory to its rightful place within international relations discourse without at the same time introducing empirical relativism under the guise of empirical diversity. Theoretical diversity is a means to an end – knowledge about a given phenomenon – and not an end in itself. While the third debate has placed the scientific study of world politics and international relations inquiry in a position where it must reconstruct its philosophical foundation, this need not necessarily jeopardize the ideal of a cumulation of knowledge. Instead, treating science as a self-contained system, with its own rules and norms based on scholarly conventions and reason rather than irrefutable principles of logic, places the scientific approach on a more adequate epistemology.

Eventually, of course, the post-modernist critique will affect most approaches to international relations and not just quantitative approaches. Nevertheless, the critique has ended much of the myopia associated with logical positivism and created a more congenial space for normative and legal approaches, as well as theory construction and conceptual analysis in general. Post-positivism and post-modernism can have beneficial effects so long as they do not become the new orthodoxy. The danger is that some traditionalists will use post-

positivism as a weapon to replay the second debate (on traditionalism vs. science) and to dismiss and ignore quantitative research rather than to engage it on its theoretical and substantive merits. Such an outcome will further divide the discipline and reduce rigor at a time when more comparison of research findings using different methodologies and more rigorous appraisal of theories and paradigms are needed. The next three chapters engage in such an appraisal by applying several of the criteria presented in this chapter to some of the most important non-quantitative neotraditional discourse in the field.