POSTMODERNISM AND THE PRESENT STATE OF INTEGRATIVE STUDIES: A REPLY TO BENSON AND HIS CRITICS*

Carol Nicholson
Department of Philosophy
Rider College
New Jersey

ABSTRACT

Benson and his critics seem to make three troubling assumptions: 1) There is only one valid theoretical approach to interdisciplinary studies. 2) Unanimous agreement is a possible and desirable goal. 3) When a consensus on general principles and methods is achieved, a new legitimacy will follow. These assumptions are all wrong because they are based in the modern Cartesian school of foundationalist epistemology rather than postmodern epistemology. Knowledge and justification are better understood as social phenomena rather than as grounded in nature, reason, language or historical laws. Interdisciplinarians should be open to a variety of approaches, picking what works the best for the time being.

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The present is a time of crisis and chaos in interdisciplinary studies. Much of the recent literature reveals a profound sense of uneasiness not only about the future of particular interdisciplinary programs but also about a number of issues connected with the notion of interdisciplinarity in general. In the development of any type of academic inquiry it is sometimes useful to step back from the substantive issues in order to reflect upon the tradition itself and give a theoretical

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In the first edition of *Issues* (1982) Thomas Benson authored "Five Arguments Against Interdisciplinary Studies" p. 38-48, to which three responses by William Newell, Jerry Petr, and Raymond Miller were published in the 1983 edition of *Issues* (pages 1-31).

substantive issues in order to reflect upon the tradition itself and give a theoretical account of it. One sign that such a time has come in the relatively recent tradition of integrative studies is the debate initiated by Thomas Benson's assuming the role of devil's advocate in his "Five Arguments Against Interdisciplinary Studies." (1982:38-48)

Benson identifies what he takes to be the most popular and forceful objections as follows: First, interdisciplinary studies involve a number of serious conceptual confusions about their nature, methods, and goals. Second, undergraduates normally lack the disciplinary competence to derive long-lasting benefits from interdisciplinary instruction. Third, concentration on an interdisciplinary curriculum may interfere with a student's ability to compete successfully for jobs and admission to graduate school. Fourth, many integrative courses are shallow and lacking in intellectual rigor. Finally, such programs tend to be expensive in terms of faculty-student ratios in a time of scarce resources.

I shall focus upon the first of Benson's arguments, the charge that interdisciplinary studies are conceptually confused. Although he does not explicitly connect this theoretical objection with the other four, which involve pedagogical and practical considerations, his conclusion implies that a sound theoretical foundation is a necessary condition for maintaining rigorous standards and persuading skeptical colleagues and budgetary authorities of the value of an interdisciplinary education. Thus, unless the first objection is successfully met in the form of a general theory of interdisciplinary study, the others appear to be insurmountable.

Benson's first argument rests on the premise that academic disciplines are normally defined by reference to either a distinctive subject matter or a distinctive method of inquiry. He points out that those of us who engage in interdisciplinary studies, on the other hand, lack a clear understanding of what we are doing, why we are doing it, and how we should go about it. Are we attempting to "integrate" two or more disciplines, and if so, what exactly is the nature of the connection we are seeking? Is it simply a matter of borrowing insights and techniques from other fields or do we intend to establish a permanent bond among the various disciplines based upon a holistic view of knowledge or reality? Alternatively, should we be concerned with the more modest goal of solving particular problems that do not admit of resolution from the standpoint of any single discipline? If we choose the latter pragmatic and piecemeal approach, it may still be objected that we lack an explicitly articulated definition of the logical structure of interdisciplinary problems which would enable us to distinguish them from other sorts of problems. Benson argues that in the absence of any consensus about either the appropriate criteria for selecting our problems or the principles for deciding which disciplines should

be relied upon for solving them, there is no more coherence in our methodology than in our understanding of the nature of our subject and our aims.

In their replies to Benson, William Newell, Jerry Petr, and Raymond Miller take issue with many of his detailed arguments, but concede the main point that lack of agreement about methodological principles and goals constitutes a serious weakness in interdisciplinary studies, a problem of the utmost practical as well as theoretical importance. (1983:1-39) The dire consequences that we are warned may follow as a result of failure to develop a general theory of interdisciplinarity include shoddy research and teaching, ill-prepared students, the wasteful use of resources, and perhaps eventually the elimination of programs and faculties, and a virtual Dark Ages for integrative studies.

I have no doubt that these are real dangers facing innovative educational and research projects in the present academic climate, and I agree that a reflective, philosophical phase is important for the continued growth of excellence in interdisciplinary research and teaching. For these reasons I find the debate between Benson and his critics to be both timely and extremely valuable. I am troubled, however, by three distinct but related assumptions which seem to be unquestioned by either side: 1) the idea that there is only one valid theoretical approach to interdisciplinary studies, 2) the belief that unanimous agreement in the theory of interdisciplinary studies is a possible or even a desirable goal, and 3) the expectation that such a consensus on general principles and methods will provide interdisciplinary studies with a new legitimacy which is presently lacking. If these assumptions are subjected to critical examination, a somewhat different outlook on the current state of integrative studies can be seen to emerge.

My first quarrel is with the assumption that a single set of general principles and methodological rules can and should be developed to guide interdisciplinary inquiries in every area of specialization. Neither Benson nor his critics seem to have noticed a rather obvious logical dilemma entailed by this presupposition. Let us suppose for the sake of argument that there is such a thing as a rule or principle which applies to all interdisciplinary studies, in somewhat the same way as the law of noncontradiction is presupposed by logic, or what Kuhn calls "paradigms" or "disciplinary matrices" govern normal inquiry in the natural sciences. From which discipline, if any, is this principle derived? If it belongs to any one of the specialized disciplines, it will be too limited in scope to perform the required role of guiding the connecting of insights from all other disciplines. No serious scholar today would maintain that theological or biological principles should regulate the practice of interdisciplinary work on the overlap between history and sociology, or that political scientists or psychologists should dictate methodologies to interdisciplinarians in the fields of literature and music. Academic freedom entails both the uninhibited pursuit of knowledge wherever the standards of one's profession may lead, and at

the same time the recognition of the limits of any one discipline's authority with respect to others.

If, on the other hand, the interdisciplinary principle is not derived from any particular discipline, how is it to be discovered, and what evidence is to be considered relevant to its evaluation? This way out of the diiemma would be like what Newell calls the "adisciplinary" approach, which he scorns as an attempt to operate in an intellectual vacuum. The force of this dilemma is that if we believe in the existence of universal interdisciplinary principles, we must deny either academic freedom within the disciplines or the value of disciplinary standards. I see no way to escape it unless we abandon the ideal of a general interdisciplinary methodology.

The natural tendency to aim at theoretical simplicity will create resistance to the suggestion that all integrative studies are not somehow united in their basic approach. Benson emphasizes the need to develop a better understanding of "the essence of the interdisciplinary problem" and its "logical form," (1983:31-34) as if these concepts were unproblematic, but it is not clear that there is such a thing as an "essential feature" common to all interdisciplinary.topics. In a quite different but, I think, relevant context Wittgenstein has cast doubt on the habit of philosophers to assume that, because diverse phenomena are called by a common name, they must have an identical nature. According to his famous example, we cannot specify any single characteristic shared by all games, for instance, the activities of basketball, chess, hide and seek, and playing house. Perhaps interdisciplinary theorists have been mislead by language in taking it for granted that "interdisciplinarity" is the name of an essence, rather than simply a term that characterizes a group of academic practices loosely related by "family resemblances" but not by a single logical structure.

Wittgenstein's advice is that instead of expecting to find a universal wherever there is a common name, we should look and see whether or not there are similarities. The lack of an essential feature shared by, for example, environmental engineering, women's studies, and phenomenology has not prevented valuable work from being done in these interdisciplinary fields. Even if it were possible to achieve, it is not clear that an understanding of how the "logical structure" of problems in social psychology, gerontology, and African studies is similar or identical to all other interdisciplinary issues would further research and teaching in these areas.

One rather common way of trying to find uniformity in the midst of diversity is to distinguish supposedly "legitimate" from "illegitimate" types of integrative inquiry. Some have argued that the "correct" view of interdisciplinary work involves a synthesis of the disciplines in a unified theory of knowledge, but others reject this

approach as an impossible agenda (Miller, 1982:30; Doyal, 470-487). Newell, for example, argues that only a problem-solving model can defend itself adequately against criticism. (1) While admitting that "it is not so clear what principles guide the interdisciplinarian," he speaks of the need to train faculty in "*the* interdisciplinary method (italics added)" (3 & 14) in the perhaps overly confident expectation that once the principles of this method are articulated, they will be found to be universally applicable. According to Petr, "Bill Newell has given interdisciplinary educators their marching orders; Tom Benson has shown them the walls they must scale." (23) While I am willing to march for the interdisciplinary cause, I am not sure that we all need to be marching in the same direction or scaling the same walls.

This brings up my second objection to the assumption that interdisciplinarians should strive for universal agreement about their subjects, methods and goals. Newell insists that "If our profession were to agree on a conception of interdisciplinary studies similar to it [the model he proposes], we would be in a position to argue that, in principle at least, interdisciplinary studies can answer its critics. Until such agreement is reached, however, we are quite vulnerable to attack." (14) He hopes that his exchange with Benson will "move our profession towards consensus on the nature of interdisciplinary study."

This hope, however, is curiously in conflict with his overall vision of the main value of interdisciplinary education, with which I am far more sympathetic. Newell believes that the interdisciplinarian is able to appreciate "the value and legitimacy of alternative perspectives" which leads to a "richness of insight not available to the adherent of any one disciplinary orthodoxy." (14) The assumptions and distinctive world views of the different disciplines may "lead to conflicting or incommensurate insights" which it is the task of interdisciplinary studies to connect. The "heart of the interdisciplinary method" of education is to develop "openness to alternative ways of looking at the world." Petr (22) and Miller (1983:28) also emphasize the cultivation of "tolerance for ambiguity and multiple perspectives" and flexibility in the face of "challenges to the conventional."

It strikes me as odd that interdisciplinarians who pride themselves on the ability to welcome and appreciate conflicting insights from different disciplines should be unwilling to tolerate different or incompatible points of view within their own interdisciplinary territory. We know from our experience of working with the literatures and methods of different disciplines that disagreements among scientists, historians, and artists need not entail "conceptual confusion." Even inside any particular discipline there are deep divisions and conflicts without which it is unlikely that progress would ever be made. Then why should we take seriously Benson's charge that the lack of ideological agreement among interdisciplinarians is a powerful objection to integrative studies? I doubt that the political goal of securing consensus is important enough to sacrifice the open-minded attitude

towards diversity that is both our raison d'etre and our best argument against our critics.

My final criticism has to do with the issue of how integrative studies can be justified. So far I have been concerned with raising doubts about the existence of an "essence" of integrative studies and the possibility of discovering a set of general methodological principles that all interdisciplinarians would accept. If my efforts to undermine these assumptions are successful, it may appear to some readers that the project of justifying interdisciplinary inquiry is doomed to failure. I do not believe that this conclusion follows, but in order to see how the inference can be avoided, we need to reconsider some of our deepest preconceptions about the nature of knowledge and the relation between theory and practice. In order to highlight these preconceptions and show why I think they need to be revised, I shall give a brief (and necessarily somewhat simplistic) overview of the traditional ways of thinking about knowledge, beginning with the 17th century.

Modern epistemology can be described as a series of debates between rationalists and empiricists, realists and idealists, and materialists and mentalists, about the foundations of knowledge. Descartes is widely acknowledged to be the "father" of modern philosophy because his method of systematic doubt resulted in what he thought was an Archimedean point upon which a "firm and permanent structure in the sciences" could be constructed. Locke and later empiricists argued that the foundation of knowledge is not the clear and distinct ideas of reason but rather the data provided by sensory experience. The sharp disagreements between the Lockeans and the Cartesians occurred in the context of a shared assumption that knowledge must be grounded in the most basic ideas from which it is derived. Kant thought he had reconciled rationalism with empiricism by discovering the justification of science In the necessary and universal categories of the human mind, but did not question the need for knowledge to be grounded and sanctioned by a system of *a priori* principles. Hegel historicized Kant's categories by making them stages in the dialectical development of the Absolute Spirit, and Marx applied the method of dialectics to the material conditions of society and class-conflict, but both assumed that the universal laws of history are what provide the logical basis of knowledge.

The linguistic turn in the 20th century shifted the focus of the quest for foundations from human nature and history to the structure of language. Chomsky attempted to revive the rationalist program by locating the ground in an innate universal grammar, while the logical positivists based knowledge on empirical observation statements and the verifiability criterion of meaning. Many believed that the new sciences of linguistics and language philosophy would finally succeed where Descartes and his successors had failed by discovering a permanent value-

neutral framework that would be able to assess the claims of all forms of inquiry and ground our knowledge of the natural as well as the human world.

This expectation has not been fulfilled, but the traditional hope that the foundations of knowledge will someday be discovered has not disappeared. In contemporary social science, heirs of the empiricist tradition search for secure foundations by emulating and adapting the techniques of the natural sciences. Positivist historiographers advocate the use of statistical methods and "covering law" models of causal explanation, and sociobiologists apply the evolutionary paradigm of natural selection to human behavior. On the other hand, critical theorists, influenced primarily by Hegel and Marx via the Frankfurt School, and ethnomethodologists, who derive their inspiration from Husserl and Schutz, attempt to ground their methods in phenomenological and hermeneutical theories of human nature and society. Literary criticism has become so overtly theoretical that a typical journal is more likely to include discussions about textualist, intentionalist, Marxist, feminist, psychoanalytic, structuralist, and deconstructionist methods than interpretations of particular works. It appears that many disciplines are not only dominated by the belief that results must be grounded in a theoretical framework but have become almost obsessed by the Cartesian problem of the foundations of knowledge" (Bernstein 16-20).

Integrative studies seem to share the same obsession. In the debate between Benson and his critics about the value of integrative studies, it is taken for granted on both sides that interdisciplinary inquiry requires theoretical "grounding" in order to be justified. Benson ciaims, for example, that the neglect of theoretical considerations has been responsible for "widespread doubts about the intellectual foundations and value of integrative studies," and concludes that we need to think more about our own "logical foundations" in order to develop "more compelling justifications" for interdisciplinary education. (1982:41 & 47) The assumption that the justification of knowledge, whether disciplinary or interdisciplinary, is inseparably connected to its theoretical ground is so common and seemingly plausible that it may be difficult to take seriously a proposal to challenge it. Is there any other way to think about knowledge and its justification?

There is an already fairly well-established alternative to foundationalist epistemology, which interprets knowledge and justification as social phenomena rather than "grounding" them in nature, reason, language, or historical laws. The recent efforts of psychologists, sociologists, political scientists, historians, literary critics, and philosophers to develop the implications of a different understanding of knowledge have been variously described as antifoundationalism, social constructionism, Kuhnian science, the new pragmatism, contextualism, pluralism, and deconstructionism. It is not always recognized that all of these labels refer to

diverse applications of a similar orientation -- the attempt to go beyond modern Cartesian epistemology.

Most disciplines are still dominated by foundationalist assumptions, so from within any one field, the new epistemology appears to be a "fringe" rather than a "mainstream" phenomenon, and many of the leading figures in the trend away from foundationalism are unaware of the parallel work being done in other areas.[1] It is only from an interdisciplinary perspective that we can begin to see these tendencies as a coherent school of thought and a significant movement with important implications for every branch of knowledge. For purposes of convenience, I shall refer to this interdisciplinary development as "postmodern epistemology."

I shall not attempt to give a precise definition of the new approach to knowledge, but its contours can be roughly sketched in terms of four themes, each of which has often been misunderstood, but which collectively have significant implications for integrative studies:

1) Fallibilism is not a philosophical "principle," in the sense of a necessary and eternal truth, but an attitude towards empirical descriptions and conceptualizations in general. It treats them as hypotheses to be tested rather than undeniable conclusions or indubitable starting points. According to the fallibilistic approach, the assumption that anything is absolutely certain or immune to criticism (outside the fields of formal logic and mathematics) does not advance knowledge, but eliminates the stimulus for further thought.

2) Historicism in this context should not be understood (in Popper's sense) as a theory about necessary and predictive laws that govern the historical process. It means a way of viewing abstract accounts of human nature, language, and rationality which claim to go beyond the contingencies of history, convention and local practice. Historicism treats all such accounts as products of the contingencies they attempt to transcend and as equally liable to variation and change. There is no such thing as a transcultural or ahistorical point of view.

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[1] Kenneth A. Bruffee writes, "One cause of this situation Is that there seems to exist no bibliographical guide that brings social constructionist texts together in one place, presents them as a coherent school of thought, and offers guidance to readers wending their way through unfamiliar territory." His essay "Social Construction" is intended to fill this need. (1986:773-790)

3) Pragmatism, like fallibilism and historicism, is not a systematic theory of knowledge, but a way of thinking about theories. It defines "truth" not as correspondence with reality but as the way we have so far found it most useful to describe our collective experience. Pragmatists argue that foundationalist epistemology should be rejected because it has not worked. Their method of "contextual justification" is to defend a point of view or institutional practice by arguing that it is the best available option, or at least not as bad as the alternatives that have been tried so far.

4) Pluralism is an attitude of doubt that the goal of universal agreement can ever be reached. It should not be interpreted as implying a radical skepticism about the possibility of communication among different conceptual frameworks; nor does it entail a kind of relativism in which we are imprisoned in our self-contained world views and paradigms. Pluralism encourages a variety of methods within any area of inquiry, even if they are incompatible or incommensurable with one another. Failure to find a common ground between conflicting perspectives is regarded not as a permanent tragedy, but as merely a sign of the temporary limitations of our theoretical vocabulary and current horizons.

Fallibilism, historicism, pragmatism and pluralism are all important themes in postmodern epistemology, although in the diverse literature of the movement they are combined and emphasized in many different ways. No strategy involving any of these four themes can consistently claim to have offered "knock-down" demonstrations that knowledge has no foundations and that the quest for certainty and universality is a wild-goose chase, but can only offer the more modest promise that the new orientation will help us to get rid of some of the obstacles to free inquiry that we have inherited from the modern epistemological tradition.

In order to understand the broad implications of the non-foundationaiist understanding of knowledge, the history of modern philosophy must be reinterpreted to highlight another tradition than the one initiated by Descartes and Locke, its origins can be traced back to Vico's *Scienza nuovo* (*The New Science*), first published in 1725. Vico argued against Descartes' theory of knowledge for several reasons: it assumed that there is only one valid method of inquiry which governs every legitimate branch of study; it neglected the disciplines of art, law, and history because of its orientation towards the mathematical and physical sciences; and it treated human nature and language as invariant, which made historical understanding impossible. Vico substituted for Descartes' *cognito ergo sum* the principle of *verum factum* (the true and the made are convertible), which means that we can know with certainty only that which we ourselves have created. He anticipated the view, which was not generally accepted until the 20th century, that mathematical truths are certain because they are arbitrary symbolic creations of

the human mind. Vico's message was largely ignored during his lifetime and in the next two centuries while our present disciplines were being formed. Although Descartes was the dominant influence in shaping the modern attitude towards knowledge, Vico may turn out to have been an equally fertile parent when the history of postmodernism is eventually written.

The tradition that Vico began is of particular importance to integrative studies. Not only did Vico's contributions to the fields of history, jurisprudence, language and myth open up new areas of interdisciplinary research, his original epistemology encouraged later thinkers to question the traditional organization of knowledge and the fragmentation of the disciplines. In the early twentieth century Croce and Collingwood borrowed a great deal from Vico for their work on the overlap of the disciplines of philosophy, history, art, religion and the sciences. They did not have much influence, however, since the intellectual climate of the time was more receptive to analysis than synthesis and to specialization than integration.

At about the same time in America, Peirce proposed a fallibilistic method, which would not block the road of inquiry by positing self-evident truths or incorrigible intuitions in advance. James reinterpreted Peirce's pragmatism as the attitude of looking towards the results rather than the foundations of knowledge for its justification. Dewey continued the tradition, but after his death, the "Golden Age" of American philosophy came to an end, and the analytic style imported from England began to dominate most departments of philosophy in this country.

It was not until the publication of Kuhn's *The Structure of Scientific Revolutions* in 1962 that the assumptions of modern epistemology began to be widely questioned. Kuhn challenged the prevailing theory of method in the natural sciences by a study of the actual historical practices of scientists. He argued that scientific revolutions have not in fact resulted from the straightforward application of either deductive or inductive methods and that observations are always a function of the prevailing disciplinary paradigm. In the absence of a neutral decision procedure which must lead every investigator to the same conclusion, he found no better criterion of knowledge than the consensus of the community of scientists. "Scientific knowledge, like language, is intrinsically the common property of a group or else nothing at all." (210)

The conclusion that scientific knowledge is a social construct was shocking to many because it called into question the deep-seated notion that science progresses towards an objective representation of the truth. Kuhn wrote, "There is, I think, no theory-independent way to reconstruct phrases like 'really there;' the notion of a match between the ontology of a theory and its 'real' counterpart in nature now seems to me illusive in principle." (206) Kuhn has often been criticized

as an irrationalist, whose attacks upon cherished notions of scientific objectivity would lead to anarchy, but he repeatedly denies that his thesis involves any such implications. The charge of irrationalism appears to be valid only because of a false dichotomy generated from the point of view of foundationalism. If we give up the assumption that knowledge must either be grounded in a universal paradigm or not count as knowledge at all, then Kuhn can be interpreted as calling for a more flexible and historical model of rationality, rather than denying its possibility.

The new model locates knowledge in the actual practices of a community, rather than in an ideal of correspondence between individual mental representations and a non-human world. It does not reduce reason to the ability to follow objective rules, but emphasizes the presence of tacit dimensions of judgment and imagination in the process of making scientific decisions. Kuhn's view of rationality was developed through an interdisciplinary approach involving history, science, psychology, sociology, and philosophy. Like Vico's theory of knowledge, one of its effects has been to encourage further interdisciplinary study by challenging the assumption that there is only one valid method to which every form of inquiry must conform.

Rorty's *Philosophy and the Mirror of Nature* was another landmark in the postmodernist movement in philosophy. Synthesizing Dewey, the later works of Wittgenstein, and Heidegger, he generalized Kuhn's view of science by arguing that all knowledge is a socially constructed phenomenon. His strategy was to try to deconstruct the modern epistemological tradition by undermining its central imagery of knowledge as a special kind of "seeing" with the "eye of the mind," which operates like a mirror reflecting images of an independent reality. The confusion between knowledge and immediate visual perception, Rorty argued, has mislead us ever since Plato's allegory of the cave into expecting to reach a perspective beyond time and change which would give us a direct insight into nature. He was aware that there would be resistance to the suggestion that there is not just one true way of describing reality and that "objectivity" can mean no more than "the best idea we have come up with so far," but he interpreted this sort of dissatisfaction as simply another version of the phenomenon described by the existentialists as the desire to "escape from freedom" by finding security in the constraint of external criteria. (1972:376) In the new culture which Rorty envisions, no particular vocabulary, set of principles, or specialized discipline would have privileged status as the ground of knowledge. Fixed disciplinary boundaries would disappear, and "all-purpose intellectuals" would justify their practices not by a hopeless quest for certain foundations but simply by their ability to "keep the conversation going" among incommensurable perpectives. (1982:xxxix)

To discuss the many other writers who have explored the historical origins of antifoundationalism and its implications for revising our understanding of the

mind, emotion, self-identity, gender, moral development, politics, art, literature, and a host of other concepts is beyond the scope of this essay and the competence of its author.[2] The brief description that I have given of some of the important developments in postmodern epistemology is meant only to suggest possible avenues for further study and to point out some of the obstacles we face if we continue to operate under the assumptions of "modernism."

Interdisciplinarians now stand at a crossroads. If foundationalism is true, and Benson and his critics are correct in noting that interdisciplinary studies lack a well-developed logical ground, we are presented with an image of an elegant and dearly beloved home, which unfortunately has been erected on shifting sands and is in danger of toppling over in an intellectual high wind. If this picture were truly representative of the current state of integrative studies, we would indeed be well advised to turn our attention immediately away from embellishing the structure and attend to the more pressing problems of the foundation.

But of course, I am not convinced that our interdisciplinary programs are "grounded" in shifting sands. I do not think that the metaphors of foundationalism are good and useful ones for portraying the present state of integrative studies. Everyone knows that knowledge is not literally a building, but nevertheless we do sometimes confuse facts and theories with cinder blocks and beams. We know that "theories without undeniable first premises do not hover mysteriously in thin air; nor do they inevitably plummet to crashing defeat" (Herzog 28). And yet we talk about knowledge as if it were a structure that must be built up from a "foundation," and we criticize theories for lacking a solid "base." We try to "build" systems and provide "frameworks" for our points of view with "supporting" arguments. We speak of "poking holes" in the arguments of the opposition and "undermining" their positions so that their theories will "fall apart" (Lakoff 53, 98 & 104).

Metaphors are powerful instruments without which we would not be able to go beyond the level of mere sensation and describe our conscious life at all, let alone our intellectual activities. I do not imagine for a moment that we could do without them altogether by replacing them with more adequate, literal ways of expressing ourselves. I do think, however, that we should be aware of the

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[2] See, for example, Gergen for an introduction to a variety of applications in psychology and the social sciences; Herzog for an application to political theory; Fish for an application to literary criticism; and Bruffee for applications to education and a helpful interdisciplinary bibliography.

metaphors that we habitually use, and recognize that they are not descriptions of "the way things are," nor on the other hand, are they merely subjective and optional figures of speech. Although we cannot eliminate the metaphors embedded in the world view of our culture and our disciplinary paradigms, by recognizing the metaphorical character of our usual ways of describing knowledge, we may at least be able to free ourselves from the illusion that knowledge must have foundations in order to claim validity. The only way to gain a critical perspective on our own cultural metaphors is to learn to speak in a new theoretical language, to generate new metaphors for describing our experience.

It seems to me that postmodernism offers a more promising framework in interdisciplinary studies than the quest of Benson and his critics for a solid foundation, a unified methodology and universal agreement. From the postmodernist point of view, knowledge is more like a city than a building. A city does not have an "essence" which can be defined in terms of a literal or metaphorical "structure." It does not rest upon a single block of concrete and need not appeal to a theoretical foundation in order to justify its practices. It does not expect all of its citizens to agree on any of its policies, but negotiates a temporary consensus through the free exchange of ideas in public debate. Its laws are flexible enough to allow for change when they do not work; they are broad enough to incorporate different norms to govern a wide range of professional activities and a rich variety of customs in its diverse neighborhoods.

The analogy is not exact (is any analogy?), but it does provide a suggestive alternative to the images of knowledge in the Cartesian tradition. Interdisciplinarians who are willing to move beyond foundationalism will recognize that we need not seek to be guided by pre-established criteria or to "ground" our activities in universal principles. We would not insist on a canonical vocabulary or list of problems and methods. While doubting the existence of universal trans-disciplinary principles, we could continue the debate about whether to concentrate on connecting disciplinary insights or solving specialized problems. We would not take it for granted that lack of agreement necessarily means a failure of rationality. We would welcome all types of approaches to integrative studies, finding solidarity, in spite of disagreements, in the shared commitment to making sure that no serious point of view is left out of the conversation or out of the curriculum.

Newell recommends that we keep standards high by "bringing our practice in line with our rhetoric." (14) Alternatively, I am proposing that we bring our theory in line with our practice and revise the "modernist" way of thinking about the relation between theory and practice in general. From the postmodern point of view, the purpose of theory is not to "ground" our practices but to make explicit what is presupposed by them. Postmodern epistemology cannot provide a logical foundation for interdisciplinary studies (no theory can do that); but it can serve as

an important reminder of what we already know from our practical experience. In practice, interdisciplinarians tend to exemplify the postmodern attitudes of historicism, fallibilism, pluralism, and pragmatism: they recognize that our current disciplinary boundaries are the result of historical contingencies and do not reflect natural and unchanging divisions of knowledge; they do not regard any disciplinary paradigm as holding a monopoly on the truth; they are able to appreciate a plurality of perspectives and to employ different vocabularies in wide-ranging dialogue; they judge their programs and their teaching and research methods, not by the standards of a single discipline, but by how well they work.

Interdisciplinarians are sometimes the only ones willing and able to combat the dogmatism of academic departments about what are deemed to be the acceptable subject matters, methods, and evaluation procedures. If we succumb to the temptation of modern epistemology and try to "legitimize" integrative studies by substituting interdisciplinary orthodoxies for disciplinary ones, we shall defeat our most important purpose. Our primary responsibility is to build intellectual "cities" that cut across departmental and disciplinary boundaries, to develop a broad understanding and a healthy skepticism about narrow visions, and to try to pass on what we have learned within those communities to our students. The only real "foundation" of knowledge is the one that is laid in our classrooms, where we train young minds to be capable of benefitting from all there is to be read and talked about in the next generation.

Giving up foundationalism means recognizing that we can advance knowledge by enriching our stock of metaphors and concepts for describing our collective experience, by learning to use new vocabularies from perspectives which may appear at first to be incommensurable with our own in the hope that they may help us to get along better with what we are interested in doing, insofar as our interdisciplinary studies encourage this kind of cross-fertilization, we are not in such bad shape as Benson and his critics seem to think. If we are in bad shape, it may be because our anxieties about "metaphysical earthquakes" are distracting us from talking to people in other disciplines, reading their books, learning and teaching new vocabularies, and generally performing our duties as citizens of the interdisciplinary community. These aims can best be achieved by adopting a selfconsciously postmodern perspective.

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