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Are Discourse Communities Incommensurable in a Fragmented Psychology? The Possibility of Disciplinary Coherence

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The question of incommensurability is an overlooked issue that has profound consequences for our ability to understand relationships and utilize common standards for comparison, contrast, and evaluation in psychology. Are the differences among discourse communities so deep that there is no common “commensurate” — no common measuring stick for making comparisons among communities? If so, then the community of communities, the discipline of psychology, has no way to compare competing knowledge claims, and no way to effect disciplinary unity and coherence. Kuhn’s distinction between incommensurability and incompatibility is described, along with its challenge to Enlightenment rationality and scientific method for brokering the relativity among discourse communities. Popper’s misconception that this challenge implies an “anything goes” nihilism is also discussed, specifically his misconception that incompatibility and incommensurability mean incomparability. On the contrary, the article shows how recognizing the incommensurable is often the key to comparison, and thus disciplinary coherence and unity.

As Yanchar (2000, this issue) has described, the authors of this special journal issue believe there are three main questions that need to be answered before the topic of psychology’s fragmentation can be adequately addressed (see also Yanchar and Slife, 1997). Clearly the first, from our perspective, is the question of incommensurability, the question of how deep the differences among the various communities of psychology go. Are these differences so deep that there is no common “commensurate” — no common measuring stick — for making comparisons among these communities? Are they so deep that the only valid comparisons are those *within* a community and not *across* communities?

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If so, then the community of these communities — the discipline of psychology — has no way to compare competing knowledge claims across communities, no way to evaluate who is most correct or most effective, especially when such claims directly oppose one another. In this sense, the question of incommensurability is the most fundamental question of the fragmentation issue. All questions of coherence, correspondence, unification, and, indeed, relationships in general hang in the balance, because these questions all depend on some modicum of common standards in which to compare the divergent communities.

Of course, the ability to form valid comparisons is not just important to disciplinary fragmentation but to any topic or field that attempts to understand differences and similarities among divergent communities — present or past, animate or inanimate. Thus, the incommensurability question is vital not only to the philosophy of science (the broader grounding of this special issue) but also to historicism, constructionism, relational therapies, objectivism, multiculturalism, and ethics, to name but a few. Indeed, as Richard Rorty (1979, p. 316) points out, the notion that all discourse communities are ultimately commensurable is *the* fundamental bias of epistemology since Descartes — a bias, incidentally, that Rorty seeks to eliminate.

This bias, however, is not typically made explicit, nor are its implications generally understood in psychology. Part of the task in this article, then, is not only to show why this question is significant, but also to explicate what the term incommensurability means, both in definition and in significance. As we shall see, the answer to the question posed in the title will be the more familiar academic answer to many questions: “yes and no, it depends.” However, the whole notion of “it depends” depends *itself* upon the whole notion of incommensurability, as this article will show.

Setting the Stage

The question of incommensurability is so rarely raised in psychology that a brief background on the topic might be helpful. The incommensurability issue originally arose most explicitly in the philosophy of science. Thomas Kuhn (1970), in his well-read and well-slandered book, *The Structure of Scientific Revolutions*, is perhaps most responsible for first giving the question visibility. His initial foray into the question was later followed up by his philosophical colleagues: Feyerabend, Lakatos, Popper, and Toulmin.

Kuhn's primary contention was that the model for how a scientist chooses theories must be changed from the “received view.” Kuhn (1970) was skeptical about the search for “an algorithm able to dictate rational unanimous choice” and emphasized, instead, that the criteria of choice “function not as rules, which determine choice, but as *values*, which influence it [the choice]”

(emphasis added, p. 331). This notion that science is value-laden was somewhat controversial at the time, but Kuhn's contention that these values could themselves be incommensurable touched off a firestorm of debate in philosophy of science circles. No less than the *enfant terrible* of philosophy, Paul Feyerabend (1975), essentially supported Kuhn's position, while Karl Popper (1972) — perhaps the most famous philosopher of science of our time — lined up against Kuhn.

What was this heated debate all about? It is important, particularly, that we understand what Kuhn was contending, because as Richard Bernstein (1983) and others have noted, Kuhn has been mightily mischaracterized and misunderstood in the process of this polemic. Kuhn basically railed against the linear notion of scientific progress. He held, as the title of his book indicates, that science develops through incommensurable revolutions. As he put it, "the tradition that emerges from a scientific revolution is not only incompatible but often actually incommensurable with that which has gone before" (Kuhn, 1970, p. 103).

As this quote makes clear, incommensurability is not the mere incompatibility of theories. The concept of incompatibility is a logical one. Two theories are logically incompatible if they entail a logical contradiction, which may seem in our era of Post-Enlightenment rationality about the worst sort of difference imaginable. However, such a position assumes that there is some sort of objective commensurate — whether it be logic, method, or rationality itself — from which to make the comparison. When Kuhn and Feyerabend held that revolutionary theories are not only incompatible but also incommensurable, they were contending that no such objective rationality exists. That is, they were holding that even the logic and rationality of the two theories may differ.

Kuhn (1970) made this point most clearly when he likened the competing paradigms to "different worlds" (p. 150). Indeed, as Kuhn considered it, this aspect of incommensurability is the "most fundamental aspect" of competing paradigms (p. 150). A lengthy quote will illustrate this aspect of Kuhn's notion of incommensurability best:

In a sense that I am unable to explicate further, the proponents of competing paradigms practice their trades in different worlds Practicing in different worlds, the two groups of scientists see different things when they look from the same point in the same direction [That is why], before they can hope to communicate fully, one group or the other must experience the conversion that we have been calling a paradigm shift. Just because it is a transition between incommensurables, the transition between competing paradigms cannot be made a step at a time, forced by logic and neutral experience. (p. 150)

Feyerabend (1975, 1977) made a similar contention in his distinction between three types of incommensurability. He goes on to claim that there is

really only one type which is meant by Kuhn and others when using the term. This type of incommensurability assumes that different paradigms “use *concepts* that cannot be brought into the usual logical relations of inclusion, exclusion, overlap” (Feyerabend, 1977, p. 363). In this sense, it is clear that Kuhn and Feyerabend are going well beyond the mere incompatibility of theories. It is clear they are claiming that the received view of rationality is not up to the challenge of comparing rival paradigms, because the received view of rationality is itself part of *one* paradigm.

The Controversy

Enter Karl Popper onto our philosophy of science stage. Popper saw the claims of Kuhn and Feyerabend as an unmitigated attack on the rationality of science. If science cannot justify its choice of theories on rational grounds, then it is essentially groundless and relativistic. Popper (1970) used the metaphor that he has called the “Myth of the Framework” to illustrate this groundlessness (p. 56). This metaphor depicts scientists as “prisoners caught in the framework of our theories” (p. 56). These prisoners are so locked into their individual communal frameworks that persons from outside their community cannot communicate with them. They lack a common grounding, including a common language, and even a common method for accurately translating languages. Popper, of course, considered this to be a dangerous myth. He feared that if it was believed and upheld, it would lead science ultimately to relativism and nihilism.

It is Popper’s critique of Kuhn and Feyerabend, and the agreement of so many psychologists with that critique (e.g., Capaldi and Proctor, 1999), that provides the impetus for the present article. If psychology is fragmented into communities that are similar to paradigms — and as Yanchar and Slife (1997) have noted, there is certainly evidence that it is — then the Kuhn/Popper question has to be answered before we can proceed to address the issue of psychology’s fragmentation. That is, can the various paradigms of psychology communicate with one another? Are the many discourse communities of psychology prisoners of their theories and their assumptions about the world, as Popper warned? Are they residing truly in different worlds, in this Kuhnian sense?

If they are, then Popper would seem to advise us to give up hope of ever having a coherent discipline. We would have no way to communicate with one another, and we would have no common ground for evaluating which theories are the most correct or effective. Even the logic of scientific method itself could not help us, because what is logical could vary from community to community — to wit, the various approaches to method (qualitative, quantitative, phenomenological) now being pressed by the various factions

within psychology. In other words, if the various communities of psychology cannot, in principle, communicate, be compared, and endorse the same method, then the discussion about unification and fragmentation is at an end. No unification strategy is possible, and no institutionalized psychology is realistic.

This is apparently not an idle disciplinary threat, at least not in the eyes of many psychologists. Many of psychology's leading commentators and observers have expressed sincere and anxious concern about the possible incommensurability of the discipline (Koch, 1993; Rychlak, 1993; Staats, 1987; Wertheimer, 1988). The late Sigmund Koch (1993), for example, believed that "ubiquitous evidences of increasing differentiation and fractionation [existed] within psychology" (p. 902). The incommensurability of these differences and fractionations is the main reason Koch has never believed that psychology was a coherent discipline. Psychology is instead a "congeries of applied interest areas" (p. 902). From another point of view entirely, Arthur Staats (1987), the inveterate advocate of psychological unity, has long been concerned with psychology's tendencies toward fragmentation — what he calls the "methodology of noncommunication [or] incommensurability" (p. 1030). This methodology, he concludes, will ultimately lead us to "no resolution of disagreement" (p. 1030).

The Meaning of Incommensurability

However, these conclusions of incoherency and nonresolution are by no means inevitable. Indeed, their inevitability hinges on what is meant by the term "incommensurable." Once this term and its important implications are clarified, a dramatically different picture of the fragmentation of psychology is available. Such a clarification can serve anyone concerned with reconciling or making sense of different cultures, communities, or contexts, including multiculturalists, social constructivists, and ethicists. We owe a great debt to the philosophers of science, because their rigorous discussion of these issues guides the way. They typically make two distinctions regarding incommensurability that are helpful (e.g., Bernstein, 1983).

The first distinction was already introduced above — the distinction between incompatibility and incommensurability. Incompatibility is the logical contradiction of two or more theories. An example would be the contradiction between some aspects of humanistic theorizing and some aspects of behavioristic theorizing. Some humanists, for example, consider persons to possess a free will (e.g., Rychlak, 1979), whereas some behaviorists view persons as environmentally determined (Skinner, 1974; cf. Slife, Yanchar, and Williams, in press). As psychological theorists have shown elsewhere (Slife, 1994; Slife and Fisher, in press; Valentine, 1992), the traditional definitions

of free will and determinism in these theories form a logical contradiction, with free will involving the ability to do otherwise and determinism involving the inability to do otherwise. Although this contradiction is important in many ways, it is, for the purposes of our discussion, only "skin deep." Incompatibilities still imply a common logical ground for knowing that they are incompatible or contradictory. In other words, both theories would endorse a common approach to logic, rationality, and as the empirical research of Skinner (1974) and Rogers (1951) has evidenced, sometimes even a common approach to knowledge advancement.

Incommensurable differences, on the other hand, imply a much more profound depth of divergence among theories. Such differences imply a division not only in theory but also in the philosophy and world view that grounds the theory. Incommensurable differences are a little more difficult to illustrate than are incompatible differences. However, the distinction that many draw between modern and postmodern philosophies is intended to mean a distinction of incommensurability.

For instance, humanism and behaviorism are considered to stem from essentially the same modernist and Enlightenment philosophy of psychology, whereas postmodern philosophy is thought to dispute their common philosophical ground (Slife and Williams, 1995). Postmodernists, for example, do not typically endorse the subject/object dualism or the metaphysical reductionism of traditional behaviorism and traditional humanism. The incompatibility of free will and determinism — itself a product of modernist dualism — is thus irrelevant to postmodern perspectives (Slife and Fisher, in press). In this sense, the point of original comparison — the *commensurate* or common measuring stick between humanism and behaviorism — is not available in postmodern theorizing.

Anthropologists illustrate the difference between incompatibility and incommensurability by pointing to genres. When an anthropologist wanders into an aboriginal village and converses with a native leader, it helps greatly to know the genre of the discussion. Is it theological, economic, scientific, poetic? Of course, the anthropologist must also recognize that these categories may themselves be inappropriate. However, if the visitor assumes that the discourse is scientific when it is theological, all sorts of misunderstandings can occur.

The classic confrontation between Galileo and Cardinal Bellarmine illustrates this type of misunderstanding. As Rorty (1979) has noted, this confrontation between incompatible visions of the earth/sun relation was also a confrontation of incommensurable genres, with Galileo's genre being science and Bellarmine's genre being theology. In this sense, the very things that counted as evidence — and even the need for evidence — differed fundamentally. Without the recognition of genres, no real dialogue could occur.

Historically, no real dialogue *did* occur between Galileo and Bellarmine. They spoke as though speaking different languages without a translator — Galileo speaking from a scientific perspective and Bellarmine speaking from a religious perspective. Moreover, as Rorty demonstrates, each person in such a dialogue can be correct — and be “proven” to be correct — within his own genre, despite a fundamental disagreement.

This possibility of equal correctness is, of course, what scares scholars like Popper. He seems to ask: How can we evaluate competing truth claims when all are equally correct, depending on their particular genres? In other words, incommensurability leads to relativism; we must evaluate the integrity of each person’s argument *relative to* his or her background assumptions, methods, and purposes.¹ This means that rationality itself can be relative to incommensurable paradigms, and there can be no objective, universal logic or method to adjudicate arguments from different genres or discourse communities.² If one then assumes, as Popper does, that rationality is the *only* basis for comparison and adjudication, then incomparability and nihilism are the only result.

Here is where advances in the philosophy of science have been so helpful to our understanding of the fragmentation issue. Bernstein (1983), for instance, cogently argues for a second distinction that is crucial to this issue — the distinction between incommensurability and incomparability. Bernstein (1983) showed how Popper had misunderstood Kuhn. Kuhn was not drawing attention to the incommensurability of paradigms to make them incomparable. Kuhn was drawing attention to their incommensurability *to make them comparable*. That is, Kuhn’s expressed intention was to compare paradigms, to compare their profound (and incommensurable) differences. The point of confusion is that Kuhn believed the mere recognition of theoretical incompatibilities was ultimately too superficial to be helpful in drawing these paradigmatic comparisons. His discounting of incompatibility made it seem to Popper — someone who relied on logic and rationality, and thus judgments of incompatibility — that he had abandoned judgments and evaluations altogether.

Kuhn advocated, instead, a more profound understanding of paradigms, an understanding that did not miss the incommensurable differences needed to truly compare and bring coherence to the enterprise and growth of science. In this sense, he believed we had to remain open to the possibility that our usual (scientific) approach to comparison — relying on rationality and observation — would itself be inadequate to the task of comparison. However, he

¹It remains to be seen, at this point, what *type* of relativism this is (cf. Slife, 1999).

²Here I use rationality to mean Enlightenment rationality, a set of rules that will tell us how agreement can be reached.

also assumed that there were other bases for comparison and evaluation, and other prospects for common ground. Indeed, another basis for comparison and grounding is the topic of the next article of this series (Kristensen, Slife, and Yanchar, 2000, this issue).

The Answers

Before turning to this important article, however, the question posed in the title of the present article needs to be answered directly: Are psychology's discourse communities incommensurable? Armed now with the distinctions between incompatibility (as logical contradiction), incommensurability (as a fundamental difference in framework or genres), and incomparability (as a difference that disallows comparison), we can proceed to answer this deceptively complex question. The answer, as promised at the outset of this article, has to be yes and no, depending on how one defines incommensurability.

If by incommensurability one means that psychology has many discourse communities which differ fundamentally in language, background framework, and philosophical world view, then we have no choice but to answer this question in the affirmative. This, of course, was Kuhn's original point: do not underestimate the differences among the various theories in the natural or social sciences. They differ in profound ways that the usual tools of scientific comparison — empiricism and rationalism — may not reveal or be able to evaluate. Because science is itself assumption-laden and because scientific assumptions can themselves be incommensurable with certain other assumptions, objective observation (in the sense of empiricism) and rational thinking (in the sense of rationalism) cannot always be counted on to make the comparisons and judgments needed among theories.

Consider, for example, the theories of postmodernism that specifically refute Enlightenment rationalism and British empiricism (cf. Capaldi and Proctor, 1999; Polkinghorne, 1983). These theories cannot be evaluated, in principle, by the very epistemologies they reject, the epistemologies of scientific method. These theories imply, instead, a different sort of method and thus another approach to comparison altogether (Slife, 1998). The problem is that many scholars, such as Popper, view this type of difference as leading to chaos and the lack of *any* comparison, in principle.

However, as Bernstein (1983) has shown, incommensurability does not have to imply incomparability and thus absolute relativity and nihilism. Indeed, incommensurability implies, by its very nature, that we know about and can bring into relationship the groups that we consider incommensurable. How else can we know that there *are* differences, incommensurable or otherwise? Discourse communities, in this sense, can have incommensurable languages and methods, but the very fact that we (of one discourse commu-

nity) can know of these alternative languages and differing standards means that there is a fundamental basis for comparison, a common ground that allows translation to occur (Davidson, 1973).

This insight can provide a different answer to our title question. If by incommensurable one means that discourse communities or different theories in psychology are incomparable, then the answer to our question has to be in the negative — that is, psychology's discourse communities are *not* incommensurable. The fact that we are aware of differing theories and communities implies some recognition of them, some re-cognition or "seeing before." That is, there is something about them that is familiar, if not tautological (Rychlak, 1988), with our own community or point of view.

With postmodernism, for example, the very name of this movement betrays its relationship to modernism — the "post" meaning either "after" or "other than." To be after or other than is to be *inherently* related and comparable to modernism *by definition*.³ If postmodernists were truly incommensurable with modernism, in the sense of incomparable, then they could not even know of modernism. Modernism would be unrecognizable and *post* modernism impossible to conceptualize. These philosophies would be analogous to two ships passing in the night. This analogy is often misused to imply *difficulties* in communicating among incommensurable communities. However, ships that truly pass one another in the night *do not know they are passing*; there is no recognition of the other to know of any difficulties.

As diverse and pluralistic as psychology is, this total lack of recognition is clearly not the case. Communication difficulties are rampant among disciplinary communities, to be sure, but such difficulties do not imply a total *lack* of communication and thus a complete fragmentation and incoherence of the discipline. Indeed, the point of philosophers like Kuhn, Feyerabend, Rorty, and Bernstein on this issue is that these difficulties occur, at least in part, because of our traditional reliance on Enlightenment rationality (traditional science) for solving disciplinary communication and evaluation issues. That is, we tend to throw up our hands in dismay when paradigms clash and rational or empirical methods do not solve the problems. This is the reason that many observers of psychology have viewed the discipline as incoherent and predicted its dissolution.

Another approach, however, is to be open to the possibility, as Kuhn's and Feyerabend's historical analyses demonstrate, that some paradigms and some discourse communities violate our Enlightenment standards of rational comparison. This violation does not have to mean that such communities are

³Part of the problem here is that Enlightenment rationalists assume that a contrary or contradictory relation is the same as no relation. This is obviously false, because, as Rychlak (1988) and others have shown, a contrary relation (or what is sometimes known as a "disjunctive") is often necessary even to understand the meaning of that to which it is contrary.

themselves irrational — or relativistic or subjective or whatever is the current “boogey-man” for traditional scientists. This violation can mean that these Enlightenment standards are merely more parochial than we had first assumed, and that there are *other* standards for comparison. Indeed, the very existence of such communities implies that such alternative standards and alternative frameworks for comparison must exist. Otherwise, we could not know of these incommensurable violators of our rationality. To know them is to bring them in some relation or comparison with ourselves. This, then, is why our discussion of incommensurability takes us inexorably to the question of what is the point of comparison or the common level of discourse, if it is not rationalism and empiricism. This is the question taken up in the next article.

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