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The Problematic of Fragmentation: A Hermeneutic Proposal

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This paper summarizes the longstanding debate over psychology's fragmentation by illustrating two principal impediments to the fostering of consensus and unity. The paper then discusses the important benefits of past dialogue concerning these issues, suggesting that some progress has been made in dealing with problems of disunity and fragmentation, particularly at the metatheoretical and philosophical levels. This general discussion then forms the backdrop for the following articles, which together form a single argument in favor of a hermeneutic approach to the problem of fragmentation.

Since at least the medieval period, part of the job of any scientist has been to reduce uncertainty. Whether it is the uncertainty of everyday life or the uncertainty of previous scientific work, one of the ultimate goals of science has been to formulate principles that reduce the seeming ambiguity, disharmony, and complexity of our existence. The logical outcome of such uncertainty reduction is assumed to be some set of covering laws, such as those seen in classical physics, that unify and simplify our understanding of an entire domain. The absence of a coherent body of unifying laws leaves a discipline open to the charge that it is fragmented and pre-scientific (Robinson, 1986; Staats, 1983).

While the development of psychology has been marked with growth and vitality in the past one hundred years, the discipline has shown clear signs of disunity and fragmentation, suggesting that it may yet be pre-scientific in nature (e.g., Gardner, 1992; Observer, 1982; Robinson, 1986, p. 397). Critics have commonly remarked that the discipline is plagued by a dizzying array of

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irreconcilable theories, models, methods, and even philosophies regarding topics as varied as learning, memory, motivation, consciousness, intelligence, personality, and psychotherapy (e.g., Staats, 1983; Yanchar and Slife, 1997). Can all these rival positions, staked out on all these diverse topics, be equally true? Sorting all this out has never been considered an easy task. However, the task has recently been made more difficult by a growing skepticism about the neutrality and objectivity of science. That is, the scientific method is itself under fire as just another set of rival assumptions — a means of sorting things out that is itself based on a specific world view (Slife and Williams, 1997).

Increasing concern over the fragmented state of psychology has prompted many to call for more deliberate efforts to effect disciplinary coherence and organization. These individuals are prone to call for sweeping changes that would organize and unify the vast theoretical and experimental literature of psychology. To this end, rigid cross-disciplinary frameworks have been constructed (e.g., Staats, 1996), methodological requirements have been proposed (e.g., Fishman, 1990; Hoshmand and Martin, 1994; Minke, 1987; Yanchar, 1997a), and calls for the practical implementation of unified knowledge have been voiced (e.g., Cahill, 1994; Franks, 1988).

Despite many years of discussion and debate, and despite the enormous literature that has accumulated on this vexing issue, little progress toward unity and harmony has actually occurred. One recent review, in fact, suggested that disciplinary fragmentation is showing signs of becoming even more widespread (Yanchar and Slife, 1997). Adding to the complexity are those who dispute the need for tight disciplinary organization or unification. Some psychologists, for example, call for various forms of theoretical or methodological pluralism, and argue that such diversity is essential to scientific advancement (e.g., Polkinghorne, 1983; Rychlak, 1988, 1993; Toulmin, 1987; Viney, 1996). Others argue that the discipline of psychology should be dissolved outright, with the residue being compiled into independent scholarly disciplines such as humanistic psychology and behavioristic science (e.g., Fraley and Vargas, 1986; Kendler, 1987). A third proposal suggests that psychology should be abandoned in favor of cognitive science, an interdisciplinary field that may, according to some, provide the unity and coherence that is required to profitably study human action and abilities (Baars, 1985, 1986; Gardner, 1992).

The consequence is that psychology is not only fragmented as a discipline but also fragmented in its attempt to address its fragmentation (Yanchar and Slife, 1997). Is there a way out of this disciplinary morass? Why has there been so little advancement toward a solution? Why has unification been so elusive?

Reasons for Disciplinary Disunity

One answer to these questions comes from the overwhelming diversity of unrelated (or weakly-related) topic areas traditionally studied by psychologists. No doubt, the literature illustrates many potentially interesting relationships among these topics, such as the relationship between stress and cognitive functioning or the relationship between biology and personality formation. However, these relationships are tentative at best and are often vaguely understood by researchers and theorists. For example, the particular way in which genetic material (a physical substance) can cause or contribute to personality formation (a non-physical substance) is as much a mystery as other ultimate questions that lie beyond the purview of scientific inquiry (Williams, 1990). For this reason, a discipline as broad and pluralistic as psychology is bound to exhibit a certain amount of compartmentalization, and perhaps fragmentation, within its theoretical boundaries. It is not surprising, from this perspective, that unity and harmony have eluded psychology.

A second reason that progress toward unity has been so elusive involves the massive collection of psychological theories. In fact, there appears to be so much theoretical diversity that some have called into question the very possibility of a unifying theoretical framework (Gardner, 1992; Koch, 1981; Krech, 1970; Leahey, 1992, pp. xix; Messer, 1988). Other psychologists have contended that theoretical diversity is a result of organizational structure. They have argued that the discipline rewards innovation and the development of new theoretical avenues at the expense of integration and the extension of traditional frameworks (e.g., Maher, 1985; Staats, 1983). Paralleling this widespread, perhaps chaotic, theoretical fragmentation are various proposals aimed at fostering increased coherence in the discipline (see Yanchar and Slife, 1997). In other words, wide ranging conceptual diversity occurs not only in the theories of psychology but also in the approaches to unification. This multi-level diversity has obviated the development of a common platform for discussing the strengths and weaknesses of various unification strategies.

Benefits of Prior Discussion

The lack of such a platform does not mean that the many discussions of fragmentation have been profitless. At least four benefits have resulted from the fragmentation literature. First, many articles and commentaries have helped sensitize psychologists to what is at stake in the debate. As many authors have noted, there is no guarantee that institutional psychology will survive sustained disorganization and incoherence. If psychology continues to fractionate, we must be prepared to face the real possibility of disciplinary

dissolution (Spence, 1987). Second, dialogue concerning fragmentation has raised key theoretical and philosophical issues that must be addressed as we consider the viability of institutional psychology (Hyland, 1985; Manicas and Secord, 1983; Slife, in press; Slife and Williams, 1997; Staats, 1983; Yanchar, 1997a). These issues — particularly ones regarding epistemology, ontology, and axiology — cannot be resolved through empirical research, because an empiricistic approach is only one perspective (and thus only one epistemology, ontology, and axiology) among many under consideration for the unification of psychology.

Third, dialogue about this issue has shown that fragmentation takes place at many levels — including theoretical, methodological, practical, and linguistic — and that no single, across-the-board solution is likely to be suitable for reversing trends toward fragmentation at all these levels. Fourth, and perhaps most importantly, the literature on fragmentation demonstrates that the evaluation of theories, methods, proposals, and so forth, cannot be ignored as we strive to make psychology more coherent. There must be some rationality, criteria, or standard that enables the evaluation of theories, models, and knowledge claims. Indeed, it is at this level that psychology provides its most powerfully binding form of unification or rationality (Hoshmand and Martin, 1994; Osbeck, 1993; Yanchar, 1997b). Of course, the exact nature of this evaluative standard is still open to question, and need not take the form of a hierarchical system of positivist-inspired rules. Possibilities formulated by thinkers from a variety of perspectives (e.g., Hoshmand and Martin, 1994; James, 1907/1978; Manicas and Secord, 1983; Rychlak, 1993; Staats, 1983; Viney, 1998) need to be closely examined as we ponder the crucial issue of evaluation.

As helpful as the benefits of this literature may be, they present us only with the key issues — issues that require serious consideration and resolution before unification may be possible. The work of examining and resolving these issues likely requires that we secure some common standpoint or platform from which to consider psychology's future, the important philosophical questions it faces, and the possibility of a meaningful evaluative standard. Is there some common standpoint for addressing these concerns, or are we, as some have hypothesized, lost in a relativistic morass of self-contained and incomparable theoretical alternatives? Does the search for a metalevel framework lead unavoidably to an infinite regress of criteria selection and speculative metaphysics? Will psychology dissolve inexorably into insular and incommensurable discourse communities that utterly resist any form of unification — including even pluralistic and flexible organization?

Overview of the Articles

The following articles are expanded and refined (in some cases substantially changed) versions of a set of papers originally presented at the 1997 meeting of the American Psychological Association, in the symposium "The Problematic of Fragmentation: A Hermeneutic Solution." As these articles will illustrate, philosophical hermeneutics provides a unique perspective on the question of unity and evaluation that is well suited to facilitating further dialogue among psychologists on these key issues. These papers do not provide concrete solutions to the problem of fragmentation, but they do illustrate a suitable starting point for constructive dialogue over the most important issues facing a disunified science, and do so in a way that precludes no unification strategy at the outset.

Stephen Yanchar's paper opens the discussion, provides a brief introduction to psychology's fragmentation, and examines the idea of rigid scientific unity. Yanchar traces such rigid unity to positivist criteria for scientific progress, and questions whether these criteria are appropriate or helpful to contemporary psychology. Yanchar recommends a flexible and pluralistic discipline, yet acknowledges that important questions regarding relativism and incommensurability (i.e., the inability to compare, contrast, and evaluate rival paradigms) arise under this more liberal philosophy of science. In response, Yanchar frames three questions that must be answered before the issue of fragmentation can be productively discussed: (1) Are the philosophical commitments that inform diverse discourse communities within the discipline truly incommensurable? (2) If these philosophical commitments are not incommensurable, then on what grounds are meaningful comparisons and evaluations possible? Ontological grounds? Epistemological grounds? Moral grounds? Some other grounds? (3) Given that such comparisons and evaluations are possible, how can they be carried out in psychology?

Brent Slife answers the first of these questions by drawing a distinction between *incompatible*, *incommensurable*, and *incomparable* in the philosophy of science literature. Using Kuhn (1970) as an illustration, and extending the work of Richard Bernstein (1983), Slife shows that the incommensurability of paradigms means neither incomparability (an inability to make comparisons and evaluations) nor incompatibility (mere logical contradiction). Rather, incommensurability signifies the absence of a universal and atemporal standard (such as traditional science or rationalistic logic) with which to make comparisons and evaluations. However, the absence of this type of standard does not mean the absence of any standard. Indeed, how could the various discourse communities have any reasonable knowledge of one another if there were no basis for comparison? In this sense, Slife argues that there must, of necessity, be a standard for evaluation and comparison —

across discourse communities — that is contextual and yet not absolutely relativistic. What, then, is the basis of this comparison?

Kristensen, Slife, and Yanchar answer this question by showing that evaluations must occur on fundamentally moral grounds. These authors first show how moral systems are not only implicit in any disciplinary criteria of evaluation, including the natural sciences, but also a necessary core of any disciplinary strategy for unification. Consequently, a common moral system, however implicit or unrecognized it may be, is the root of what little coherence psychology may currently enjoy. An implicit morality is also what allows the various incommensurable discourse communities to recognize one another as incommensurable communities. Therefore, the first task of unification, for these authors, is a disciplinary conversation that makes the implicit morality of psychology explicit, and examines and modifies this moral system for deliberate unification efforts. To aid in these efforts, Kristensen, Slife, and Yanchar outline four characteristics of a productive disciplinary conversation.

However, a third question arises in this regard: How does one use this moral discourse as a common standard of evaluation in psychology? Frank Richardson answers this question by suggesting that philosophical hermeneutics recognizes this inherently moral dimension of evaluation. He shows how it promotes a dialogic understanding through which crucial issues such as ontology and epistemology (and their implications) can be profitably discussed. Richardson stresses that this discussion need not devolve into a power grab by social constructionists or a lobby for the traditional modernist perspective. Rather, this hermeneutic dialogue can provide a context in which "self-interpreting" beings may collectively evaluate the moral differences made by competing notions of morality, ontology, and so on. This evaluation is accomplished, in part, through greater openness of the many knowledge communities of psychology. Such openness demands that the claims of psychology be submitted to critical dialogue, where they are philosophically and historically situated, and clarified regarding their implications for human experience and the discipline.

Jack Martin follows Richardson with an important discussant commentary of this related set of papers. Martin begins by focusing on the work of hermeneutic philosopher Hans-Georg Gadamer, clarifying the contribution that Gadamer's work has historically made to this discussion over the issues of unity, relativism, and evaluation. While Martin essentially lauds the proposed strategy of dealing with these issues, he also questions the ability and desire of mainstream psychology to undertake an endeavor whose goal it is to pursue greater openness, theoretical clarity, and moral evaluation.

References

- Baars, B.J. (1985). The logic of unification. Contemporary Psychology, 30, 340.
- Baars, B.J. (1986). The cognitive revolution in psychology. New York: Guilford Press.
- Bernstein, R.J. (1983). Beyond objectivism and relativism: Science, hermeneutics, and praxis. Philadelphia: University of Pennsylvania Press.
- Cahill, S.P. (1994). A unified training model in a disunified science? Implications of "psychology's crisis of disunity" for graduate clinical training. *International Newsletter of Uninomic Psychology*, 14, 13–16.
- Fishman, D. (1990). The quantitative, naturalistic case study: A unifying element for psychology. International Newsletter of Uninomic Psychology, 9, 1–7.
- Fraley, L.E., and Vargas, E.A. (1986). Separate disciplines: The study of behavior and the study of the psyche. *The Behavior Analyst*, 9, 47–59.
- Franks, C.M. (1988). Unifying psychology: With special reference to clinical psychology. *International Newsletter of Uninomic Psychology*, 5, 25–27.
- Gardner, H. (1992). Scientific psychology: Should we bury or praise it? New Ideas in Psychology, 10, 179–190.
- Hoshmand, L.T., and Martin, J. (1994). Naturalizing the epistemology of psychological research. Journal of Theoretical and Philosophical Psychology, 14, 171–189.
- Hyland, M.E. (1985). Do person variables exist in different ways? American Psychologist, 40, 1003-1010.
- James, W. (1978). Pragmatism: A new name for some old ways of thinking. Cambridge, Massachusetts: Harvard University Press. (originally published 1907)
- Kendler, H.H. (1987). A good divorce is better than a bad marriage. In A.W. Staats and L.P. Mos (Eds.), Annals of theoretical psychology (Volume 5, pp. 55–89). New York: Plenum.
- Koch, S. (1981). The nature and limits of psychological knowledge: Lessons of a quarter century qua science. *American Psychologist*, 36, 257–269.
- Krech, D. (1970). Epilogue. In J.R. Royce (Ed.), Toward unification in psychology: The first Banff Conference on Theoretical Psychology (pp. 298–301). Toronto: University of Toronto Press.
- Kuhn, T.S. (1970). The structure of scientific revolutions (second edition). Chicago: The University of Chicago Press.
- Leahey, T.H. (1992). A history of psychology: Main currents in psychological thought (third edition). Englewood Cliffs, New Jersey: Prentice–Hall.
- Maher, B.A. (1985). Underpinnings of today's chaotic diversity. *International Newsletter of Paradigmatic Psychology*, 1, 17–19.
- Manicas, P.T., and Secord, P.F. (1983). Implications for psychology of the new philosophy of science. *American Psychologist*, 38, 399–413.
- Messer, S. (1988). Philosophical obstacles to the unification of psychology. *International Newsletter of Uninomic Psychology*, 5, 22–24.
- Minke, K.A. (1987). Research methodology in a unified psychology: A paradigmatic behavioral perspective. *International Newsletter of Uninomic Psychology*, 3, 4–10.
- Observer. (1982). Unity and disunity in science and psychology. The Psychological Record, 32, 291–295.
- Osbeck, L. (1993). Social constructionism and the pragmatic standard. Theory & Psychology, 3, 337–349.
- Polkinghorne, D. (1983). Methodology for the human sciences: Systems of inquiry. Albany, New York: SUNY Press.
- Robinson, D.N. (1986). An intellectual history of psychology. Madison: University of Wisconsin Press.
- Rychlak, J.F. (1988). Unification through understanding and tolerance of opposition. *International Newsletter of Uninomic Psychology*, 5, 13–15.
- Rychlak, J.F. (1993). A suggested principle of complementarity for psychology: In theory, not method. *American Psychologist*, 48, 933–942.
- Slife, B.D. (in press). Theoretical psychology. Encyclopedia of psychology. Oxford: Oxford University Press.

Slife, B.D., and Williams, R.N. (1997). Toward a theoretical psychology: Should a subdiscipline be formally recognized? *American Psychologist*, 52, 117–129.

Spence, J.T. (1987). Centrifugal versus centripetal tendencies in psychology. American Psychologist, 42, 1052–1054.

Staats, A.W. (1983). Psychology's crisis of disunity: Philosophy and method for a unified science. New York: Praeger.

Staats, A.W. (1996). Behavior and personality: Psychological behaviorism. New York: Springer Publishing Company.

Toulmin, S. (1987). On not overunifying psychology: A response to Kranz. New Ideas in Psychology, 5, 351–353.

Viney, W. (1996). Disunity in psychology and other sciences: The network or the block universe? The Journal of Mind and Behavior, 17, 31-44.

Viney, W. (1998, August). A proposal for unifying psychology: A variation on James's pluralism. Paper presented at the meeting of The American Psychological Association, San Francisco, California.

Williams, R.N. (1990, August). The adequacy of language and explanation: Reasons, causes, and accounts. A paper presented at the meeting of The American Psychological Association, Boston, Massachusetts.

Yanchar, S.C. (1997a). William James and the challenge of methodological pluralism. *The Journal of Mind and Behavior*, 18, 425–442.

Yanchar, S.C. (1997b). Fragmentation in focus: History, integration, and the project of evaluation. *Journal of Theoretical and Philosophical Psychology*, 17, 150–170.

Yanchar, S.C., and Slife, B.D. (1997). Pursuing unity in a fragmented psychology: Problems and prospects. Review of General Psychology, 1, 235–255.