

# Psychology's House of Intersecting Dialogues

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The forthcoming APS convention revolves this year about the Unity of Psychological Science. But is there, will there be, or even should there be such unity? These questions seem quite timely, for the house of psychology today is hardly the paragon of tranquil harmony. Unprecedented tensions are pulling it apart and formidable centrifugal forces threaten to decimate it, perhaps to the point of total eradication, as some skeptics presage.

Both internal and external developments have conspired to create this state of affairs. The former relate to the increased specialization any mature field of science may expect to undergo. In the early stages of a science, the amount of substantive and methodological knowledge is meager enough to afford its mastery by a single individual (As recently as the 1960s, psychology graduate students were expected to be knowledgeable in all of the diverse facets of psychology including its biological, cognitive, or socio-cultural aspects). With increasing cumulation of knowledge, however, comprehensive mastery by any one mind verges on the impossible.

## Evolution of a Science

Consequently, separate scientific groupings congeal around diverse aspects of an evolving discipline. These groupings tend to address different bodies of knowledge, use different methodological devices, and evolve unique histories and specific intra and intergroup dynamics. So it has been with psychology. Moreover, external developments in neighboring fields, technological advances, and research support policies by the federal government and other agencies have created situations where psychologists may have found themselves sharing more in common with colleagues outside of their discipline than with their departmental neighbors. Biological psychologists have been increasingly drawn to their neuroscience colleagues in medical schools or departments of biology or zoology. Industrial and organizational psychologists have been attracted to business schools, cognitive psychologists to computer-science specialists, linguists, or philosophers of mind, and clinical and educational psychologists have often found fertile work environments in freestanding professional schools or schools of education (Spence, 1987).

Federal funding policies (e.g., inspired by the congressional support for a "Decade of the Brain") also confront psychologists with exciting opportunities and adventures. These often transcend psychology's disciplinary boundaries and draw psychologists further and further from their disciplinary center.

Finally, the ever-present differences of emphasis and preoccupation of the basic and applied branches of psychology recently have reached crisis proportions, culminating in a partial exodus in the last decade of academic, applied, and research scientists from the American Psychological Association (APA) and their establishment of the American Psychological Society (APS).

## Death Knell?

Do these developments sound the death knell of psychology as an organized field of science? There are those who would answer in the affirmative and point, as cases in point, to the APA-APS split and to the increasing fractionation of some psychology departments across the land. They view these events as unmistakable portends of things to come. Yet, even though the winds of change are blowing, there are good reasons to believe that psychology is here to stay:

**Mission.** Perhaps the most important reason is psychology's disciplinary success that forged a unique niche for it in contemporary society. It is difficult to envisage the proper functioning of central life-domains today without the salient presence of relevant psychological services. The clinic, the school system, the work place, all are pertinent examples, as are the realms of interpersonal and intergroup relations. The fundamental needs for psychology's contributions in these domains are unlikely to vanish, and future developments (e.g., the technological revolution in electronic communication, the internet, virtual-reality devices, or the information highway) are likely, if anything, to compound them.

Nor will societal needs be optimally served by psychological technicians uninformed by systematic scientific research. A major strength of psychology and a source of its vitality are its integral ties to major real-world concerns we have been called upon to address. It is for that reason that the rift between the scientific and applied branches of psychology is to be strenuously resisted. Psychological practitioners and scientists inherently need each other. The former cannot do without the cutting -edge knowledge that only scientific research can provide. The latter are dependent on feedback about the ecological validity of their ideas in complex, real-life environments, and they derive profound justification for their efforts (and the considerable amounts of public funding these require!) from evidence of their ideas' ultimate utility to society. Thus, the maintenance of a dynamic interrelation between psychological science and practice seems a *sine qua non* without which both sides will be considerably weakened.

**Problem orientation.** Does that imply the survival of psychological pockets in domains having similar levels of analysis to practical concerns, (e.g., clinical, industrial, social or personality psychologies), and the migration of other branches of psychological science (e.g., the cognitive or bio-types) to alternative disciplinary configurations (e.g., medical schools, or institutes of cognitive science or of neuroscience)? Not if one adopts a problem-oriented approach to science (Cacioppo and Berntson, 1992).

A major tenet of such an approach is the principle of multiple determinism whereby a phenomenon at one level of organization (e.g., a psychological "problem") may have numerous determinants, both within and across organizational levels. Take the problem of anxiety for example. In a recent issue of *Science* (November 29, 1996), a study is reported about a link between anxiety-related behavior and the transporter gene that controls the brain's ability to use serotonin. Thus, genetic and neurochemical processes are involved in anxiety. But anxiety could be also examined at a behavioral level of analysis (e.g., in terms of the effects of repeated failure, frustration, or a lack of contingency between actions and outcomes), at a cognitive level of analysis (e.g., in terms of perceived discrepancy between one's obligations and their fulfillment), at a psychopathological level of analysis (e.g., schizophrenic break with reality), and at a social psychological level of analysis (e.g., evaluation apprehension, accountability pressures or interpersonal conflict).

A major potential benefit of a multi-leveled approach is the greater ecological validity of research findings it may afford (in so far as problems in the real world are unlikely to be neatly packaged at any

single level of analysis). However, such an approach does require as a precondition the problem-oriented collaboration of scientists of various stripes. Thus, not only is there good reason for diverse psychological types to remain within their disciplinary house, but there is also an excellent reason to invite scientists from other apposite domains (e.g., zoology, neurophysiology, or neuroanatomy) to join our ranks and toil in common on significant psychological issues of interest to humankind. Such a problem-oriented approach sees virtue in our multifarious nature and constructively exploits psychology's essence as a house of intersecting dialogues.

**Unique contribution to interdisciplinary endeavors.** Over the many decades of its existence as a scientific discipline, psychology boasts numerous significant achievements, not the least of which lie in the domains of research methodology and data analysis. Such knowledge constitutes an invaluable and unique resource that psychologists contribute to various interdisciplinary efforts in which they are often invited to partake. Thus, even where psychologists may choose to join interdisciplinary research teams (e.g., in neuroscience, or in cognitive science), they may be capable of making particularly valuable contributions precisely by dint of their unique scientific culture, foreign to other participating scientists.

Obviously, such contributions presuppose prior immersion in the culture of psychological science and proper training grounds for such immersion within departments of psychology.

**Psychology: An ever powerful attractor.** What vision then, for the future of psychology, may one project at the brink of the 21<sup>st</sup> century? The continued presence and strength of psychology is not to be doubted. It represents a vital and prominent node on the interdisciplinary map, even if it no longer maintains its long-held monopoly on research on issues of mind and behavior. In dynamic systems terms, psychology exists as a powerful "attractor" that many (from within or outside the discipline) may be drawn to in the context of alternative "attractors" some may find irresistible. This is hardly a bad situation to be in, for it offers manifold options and opportunities for stimulating interdisciplinary experiences and intellectual growth. And to those committed to the pursuit of strictly "psychological" problems, it may mean the challenge of expanding our vistas and developing the competence to follow the many intersecting dialogues that such problems inspire these days.