

# Quantum Psychiatry: A New Paradigm?

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## **Abstract**

Psychiatry needs to get beyond dogmatism (biological reductionism or psychoanalytic orthodoxy) and eclecticism (the biopsychosocial model). There may be no solution to this dilemma beyond a method-based psychiatry, in which different methods are used for different purposes. In this brief commentary, I discuss another alternative: the potential role of an integrated theory of brain and mind based on quantum mechanical concepts, seeking to solve the central problem of how the parallel processing networks of the brain are translated into the sequential experience of mind.

**Key Words:** psychiatry, quantum mechanics, quantum psychiatry

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Is psychiatry ready for a new paradigm? The concept of paradigms, derived from Kuhn, is probably overused. Paradigm shifts, as he described it, are infrequent and major events in the history of science. Numerous writers have wondered over the years whether psychiatry is on the verge of such a shift. I do not know, but the authors in this volume suggest that this may be the case, and that the paradigm shifts involves a transition to scientific influence from quantum, as opposed to classic, physics.

There is no doubt that the metaphors which have ruled the psychiatric mind have been rather pedestrian. Freud had his hydraulic theory of libido, moving back and forth from id to ego and superego; later biological psychiatrists provided an idea of a chemical imbalance in catecholamines. The mind is clearly much more complex than can be described adequately with the notion of a chemical imbalance, and the moving around of hypothesized libido fails the principal criterion of any empirical testability.

We know the brain involves highly complex parallel structures of neural networks, not sequential linkages of neurotransmitter-based emotions or thoughts. How we can incorporate this parallel neurobiological structure into our sequential clinical thinking is a problem.

I have suggested that the simplistic clinical dogmas of psychoanalysis and biological reductionism fail us (Ghaemi, 2007). So too does the most popular attempt at going beyond those dogmatisms: the biopsychosocial (BPS) model. The BPS model has turned out to be an eclectic theory: that at best, the mere permission to emphasize whichever aspect of mental illness; at worst, the enabler of the personal dogmatisms that each of us might possess (Ghaemi, 2009). Engel himself thought he was going beyond classical physics, but his later writings on this topic are relatively superficial (Engel, 1992). His use of General Systems Theory was not deeply thought through, and suffered from important philosophical inconsistencies, including the lack of any specificity that might guide research and practice.

It may be that we can get no further than recognizing all our distinct methods in

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psychiatry, and their relative strengths and weaknesses, and trying to apply them where they are best applicable – a method-based psychiatry as opposed to dogmatism or eclecticism. However, if a single new theory would make sense of the confusion facing us, it would be preferable. This kind of integrationism may be addressed with sequential scientific methods, as in the work of Kandel on how changes in neuronal function in the snail are associated with

learned conditioning (Kandel, 1998). The human brain is so much more complex, however, that quantum approaches, such as Mender's suggestions regarding how neural networks may relate to quantum mechanical concepts, would seem rational. Such views may seem abstruse, even crazy, but to paraphrase Niels Bohr's comment upon hearing a new quantum mechanical theory: It sounds crazy, but I wonder if it is crazy enough to be true.

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