Our conceptualisation of ourselves within this novel world and ourselves. Perhaps most importantly, cations of this new "post-mechanistic" science move away from positivism towards appreciation of the non-scientific understandings of our universe interacting intimately with it, rather than standing back as an aloof observer. Einstein's theory of relativity, which successfully challenged Newtonian concepts of space and time, was followed by quantum theory which changed our concept of the subatomic world from a simple deterministic one to a "shadowy and paradoxical conjunction of waves and particles governed by the laws of chance" (Davies & Gribben, 1992). More recently, chaos theory has shown that "non-linear" systems can become unstable and change in random and totally unpredictable ways. The implications of these discoveries are vast and will touch many disciplines. A whole new cosmology is emerging which places man firmly in the universe interacting intimately with it, rather than standing back as an aloof observer.

What are the implications for psychiatrists? Studies have started to appear in recent years applying the theory of chaos to such subjects as schizophrenia (Schmid, 1991), neurosynaptic transmission (Mandell, 1983), and the dynamics of psychotherapy (Lonie, 1991). In addition, the philosophical implications of this new "post-mechanistic" science move away from positivism towards appreciation of the validity of non-scientific understandings of our world and ourselves. Perhaps most importantly, when we conceptualise ourselves within this novel scientific paradigm, we can no longer view ourselves in a reductionistic fashion. Human beings become more than biological machines. In fact the 'high-priests' of science - the theoretical physicists - are telling us that we are no longer able to conceive the universe or ourselves as machine-like systems but rather as holistic, indeterministic open systems, vibrant with potentials and possessing infinite richness. It appears to me that such a view overlaps significantly with the six axioms which Professor Cawley describes as "primary features of human experience". In the view of today's theoretical physicists, Ryle (1990) was right to dismiss the notion of the "ghost in the machine" - "not because there is no ghost, but because there is no machine" (Davies & Gribben, 1992).

I believe that these changes in thinking will not only validate the importance of Professor Cawley's 'non-science' component, but will also incorporate aspects of it, such as the area of subjective experiences and inner life, into the science of the 21st century.


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Ethnicity and relapse in schizophrenia

Sir: I read with interest the paper by Birchwood et al (Journal, December 1992, 161, 783-790). They do not, however, refer to the study carried out at the Bethlem Royal and Maudsley Hospitals ('Joint Hospital'), an account of which was published the previous year (Gupta, 1991). Although the two studies do differ in a number of respects, many of their findings are similar. In both, for example, the Asian group had fewer readmissions to the hospital in question than the white group. Also the attrition rate at follow-up was greater in the former than in the latter (Gupta, 1992). What is not clear is whether these findings reflect differences in outcome or differences in the way in which different ethnic groups interact with medical and psychiatric services.

The social and family environment may of course affect both morbidity and service utilisation. Birchwood et al show that their Asian group were