

The theory of the Unconscious as developed by Freud some 50 and more years ago revolutionized psychological thought and psychiatric practice. It was firmly resisted for many years; but today, no one doubts the reality and importance of unconscious processes, least of all biologists.

During that time, we have observed revolutionary advances in other areas of general and of human biology, notably in genetics and molecular biology, with ramifications in such areas as the evolution of man and his biological relationship to other primates; hereditary aspects of variation in man; the biochemistry and development of the central nervous system. My main questions are mainly concerned with the assimilation and use of this kind of information and insight in psychiatric practice. Mx

May I state my prejudices as an interested onlooker? I have the impression that while Freud himself was very well informed in the knowledge of human biology available in the 1900's, and stressed its importance, the very thrust of his own revolution isolated both himself and his followers from the stream of new biological knowledge that has emerged since then. This is easily understandable as a reaction to the hostility that his ideas faced, and in the light of the preoccupation and excitement elicited by the exploration of previously forbidden territory. I am then moved to ask you to discuss:

1. Is contemporary training in and practice of psychiatry (and psychoanalysis in particular) sufficiently aware of modern biology? In the theoretical model of the human organism, is it relevant to know about the chemistry of DNA and its function in development?
2. Many commentators believe that psychotherapy in practice deviates widely from the theory taught by the various schools. One way to test such a proposition is to ask whether the therapeutic behavior of different (presumably equally successful?) psychiatrists of different schools

does not converge to a degree that would hardly be predicted by a review of their theoretical doctrines.

3. "Intelligence" (i.e. ~~XXXXXX~~ I.Q. scores) is the only "quantifiable" aspect of personality to have been extensively studied by geneticists, who find "heritabilities" of the order of .5 to .7 from studies on twins reared in separated, adoptive families. (These findings, I will emphasize are quite irrelevant though often misapplied to ~~XXXXXXXXXX~~ ~~of~~ genetic differences in intelligence among races, which are confounded by obvious, systematic differences in sociocultural environments.) How does intelligence, and its biological variability, fit into your model of the psyche? Is it modifiable by therapy? If so, is a sharpening of intelligence a goal of practical therapy? On the other hand, how do differences in intelligence ~~influe~~ among patients influence therapeutic management?

4. This question is, in a way, a restatement of all the others. To what extent is the "psyche", which is the object of psychodynamic models, transmitted through the sociocultural environment, to what extent via biological inheritance (i.e. the DNA of the species)?

A better question is, how can we know?