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Psychoanalysis as Science

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Abstract

Current objections to psychoanalysis as untestable and unscientific ignore two facts. First, a large body of experimental evidence has tested psychoanalytic ideas, confirming some and not others. Second, psychoanalysis itself, while it does not usually use experimentation, does use holistic method. This is a procedure in wide use in the social sciences and even in the “hard” sciences.

Psychoanalysis as Science

My essay, “Psychoanalysis as Science” [1] makes two points. One, although ignored in the “Freud wars,” experimenters have in fact generated much empirical evidence for the validity of at least some of psychoanalytic theory of mind. The oft-repeated mantra, “There is not a shred of scientific evidence for psychoanalysis,” is simply false. Two, part of the devaluing of psychoanalysis derives from a failure to understand that it rests on a non-experimental method, widely used in the social and “hard” sciences.

As for experimental evidence, two impressive books by Seymour Fisher and Roger Greenberg [2,3], summarize some 2500 empirical tests of Freud’s claims. They speak of “the incredible amount of effort that has been invested in testing Freud’s ideas fairly” [3, p. 285].

Freud’s general idea that the dream has adaptive functions survives. Experimenters confirm the clusters of traits associated with orality and anality. The literature supports an oedipal stage, but finds that a good superego is likely to come from a loving rather than a fearful relationship with a father. There is no support for any of Freud’s ideas on female development. Homosexuals of both sexes tended to have negative father images. The literature confirms Freud’s link of depression to parents who were disapproving and unnurturing, but not to early experiences of loss, although early loss gives recent losses more effect. There was strong confirmation of links between depression and oral fixation and between depression and tendencies to be self-critical and self-attack. Freud’s account of paranoia gets confirmation. And so on.

Experimental psychologist Joseph Masling directed the book series, *Empirical Studies of Psychoanalytic Theory* [4-13]. In these ten volumes, distinguished psychologists and psychiatrists experimentally test and modify both Freud's and later psychoanalytic theory. There are subliminal studies; analyses of transcripts of psychoanalytic sessions; explorations of the psychodynamics of gender and gender role; studies of unconscious feelings and motives and thought processes; longitudinal studies of development in infancy and across the lifespan; analyses of psychopathology (bulimia, depression, schizophrenia, etc.); studies of dreaming; studies of wishes; of the therapeutic alliance, and on and on. These volumes offer a wealth of empirical support and modification for a wide range of particular psychoanalytic hypotheses. Masling's first eight volumes contain 327 pages of references with an estimated 6300 citations, most of which deal with experimental testing of psychoanalytic ideas [14].

Drew Westen sets out five general propositions that establish modern (as opposed to early, purely "Freudian") psychoanalysis [15]. He adduces some 350 references that support this metapsychology. 1) there are unconscious motivations and defenses. 2) mental processes are in parallel or function multiply, leading to conflict and compromise. 3) personality patterns form in childhood and continue through life. 4) early patterns of attachment guide later relationships and symptoms. 5) personality development involves changing dependency but also pre-oedipal stages (oral, anal, etc.)

(Fisher and Greenberg also confirm oral and anal stages. And they are what convinced me, a literary critic, of psychoanalysis' validity. Modern writers are often deliberately "Freudian," but I found "oral," "anal," "phallic," and oedipal clusters of images and ideas in the personal styles of pre-Freudian writers like Chaucer, Marlowe, Shakespeare, Keats, Dickens, or Twain.)

As the squibs and squillets fly in the Freud wars, neither psychoanalysis' detractors nor its supporters mention these many experiments. Psychoanalysts do not find experiments relevant to their practice. Non-analytic psychologists share a deep-seated prejudice against psychoanalysis embedded in psychology textbooks and indoctrinated in beginning psychology courses.

When psychoanalysts do point to evidence, they point to clinical evidence. Psychologists, however, rightly point out that clinical evidence is unreliable and demand experiment [16]. One needs to qualify that objection, however, by recognizing that other branches of social and "hard" sciences have somewhat the same problem. The large theories of geology, astronomy, oceanology, meteorology, ecology, biology, and even physics do not lend themselves to repeatable experiments. But no one doubts that these sciences are sciences. In judging psychoanalysis as a science, then, one needs to consider the range of scientists' methodologies, initially in the social sciences. One has to get over the idea that the only "science" is experimental. There is another method for dealing with non-repeatable, single instances like the psychoanalysts' patients.

In thinking about psychoanalysis and scientific method, I have found the ideas of Paul Diesing [17-20] the most helpful. Instead of starting with an abstract definition of science, Diesing observed social scientists at work by reading papers and visiting laboratories. He singled out four methods in common use. Two pertain here.

One is, of course, experiment. A psychological experimenter seeks numerical correlations among independent, dependent, and controlled variables within a population of subjects. Although we generally regard experimentation as the most rigorous and "scientific" of social science methods, it has problems.

Most psychological experiments treat some stimulus as the independent variable and the response as the dependent variable. This model more or less locks the experimenter into a stimulus-response view of humans, dropping individuality out through statistical manipulations. We become blank slates on which the environment writes its influences. Thinkers like Chomsky and Pinker have raised serious doubts about this "Standard Social Science Model."

In dismissing psychoanalysis, experimental psychologists sometimes declare they cannot confirm some large psychoanalytic concept like repression. What is striking, Matthew Erdelyi points out, is that they then dismiss the concept instead of holding their methods accountable for the failure [21, pp. 258-59].

Another problem arises because each experimenter defines variables and methods very precisely. Hence, psychological experimenters have difficulty in generalizing results beyond the particular experimental method used [17, p. 4]. In years of asking students and colleagues for a large generalization about human nature given to by experimental psychology, I have come up blank.

The other mode Diesing points to that pertains here is holistic method. It serves best to study unique systems that cannot readily be multiplied for experimental or survey manipulations: a community, a family, or a corporation for example, or a single human being. Lots of social scientists use holistic method, and they consider it valid and scientific. I am thinking of anthropologists, archaeologists (notably in studying hominids and long-buried cultures), sociologists and psychologists studying special groups, some market researchers, some geographers, and most political scientists and historians [17, p. 137-8].

First, the researcher gathers data. These data consist of raw facts, as free as possible of confining hypotheses. Second, the researcher groups the data into themes, each theme representing a certain uniformity in the material, some clustering or repetition or contrast. One tests a theme by seeing whether further instances do appear. If only a few turn up, one stops paying attention to that theme. If more than one or two negative instances appear, one discards it. A theme, says Diesing, is like a pawn, easily gotten and easily discarded [17, p. 229]. Interestingly, Levine and Luborsky were able in experiments to achieve inter-judge reliability for such interpretations [22]. Similarly, Donald Spence achieved inter-judge agreement on a low-level interpretation of a dream [23].

Third, one proceeds to combine those themes into a pattern of repetitions and contrasts that applies to all one's data. This is a "pattern explanation" of the dream, parapraxis, symptom, or even a whole culture or character: a coherent system. Fourth, one checks the explanation against new data, refining and correcting it [17].

Anthropologist Claude Lévi-Strauss, for example, offers an elaborate discussion of various customs of the Bororo Indians, the layout of the village, dances, theories of the dead, myths, clothing, and so on. He then pulls them all together into "one regulation [that] takes precedence over all others" [24, p. 230].

Moreover, holistic method has proved useful in the hard sciences, for example in the geological theory of plate tectonics. It began with noting the matching shapes of the opposing Atlantic coasts; movements in geological time of the magnetic poles; the positions of earthquakes, ridges on the ocean floor, and volcanoes; the relative ages and positions of different mountain ranges; even the presence of marsupials in Australasia and their absence elsewhere. In short, the theory begins with a hodgepodge of data and ends by offering a narrative account of the movement of huge plates within the earth to explain a great variety of phenomena. This is, quite simply, holistic reasoning leading to a narrative explanation. It is as "scientific" as scientific gets. We teach it to our schoolchildren [25].

The major example of holistic reasoning and pattern explanation in the hard sciences is, of course, the theory of evolution. Again, Darwin began with a jumble of observations that he brought together into a single principle. Later experiments, as in plate tectonics, can confirm parts of the reasoning.

It seems to me (as to Diesing [18]) this holistic procedure is the rock-bottom core on which psychoanalysis builds. First, the researcher-analyst takes as data the patient's free associations. Second, the analyst groups those details of speech into themes. Third, the analyst groups themes into an overall configuration or model or narrative, so as to give a systematic description of the case that will constitute an explanation of the themes and data arrived at so far. This

tests at this third stage are: How many themes are included in the configuration and how many are left out? Th how coherent or well-organized does the model make the themes [17, p. 230].

In Freud's first published dream analysis, for example, he began by spelling out his associations (his data). In doing so, he indicated a variety of recurring themes. Finally, he concluded: "They could all be collected into a single group of ideas and labelled, as it were, concern about my own and other people's health-professional conscientiousness" [26, p. 320]. This is purely and simply holistic reasoning.

In this very brief summary, one-quarter the size of the original essay [1], my two points are simply 1) there is considerable evidence from experimental psychology that psychoanalytic theory is, in part, valid. 2) within psychoanalysis, the therapist uses an accepted scientific method appropriate to a human subject matter to arrive at generalizations. It seems to me psychoanalysis' can therefore legitimately be called a "scientific" theory of mind.

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