

P.E.Meehl: Philosophical Psychology Seminar

Lecture 12 (of 12) 06/01/1989 (poor sound in spots)

[Psychoanalysis, cont. from previous lecture:

Why psychoanalytic session is better evidence than experiments or correlational studies.

If the free association method is not a good data source, then psychoanalysis is probably erroneous. The core problem of psychoanalysis is the session inferences.

Distinction between 2 things: (1) No experimental or statistical evidence on this;

(2) Evidence against but I believe it anyway. Rely on clinical experience given (1).

Not if (2) is against your clinical impressions. Not just scientific error—*moral* wrong.]

Appraising a scientific theory if we realize H_0 is poor way to do it:

Weak and strong use of significance tests

Epistemological risk \neq Statistical risk. That α is small, doesn't mean theory risk is small.

"Numerify" is word, weaker meaning.

Popperian risk. Salmonian coincidence. "Almost hits," "near misses" can sometimes corroborate theory strongly.

Index must combine risk with closeness.

Case studies can't settle metatheory arguments. Anecdotes all refute statements never made.

Ex: Prout's hypothesis. Ex: Popper's example (Bohr-Kramers-Slater)

If metatheory is inherently stochastic, way to study it is actuarially.

Many properties of theories besides their factual performance (as Laudan shows).

Empirical fit: 2 components: How narrow tolerance, how close we come. *Spielraum*.

Any method must relate the theory tolerance to the *Spielraum*. Ex: Baby elephant trunks.

Index Numbers problem

$C = [1 - (D/S)] [1 - (I/S)]$ [C* handout & publication #147]

Function forms without parameters. Curve fitting of constants, still can predict function form.

15-20 functions make up 99% of those occurring in science.

"Closeness"? Not a residual sum of squares.

Pure error (influenced by size of individual differences)

Lack of fit (this is what we want)

4 theoretical track record aspects

Point predictions

Function form

Reducibility (Comte Pyramid)

Qualitative diversity of experiments

I prove verisimilitude and track record are highly correlated