Confessions of a Biometric Psychopathologist

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In August (1986) I received a letter from Richard Lewine which read in part as follows:

"My real reason for writing is to invite you (at the behest of the planning committee of the October Cambridge meeting) to give the address at our banquet. We would like this to be an informal biographical sketch of your career not so much the dates and positions but rather your observations and feelings about psychopathology, research, mental health field, etc."

This was August and October seemed far away so I accepted. But October soon came and I had to decide what to say to you.

Here is what is in store for you:

1. State of psychopathology when I entered the field.
2. Informal brief biographical sketch.
3. Sections of my closing comments at the Heidelberg Symposium "On the Search for the Causes of Schizophrenia".

I. State of Psychopathology in the 30's

Wittgenstein has pointed out that the trouble with psychology is not that it is a young science, but that in it, theory and experiment pass each other by like ships in the night. There was a time when this dichotomy between theory and experiment held true of all science. Before the advent of Alexander the Great there were two cultures dealing with what now would be called science - The ancient Hellenic culture and the Babylonian culture. In his seminal book, "Science since Babylon", Derek de Sola Price points out that the ancient Greeks had well developed conceptual theories about the movement of the
planets, but had no skills at measurement, while the ancient Babylonians were very skilled in measurement but had no conceptual framework to explain the measurements. The Babylonians could pinpoint the position of the planets against the fixed stars and trace their perigrenations and predict future positions but had no conceptual models to integrate the measurements, while the Greeks had the conceptual framework but could make no predictions for lack of measurement. Only after Alexander the Great combined the two cultures by conquest did modern science emerge integrating conceptual models with their verification through measurements. Ptolemy's Amalgest was the first scientific treatment of the extremely complex way in which each of the planets appear to move across the background of the fixed stars. It is interesting to note that the Amalgest which was based on the integration of the Greek and Babylonian traditions, being science, has been outmoded and hardly heard of today while Euclid's geometry, being pure conceptual mathematics, more like art than science, is still with us. Science, apparently is ad hoc, while Art is forever (story of second hand book store).

An amusing event happened when I became acquainted with deSola Price's historical conclusions. I wrote him a letter saying that if his hypothesis is tenable, there should have been more left handed individuals in ancient Greece than in Babylonia since the former were so good in spatial relations. His wife answered the letter indicating that he had passed away a few years ago but that he would have been interested in my question because he was left-handed himself and believed all right-handed people were brain-injured! In the 30's, psychopathology
consisted of a vast variety of conceptual models on the one hand, and of carefully collected systematic data on first admissions, releases, mortality rates, etc., but the theorists ignored the measurements while the data collectors had no concept of the theories. Thus, you had the Adolf Meyers who eschewed statistics and the Benjamin Malzbergs who were innocent of theory. It was not until the Biometric movement was introduced into psychopathology by men, like Jellinek at Worcester State Hospital in the 30's that scientific studies became possible.

Today, as I look over the scene, I would like to nostalgically hark back to those innocent days when a finding was a finding and did not have to fit some model, and did not require that it must be put into immediate use to solve the problem of schizophrenia, or else, the funding would be withdrawn. We "knew" then much more than we "know" now and though they tell me that nostalgia ain't what it used to be anymore, I miss those days. Some 20 years ago, I memorialized those days as follows:

Most of us past 50 can recall the days before the advent of the drug revolution when custodial care was the mode, psychosurgery was in bloom, electroshock treatment (ECT) flourished, and insulin was in flower. Those were heroic days, life seemed simpler; diagnosis was unnecessary, psychotherapy was in doubt, and psychoanalysis very rewarding, at least to analysts. Our hospitals were overcrowded, community psychiatry not even a pipe dream, and sensitivity training unheard of.
The air was still clean, our language still pure, our noise level bearable, our youths still tractable, and women still unliberated. With the advent of the drug era, all hell broke loose! The air became dirty, language foul, noise level unbearable, youth impossible, psychoanalysis declined, diagnosis again became necessary because our choice of therapies multiplied, our hospitals began to empty, and our entire environment and culture became threatened by pollution. Yet, there seems to be a balance in nature—a law of conservation of pollution—for, when our air and language were clean, noise level low, and drugs were still medicine, sex was a dirty word, and now, with sex clean...

In my own case, the adoption of the biometric approach resulted from a chance luncheon meeting with one of my Advanced Abnormal Psychology classes at Columbia University. The students told me that they enjoyed my reports on experimental findings but could see no systematic connection between them. My contention that what drove me was curiosity, that I was curious about such matters as the effect of E.C.T. on memory, about prognosis of outcome of insulin therapy by means of sorting tests, etc., did not seem to be a satisfactory explanation in their eyes. I then turned to the philosophy of science to see how other sciences dealt with the integration problem and that is how I developed the need for conceiving of scientific models for experimentation.

A. Scientific Models

Since sorting ability depended on noting similarities and differences, I went back to the development of the concepts of similarity and differences in the infant. The model I proposed was that similarity developed out of the idea of self-reference - whatever served the developing child equally well was similar. Thus the string to bring in a toy and fork that could accomplish the same purpose were similar while the brick lying on the table was different in such an occasion. The self reference gradually gets deconcretized into an abstraction, so that $E=MC^2$ remains true even if one makes an error, in writing it. It was the failure on the part of the schizophrenic to deconcretize self reference that lay at the bottom of his poor sorting performance, and those who deviated most had the poorer outcome.

2. Model for the development of the interview - as a mini-experiment.

3. Model for the Rorschach - visual space and inkblot space.

4. Model for E.C.T. memory loss

5. Etiological models and vulnerability - stress development of models.

II. Biographical sketch.

A. My origins
1. Lithuania Shtetl, imbued with Jewish Education, Hebrew and Talmud - Family expected me to continue - go to the Yeshiva and be a scholar.

2. Emigration to U.S.A. - landed in Baltimore

3. Search for a career - Johns Hopkins
   a. AB in Chemistry, flirtation with geology - study of (ancient) Arabic.

4. Philadelphia - Graduate work in chemistry and physics.

5. Jewish Teaching as a livelihood.
   a. Call to New York to head up Jewish Extension education in Bronx - Dr. Benderly

B. Columbia University
1. Teachers College
   Thorndike and handwriting

2. Woodworth, Poffenberger, Warden, Garrett
   Peers - Lorge, Razran, Maller - wil experiment

3. Ph.D. - Some effects of incentives - Individual differences in rivalry. Feeling of alienation made me into an observer of the scene. Rivalry and competition seemed to me to be the spirit of the culture.

4. Freud - Oedipus situation

C. Psychiatric Institute
1. Carney Landis

   Not a scientific technique or therapy that came along that did not get evaluated - watchdogs of psychopathological scene.

2. Personality Inventories
Like mindedness - First grant

3. Evaluation of therapies and personality -
   projective techniques.

4. ECT studies
   Insulin studies

5. Psychosurgery

6. Prognostic Studies - failure of the clinical
   psychological tests

7. Mendelejeff Table to the rescue

III. Biometrics Research - New York

A. US-UK

B. Systematic Interviews - RDC - DSM III

C. Cross-modality

D. P300

E. Verbal Conditioning

F. Social Networks

G. Aging

IV. Pittsburgh

I followed Casey Stengel's example after he was forced to
give up the Yankees, he developed the Mets. In the same way
after being forced out of PI, I built another unit in
Pittsburgh.

A. Markers
   1. Pupillography - Markers and information processing
   2. Heart rate
   3. Biobehavioral Measures

B. Psychosocial Research
1. Life events
2. Recidivism
3. Studies in respite and spontaneous improvement

V. Thoughts on the S.R.P. (Society for Research in Psychopathology

A. Historical role of psychology in Psychopathology
   1. Janet Addressed APPA 1921, became Honorary Member 1934.
   2. Kraepelin - Wundt relationship
   3. Role of psychologist L. Eugene Emerson in saving APPA from dissolution.
   5. Psychologists in the A.P.P.A.
      (a) Boris Sidis - P.I.
      (b) Frederick Lyman Wells - twice president
      (c) David Wechsler
      (d) W. Edward Taylor
      (e) G. Stanley Hall pres.
      (f) Lightner Witmer
      (g) Lydiard H. Horton

B. What should the relation of SRP to APPA be
   1. Split between psychiatric and psychological psychopathologists?
      (a) Is it desirable?
      (b) Depends upon the future of psychopathology

C. Future of psychopathology
1. Options
   (a) Continue as is.
   (b) Psychiatry limits itself to psychosis and the rest go to education and rehabilitation.
   (c) Psychology limits itself to psychosocial and psychological area.
   (d) Psychopathology and medicine intertwine or separate

D. SRP and the baseball farm system

VI. Heidelberg Symposium

(Read extracts)