Conceptualization of Mental Illness and Historical Evolution of Psychiatric Classification

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About Me

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• No relevant financial conflicts of interests.

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Aims of the Talk

• Provide an overview of historical evolution of classification systems in psychiatry with an emphasis on conceptual and methodological assumptions

• Focus on Kraepelinian and Neo-Kraepelinian strands of psychiatric nosology

• End with some general remarks about future directions in the context of the present collapse of the neo-Kraepelinian approach
The ‘Unsaisds’ of Psychiatric Nosology

• German Berrios: psychiatric nosology is postulated by ‘unsaisds’

• Thinking about and crafting classifications within a given historical period is like playing a game of chess.

• The movement of the pieces on the chess board is limited by explicit and implicit rules: some moves will not be made because “they are forbidden by the rules, others because they are patently suicidal, and yet others because they are not fashionable. The same with classifications.” (Berrios, 1999)
A Tug of War Between Description & Conjecture

“Throughout the history of psychopathology, when conjecture was seen as taking us too far beyond anything apparent in an agreed upon sense, there were calls to limit claims to what are more readily considered to be descriptions.”

Zachar, Banicki, & Aftab

Historical and Philosophical Considerations in Studying Psychopathology
A Tug of War Between Description & Conjecture

“The more agreement there is on the background theoretical assumptions, the less disagreement there is on “what” is being described. This suggests that what are considered “descriptive” approaches to psychopathology are approaches where there has been comparative agreement among multiple parties regarding the background assumptions.”

Zachar, Banicki, & Aftab
Cycles of Descriptive & Theoretical Emphasis

• “periodic flowering of theoretical structures focusing on underlying processes (Koehler, Piaget, Freud, etc) in order to progress beyond “blind empiricism”… A problem with such theoretical structures has been the tendency to expand them far beyond their empirical base…”

• “But the same can be said for more purely descriptive approaches. These have been accused of being sterile, rarely progressing beyond counting & describing, and coming to dominate their era far beyond what is empirically justified. Of course, even descriptive approaches are more theoretical than is often claimed, since crucial assumptions are involved…”

Cycles of Descriptive & Theoretical Emphasis

This will inform our discussion of

• Kahlbaum, Hecker & Kraepelin’s reaction to a descriptively impoverished biological psychiatry
• Critics of Kraepelin (Hoche, Jaspers, Meyer, etc.) reacting to conjectural excesses of Kraepelin’s classification
• The rise of Neo-Kraepelinians and descriptive psychiatry in reaction to conjectural excesses of psychoanalysis
• Critics reacting to conjectural excesses of contemporary descriptive psychiatry
Roots of Modern Psychiatric Nosology

• 1682 – Thomas Sydenham: “nature, in the production of disease, is uniform and consistent”

• 1801 – Phillipe Pinel classified “mental alienation” into four species of melancholia, mania, dementia, and idiotism.

• He did not see these as separate entities, but rather as modes of expression of a single disease of mental alienation

• 1860 – Benedict-Augustin Morel conceptualized psychiatric disorders as varying manifestations of “degeneracy”

Unitary Psychosis

- Dominated 19\textsuperscript{th} century German thinking about madness
- Complemented ideas about “degeneracy”
- Single mental illness that evolved through different stages
- Beginning with melancholy, progressing to mania, psychosis, and eventually dementia (dissolution of mental personality)
- Affective disorders were seen as early stages, more amenable to treatment

\textit{Engstrom, 2016. Osiris}


19th Century Version of Early Intervention

“In terms of psychiatry’s institutional development, the concept of unitary psychosis was a stroke of professional genius because it effectively undergirded what can best be described as a dogma of early and rapid institutionalization. Alienists spared no opportunity to stress that illnesses, if they were identified in their early affective stages, had a better chance of being cured and were less likely to evolve into chronic conditions... Throughout much of the 19th and early 20th centuries, the specter of further decline into debilitating chronic conditions drove widespread efforts to have affectively deviant patients institutionalized as early as possible.”

Eric Engstrom, 2016
Wilhelm Griesinger (1817–1868)

Mental illnesses are brain diseases
“Griesinger ... insisted that hopes for an expansion of psychiatric knowledge rested on the study of neurological diseases. Nevertheless, to date it cannot be said that our understanding of mental disorders has been significantly advanced by the results of patho-anatomic studies of the brain”

Emil Kraepelin, 1886
Karl Kahlbaum (1828 – 1899) & Ewald Hecker (1843 – 1909)
Commonly used psychiatric terms were heterogeneous symptom complexes & diagnostically nonspecific

Reliance on them had furthered confusion & led to failure of neuropathological research

Etiological research would not yield results until it was guided by proto-diseases entities, determined not only by symptoms but also by considerations of longitudinal course of illness

General Paresis of the Insane (GPI) was the paradigmatic example

Importance given to natural history descriptions rather conjectures about causes
• “... the various forms in which mental illness has been known since antiquity, and is still known today, cannot be considered as different species in their own right but only as symptom-clusters which can appear in the course of different disorders.” Karl Kahlbaum, 1863

• “…the commonly accepted names for psychiatric illnesses, i.e., melancholia, mania, insanity, confusion and dementia are completely unsuitable and insufficient, because these names do not designate true disease forms but temporary conditions.” Ewald Hecker, 1871

“... the subtle anatomy and physiology of the brain are still in a dismal state and ... the pathological anatomy of the psychoses up to now has offered us extremely few hard facts.”

“No wonder we find in “mania” at times this and at times that change .... in the brain. Would it be any different if we were to trace the anatomo-pathological substrate of “abdominal pain”?"

Ewald Hecker, 1871
“In mental health, we are stymied by our language. The most obvious linguistic problem can be found in our current diagnostic terms, what my predecessor Steve Hyman has called “fictive categories.” Terms like “depression” or “schizophrenia” or “autism” have achieved a reality that far outstrips their scientific value. Each refers to a cluster of symptoms, similar to “fever” or “headache.” But beyond symptoms that cluster together, there should be no presumption that these are singular disorders, each with a single cause and a common treatment.”

Thomas Insel, 2012
(Former) Director of NIMH
“the DSM diagnoses are based on a consensus about clusters of clinical symptoms... In the rest of medicine, this would be equivalent to creating diagnostic systems based on the nature of chest pain or the quality of fever... Imagine deciding that EKGs were not useful because many patients with chest pain did not have EKG changes. That is what we have been doing for decades when we reject a biomarker because it does not detect a DSM category...”

Thomas Insel, 2013
(Former) Director of NIMH
Emil Kraepelin (1856–1926)

- In our contemporary minds, Kraepelin is often seen as an anti-psychological, brain-based, biologically reductive psychiatrist
- The reality is quite different
Email Kraepelin

• Saw psychology as an important scientific discipline & a natural science – studied with Wilhelm Wundt

• Psychiatry, like other sciences, deals with natural phenomena. There exist “natural kinds” or “natural disease entities” and the task of psychiatric nosology is to discover them

• Sought to identify disease entities through an iterative process of careful clinical observation and follow-up

• Disagreed with Griesinger’s central emphasis on neuropathological research

• His nosological agenda was pragmatic and tentative
Kraepelin’s Concept of Disease Entities

• Pathological anatomy, etiology, & clinical symptomatology including course of illness would converge in the case of natural disease entities

• “Judging from our experience in internal medicine it is a fair assumption that similar disease processes will produce identical symptom pictures, identical pathological anatomy, and an identical etiology... If, therefore, we possessed a comprehensive knowledge... all of these classifications would exactly coincide.”

Emil Kraepelin, 1899 (6th edition of Psychiatrie)
Psychopathic Personalities

“Those psychopathic conditions which develop on a morbid constitutional basis include an extensive borderland between the pronounced morbid states and mere personal eccentricities...

... the distinction is one of degree and is to a certain extent arbitrary.

... not characterized by any definite disease process, but rather by a general deviation from the normal mental life.”

Emil Kraepelin, 1899 (6th edition of *Psychiatrie*)
• Karl Jaspers: divided psychiatric conditions into 3 groups
  1. Somatic entities
  2. Psychological and developmental syndromes
  3. Psychopathies
• Jaspers conceived of them as “essentially different from each other” without prospects for a “single unifying and comprehensive viewpoint from which any systematic ordering... could emerge.”
• Kurt Schneider divided psychiatric disorders into “diseases” (organic & functional psychoses) and “abnormal variations” (personality disorders & reactions to experiences)
Reactions to Kraepelin: Alfred Hoche (1865–1943)

“Underlying all these busy efforts is the unassailable belief that even in the field of psychiatry it must be possible to discover clearly defined, pure, and uniform forms of illness. This is a belief that is carefully nourished by the analogy to physical medicine without any consideration being given to the fact that the nature of the relationships between symptom and anatomical substrate ... affords no basis for any comparison between them.”

Alfred Hoche, 1912

Reactions to Kraepelin: Adolf Meyer (1896–1927)

• Meyer was skeptical that a focus on course of illness and outcome as a powerful simplifying principle could lead to the identification of distinct diseases.

• Social and environmental factors have a substantial impact on illness course; outcomes cannot be attributed to constitutional factors.

• He argued that Kraepelin ignored not only brain science but also psychological processes.

• Kraepelin was not interested in detailed case histories.

• Meyer went on to develop his own “psychobiological” approach.

Kendler & Engstrom. A J Psych. 2018
Reactions to Kraepelin: Karl Jaspers (1883–1969)

• Kraepelin’s notion of natural disease entities was problematic
• A one-to-one relationship between the underlying etiology and the resulting clinical syndrome was rarely found
• Kraepelin’s diagnostic categories were too over-inclusive & could not reliably be distinguished
• Kraepelin’s categories were being too easily reified; it was dangerous to assume that dementia praecox or manic-depressive insanity represented objectively true, natural entities

Kendler & Engstrom. A J Psych. 2018
Karl Jaspers: Methodological Pluralism

• Applied Dilthey’s *Erklären* (causal explanation) vs *Verstehen* (psychological understanding) distinction to psychiatry

• Instead of natural disease entities, emphasized Max Weber’s notion of “ideal types”

• Observation of a particular phenomenon that has been made abstract; a simplification that consists of the most striking and unique aspects

• Cautioned against “neuromythology” as well as “psychomythology”
Mid-20th Century: Nosological Ambivalence

- Psychiatrist Erwin Stengel was commissioned by WHO to review existing psychiatric classifications.
- “Recently, the attitude of many psychiatrists towards the conventional type of classification has become one of ambivalence, if not of cynicism. This attitude derives partly from a low estimation of diagnosis... classifications based on the Kraepelinian system have continued to be used in some form or other all over the world. Many psychiatrists have done so under protest and expressing their disbelief in the working hypotheses underlying that system” (Erwin Stengel, 1958)

Psychoanalytic Neglect of Classification

“no comprehensive and detailed psychoanalytical classification of mental disorders exists”

Erwin Stengel, 1958
Mid-20th Century: Crisis of Reliability

• A wave of research studies which demonstrated problematically poor interrater reliability of psychiatric diagnoses and highlighted the need to place psychiatric nosology at a more stable footing.

• Studies such as the US-UK diagnostic project also highlighted the alarming discrepancies in international diagnostic practices.
ICD and Descriptive Classification

• At the request of the Registrar General of the UK, a committee chaired by Sir Aubrey Lewis was tasked with producing a glossary of terms for use in the UK with ICD-8
• Lewis was in favor of using a descriptive, symptom-based approach
• The British Glossary (1967) served as a template for ICD-8’s Glossary
• ICD-8 and its associated Glossary is considered to be “the first firmly symptom-based classification of mental disorders” (Fulford & Sartorius, 2009)
Neu-Kraepelinos

Samuel Guze

Eli Robins

George Winokur

Article
January 1972

Diagnostic Criteria for Use in Psychiatric Research

John P. Feighner, MD; Eli Robins, MD; Samuel B. Guze, MD; et al.

The Neo-Kraepelinian Approach

- Psychiatry should operate within the medical model
- There are natural disease entities in psychiatry
- There can be no scientific psychiatry without a serious, systematic effort to develop a valid classification of psychopathology
- Such a serious, systematic effort requires operationalized diagnostic criteria
- Research into biological aspects of mental illness is crucial for the identification of disease entities
- Validators such as clinical presentation, neurobiological findings, longitudinal course, & family history/genetics will converge when we identify psychiatric disease entities
Biological psychiatry: is there any other kind?

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DSM-III and Spitzer

• Symptom-based descriptive, operationalized criteria for all disorders
• “Atheoretical” with regards to etiology
• Focused on ensuring reliability
• Multi-axial
• Included a formal definition of mental disorder for the first time
• Deeply embedded in implicit neo-Kraepelinian assumptions
DSM-III & Neo-Kraepelinian Approach

This combination of being “descriptive” while implicitly adopting a neo-Kraepelinian stance explains the apparent paradox that DSM-III was seen as a victory of the “medical model” and “biological psychiatry” despite being “atheoretical” with regards to etiology.

Robert Spitzer publicly stated that he is not a neo-Kraepelinian, but many prominent members of the DSM-III task force were.
“In the more than 30 years since the introduction of the Feighner criteria by Robins and Guze, which eventually led to DSM-III, the goal of validating these syndromes and discovering common etiologies has remained elusive. Despite many proposed candidates, not one laboratory marker has been found to be specific in identifying any of the DSM-defined syndromes. Epidemiologic and clinical studies have shown extremely high rates of comorbidities among the disorders, undermining the hypothesis that the syndromes represent distinct etiologies. Furthermore, epidemiologic studies have shown a high degree of short-term diagnostic instability for many disorders. With regard to treatment, lack of treatment specificity is the rule rather than the exception.”

Kupfer, First & Regier, Research Agenda for DSM-V, 2002
“I am not denying that humans experience psychosis or have disabling bouts of dysphoria or extremes of increased energy and mood elevation. I am just saying that our current constructs map sloppily onto the heterogeneity of human experience. Also, by looking at how we now prescribe our drugs (extremely non-specific to our syndromes) and, even more importantly, by examining approaches that seem to be helpful but ignore our diagnostic classification, I am growing increasingly uncertain that it really matters how we define and classify these things.”

Sandra Steingard, 2014
“Recently, the attitude of many psychiatrists towards the conventional type of classification has become one of ambivalence, if not of cynicism. This attitude derives partly from a low estimation of diagnosis... classifications based on the Kraepelinian system have continued to be used in some form or other all over the world. Many psychiatrists have done so under protest and expressing their disbelief in the working hypotheses underlying that system”

Erwin Stengel, 1958
“Those who are out of sympathy with the aims and philosophy of the neo-Kraepelinian school can console themselves with [the thought that] its present dominance will not last forever, or even for long if it commits itself to a crude belief in discrete disease entities and ignores the effects of social and psychological influences.”

Robert E. Kendell, 1982

Schizophr. Bull.
DSM’s definition of mental disorder

- The need for a formal definition arose in the context of the homosexuality declassification in early 70s
- Spitzer devised a restricted definition of mental disorder based on “distress and impairment” to justify declassification
- DSM’s notion of “dysfunction”: vague, undefined, folk psychological
- Subjective, value-laden, context-dependent, socio-culturally influenced
- Implication: the boundaries of mental disorder require constant negotiation with society & stakeholders
- Evident in discourse around transgender identity, paraphilias, autism/neurodiversity, and mad pride

Public and Private Classifications

• Sir Aubrey Lewis made a distinction between public and private classifications

• Public classifications: shared, allow for uniformity of usage, meaningful comparisons, epidemiological work

• Private classifications: used for particular groups for particular purposes

• Lewis never intended descriptive public classifications (such as ICD-8) to replace or suppress private classifications, which he saw as essential
“The ever-wider use of descriptive classifications beyond their originally intended purpose is an example of what the psychiatrist and historian, Paul Hoff, has called psychiatry’s tendency to succumb to one or another ‘single message mythology’. We start out, that is to say, with a perfectly good idea and then run into trouble by trying to make it into the ‘big idea’, a cure-all, a sinecure. What is needed, then, to return to Lewis’ original suggestion, is not to abandon symptom-based classifications but to limit their use to the purposes for which they are appropriate while at the same time recognising that other classifications (Lewis’ ‘private classifications’) will be needed for other purposes.”

Fulford & Sartorious, 2009
There is a need for parallel development & simultaneous use of multiple classifications; we need to abandon the idea of “one classification to rule them all” or insist on naïve “winner takes all” paradigm shifts.

- Dimensional & hierarchical approaches (HiTOP)
- Neurobiological & neuropsychological approaches (RDoC)
- Phenomenological approaches (EASE)
- Idiographic, psychodynamic approaches (PDM)
- Psychological formulation approaches (PTMF)
Conclusions

• Neo-Kraepelinian assumptions underlying our classifications can no longer be taken for granted; they are increasingly suspect

• Our current diagnostic categories are largely pragmatic constructs, despite their essentialist aspirations

• Underlying reality is messy: dimensional, hierarchical, complex, dynamic, subject to looping effects, socially-influenced, idiographic as well as nomothetic

• Tackling this reality requires conceptual, explanatory, and nosological pluralism

• Our notion of “mental disorder” is highly value-laden & requires constant dialogue and negotiation with the broader society & with those it classifies
An Inherently Difficult Subject

“It may be readily surmised that where the best thinkers have failed to produce an unexceptionable classification, the failure must be due to some inherent difficulty of the subject.”

Edward Charles Spitzka, 1887

*Insanity: Its classification, diagnosis, and treatment*
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