

# Dealing with brains, persons, societies?

On psychiatry's identity in the 21<sup>st</sup> century

Paul Hoff



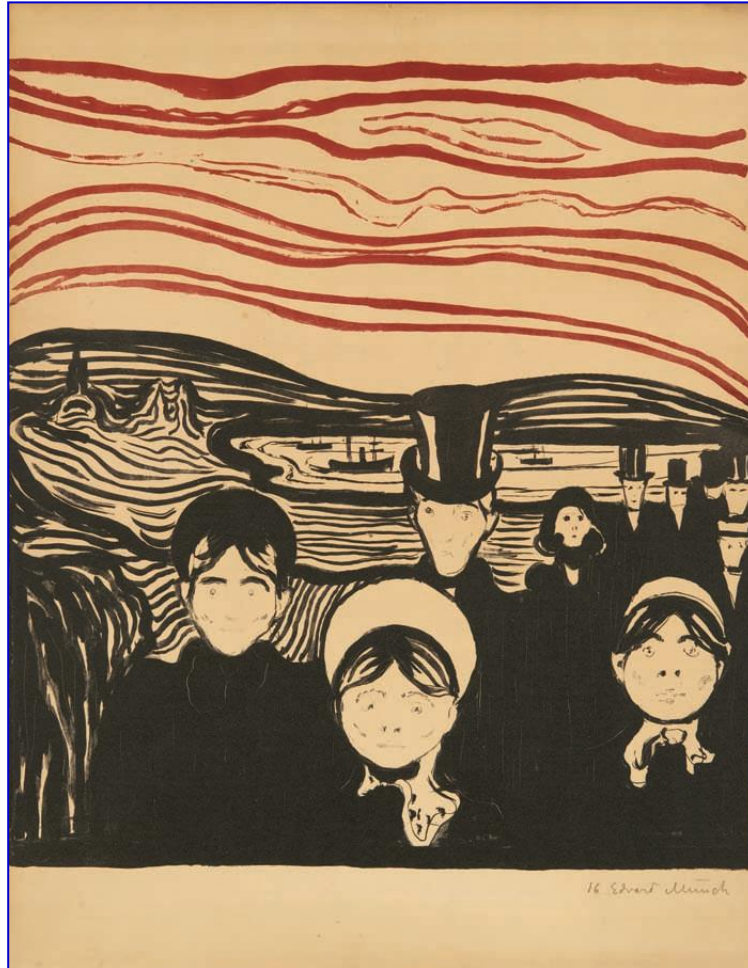
**Annual Meeting**  
Nyborg, 17 - 19 March, 2016

# Agenda

- Psychiatry: Some specific features
- What is the *object* of psychiatry?  
Historical cornerstones
- Lessons learned?  
On psychiatry's identity in the 21<sup>st</sup> century
- Résumé

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## Angst [*Fear*]

1896

Edvard Munch  
1863 - 1944

# Two faces of psychiatry



## «Ars medica»

- Subject
  - Idiographic
- Reproducibility not that important
- Focus on qualitative phenomena
- Closely linked to *all* scientific fields



## «Science»



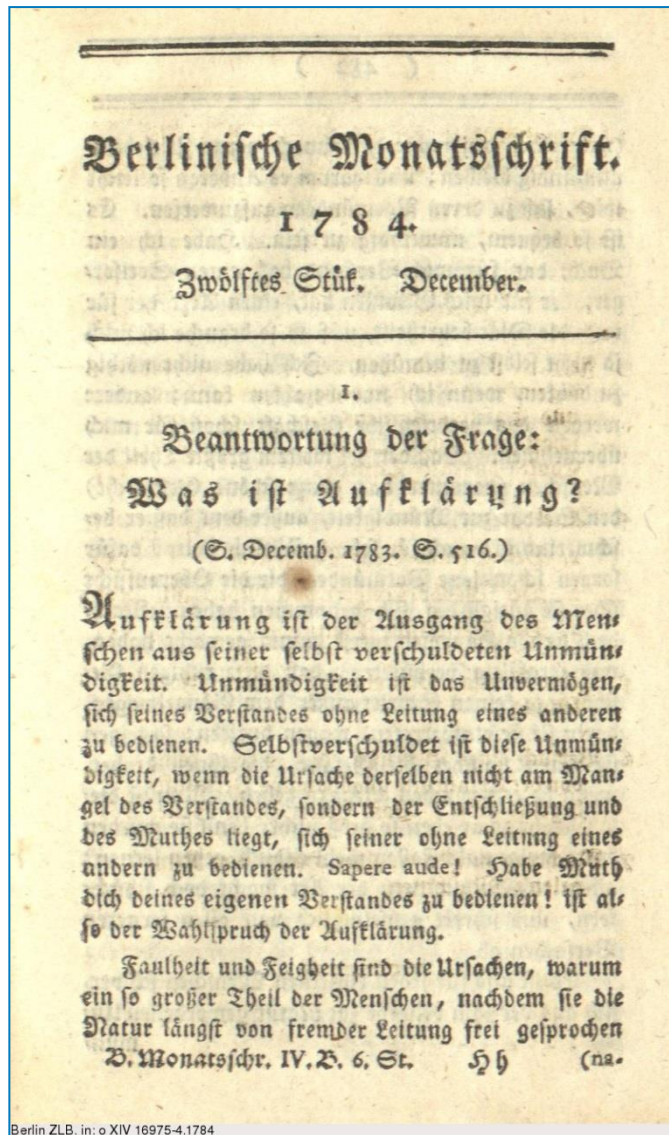
- Object
  - Nomothetic
- Reproducibility as a crucial criterion
- Focus on quantitative phenomena
- Closely linked to *natural sciences*, especially biology

# Special features of psychiatry

- Complex interdependence of scientific, social and political factors
- Controversies about its identity  
(e.g. medical model, antipsychiatry)
- Philosophical issues are ubiquitous, although often unpopular  
(e.g. mind & brain, subject & object, autonomy & determinism, person & society)

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## The beginning

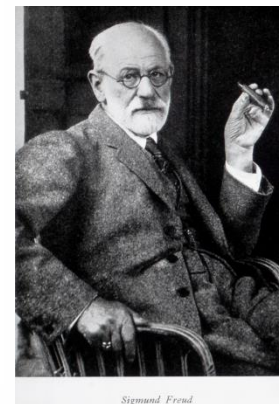
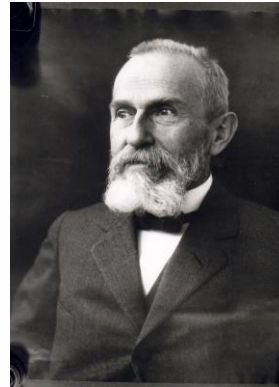
Kant, Immanuel (1784)

**Beantwortung der Frage:**  
**Was ist Aufklärung?**

Berlinische Monatsschrift,  
Heft 12, S. 481 - 494



# Defining mental illness – A broad spectrum ...



## **«*Mentally ill*»**

Hypotheses und metaphors  
from 1750 until today

**Illness of the «Ratio»**

**Consequence of immoral life**

**Illness of the brain**

**Natural disease units**

**Adjustment disorders**

**Powerful unconscious factors**

**Degeneration**

**Resulting from poor living conditions**

**Different existential mode**

**Repressive concept**

**Communicative disorder**

**Bio-psycho-social model**

# Late 19<sup>th</sup> century „Gehirnpsychiatrie“



**Theodor Meynert**  
1833 - 1892

**Brain function as the  
*only* reality**

**Mental events as mere  
epiphenomena**

# Around 1900

## Influential clinicians (I)



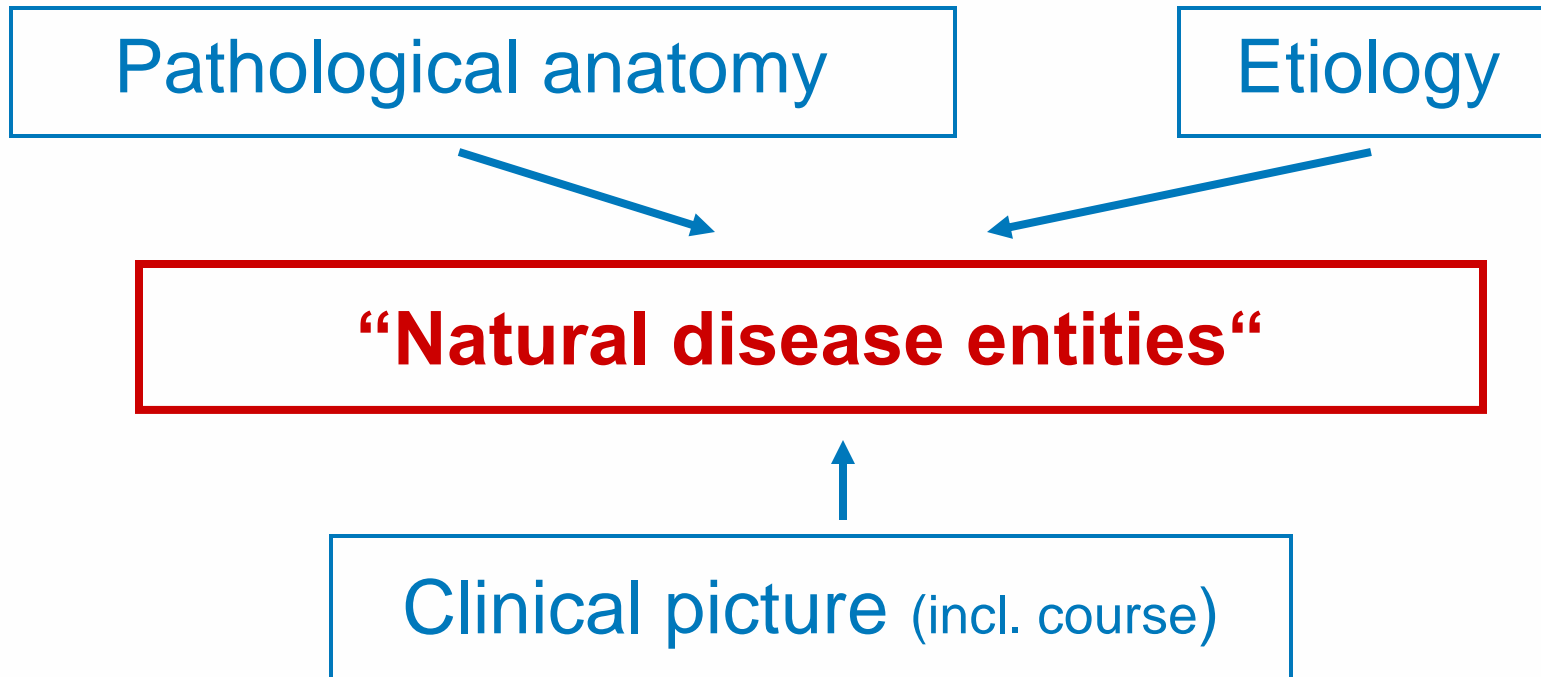
**Emil Kraepelin**  
1856 - 1926

**Psychiatry as an empirical  
medical science**

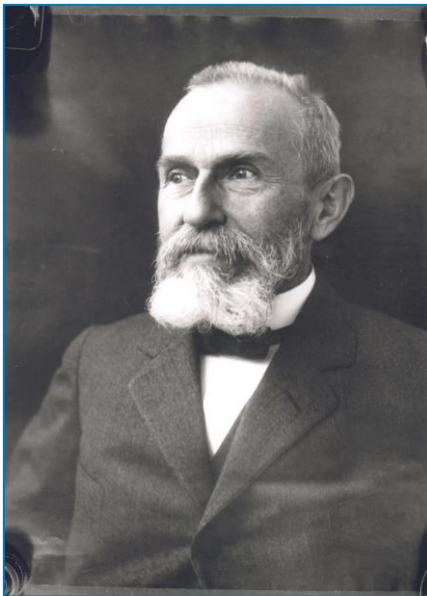
„Natural disease entities“



# Kraepelin's disease concept



## Around 1900 Influential clinicians (II)



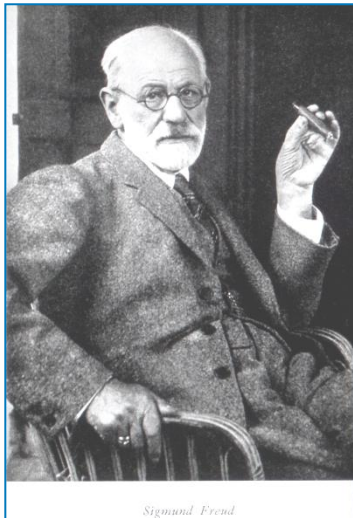
**Eugen Bleuler**  
1857 - 1939

**Biological *and* biographical  
factors are relevant**

„Brain research *and* psycho-  
analysis“

20<sup>th</sup> century

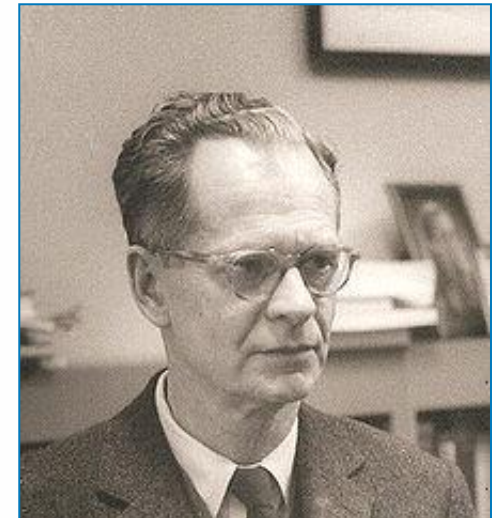
# Psychoanalysis and behaviorism



**Sigmund Freud**  
1856 - 1939

**Unconscious  
elements** shape  
personality

**Learning/Condi-  
tioning** shape  
personality



**Burrhus Frederic Skinner**  
1904 - 1990

# «Multidimensional psychiatry»



**Ernst Kretschmer**  
1888 - 1964

**Psychiatry as a genuinely  
multidimensional science**

Mental events as causal  
factors in delusional and  
psychotic disorders



# After World War II

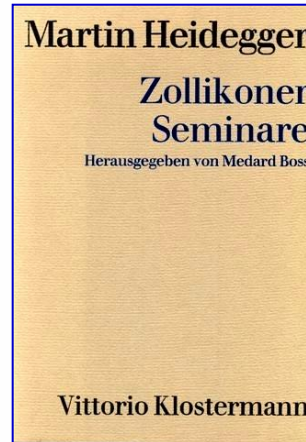
## Anthropological psychiatry



**Ludwig Binswanger**  
1881 - 1966



**Medard Boss**  
1903 - 1990



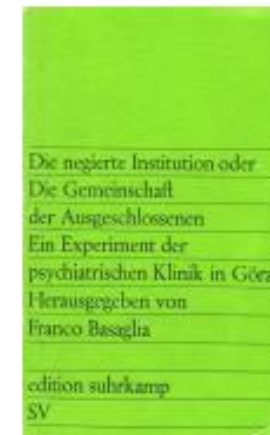
**Mental disorders  
are biographically  
meaningful**

(without denying  
biological factors!)

# From 1960 Antipsychiatry



University Hospital  
of Psychiatry Zurich



From 1960 until today

## **Social psychiatry**

- in a broad sense -

- New ways of psychiatric care
  - «Enquete» 1975 (Germany), community psychiatry
- Changing role models
  - shared decision making, recovery, peer involvement
- Ethical and juridical developments
  - patient autonomy, advance directives

From 1960 until today

## Neuroscientific psychiatry

- Neurochemistry (e.g. dopamin hypothesis)
- Neurophysiology (e.g. EEG)
- Genetics/Epigenetics (e.g. association studies)
- Endophenotypes (e.g. P300, LDAEP)
- Brain imaging (e.g. CT, fMRT, PET)

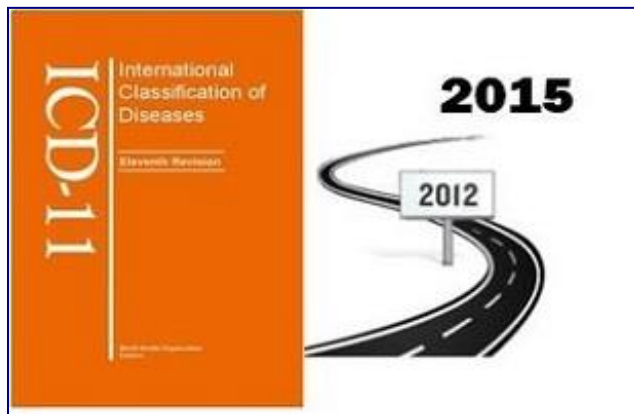
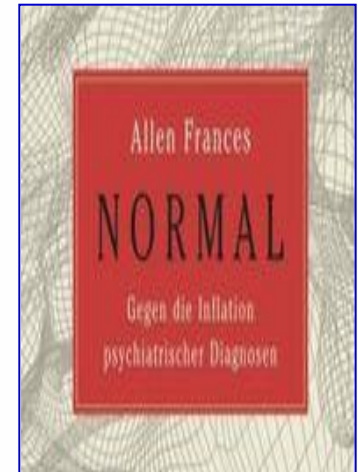
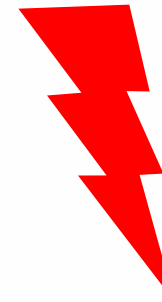
From 1980 until today

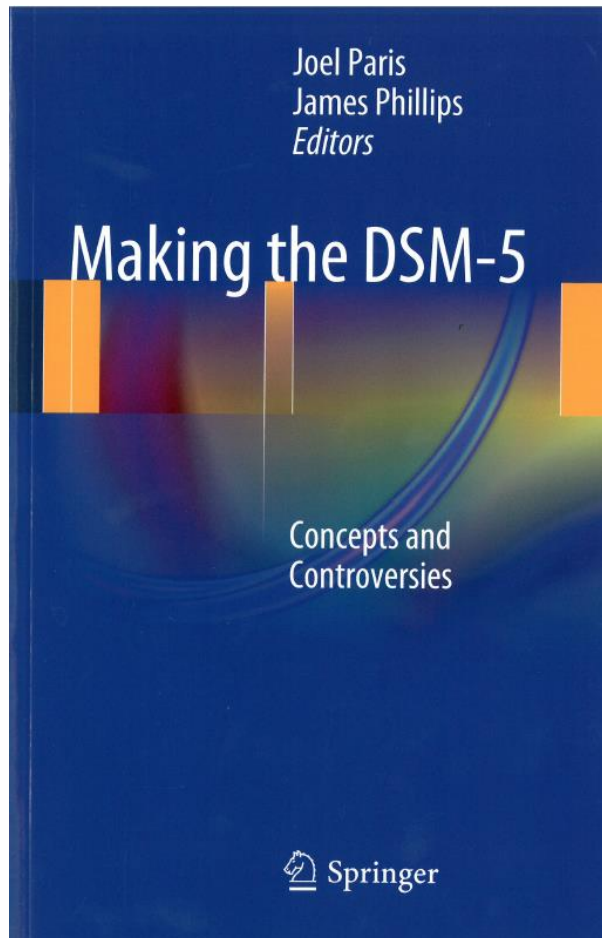
## Operationalized psychiatric diagnoses

as in ICD-10 & DSM-5

- Nominalistic *and* categorial approach
- Etiologically neutral (not: „atheoretical“!)
- Central method: Description
- Explicit criteria / algorithms for each diagnosis
- Quantitative rather than qualitative criteria
- Comorbidity

# Controversial issues ...





## A critical analysis

2013

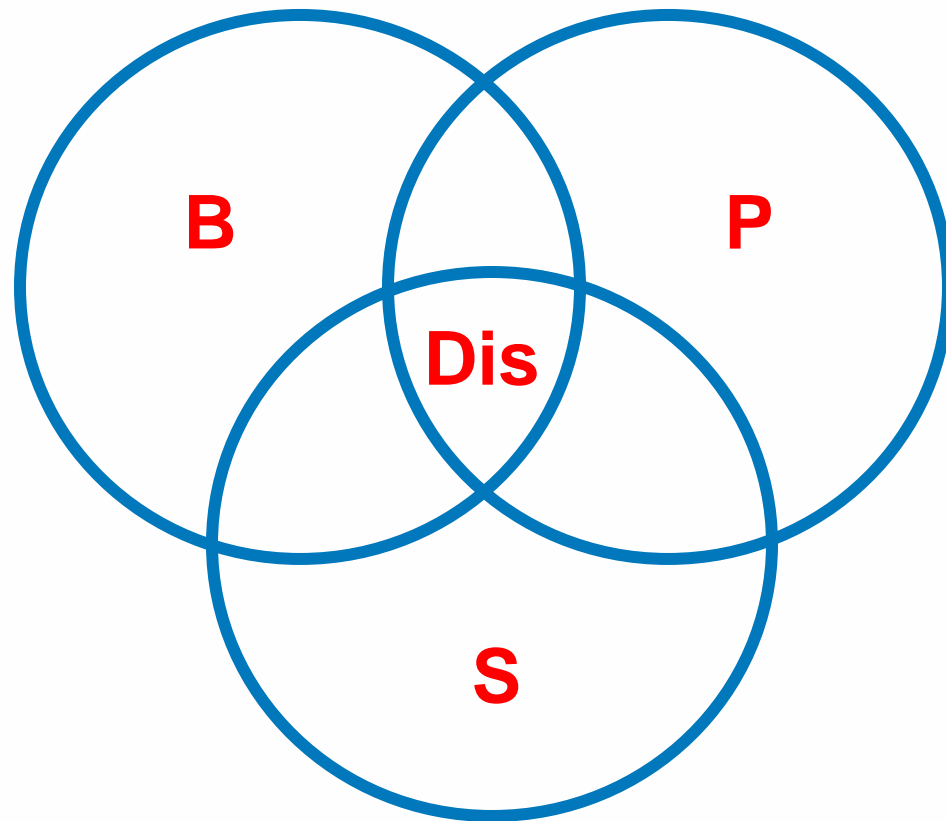
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**On psychiatry's identity in the 21<sup>st</sup> century**
- Résumé



# Bio-psycho-social model: Well balanced, but less robust as it looks ...

**B**iological,  
**P**sychological,  
**S**ocial factors  
→ Mental  
**Dis**order



# What is a mental illness?

- A neuroscientific **object**?
  - Naturalistic-realistic definition -
- An individual **reaction** to stressful life events or episodes?
  - Biographical definition -
- **A concept**, based on expert consensus?
  - Nominalistic definition (as in ICD-10/DSM-5)

# Overstretching methods: The risks

Approach to mental illness ...		Uncritical use will result in ...
Brain disease	→	<b>naturalistic fallacy</b>
Understandable condition	→	<b>hermeneutic fallacy</b>
ICD-10/DSM-5	→	<b>formalistic fallacy</b>



Dialog Clin Neurosci 2015, 17: 6-7



University Hospital  
of Psychiatry Zurich

# Guest editorial

## **Why do we need a diagnosis? Maybe a syndrome is enough?**

Norman Sartorius, MD, PhD, FRCPsych

### **Abstract**

*The recent publication of the Diagnostic and Statistical Manual of Mental Disorders 5.1 by the American Psychiatric Association, and the continuing work of the World Health Organization on the 11th revision of*

into categories? Why do we not report on our work in terms of symptoms which are sometimes the main target for investigation and treatment? Why do we not use categories describing the level of impairment or the degree of disability when talking about patients? and so on.

The abundance of questions of this type is the sad consequence of the fact that science and experience have so far failed to define a single disease in the field of psychiatry. The term “disease” can be used for conditions for which we have: (i) discovered the causes; (ii) understood the pathogenesis, (iii) comprehensively described the clinical picture and the reaction to treat-



## MEDICINE

# Brain disorders? Precisely

Precision medicine comes to psychiatry

By **Thomas R. Insel** and **Bruce N. Cuthbert**

**M**ental disorders represent a public health challenge of staggering proportions. In the most recent Global Burden of Disease study, mental and substance abuse disorders constitute the leading source of years lost to disability from all medical causes (1). The World Health Organization estimates over 800,000 suicides each year globally, nearly all of which are a consequence of a mental disorder (2). These high morbidity and mortality figures speak to the potential for overall health gains if mental disorders can be more effectively diagnosed and treated. Could a “precision medicine” approach find traction here?

Precision medicine—a more targeted approach to disease—is already becoming a reality in cancer, where molecular diagnosis is leading to better defined, individualized treatments with improved outcomes (3). Precision medicine is also the basis for planning large-cohort studies, using genomics and phenotyping (physiological and behavioral characteristics) to improve diagnostics and therapeutics across medicine. The idea is to integrate clinical data with other patient information to uncover disease subtypes and improve the accuracy with which patients are categorized and treated.

health disorders” or “mental disorders” or the awkwardly euphemistic “mental health conditions,” when juxtaposed against brain science, invite continual recapitulation of the fruitless “mind-body” and “nature-nurture” debates that have impeded a deep understanding of psychopathology. The brain continually rewires itself and changes gene expression as a function of learning and life events. And the brain is organized around tightly regulated circuits that subserve perception, motivation, cognition, emotion, and social behavior. Thus, it is imperative to include measures of both brain and behavior to understand the various aspects of dysfunction associated with disorders. Shifting from the language of “mental disorders” to “brain disorders” or “neural circuit disorders” may seem premature, but recognizing the need to incorporate more than subject-

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*“...syndromes once considered exclusively as ‘mental’ are being reconsidered ... as syndromes of disrupted neural, cognitive, and behavioral systems.”*



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**Brain disorders? Precisely**  
Thomas R. Insel and Bruce N. Cuthbert  
*Science* **348**, 499 (2015);  
DOI: 10.1126/science.aab2358



University of  
Zurich <sup>UZH</sup>



# RDoC's scope: Paving the road to «precision medicine»



University Hospital  
of Psychiatry Zurich

## Deconstructed, parsed, and diagnosed.

A hypothetical example illustrates how precision medicine might deconstruct traditional symptom-based categories. Patients with a range of mood disorders are studied across several analytical platforms to parse current heterogeneous syndromes into homogeneous clusters.

### Symptom-based categories

Major depressive disorder



Mild depression  
(dysthymia)



Bipolar depression



### Integrated data

**Genetic risk**  
polygenic risk score

**Brain activity**  
insula cortex

**Physiology**  
inflammatory markers

**Behavioral process**  
affective bias

**Life experience**  
social, cultural, and  
environmental factors

### Data-driven categories

Cluster 1



Cluster 2



Cluster 3



Cluster 4



Prospective  
replication and  
stratified clinical  
trials

# Schizophrenia in the 21st century: New insights and translation into improved therapies

Judith Pratt

This special issue focuses on recent advances in understanding the causes and the pathophysiology of schizophrenia, the approaches that are being adopted to translate this knowledge into new treatments and the analyses of recent trials with novel non-dopamine based treatments.

Over 100 years have elapsed since schizophrenia was first

Howes and colleagues provide a timely update of the dopamine and glutamate hypotheses of schizophrenia pathophysiology emphasising that there is evidence for dopamine presynaptic dysfunction and glutamatergic abnormalities. They also argue for an integrated model of these key neurotransmitter systems. While it is currently challenging to mesh the genetic findings in schizo-

Psychopharm

*Journal of Psychopharmacology*

2015, Vol. 29(2) 83–84

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## Programmatic focus:

«A key aim of schizophrenia research is to define the disorder in biological terms **rather than clinical presentation.**»



University Hospital  
of Psychiatry Zurich



## Schizophrenia in the 21st century: New insights and translation into improved therapies

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### Programmatic focus:

«A key aim of schizophrenia research is to define the disorder in biological terms **rather than clinical presentation.**»

## But:

If we **deny the scientific relevance of all non-biological** (e.g. descriptive, phenomenological and hermeneutical) **approaches**, we will again be advocating a **narrow naturalistic reductionism.**



University Hospital  
of Psychiatry Zurich





## To sum up the present state of psychiatric affairs ...

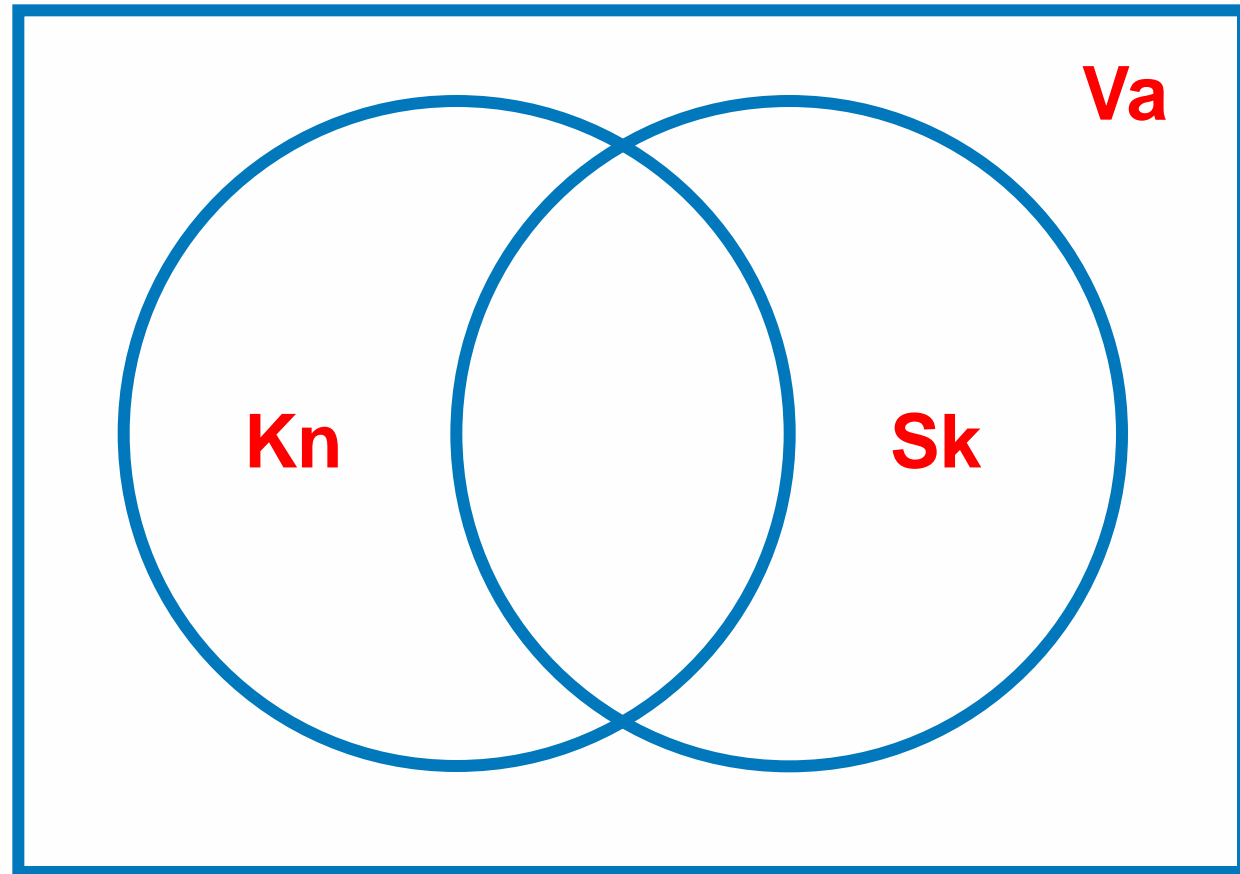
- Not a single one of the available theories will be able to fully meet the high demands psychiatry is confronted with.
- Therefore, the multidimensional approach is not a peripheral issue in psychiatry (*“nice to have”*), but situated at its very centre.

# Why single-method approaches cannot work in psychiatry

- Medicine needs the **three elements** of
    - ♦ Knowledge
      - ♦ Skills
        - ♦ Values
- to be **balanced** towards each other.

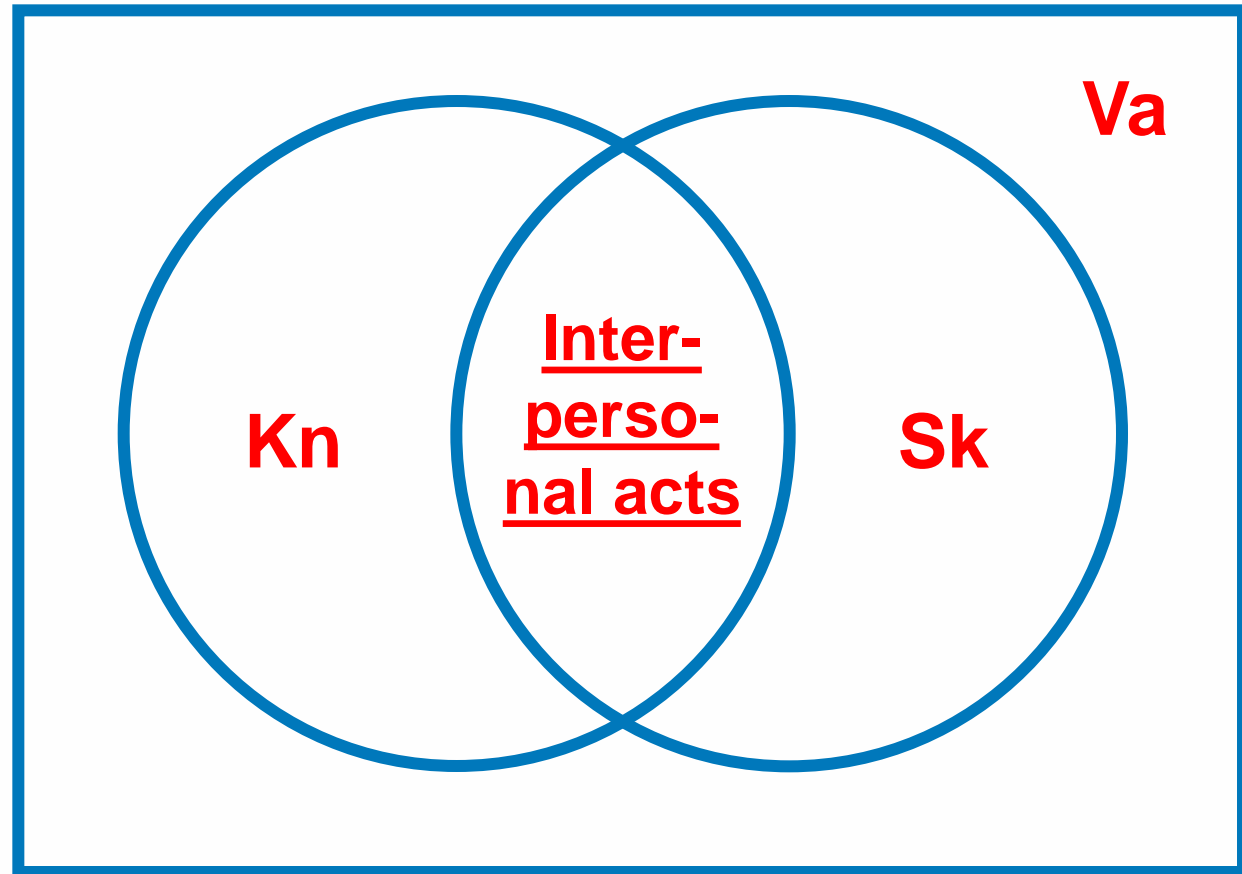
# «KSV balance» in medicine

**Kn**owledge  
**Sk**ills  
**Va**lues



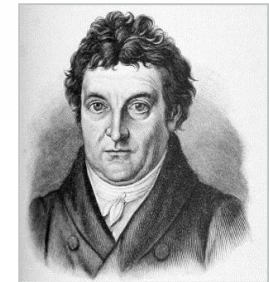
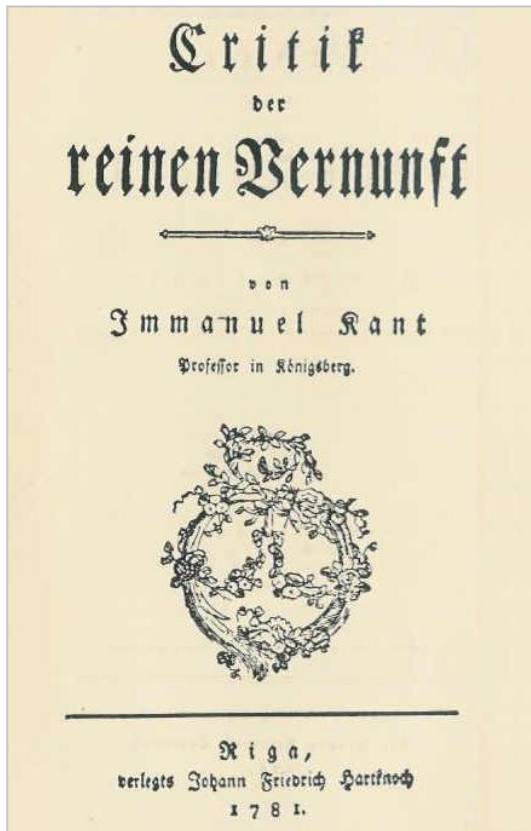
# «KSV balance» in medicine

**Kn**owledge  
**Sk**ills  
**Va**lues





Immanuel **Kant**  
1724 - 1804



Johann Gottlieb **Fichte**  
1762 - 1814



University Hospital  
of Psychiatry Zurich



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- **Résumé**

# Résumé

- 1 When using the term “mental illness”, we implicitly refer **to a specific concept, *not* to a given thing.**

This principle is **equally applicable** to concepts founded in neurobiology, psychology (hermeneutics) and social sciences.

## Résumé

**2** This **does not at all weaken** psychiatry's identity as a medical discipline.

On the contrary: It respectfully reflects psychiatry's status as a **fundamentally multidimensional field**.



## Résumé

- 3 Acknowledging subjectivity and interpersonality as indispensable elements of psychiatry (although they do *not* fit into strictly naturalistic frameworks), will not impede neurobiological research, but strengthen it.

# Résumé

## 4 So, *whom or what* do we treat?

- ♦ We treat **persons**.
- ♦ But persons
  - who do have a **bodily existence**
  - who can fully realize their personhood only in the **interaction with others**.

The screenshot shows the website of the University Hospital of Psychiatry Zurich, specifically the page titled «Schizophrenie»: Rezeption, Bedeutungswandel und Kritik. The page features the university's logo and name at the top left, a navigation menu on the right, and a main content area with a sidebar on the left. The sidebar contains links to 'Über uns', 'Teilprojekte', 'Personen', 'WORKSHOP OKT 2014', 'Agenda', 'Presse', 'Links', and 'Partner'. The main content area has a title «Schizophrenie»: Rezeption, Bedeutungswandel und Kritik eines Begriffes im 20. Jahrhundert, followed by a paragraph of text and a section titled 'Im Projekt «Schizophrenie»: Rezeption, Bedeutungswandel und Kritik eines Begriffes im 20. Jahrhundert'. To the right of the text is a graphic titled 'PSYCHIATRIE – WISSEN – GESELLSCHAFT' which is a word cloud or collage of terms related to psychiatry and society.

www.schizophrenie.uzh.ch/index.html — UZH – «Schizophrenie»: Rezeption, Bedeutungswandel und Kritik – «Schizophrenie»: Rezeption, Bedeutungswandel und Kri...

Home | Kontakt | English

**Universität Zürich**

**«Schizophrenie»: Rezeption, Bedeutungswandel und Kritik**

Über uns  
Teilprojekte  
Personen  
WORKSHOP OKT 2014  
Agenda  
Presse  
Links  
Partner

**«Schizophrenie»: Rezeption, Bedeutungswandel und Kritik eines Begriffes im 20. Jahrhundert**

«Schizophrenie» – eine Metapher in der Alltagssprache und im politischen Diskurs, ein Topos in der Art Brut und ein filmästhetisches Konzept, eine für Betroffene und Angehörige belastende Erkrankung. – Der Begriff, den der Schweizer Psychiater Eugen Bleuler 1908 in die psychiatrische Fachsprache einführte, hat seit seiner Entstehung weit über die Psychiatrie hinaus Bedeutung erlangt und eine Vielfalt von sozialen Diskursen, Praktiken und Techniken hervorgebracht.

Im Projekt «Schizophrenie»: Rezeption, Bedeutungswandel und Kritik eines Begriffes im 20. Jahrhundert beschäftigen wir uns aus interdisziplinärer Perspektive mit diesen unterschiedlichen Verwendungs-, Bedeutungs- und Wirkungszusammenhängen von «Schizophrenie». Im Austausch von Psychiatrie, Linguistik, Philosophie, Film- und Geschichtswissenschaft fragen wir nach Differenzen und Zusammenhängen: Zwischen Medizin und Gesellschaft, ÄrztInnen und PatientInnen, Normalität und Abweichung, Fachwissenschaft und Popularisierung, Ästhetik und Denkstil sowie Natur-, Human- und Geisteswissenschaft. In diesen Spannungsfeldern konkretisiert sich das Selbstverhältnis der Subjekte in modernen Gesellschaften ebenso wie die historisch bedingte, subjektive und objektive Erkenntnis des Menschen.

**PSYCHIATRIE – WISSEN – GESELLSCHAFT**

Ein transdisziplinärer Workshop mit Beiträgen aus Psychiatrie, Philosophie, Linguistik, Geschichts-, Kultur- und Bildwissenschaften

Angelika Linke  
Yvonne Ilg  
Linguistics UZH

Jakob Tanner  
Marina Lienhardt  
Social History UZH

Margit Tröhler  
Veronika Rall  
Film Studies UZH

Paul Hoff  
Anke Maatz  
Psychiatry UZH

[www.schizophrenie.uzh.ch](http://www.schizophrenie.uzh.ch)

# You are cordially invited!

## OBJECTS OF PSYCHIATRY

Between thing-making, reification & personhood

International Conference: Zurich, June 8 – 11, 2016

### KEYNOTE SPEAKERS

Prof. Dr. Peter **Galison**, Harvard University

Prof. Dr. Dagmar **Herzog**, City University of New York

Prof. Dr. Lutz **Jäncke**, University of Zurich

Prof. Dr. Norman **Sartorius**, University of Geneva



## Burghölzli Summer 2012







**Thank you  
very much for  
your attention!**