Psychiatric Discourse: Scientific reductionism for the autonomous person

Stephan Heckers, MD MSc
Department of Psychiatry and Behavioral Sciences
Vanderbilt University
Psychiatric discourse

1) Historical/current debates within psychiatry; *Of two minds* (Tanya Luhrmann)

2) Beyond psychiatry: Power, Impact on society (Michel Foucault)

3) Progress in psychiatry; Role of philosophy
Scientific reductionism

1) Complex -> simple

2) $x \rightarrow y$; $y$ is prior to $x$, more basic than $x$, fully depends on $x$ [Mind -> Brain]

3) Levels of explanation

4) Hierarchy of explanatory models
Autonomous person

1) Self-governing agent
2) Power to initiate action
3) Threats to autonomy: lack of reason, addiction
4) Self-efficacy (Albert Bandura): belief in innate ability to achieve goals
Story of a patient and a doctor

Auguste Deter (1850 - 1906)  Alois Alzheimer (1864 - 1915)
Story of a brain and a doctor

Alzheimer, A. (1907)

Alois Alzheimer (1864 - 1915)
Levels of AD Research

1. Dementia

2. 

3. Plaques /

4. 

1907
Levels of AD Research

1. Dementia

2. Temporal

3. Plaques /

4. 1907
Levels of AD Research

1. Dementia

2. Temporal Acetylcholin

3. Plaques /

4. 1907
Levels of AD Research

1. Dementia

2. Temporal Acetylcholin

3. Plaques / β-Amyloid

1907 - 1984
Levels of AD Research

1. Dementia
2. Temporal Acetylcholin
3. Plaques / β-Amyloid
4. Chr 21

1907 1984 ‘87
Levels of AD Research

1. Dementia

2. Temporal Acetylcholin

3. Plaques / β-Amyloid PS

4. Chr 21,14,1

1907 1984 ‘87 ‘92 ‘95
Scientific reductionism in psychiatry

1) Psychiatric situation
2) Psychiatric diagnosis
3) Clinico-pathological correlation
4) Causal inference testing
Psychiatric situation

Dyadic/interactional encounter of two persons: [P1] Experience -> [P2]

Formulation

1) Karl Jaspers: *Verstehen* vs. *Erklären*

2) Martin Buber: *I-You* vs. *I-It*

3) Harry Stack Sullivan: Psychiatric Interview
Psychiatric diagnosis

Formulation -> Diagnosis

1) Categorical assessment of normal/abnormal

2) Dimensions

3) Heterogeneity

4) Limited validity; hierarchy of validators?
Clinico-pathological correlation

Signs/Symptoms/Diagnosis -> Brain

1) Pathology
2) Genetics
3) Neuroimaging
4) Psychiatry = Clinical Neuroscience ?
Causal inference testing

Mind -> Circuits -> Cell -> Protein -> Gene

1) Experimental medicine
2) Randomized controlled trial
3) Rescue capabilities, prevent deficits
Types of reductionism

1) Reducing complexity:
   - [P1] Experience->[P2] Formulation
   - Formulation->Diagnosis

2) Correlation: Signs/Symptoms/Diagnosis->Brain

3) Causation: Mind->Circuit->Cell->Protein->Gene
Does reductionism work?

1) Validation of clinical diagnosis [EEG, MRI]
2) Population health [syphilis]
3) Predictive validity [allelic variation]
4) Drug development
Reductionism vs. Pluralism

1) Psychiatric movements: from sects to science (Leston Havens)
2) Bio-psycho-social model (George Engel)
3) Psychiatric perspectives (Paul McHugh)
Pluralism

Bio

Psycho

Social

• Independence?
• Convergence?
• Explanatory power?
• Progress?

Reductionism

1

2

3

4

• Eliminative?
• Causative links?
# Psychiatric matrix

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Personality Disorders

1) Abnormal pattern of inner experience and behaviors that leads to distress and impairment in functioning

2) Stress vs. distress; normal / abnormal

3) Category vs. dimension
Neurodevelopmental Disorders

1) Autism Spectrum
   – Recent prevalence estimates
   – Access to services

2) Neurodiversity
Psychotic Disorders

1) Reality distortion
2) Baseline rates
3) Social impairment
4) Insight
Psychiatric disorders

1) Reliability and validity differences
2) Need for treatment
3) Agency is a constraint for scientific reductionism in psychiatry
Need for treatment

Mind

Brain

normal

abnormal

Schizophrenia

Adjustment Disorder

Factitious Disorder

AD
Psychiatric discourse

1) 4 Levels of explanation
   (Clinical, Circuits, Pathology, Gene)

2) Psychiatric matrix
   (P1 & P2 dis-/agreement)