Changing conceptions of mental illness

- Supernatural explanations (wrath of the gods, demonic possession, witchcraft)
- Physical explanations (organic disorders of the nervous system)
- Psychological explanations (past experiences involving extreme feelings of grief, fear, disappointment, frustration, guilt can give rise to mental disorders)

Some identifying characteristics of mental disorders

1. harming others in ways not socially sanctioned (or harming oneself, e.g. attempted suicide)
2. abnormal perceptions (hallucinations) and abnormal thought patterns (delusions)
3. inappropriate or exaggerated emotional response in social situations
4. unpredictable behavior (e.g. erratic mood swings)

Forms of treatment

- Social isolation, confinement, prison
- Medical treatments, drugs, diet
- Psychological treatments (e.g. hypnosis, psychotherapy, and other methods to try to resolve the "inner conflict" presumed to be responsible for the disorder).
- Catharsis (re-enactment of traumatic experiences to purge the mind of underlying tension and conflict)

Franz Anton Mesmer (1734-1815)

- Gravity and magnetism
- Johan Gassner
- Animal magnetism
Franz Anton Mesmer (1734-1815)
- Homeostasis
- The “magnetic baquet”
- Mesmer’s interpretation
- Royal Commission investigation
- Placebo effect

Origins of hypnosis
- Hypnosis and the power of suggestion
- Mesmerism
- The Marquis de Puységur
- Artificial somnambulism
- Posthypnotic amnesia
- Posthypnotic suggestion

Origins of hypnosis
- **Hypnosis** is the induction of a trance similar to sleep; called **mesmerism** in the 19th century.
- The term **hypnosis** was coined by James Braid in 1843.
- **Nancy school** (hypnotic suggestibility is a universal human trait).
- **Salpêtrière school** (Charcot: hypnotic suggestibility is a symptom of a mental disorder – a **neurosis** called **hysteria**)

Jean-Martin Charcot (1825-1893)

Sigmund Freud (1856-1939)
- “When a member of my family complains to me of having bitten his tongue, pinched a finger, or the like, he does not get the sympathy he hopes for but instead the question: *Why did you do that?!*”

Sigmund Freud: Early life
- Born in Freiberg, Moravia (now in the Czech Republic)
- Trained in physiology and medicine in Vienna
- Studied neuropathology with Charcot in Paris
- Developed an interest in Charcot’s “hysteria” patients
- Freud hypothesized that hysteria was psychological rather than physical (physiological) in origin
Sigmund Freud (1856-1939)

- Radical new conception of mental illness
- Concept of the unconscious mind
- Founder of psychoanalytic theory and psychotherapy
- Interpretation of Dreams
- Psychosexual theory of development
- Trichotomous theory of the self
  - id, ego, superego

Origins of psychoanalysis

- Hysteria: symptoms and underlying causes
- Hypnotic suggestion and the cathartic method
- Josef Breuer, “Anna O.” and the “talking cure”
- Pathogenic ideas and the physical “conversion” of “emotional energy”
- Transference

Psychoanalytic Theory

- “Seduction theory” of hysteria (1896)
- Role of early experience
- “screen memories”
- Several pathogenic ideas converge to give rise to a single physical “overdetermined” symptom
- Free association can be used to reveal the hidden emotional causes of the disorder

Interpretation of Dreams

- Role of dreams in regulating the components of the personality or self
  - Libido – powerful force that shapes the personality; driven by the need to seek pleasure and avoid pain.
  - Dreams as wish fulfillments – compromise between desire and self-censorship

- Overdetermination—In Freudian theory, the causation of a single symptom by two or more pathogenic ideas acting in concert.
- Repression—In Freudian theory, the prevention or expulsion from consciousness of anxiety-arousing thoughts or memories.
- Intrapsychic Conflict—Freudian notion that the mind is constantly confronted with irreconcilable demands from innate biology, the external world, and the moral sense or conscience.
- Seduction Theory—An early theory proposed by Freud and then abandoned, suggesting that all hysterics must have undergone sexual abuse as children.
Interpretation of Dreams (1899)

- Dreams must be decoded to be understood
- Symbol formation
- Dream work – ideas disguised in dreams
- Manifest vs. latent content of dreams

The Interpretation of Dreams

- Latent Content—In Freudian theory, the hidden meaning of dreams that lies beneath the manifest content.
- Manifest Content—In Freudian theory, the actual images, thoughts, and content of a dream as experienced by the dreamer; it is actually a transformation of the precipitating but more psychologically dangerous latent content.

Dream Work—In Freudian theory, processes by which latent content becomes transformed into manifest content, primarily through displacement, condensation, and concrete representation.

- Displacement (in dreams)—Deflection of the psychic energy of highly charged latent content onto the related but emotionally more neutral ideas of the manifest content; one aspect of the dream work in Freudian theory.
- Concrete Representation—According to Freud, the idea that latent dream thoughts receive "concrete representation" in the subjectively real sensations of the manifest content; part of the dream work.
- Condensation—Aspect of Freud’s dream work in which two or more latent thoughts “condense” onto a single manifest dream image; similar to overdetermination.

Parapraxias

- Expression of the unconscious in everyday life
- “Slips of the tongue” (Freudian slips)
- Forgetfulness
- Interpretation of jokes and humor

Psychosexual Theory of Development

- Stages of development
- “Polymorphous perversity”
- Erogenous zones
- Oral, anal, phallic, latent stages
- Fixations
- Castration anxiety
- Oedipus/Electra complex

Dynamics of the Personality

- Ego
- Id
- Superego

Ego defense mechanisms

- Displacement
- Condensation
- Projection
- Rationalization
- Reaction formation
- Repression
- Sublimation
### Defense mechanisms

- Difficulties in **free association** can be caused by an internal struggle against the expression of conflicting ideas.
- **Defense mechanisms** exist to suppress these painful or traumatic thoughts.
- Freud linked the pattern of neurotic symptoms to conflicts between sexual feelings or urges and the psychological defenses against them.
- Bringing the conflict to **consciousness** through **free association** was a step on the way to a cure.

<table>
<thead>
<tr>
<th>Defense Mechanism</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Displacement</td>
<td>Redirection of an impulse toward a substitute target that resembles the original in some way but that is &quot;safer.&quot;</td>
</tr>
<tr>
<td>Projection</td>
<td>Freudian defense mechanism in which one's own unacceptable feelings are repressed and then attributed to someone else instead.</td>
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<tr>
<td>Denial</td>
<td>A psychoanalytic defense mechanism that comes into play when one is unable to face reality or admit the truth.</td>
</tr>
<tr>
<td>Rationalization</td>
<td>Freudian defense mechanism in which a person's true motivations are denied and a false excuse or explanation is substituted for them.</td>
</tr>
<tr>
<td>Identification</td>
<td>In Freudian theory, a process that occurs when a child assimilates aspects of the same-sex parent into his or her own personality; one result is the superego.</td>
</tr>
<tr>
<td>Sublimation</td>
<td>Transformation of anxiety-provoking thoughts and impulses into socially acceptable forms.</td>
</tr>
</tbody>
</table>

### Freud’s Contributions

- Psychological basis for mental disorders
- Comprehensive theory of personality
- Development of psychotherapy
- Role of the unconscious mind
- Concepts of ego, id, superego
- Theory of personality dynamics
- Psychosexual theory of development
- Ego defense mechanisms

### Social and Cultural Studies

- Psychodynamics of art and creativity
- Sublimation vs. repression
- *Totem and Taboo* (1913)
- *The Future of an Illusion* (1927)
- *Civilization and Its Discontents* (1930)

### Criticisms of Freud’s Theory

- Operational definitions of theoretical terms
- Basis for verification/falsification
- Sources of data
- Overemphasis on human sexuality
- Effects of psychoanalytic training
- Generalizability
Approaches to the study of animal behavior

- Anthropomorphism
- The mathematical talents of Clever Hans

Occam’s Razor

*The requirement that we shave off unnecessary or extraneous assumptions when trying to understand and explain the behavior of humans and animals.*

Morgan’s Canon

*In no case may we interpret an action as the outcome of the exercise of a higher psychical faculty, if it can be interpreted as the outcome of the exercise of one which stands lower in the psychological scale.*

Conway Lloyd Morgan (1894)

Animal minds?

- Darwin (1871)
  *The Descent of Man*
  - Sensory abilities, memory, attention, curiosity, learning, emotions, and forms of reasoning can be found in many species of animals.

Studies of animal behavior

- Natural history and field studies
- Laboratory experiments
- Ethology versus behaviorism

Ethology

- **Ethology** is an evolutionary approach to the study of animal behavior.
- Naturalistic observation
- Field experiments
- Role of natural selection and adaptation
Darwin’s theory of natural selection

1. Variation exists in behavioral traits
2. Some of that variation is heritable
3. More individuals are born than leave offspring for future generations
4. Certain behaviors make individuals better adapted to their environment. These individuals survive longer and leave more offspring than those with less successful traits

Animal cognition

- George Romanes (1848-1894)
- Conway Lloyd Morgan (1852-1936)
- Morgan’s Canon: "in no case may we interpret an action as the outcome of the exercise of a higher psychical faculty, if it can be interpreted as the outcome of the exercise of one which stands lower in the psychological scale" (Morgan 1894, p. 53).

Ethology: The naturalistic study of behavior

Niko Tinbergen (1907-1988)
Konrad Lorenz (1903-1989)
Karl von Frisch (1886-1982)

Konrad Lorenz (1903-1989)

- How innate and acquired components of behavior are integrated
- Importance of behavior for taxonomy
- Origins and basis of animal and human aggression

Konrad Lorenz (1903-1989)

- Critical period for learning – a period in the life span of an individual (in birds, a short period just after hatching) where learning or imprinting is greatly facilitated.
Konrad Lorenz (1903-1989)

- **Imprinting** — form of learning in which individuals exposed to certain key stimuli, usually during an early stage of development, form an association with the object and may later show sexual behavior toward similar objects.

Konrad Lorenz

Egg rolling in geese
Lorenz & Tinbergen (1939)

Konrad Lorenz (1903-1989)

- **Fixed action pattern**: innate, stereotyped response triggered by a well-defined simple stimulus. Once it is activated, the response is always performed to completion.

Karl von Frisch (1886-1982)

Honeybee dance communication

- **Round dance**
- **Waggle dance**

Niko Tinbergen (1907-1988)

- The “curious naturalist”
- Noninvasive **field experiments**
- Studies of herring gull behavior
- Spatial learning in digger wasps
Niko Tinbergen (1907-1988)

- **Sign stimulus** – the component of an action or object that triggers a fixed response in an animal (e.g., herring gull chick’s begging response)

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- **Releaser** – a sign stimulus given by one animal to another as a social signal (e.g., *pheromones* – chemical communication signals)

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**Radical Behaviorism**

Only directly observable events – stimuli and responses – should be studied by psychologists. Unobserved mental processes have no role in the science of psychology.

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**Neobehaviorism**

All theoretical constructs must be operationally defined.
Neobehaviorism

- Intervening variables
  - Clark Hull (1943)
  - Edward Tolman (1951)

Edward Tolman (1886-1959)

- Hypothesis formation (hesitation is shown by the rat at a choice point in the maze)
- Vicarious trial-and-error (thinking through the alternatives)

Edward Tolman (1886-1959)

- Expectancy (confirmation of a hypothesis – “turn left for a food reward”)
- Belief (repeated confirmation – “it happens every time”)
- Cognitive map (awareness of all possible outcomes)

Comparative psychology

- Marion and Keller Breland (1959)
  *The misbehavior of organisms*

The misbehavior of organisms

- What makes Sammy dance?
- The miserly raccoon
- Piggy bank
Methodological Behaviorism

**methodological behaviorism**: cognitive concepts may be necessary to explain aspects of behavior, but such intervening variables must be operationally defined.