# History of Psychology & Its Development

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[HUL261\_2022: Introduction to Psychology]



### Today's Learning Objectives

- 1. Describe the precursors to the establishment of the science of psychology.
- 2. Identify key individuals and events in the history of psychology.
- 3. Develop a basic understanding of the processes of scientific development and change.
- 4. Recognize the role of women, and people of color and those from the global south in the history of psychology.

### **Overview**

- Introduction and Prehistory
- 19th Century Developments: Physiology & Psychophysics
- Schools of Thought in Psychology
- Role of Women, People of Color and Global South in development of Psychology
- Psychology's Family Tree

### Warm Up

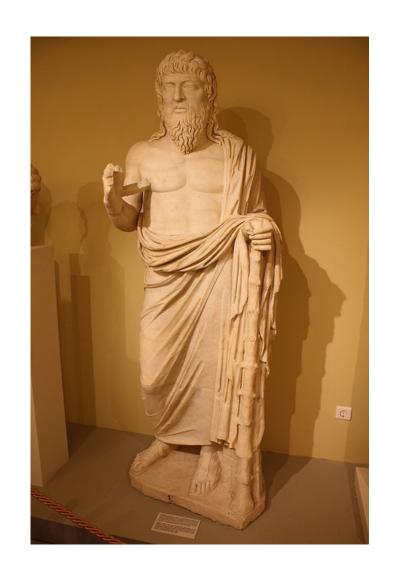


Imagine you have no idea about what happened before 1950 in India. What might be the consequences?

### **Introduction and Prehistory**

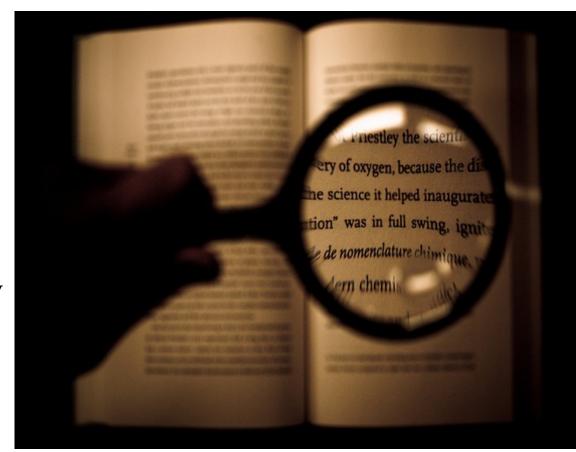
#### Introduction

- Short history but long past...
- Prehistory
  - Ancient Greek philosophers considered mind to be a suitable topic for scholarly contemplation
  - For hundreds of years, various aspects of mental life were studied by philosophers
  - Psychology as a separate study split from philosophy during mid-19<sup>th</sup> century



### **Empiricism**

- John Locke (1632-1704) and Thomas Reid (1710-1796) emphasized empiricism, or the primacy of the senses in acquiring knowledge.
- For example, John Locke believed that children were born into the world with minds like "blank slates" (*tabula rasa* in Latin) and that their experiences determined what kind of adults they would become.
- His views contrasted with those of Plato and the 17th-century French philosopher René Descartes, who argued that some knowledge was inborn in humans. (=> more about this in nature vs nurture chapter)



### Is perception reality?



our senses can, and sometimes do, deceive us.

The Ponzo Illusion: the human mind judges an object's size based on its background.

# 19th Century Developments

• Philosophical questions about the nature of mind and knowledge were supplemented in the 19<sup>th</sup> century by empirical investigations of the sensory systems of the human observer.

#### • Physiology:

Research on nervous activity provided an empirical basis for many human functions that were previously considered functions of the mind.

#### Psychophysics:

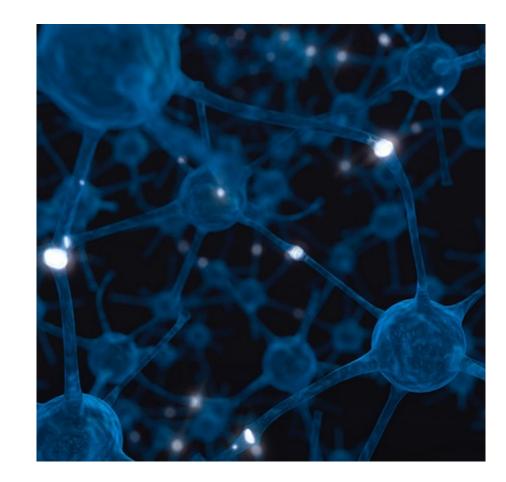
Attempted to find the quantitative basis for the mind—body relationship by employing an empirical approach.

#### • Evolution:

The writings of Charles Darwin in Britain affirmed a theory of evolution based on the empirical evidence of natural selection.

### Physiology and Psychophysics

- The study of nervous activity, sensations, and brain physiology confirmed the benefits of careful systematic empirical strategies.
- For psychology, these benefits pointed to the possibility of elucidating the physiological basis of mental operations.
- Hermann von Helmholtz
  - Speed of the neural impulse
  - Senses are fallible but can still be studied
- Weber and Fechner
  - Measured relationships between experience of senses and external reality (psychophysics)



#### **Advances in Physiology of Brain**

- Discovery of the neuron, the basic unit of the nervous system Golgi and Santiago Ramón y Cajal.
- **Phrenology** interpretation of brain functions Franz Joseph Gall (1758–1828) and his student J. G. Spurzheim (1776–1832)
- Phrenology attempted to find a physiological localization of mental faculties.
- Phrenology held that the degree of a mental faculty or trait possessed by an individual is determined by the size of the brain area controlling that function and that this can be evaluated by measuring the overlying skull area.

#### **Psychophysics**

- *Psychophysics* is a type of sensory physiology that emphasized subjective experience in the study of the relationship between physical stimuli and sensations.
- Psychophysicts were not strictly psychologists but scholars working their own traditional disciplines —physiology, physics, or natural philosophy.
- Studied sensations from several perspectives and emphasized that study of sensations can not be reduced to physiology or physics.
- Considered sensations as a reflection of the mind–body problem, rather than as a situation for anatomical and physical study alone.

# Schools of Thought in Psychology

# Schools of Thought in Psychology

 From mid-19<sup>th</sup> century onwards, psychology came to hold different views about the nature of the mind and the best way to study it.

 About the same time, fundamental questions were raised about the definition, nature and scope of psychology giving birth to different schools of thoughts in psychology.

### Structuralism



Wilhelm Wundt

Structuralism is a school of thought in Psychology that stresses the basic units of experience and combinations in which they occur.

#### Wilhelm Wundt:

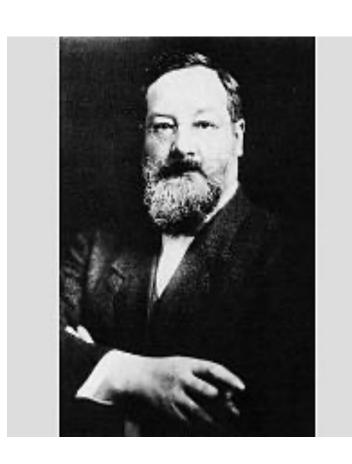
- Physiologist and Philosopher. So called 'Father of psychology'
- Founded the first experimental psychology laboratory in 1879—Leipzig Lab.
- Argued that the mind must be studied objectively and scientifically.
- Main concern was with techniques used for uncovering natural laws of the human mind—he was in search for the basic unit of thought.

### Structuralism—contd.

 Titchener: Viewed that human conscious experience could be understood by breaking it down into components

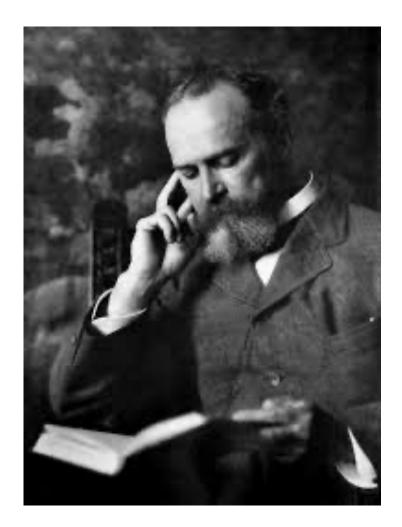
#### Approach:

- Train subjects in introspection and reporting techniques
- <u>INTROSPECTION</u>: looking inside oneself and try to describe what's going on—understanding oneself.
- Trained observers introspected and reported what they experienced
- Try to formulate general theories based on their subjects' reports.



**Edward Titchener** 

### **Functionalism**



William James

- William James' (1842-1910) seminal book
   Principles of Psychology asserted consciousness
   should be studied as a continuous whole
- Combined his studies of physiology and philosophy to create psychology
- Proposed Functionalism (what the mind does) as an alternative to structuralism (how mind is structured)

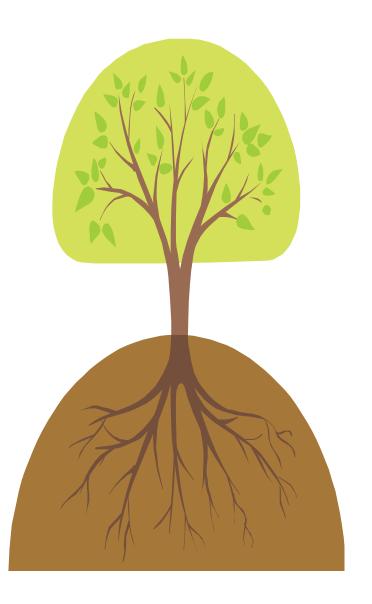
#### **Gestalt**

• School of Psychology that studies how people perceive and experience objects as whole patterns

• Max Wertheimer, Kurt Koffka, Wolfgang Kohler

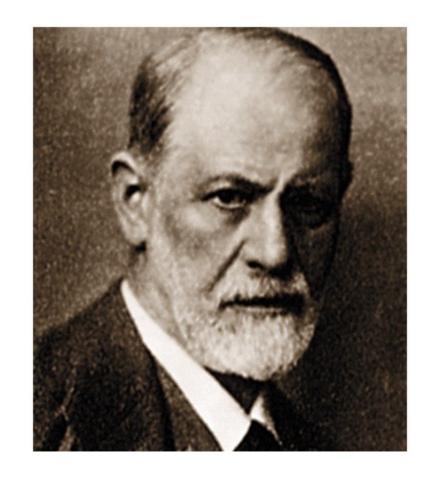
• "The whole is different from the sum of its parts"

• Mental experience depends on patterning and organizing different elements. Example: When we see a tree, we see just that, a tree, not a series of branches.



### Psychoanalysis

- Freud An Austrian neurologist
- Freud is credited with many concepts (e.g., unconscious mind) that influenced 20<sup>th</sup> century thinkers in psychology and beyond.
- In his clinical practice, Freud encountered patients suffering from nervous disorders. Their complaints could not be explained in terms of purely physical causes.

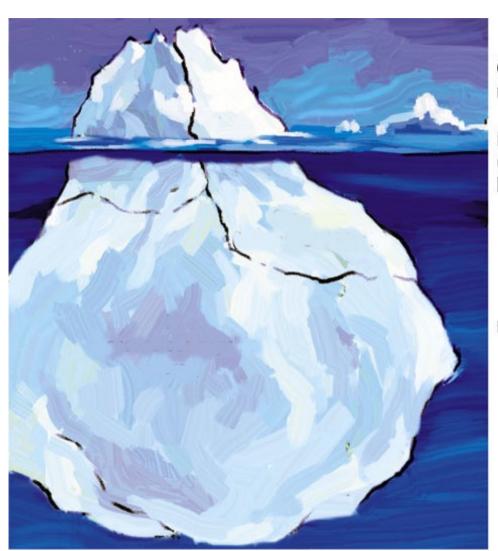


Sigmund Freud (1856-1939)

Culver Picture

### Discovery of the unconscious mind

- The mind is like an iceberg. It is mostly hidden, and below the surface lies the unconscious mind. The preconscious stores temporary memories.
- Unconscious mind is a reservoir of mostly unacceptable thoughts, wishes, feelings, and memories.



Conscious mind

Preconscious (outside awareness but accessible)

Unconscious mind

### Behaviorism

■ Behaviorists like B.F. Skinner (1904-1990) and John Watson (1878-1958) focused on what was observable and measurable and rejected the idea is that mind could be studied (or worth the effort)

■ The emphasis was on rigorous experimental investigation of overt human and animal behavior.

Ultimate goal was prediction and control of behavior



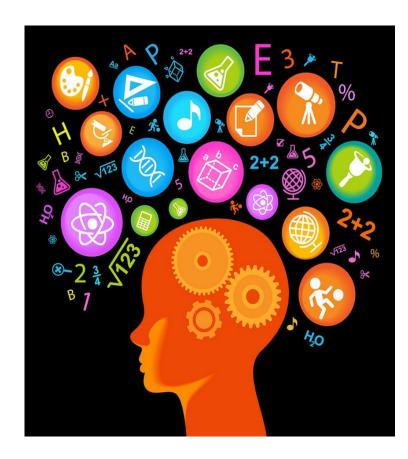
James B. Watson

"Give me a dozen healthy infants, well-formed, and my own special world to bring them up in and I'll guarantee to take any one at random and train him to be any type of specialist I might select – a doctor, a lawyer, artist..."

- Watson 1924

### **Cognitive Revolution**

- Behaviorism's emphasis on objectivity and focus on external behavior had obscured the study of mind.
- By the 1950s, new disciplinary perspectives in linguistics, neuroscience, and computer science were emerging, and these areas revived interest in the mind as a focus of scientific inquiry. This later led to formation of cognitive science.
- In the 1960's, psychologists eschewed behaviorist focus and adopted cognitive approach.
- Cognitive approach emphasized that mental processes such as language, memory, and problem solving should play a larger role in understanding human behavior.





### Women in psychology: Founding mothers

- Leta Stetter Hollingworth
  - Child development and women's issues
- Mary Calkins
  - First female president of the APA (American Psychological Association)
- Karen Horney
  - Social and cultural aspects of personality

### Psychology and Society



Psychologists have used science to impact social change

 In 1936 the Society for the Psychological Study of Social Issues (SPSSI) was formed

### Psychology and Racism

- The work of African American psychologists Mamie Phipps Clark and her Husband Kenneth Clark helped to show how segregation negatively impacts the self-esteem of African American children.
- This research had impact on the 1954 Brown v. Board of Education ruling that ended school segregation in United States

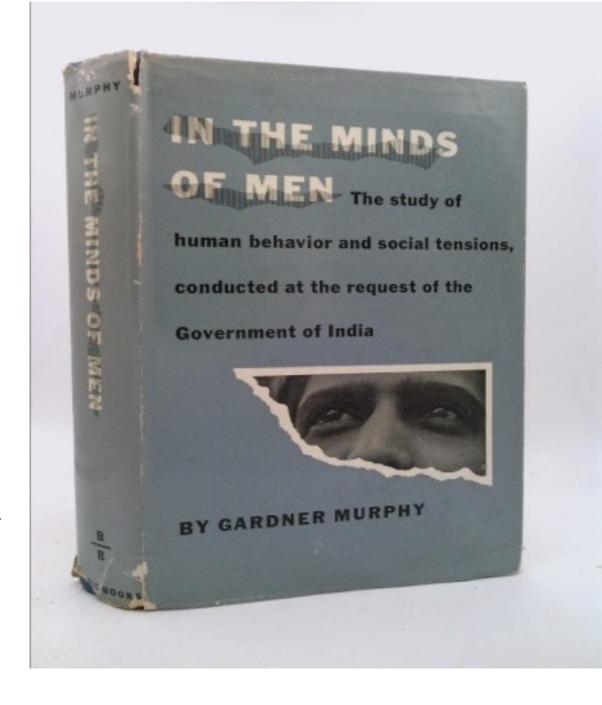


Psychologists and civil rights activists Mamie and Kenneth Clark.

### Psychology in India

- The first psychological laboratory in India was established in Calcutta University in 1916, and postgraduate classes began in the following year under Dr N.N. Sengupta, who had worked under Professor Hugo Munsterberg, a former student of Wilhelm Wundt.
- Subsequently Psychology departments were also established in Mysore in 1924, and Patna in 1946.
- Girindra Shekhar Bose, who succeeded Sengupta as the Chairman of the Calcutta University Department of Psychology in 1929 was associated with Sigmund Freud and became a pioneer of psychoanalysis in India.

- Soon after independence, the entire country faced very serious internal conflicts and other kinds of social tensions.
- Pandit Nehru invited Gardner Murphy in 1951 to initiate and conduct psychological studies on social tensions in India.
- Many Indian scholars were associated with him, and the series of studies that he conducted were subsequently published as *In the minds of men* (Murphy, 1953).
- They long remained a model and a source of inspiration to many Indian social psychologists for their studies of caste and national stereotypes and prejudice.





The Subfields of Psychology: Psychology's Family Tree

# The Subfields of Psychology: Psychology's Family Tree

- Understanding Biological Foundations
  - **Behavioral Neuroscience** how brain, the nervous system and other biological processes determine behavior.
- Understanding sensation, perception, learning, and thinking
  - Experimental Psychology
    - Methodological study of sensing, perceiving, learning and thinking
  - Cognitive Psychology
    - Emphasis on higher learning processes such as memory, reasoning, problem solving, judgment, language

• Understanding sources of change and stability in behavior

#### Developmental psychology

• Changes in behavior over the lifespan (womb to tomb)

#### Personality psychology

• Examines consistencies in people's behavior over time and traits that differentiate us from one other

• Physical and mental health

#### Health Psychology

• Explores relationship between psychological factors and physical ailments or disease

#### Clinical Psychology

• Investigates diagnosis and treatment of psychological disorders

#### Counseling Psychology

• Focuses on educational, social, and career adjustment problems

- Understanding our social networks
  - Social psychology
    - Studies how people's thoughts, feelings and behavior are affected by others
  - Cross-cultural psychology
    - Focuses on the similarities and differences in psychological functioning across cultures and ethnic groups

#### New frontiers

#### Clinical neuropsychology

• Focuses on relationships between biological factors and psychological disorders

#### Evolutionary psychology

• Examines influence of our genetic heritage and our behavior

#### Political Psychology

• understanding power relations, political phenomenon, politicians and political behavior from a psychological perspective



### **CAT: The Muddiest Point**

- What was the muddiest point about today's class?
- Use the link <a href="https://tinyurl.com/psych1-IITD">https://tinyurl.com/psych1-IITD</a> to write down what concept you are still struggling to understand.

Let's look at the results:

https://www.mentimeter.com/app/presentation/94a2c81d0182831d 7916df0b0dff77ca/451fd0e69f70

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