

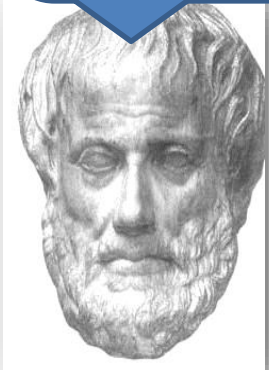
# From speculation to science:

## *The Birth of Modern Psychology*

Aristotle (4<sup>th</sup> century BCE) asked questions to understand the relationship between body and psyche.

His way of answering those questions was to **observe...** and **make guesses.**

I'm the first known writer in the field of psychology!!  
Holla!!



→ Wilhelm Wundt (1832-1920) added two key elements to help make psychology a science:

1. carefully measured observations
2. experiments

# Psychological Science is Born

## Structuralism



Wundt (1832-1920)  
Teacher



Titchener (1867-1927)  
Student

**First  
Psychology  
Lab!**

Wundt and Titchener studied the elements of the mind by conducting experiments at Leipzig, Germany, in 1879.

Know this date / location!



# Structuralism



“Now! *That* should clear up a few things around here!”

- Primarily interested in discovering what the elements of human consciousness are.
- Identify the elements of consciousness through *introspection*.
- 3 types of elements make up consciousness:

- Sensations
- Images
- Affect

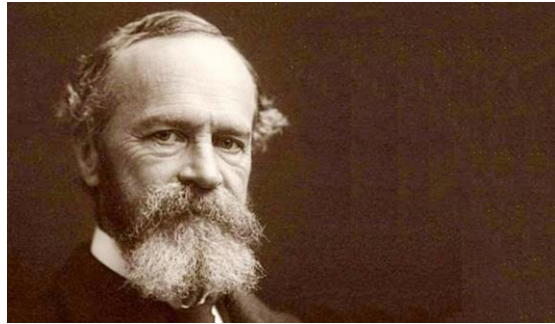


Goal of structuralists is to analyze the properties and varieties of the 3 elements.

- Lost credibility when it couldn't support some of its own basic assumptions.

# Psychological Science is Born

## Functionalism



William James  
Teacher



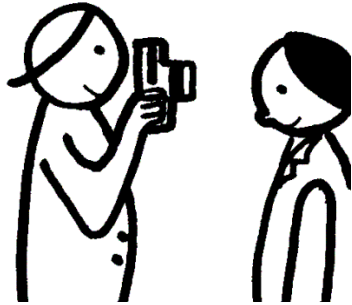
Mary Calkins  
Student

- American William James established the school of functionalism, which opposed structuralism.
- Mary Calkins was denied a PhD from Harvard despite meeting all of the requirements. She went on to become the first female President of the APA (American Psychological Association).

# Functionalism

- Functionalists sought to explain the mental processes in a more systematic and accurate manner.
- Functionalists shifted concern to "*How* does the mind work or function" and "*Why* does it work that way?"
- Strongly influenced by Darwin's approach in biology.
- Instead of focusing on the individual parts of the mind, this approach focused on the *workings* of the mind to find the purpose of consciousness and behavior.

# STRUCTURALISM



Structuralists seemed to want to get a snapshot of the mind (via introspection), and then inventory all the things in the picture

# STATIC

# FUNCTIONALISM

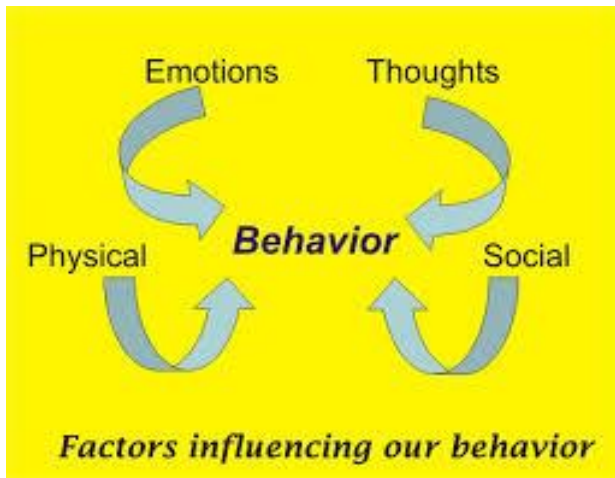


Functionalists wanted to get a fuller picture to see how all of the parts worked together, and what they accomplished as a result of the activity.

# DYNAMIC

# What does psychology look like today?

We define psychology today as the scientific study of behavior (what we do) and mental processes (inner thoughts and feelings).



HOW CAN WE OPTIMIZE THE HEALTH OF PEOPLE? HOW DO GENES AND ENVIRONMENTS SHAPE OUR BEHAVIOUR? HOW DO ORGANISMS ACQUIRE AND RETAIN INFORMATION? WHAT BRAIN MECHANISMS INFLUENCE BEHAVIOUR? WHAT HAS F=MSB/MSW GOT TO DO WITH PSYCHOLOGY? DIFFERENT SPECIES: WHAT IS SIMILAR AND DIFFERENT IN THEIR BEHAVIOUR? HOW DO PROCESSES SUCH AS LANGUAGE, MEMORY, AND ATTENTION INFLUENCE OUR UNDERSTANDING OF THE WORLD? SEEING, HEARING, TOUCHING, TASTING AND SMELLING THE WORLD. HOW? HOW DOES BEHAVIOUR CHANGE FROM BIRTH TO OLD AGE? HOW CAN WE DIAGNOSE, PREVENT AND TREAT ABNORMAL BEHAVIOUR? INTERACTING WITH, LIKING, LOVING AND HATING OTHERS. WHAT CONTROLS THIS?

## GET PSYCHED!



# Introducing Psychology: Psychology's Four Goals

1. Description: Tells "what" occurred
2. Explanation: tells "why" a behavior or mental process occurred
3. Prediction: identifies conditions under which a future behavior or mental process is likely to occur.
4. Change: applies psychological knowledge to prevent unwanted behavior or to bring about desired goals.

# The scientific approach

Objective: Explain what psychology IS NOT, and demonstrate how psychology follows the scientific method.

# Why Do Psychologists and Other Scientists Need Multiple Perspectives?

Multiple perspectives allow psychologists to better understand and research complex behavior and mental processes.





# What Is Psychology - and What Is It Not?

- *Psychology* -  
The scientific study of behavior and mental processes
- Psychology focuses on **critical thinking** and is scientific.
- Psychology is not
  - Mere speculation about human nature
  - A body of folk wisdom about people that "everybody knows" to be true. (Common sense)



# Why do we have to learn this stuff?

Psychology is first and foremost a science.



Thus it is based in research.

# Overconfidence Error 1: *Performance*

- We are much too certain in our judgments.
- We overestimate our performance, our rate of work, our skills, and our degree of self-control.

Test for this: “how long do you think it takes you to...” (e.g. “just finish this one thing I’m doing on the computer before I get to work”)?

And your unscrambling speed?

**HEGOUN ERSEGA**

# Overconfidence Error 2: *Accuracy*

- We overestimate the accuracy of our knowledge. People are much more certain than they are accurate.
- Overconfidence is a problem in eyewitness testimony.
- Overconfidence is also a problem on tests. If you feel confident that you know a concept, try explaining it to someone else.



# What Is Psychology - and What Is It Not?

- Psychology disputes unfounded claims from pseudopsychology

## *Pseudopsychology -*

Erroneous assertions of practices set forth as being scientific psychology



# Pseudopsychologies

- Examples of pseudopsychologies include:
  - **Astrology**: system that tries to relate personality to the movement of the stars
  - **Mediums**: individuals who serve as a channel of communication between the earthly world and spirits.
  - **Palmistry**: idea that reading a person's character from the lines on their palms
  - **Psychokinesis**: notion that humans can move objects through mental concentration
  - **Follicology**: notion that personality characteristics are related to hair color