

Reminder:  
Order of events....

1. Demonstration Results
2. Student Article Summary Presentation(s)
3. Section summary/"Zeitgeist" Discussion
4. Individual Discussion/ Lecture

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**Key ideas from Chapters 2-3**

Mechanism  
Determinism  
Reductionism  
Empiricism, Positivism, Experimentation  
Psychophysics  
Mind-Body  
(Psychophysics Demo and results.....)

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**Chapters 4**

The New Psychology  
(The Start of Modern Psychology)

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I. Wilhelm Wundt's Founding of Modern Psychology

Recall the measurement errors among astronomers

Slight individual differences might be due to whether one first focused on the star or on the timing device

Developed a "mind gauge" to test whether simultaneous perception of sound and sight was possible. Simultaneous perception not possible, 1/8<sup>th</sup> of a second gap between the two perceptions

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II. What is a Founder?

Boring, 1950, p.194 (see text, p. 66)

"When central ideas are all born, some **promoter** takes them in hand, **organizes** them, adding whatever else seems ... essential, **publishes** and **advertises** them, **insists** upon them, and in short "founds" a school."

(**bold** added)

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III. Overview of Wundt's Career

Studied medicine, switched to physiology  
PhD at Heidelberg (1855), taught there about 20 yrs  
"Theory of Sense Perceptions" (1862)  
-Pt 1: Mental processes through experimentation  
-Pt 2: Complex mental processes (language, social practice, non-expt)  
-Pt 3: Scientific metaphysics (integrate experiments with other fields)

"Principles of Physiological Psychology" (1874)  
More apt title would be Experimental Psychology

1900-1920: 10-volumes on "Cultural Psychology" or  
"Social Psychology" – topics such as Language, art,  
culture, myth & religion, society, culture in history.

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Professor at U. of Leipzig, 1875 – site of most work

Established Lab  
Founded Journal – "Philosophical Studies"  
Was an excellent Instructor  
Attracted students from all parts of the world

Research findings were modest

Primary impact through books, methods, educating  
most early psychologists, work of students, and  
**promoting experimental psychology**

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IV. Wundt's Research and Theories

Initial interest in **immediate** experience, then...

Voluntarism – mind actively organizes mental content

Perception (automatic, mechanistic) vs. Apperception  
(controlled, creative)

Immediate vs. Mediate experience

Method of **Introspection**: often involved  
**quantitative** or psychophysical judgments.  
Used highly trained observers within controlled  
experiments.

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The Basic Elements of Conscious Experience...

Sensations (intensity, duration, sense modality)

and

Feelings – three dimensions

pleasure/displeasure

tension/relaxation

excitement/depression

[Osgood, 1957: evaluation, potency, and activity]

.... Are organized into higher level concepts through apperception (Voluntarism, an active process)

Critics: Introspection not reliable; "German" (language, politics, location); opposition; "misrepresentations?"

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Nicolas article



[illegible]

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V. Ebbinghaus

Applied Experimental Methods to higher mental processes (research still appears in texts)

Learning and Memory: "nonsense" syllables  
"On Memory: A Contribution to Experimental Psych"

\*Repetition important in learning

\*Forgetting curve

\*familiarity and associations within stimuli

Co-Founded journal to compete with Wundt's

Used Experimental Method in novel ways

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V. The "Other Germans"

**Franz Brentano**, University of Vienna

"Psychology from an Empirical Standpoint"

**Act Psychology:** Focus on Mental Actions (Processes), not mental content

Mental acts studied through analysis of memory and imagination. Each thought is directed at an object ("Intentionality").

Several of his students/followers were known within the Gestalt School of thought (Chapter 12)

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**Carl Stumpf**, University of Berlin (student of Brentano)

"Psychology of Tone"

Acoustic perceptions of musicians

**Phenomenology:** Non-reductionist approach to introspection – unbiased description of experience as it occurs

Several of his students/followers were also known within the Gestalt School of thought (Chapter 12)

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**Oswald Külpe**, University of Wurzburg

Studied and worked with Wundt, but split apart

**Systematic Experimental Introspection:** Retrospective reports of cognitive processes after completion of experimental task. These reports were **subjective, detailed and retrospective (and elicited by researcher's questioning)**

"Imageless" thought: thinking does not always involve images nor sensations

Pushed Psychology beyond Wundt's stricter focus

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VI. Psychology in Germany

Germany provided a fertile environment for the founding of Psychology

For the first 20 years of Psychology, Germany was the place to go to obtain training in Psychology.

However, the rise of academia in the USA, combined with political changes in Germany led to a fairly "swift" movement of psychology from Germany to the USA

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Chapter 5

Structuralism

(The First "School of Thought")

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I. E. B. Titchener – Organizer of "Structuralism"

Trained by Wundt

Viewed as a loyal follower/promoter of Wundt's work

Translated Wundt's work into many languages

Came to the U.S. in 1892-3, established very productive psychology lab (program) at Cornell

"Colorful" and controversial

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Titchener's Lecture Hall – demonstrations were a key part of class

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## II. Background & Life

Born in England, studied at Oxford

Interested in experimental approach to  
“philosophy/psychology” – went to Leipzig

Translated Wundt’s books, then wrote his own  
-- An Outline of Psychology – “science of mental processes”  
<http://books.google.com/books?id=PEAAAAAAAJk&pg=raa#v=onepage&q&f=false>  
--Laboratory Manuals

Strong Advisor – Content of Consciousness

Women in Psych – Students or “Experimentalists”

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## III. Focus of Titchener’s Theory/Work

Method of Introspection – striving for reliability  
Avoid the “Stimulus Error”  
Similar to Kulpe’s method – “online” narrative  
Mechanistic view; training + attention

Goal: Discover the Elements of Consciousness  
Reductionistic – find basic elements  
Association: Discover Laws of Association  
Quality, Intensity, Duration, & Clearness

Cataloged tens of thousands of elements

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IV. Critics of Titchener's Structurism

Those critical of his Introspection Method

Too subjective

Not reliable

Not observable

Are all mental elements accessible?

(Lieberman article)

Critics of Titchener's System

His focus was too narrow

Is Association too simplistic?

(what about creative synthesis?)

No applications for his work

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Titchener.....

He was a forceful early organizer/promoter of Psychology in the U.S. (Lab, Journals, etc.)

Firmly established Experimental Methods

Structuralism was a School opposed by many – thus it drove scientific developments by opponents

Indirectly, he may have ended Wundt's impact on Psychology in the USA

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