I. INTRODUCTION

A. Introduction

- Early psychology full of conceptual tension
- Wundt’s laboratory in 1879 is an important date in the history of psychology
- Perhaps as important is the 1890 publication of William James’ Principles of Psychology.
  - It predates Titchener’s Structuralism in the US and is best conceived as a competitor.
  - James’ book is often seen as the foundation of a new uniquely US approach psychological called functionalism
- Functionalism and Structuralism seems to be the paradigmatic battle that Kuhn had talked about.

B. Psychology in the US

- Shaskin’s (1975) History of US Psychology
  - Stage one: moral and mental philosophy
    - Psychology included topics such as ethics, divinity, and philosophy.
    - To learn psychology was to learn the accepted theology of the day.
    - Influence of Samuel Johnson and John Locke.
  - Stage two: intellectual philosophy
    - Psychology became a separate discipline and US psychology.
    - Influenced by the Scottish common sense philosophers of Thomas Reid and William Hamilton.
  - Stage three: the U.S. Renaissance
    - Psychology becomes an empirical science and by the late 1880’s there is an uniquely US take:
      - Publishing of John Dewey’s textbook, the first issue of the American Journal of Psychology
      - James’s Principles of Psychology (1890)
    - Psychology began emphasizing individual differences, adaptation to the environment, and practicality.
  - Stage four: functionalism
    - Science, emphasis on the individual, and evolutionary theory combined into the school of functionalism.
I. INTRODUCTION
C. Functionalism

- An understanding of psychological processes by their casual relations to one another and to sensory inputs and behavioral outputs
- Never a well-defined school
  - Did not have one recognized leader or an agreed-on methodology.
  - Common themes, however, ran through the work of whose calling themselves functionalists.
- Opposed the elementarism of structuralism
  - Rejected the reduction of psychological processes into basic elements.

Focus was to understand the function of the mind
- Focus was not upon a description of its attributes.
- The function was to aid the organism in adapting to its environment.
- A practical science
  - Desired to be a practical science and findings to the improvement of the human condition
  - Research on many participants
    - Participants included animals, children, and abnormal humans and the use of any methodology that was useful.

Concerned with “why” of mental processes
- This led directly to an interest in motivation.

Accepted both mental processes and behavior
- Both accepted as legitimate for psychology
- Interested in individual differences
  - More interested in individual differences among organisms than similarities.
- Influenced directly or indirectly by William James
  - William James was strongly influenced by Darwin’s theory of evolution

II. FUNCTIONALISM AT HARVARD
A. William James

- William James (1842-1910)
  - Born American and was the brother of author Henry James
  - He wrote influential books on the science of psychology, educational psychology, psychology of religious experience and mysticism, and the philosophy of pragmatism.
  - He taught the first experimental psychology course at Harvard in the 1875-1876 academic year.
II. FUNCTIONALISM AT HARVARD
A. William James

- William James (1842-1910)
  - His *Principles of Psychology* (1890) is 1200 pages in 2 volumes which took 12 years to complete.
  - *Psychology: The Briefer Course,* was an 1892 abridgement
  - Criticized Associationism and Hegelianism as having no explanatory value.
  - He sought to re-conceive of the human mind as inherently purposive and selective.

II. FUNCTIONALISM AT HARVARD
A. William James

- Central Ideas
  - Stream of consciousness
    - Personal to the individual
    - Continuous; cannot be divided up for analysis
    - Always changing
    - Selective; some events are selected for further consideration while others are not
    - Functional; purpose is to aid the individual in adapting to the environment.

II. FUNCTIONALISM AT HARVARD
A. William James

- Central Ideas
  - Study of the Self
    - Three components of self (empirical self)
      - Material self: Body, family, and all things owned
      - Social self: Self known by others; many social selves
      - Spiritual self: State of consciousness, one’s own subjective reality
    - The self as a knower is the awareness of one’s empirical self.
    - He was among the first to examine self-esteem.

- Pragmatism
  - The belief that if an idea works, it is valid

- Radical empiricism
  - All consistently reported aspects of human experience are worthy of study

- Opposed Wundt’s approach to psychology
  - Specifically challenged Wundt’s experiential not cultural psychology.
II. FUNCTIONALISM AT HARVARD
   A. William James
   ▪ Central Ideas
     ▪ Habits (instincts) are formed as an activity is repeated.
     ▪ He had a neurophysiological explanation of habit formation.
   ▪ Theory of emotion
     ▪ Event (stimulus) causes a bodily reaction/behavior, which is then experienced as an emotion.
     ▪ Science must assume determinism, including psychology, but for certain approaches, the assumption of free will might be fruitful.

   ▪ Speculations
     ▪ An idea of an action precedes and causes that action.
     ▪ In most cases, ideas and actions flow immediately and automatically producing habitual or reflexive behavior.
     ▪ For voluntary behavior, ideas of various behavioral possibilities are retained from previous experiences.
     ▪ The recollection and selection (by mental effort) of a behavior is a prerequisite to voluntary behavior.

   B. Hugo Münsterberg
   ▪ Hugo Münsterberg (1863 – 1916)
     ▪ Disagreed with James on many points regarding behavior and consciousness.
     ▪ Stated that behavior causes ideas rather than ideas cause behavior as James had stated.
     ▪ He was one of if not the first applied psychologist.
     ▪ He studied clinical psychology and he wrote books on forensic psychology, and industrial psychology.
II. FUNCTIONALISM AT HARVARD
C. Mary Whiton Calkins
- Mary Whiton Calkins (1863 – 1930)
  - Attended seminars with James and researched with Münsterberg.
  - Women could not enroll in Harvard so she unofficially took the Ph.D. exam but could not receive her degree.
  - Developed a paired-associate technique to study the influence of frequency, recency, and vividness on memory.
  - Developed self psychology, which was her major contribution to psychology.

III. FUNCTIONALISM AT CLARK
A. G. Stanley Hall
- G. Stanley Hall (1844 - 1924)
  - Interests in childhood development and evolutionary theory.
  - Influenced by Darwin’s evolutionary and Haeckel’s recapitulation theory
    - Recapitulation theory states that the development of an individual through their lifetime mirrors the evolution of the species.
  - Hall’s developmental ideas were greatly influenced by this theory.
  - His work in this area did much to stimulate educational psychology and start the child development movement in the U.S.
III. FUNCTIONALISM AT CLARK
A. G. Stanley Hall

- G. Stanley Hall
  - He was responsible for inviting largely unknown Freud and Jung to visit and deliver lectures in early Sept, 1909.
  - William James, James Cattell, William Stern, and E. B. Titchener were in the audience.

B. Francis Sumner and Kenneth Clark

- Francis Sumner (1895 -1954)
  - G Stanley Hall’s last Ph.D. students
  - First African American psychologist and taught at Howard University
  - Sumner supervised Kenneth Clark
  - Kenneth B. (1914 - 2005) and Mamie P. Clark (1917-1983)
    - Known for their 1940s studies using dolls to assess children's race attitudes.
    - The work contributed to the Supreme Court ruling that racial segregation in public education was unconstitutional.

IV. FUNCTIONALISM AT CHICAGO
A. John Dewey

- John Dewey (1859 – 1952)
  - American philosopher, psychologist, and educational
  - Dewey, along with Charles Sanders Peirce and William James, is recognized as one of the founders of the philosophical school of pragmatism.
  - He is also one of the founders of functional psychology
  - He was a leading representative of the progressive movement in U.S. schooling during the first half of the 20th century.
  - Worked under G. Stanley Hall.

B. John Dewey

- His *The Reflex Arc Concept in Psychology* begins functionalism.
  - Proposed that the three elements of the reflex (sensory processes, brain processes, motor response) must be viewed as a coordinated system directed toward a goal, usually related to the survival of the organism.
  - Influential in creating “progressive” education, which stated that education should be student-oriented and not subject-oriented and students should learn by doing.
IV. FUNCTIONALISM AT CHICAGO

B. James Angell

- James Angell (1869 - 1949)
- Presented the three major points of functionalism
  - Functional psychology is interested in mental operations, not conscious elements.
  - Mental processes mediate between the needs of the organism and the environment. Mental functions help the organism survive.
  - Mind and body cannot be separated, they act as a unit in an organism's struggle for survival.

IV. FUNCTIONALISM AT CHICAGO

C. Harvey Carr

- Harvey Carr (1873 - 1954)
- Because learning is a major tool used in adjusting to the environment, it was a major concern of functionalism.
- Carr proposed the adaptive act, which has three components.
  - A motive that acts as a stimulus for behavior (such as hunger or thirst).
  - An environmental setting or the situation the organism is in.
  - A response that satisfies the motive.

V. FUNCTIONALISM AT COLUMBIA

A. James Cattell

- James M. Cattell (1860 - 1944)
- In 1891 moved to Columbia University where he became Department Head of Psychology, Anthropology, and Philosophy.
- Proposed that psychology should be applying its methods in all human activity because that is what humans do.
- Through his many editorships and ownerships of journals (including Psychological Review), he advanced the discipline of psychology and particularly functional psychology.

V. FUNCTIONALISM AT COLUMBIA

B. Robert S. Woodworth

- Robert S. Woodworth (1869-1962)
- Interested in what and why of people's behavior, particularly motivation.
  - He called his brand of psychology dynamic psychology.
  - He formulated the symbols S-O-R to include the organism and particularly the organism’s motivation.
  - His text, Experimental Psychology, remained the standard text in experimental psychology for two decades.
IV. FUNCTIONALISM AT COLUMBIA
C. E. L. Thorndike

- E. L. Thorndike
  - Thorndike studied animal behavior true to functionalism’s use of various methods.
  - Animal research in psychology helped by Conwy Morgan’s (1894) 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
  - Margaret Floy Washburn (1908) published several books and articles on animal psychology.

- Used the apparatus called a puzzle box to study trial-and-error learning using cats.
- Observed the sequence of learning resulting in cats learning to escape.
- He made the following conclusions:
  - Learning is incremental
  - Learning occurs automatically without being mediated by thinking
  - Same principles of learning apply to all mammals.

- Psychology’s first learning theory combines associationism and hedonism and consists of the laws of exercise and of effect.
  - Law of effect states associations followed by a “satisfying state of affairs” are strengthened and by “annoying state of affairs” it will be weakened.
  - Law of exercise states that the more an association is practiced, the stronger it becomes

- Thorndike went on to abandon the law of exercise and discarded the second part of the law of effect.