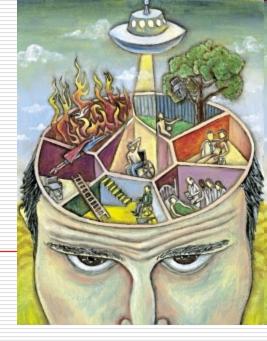
"Man is the only animal for whom his own existence is a problem which he has to solve."-Erich Fromm

### Psychology



Psychology has a long past, but a short history.

what is psychology?



Science of behavior and mind. Scientific study of behavior and mental processes.

#### Behavior

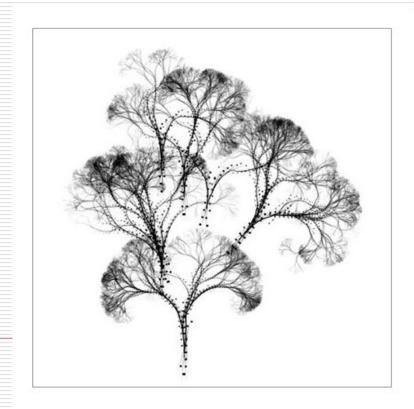
The aggregate of the responses or reactions or movements made by an organism in any situation

#### Mind

- 1. The entire set of an individual's sensations, perceptions, memories, thoughts, dreams, motives, emotional feelings, and other subjective experiences.
- 2. In cognitive psychology, the set of hypothesized informationprocessing steps that analyze stimulus information and organize behavioral responses.

### How does this apply to me, society, my environment, to different cultures, to different times and period?

- Ψ
  - historical context
  - cultural context
  - evolutionary context
  - momentary context –right now





#### Ψ is a set of questions.



# Ψ is a set of theories and procedures for asking and answering questions.



Ψ is a product of history.

#### Historical underpinnings of psychology:

#### □ Aristotle

Aristotle saw ultimate reality in physical objects, knowable through a Objects, including organisms, were composed of a potential, the and of a reality, their **form**; thus, a block of marble -- master -- potential to assume whatever form a sculptor gives it, and a see embryo has the potential to grow into a living plant or animal foliving creatures, the form was identified with the soul; plants had the lowest kinds of souls, animals had higher souls which could feel, and humans alone had rational, reasoning souls. In turn, animals could be classified by their way of life, their actions, or, most importantly, by their parts.

#### Ancient Greece

#### □ Plato

Plato (428–348 B.C.E.) was the first to make a sharp distinction between the mind and body. For Plato, the relationship between the mind and body is not an ideal one in fact, the body can be seen as the "prisoner" of the mind or soul, which is the true person. In death, the mind and soul are separated. The body decomposes into its original elements, but the mind or soul cannot decompose because it is not a composed material substance. Therefore, the mind or soul cannot die. In Plato's works one sees the direct result of dualism with regard to the question of death: It provides hope for survival of the person after the death of the body.

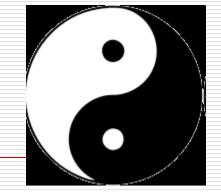


#### Dualism/Rene Descartes



- Dualism
  - Behavior is controlled by two distinct systems -- the body and soul
- □ <u>Body</u>
  - This part of natural, material world can be studied scientifically (just like other matter or material things)
- □ Soul
  - This is part of the immaterial world.
  - The spiritual, "supernatural"
  - Cannot be studied scientifically [left to religion]
- There is a great difference between the mind and the body, inasmuch as the body is by its very nature always divisible, while the mind is utterly indivisible. For when I consider the mind, or myself in so far as I am a thinking thing, I am unable to distinguish any parts within myself. . . . By contrast, there is no corporeal or extended thing that I cannot think of which in my thought I cannot easily divide into parts; and this very fact makes me understand that it is divisible. This one argument would be enough to show me that the mind is completely different from the body,
  - even if I did not already know as much from other considerations (Cottingham 1966, p. 9)

#### Monism



school that denies difference or separation between mind and body

□ Materialism



Idealism



#### Materialism

□ 18. century

П

- materialism- machine oriented (Thomas Hobbes)
- Hobbes rejected Descrates dualism and believed in mortality of soul
- nothing exists (just matter and energy), soul and mind was discarded
- brain in explanation of all behaviors; therefore even thoughts were to be understood in terms of brain activities
- he influenced school of empiricism
- for Hobbes, everything is corporeal and material, and derived from this

## Happiness is not something ready made. It comes from your own actions.

<u>Dalai Lama</u>

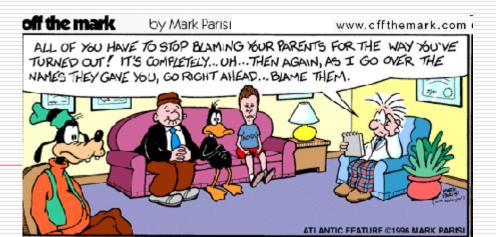


## Nativism vs Empiricism [Plato] [Aristotle]

- still perpetuaning in psychology as a debate, dispute, a challenging controversial issue.
- concerns with question whether human characteristics or abilities are born, inherited, or gained, acquired though life experiences
- nature versus nurture debate
- -nativist aspect- human is being born with a ful package, endownment of knowledge and understaning of reality. emphasized is logic reasoning and introspection, for instance Descartes- some ideas (God, me, infinity are inherited)
- -empirist aspect-knowldge is being acquired from experience and interaction with the environment
- Locke- tabula rasa (blank slate)- we are a slate that experience write on knowledge and understanding of th world
- □ -Locke, Hume, James Mill, John Stuart Mill,
- -sensory experience constitute all human knowledge and ideas
  - empiricism influenced behaviorism later, and was opposed to nativism (existence of innate ideas)
- they influenced assiocianism (experience are connected into knowledge on laws of associasions)

## Implications from nativist vs. empirist tradition

- Has huge political and social policy implications. Examples:
- If criminals are born that way, why invest money in rehabilitation programs?
- If intelligence is inherited, why invest money in educational programs?
- If laziness is inherited, then let's abolish welfare?





#### HISTORY OF PSYCHOLOGY

- the philosophers of 18<sup>th</sup> century (e.g. associanists)
   adopted very narrow perspective in psychology
- how does body function? how does mind function? how do they interact?
- □ long past, but recognized as a science at the end of 19th Century
  - many approches contradicted each other and constituted the field of psychology
- □ those approaches also believed in different goals Ψ should have
- study of physiology has been extended to study of mind

#### Wilhelm Wundt (1832- 1920)



- founder of scientific psychology (1st textbook, 1st laboratory Uni of Leipzig) (reaction time experiments- now cognitive psychology)
  - assumption that mind and behavior could also be studied scientifically similarly as planets or human organs
  - investigation of senses- especially vision (perception), attention, emotions and memories
  - Wundt- method of introspection observation and registration of nature of one's own perception, thinking, and emotions (feelings); reaction time and immediate perception of light or very brief stimuli, flashes (experiments), method of introspection did not prove to be effective in very brief stimlu presentation

#### STRUCTURALISM

- Titchener (Phd under Wundt), plus Wundt
- understanding the structure of mind; influence of chemistry and physics; experience that is constituted from elements (for example: the taste of lemonade into elements of sensation: bitterness, sweetness)
- study of sensations through a method of introspection
- 4 different dimensions of sensations: quality, intensity, duration, and clarity
- problems with introspection

#### FUNCTIONALISM

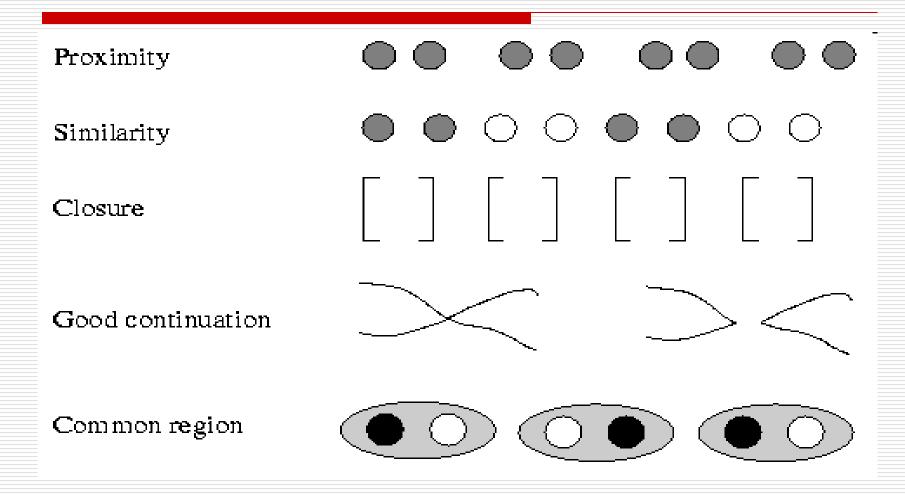


- Wiliam James (1842-1910)- critique of structuralism
- purpose of mind (what does it serve for?), analysis of elements of consciousness should be disregaded, rather dynamic, unstable, changeable nature, core of the consciousness
- how does mind serve for adaptation and functioning in the environment? (Darwin)
- method of introspection, but also observation of behavior as a subject of study
- theory of emotions- first theory of emotions (with Lange) physiological reactions cause emotions
- □ EXAMPLES>Why do we dream -- what function does it serve?
   >Why do we have emotions -- what function do they serve?

#### Gestalt psychology

- □ 1912
  - in the center of study was perception, how do we organize experience. what we see depend mainly on the stimuli in relation to the background and their organization (distance, proximity, similarity) laws of perception (Wertheimer).
- □ Wertheimer- phi phenomenon
- http://en.wikipedia.org/wiki/File:Lilac-Chaser.gif

#### Gestalt laws

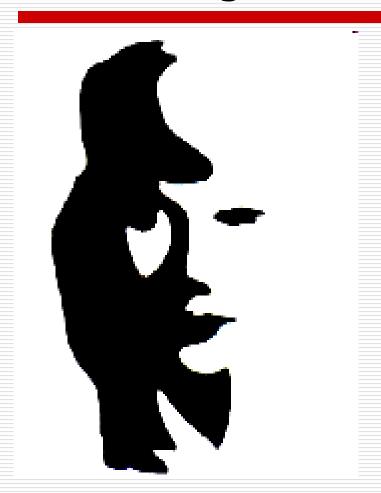


#### Gestalt figure-background principle



what do you see?

#### Gestalt figure-background principle



#### Gestalt principle- dominance of whole over details

Arcimboldo



### Wolfgang Köhler

#### experiments with chimpanzees

- problem solving
- □ AHA effect
- insight learning
- □ "Sultan tries to reach the fruit with the smaller
- of the two sticks. Not succeeding, he tears at a p
- that projects from the netting of his cage, but the
- in vain... He suddenly picks up the little stick of
- goes up to the bars directly opposite the long sti
- scratches it towards him with the "auxiliary," sε
- it, and goes with it to the point opposite the objective (the fruit),
- which he secures."



#### Behaviorism

- founded by <u>J.B. Watson</u>
- research based on results with animals mostly (influence of Darwin)- if humans are related to other species it might be useful to systematically study animal behavior and create implications for human mind functioning
  - bh refused to take into account existence of mind, or rather considered it to be the black box
  - similarly as emphasized in empiricism, a human is determined by education, upbringing
  - role of environment (compare to nativism)

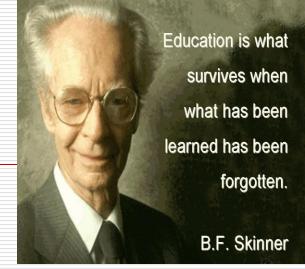
### Little Albert {experiment}



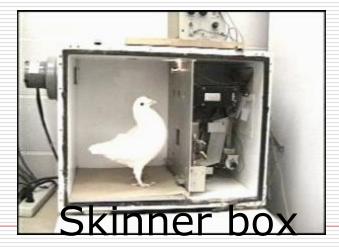
#### B.F. Skinner

#### operant conditioning

reinforcing stimulus in the environment

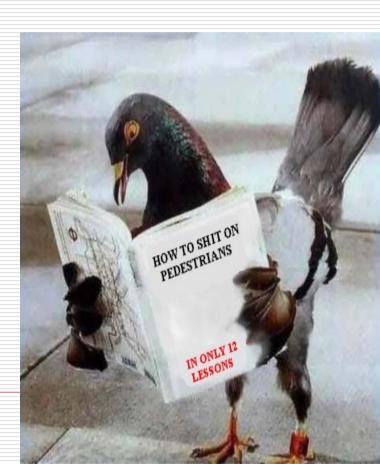


- operant- the activity (behavior)
- A behavior followed by a reinforcing stimulus results in an increased probability of that behavior occurring in the future.



#### role of reward in:

- □ a. reinforcement of behavior
- □ b. extinction of behavior

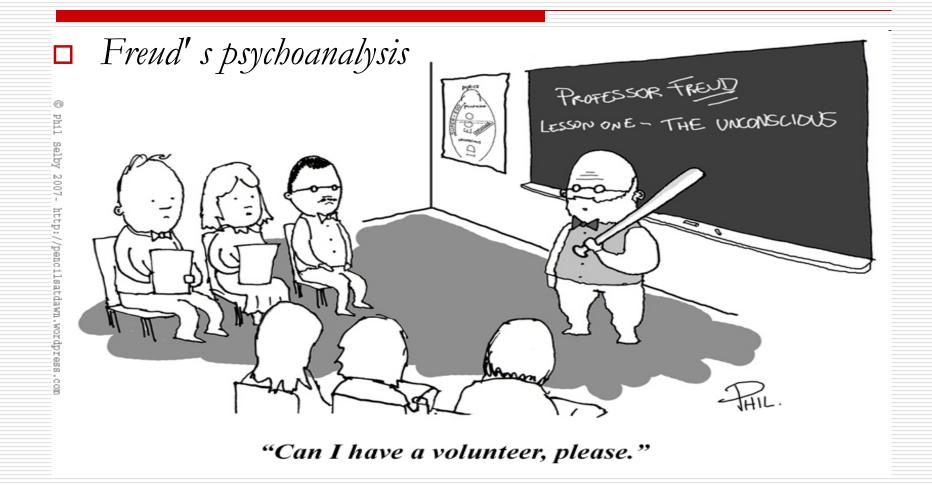


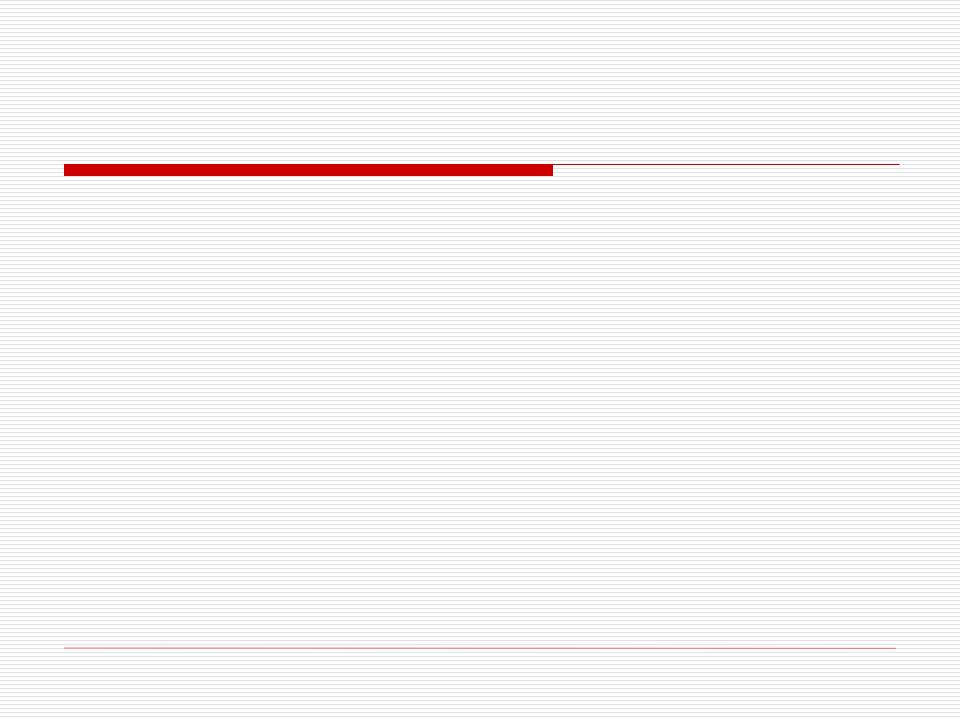
#### PSYCHOANALYSIS Sigmund Freud

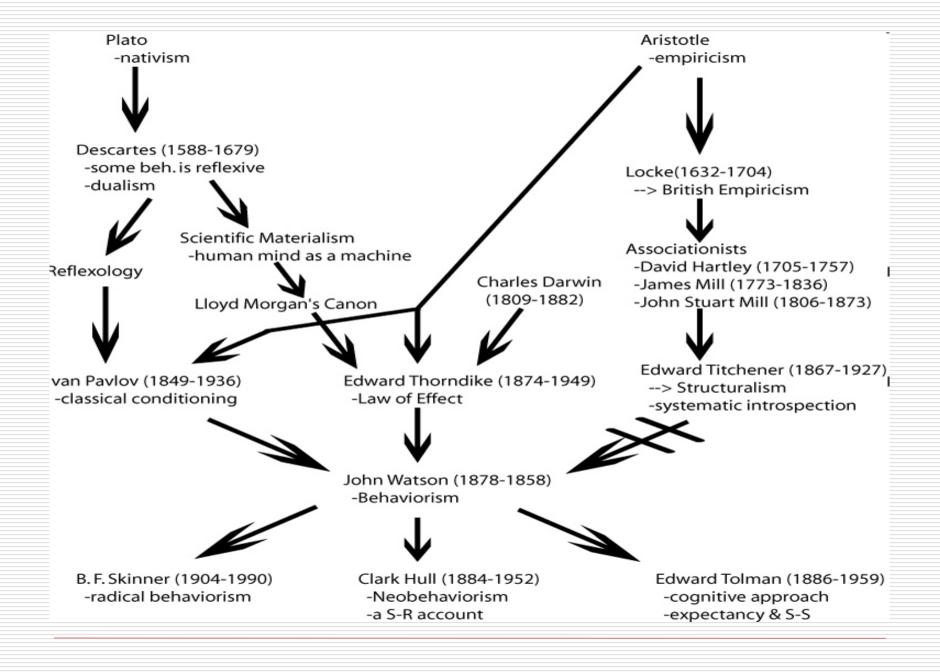
theory of personality and also method of psychotherapy

- Sigmund Freud- the foundations (at the turn of 20st century)
- the main idea is the concept of unconsciousness
- unconscious mind is a reservoir of feelings, thoughts, urges, and memories that outside of our conscious awareness. Most of the contents of the unconscious are unacceptable or unpleasant, such as feelings of pain, anxiety, or conflict. According to Freud, the unconscious continues to influence our behavior and experience, even though we are unaware of these underlying influences.
- the importance of childhood experience and childhood desires on one's adult life. Those unacceptable child desired are repressed and expelled from the consciousness into unconscious and from there they influence our thoughts, ideas, feelings, behavior.
- unconsciousness can be expressed in dreams, mishaps, slips of the tongue
- in his therapy: couch, free associasions
- motivations: aggression and sex.

#### Freud







Psychology is "Interdisciplinary" and "Eclectic"

#### **Interdisciplinary**

Any phenomenon can be approached from many different angles. Take the phenomenon of dreams. Dreams can be looked at as:

- Actions: Overt behavior, such as REM.
- Cognitions: Knowledge/thought: Why do we remember so few dreams?
- Social Behaviors: Interaction with others: What do dreams say about our relationships with other people?
- Dreams can be studied in terms of:
- Development: When do kids distinguish dreams from reality?
- Individual Differences: Do schizophrenics have different dreams than "normal" people?
- So, dreaming can be looked at from the perspective of different disciplines in psychology (and outside of psychology)

#### **Eclectic**

Psychology uses various sources to understand phenomenon, to help people, etc. Take a psychological problem like severe depression:

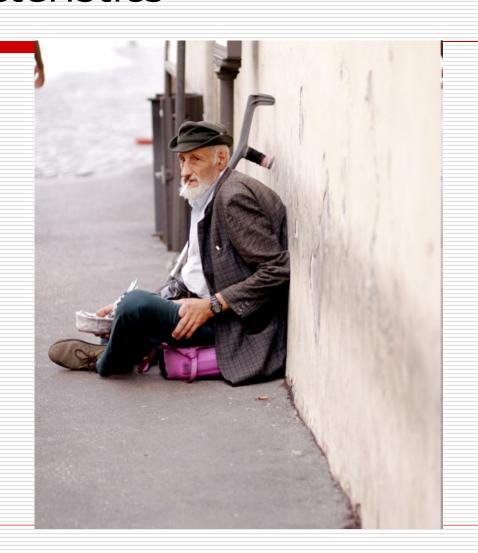
- Depression can be understood from many different theoretical perspectives (<u>not just one</u>). A few possible examples regarding depression:
- Biological perspectives (ex: hormones, hereditary factors)
- Cognitive perspectives (ex: distortions of various thought processes)
- Social perspectives: (ex: it can be a cause and a consequence of poor social skills)
- Personality perspectives (ex: some traits may predispose a person to becoming depressed more than other people)
- <u>Learning</u> perspectives (ex: depression might be observed in the home and imitated because it leads to positive consequences, e.g., attention from others)
- <u>Psychodynamic</u> perspectives (ex: depression may be a result of repressed unconscious conflicts about our true feelings of hostility toward a parent)

1.brain damage and face recognition

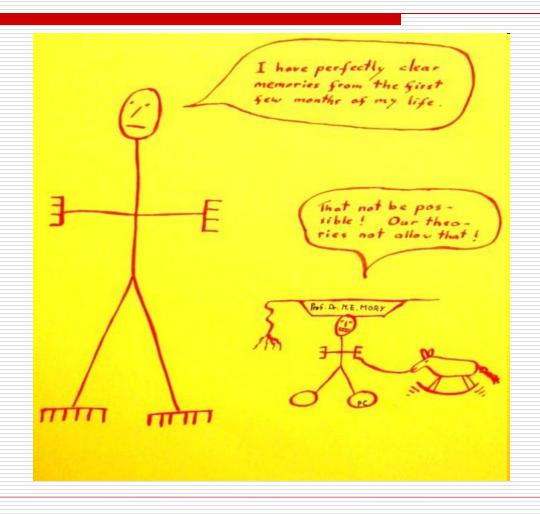
5 problems in Ψ:



### 2. overestimation of one's characteristics



### 3. child amnesia



### 4. obesity



## 5.influence of television violence on child's aggression

