

# The human body

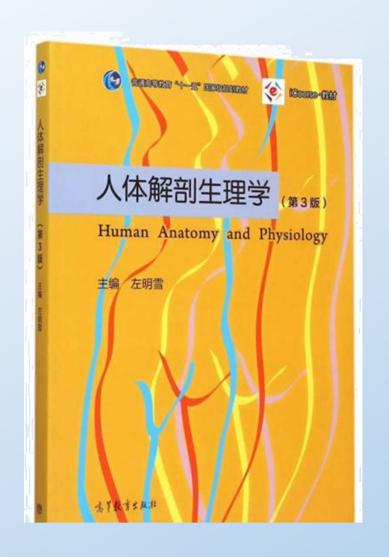
朱洵 2024.9.22

Laetoli Hominin fossil footprints, Laetoli , Tanzania 3.7 million years

# 联系方式

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# 参考书

《人体解剖生理学》 高等教育出版社 第3版

# 注意事项

- 手机不要发出声音, 不要打游戏...
- 课前下载或打印课件,课上做好笔记
  - 不是所有内容都在书上
  - 不是所有内容都在课件上
- 所有我在课堂上提到的内容都是重要的~

## 考核方式

Don't worry about it

- 课堂参与 20%; 作业20%;
- 闭卷考试 60%

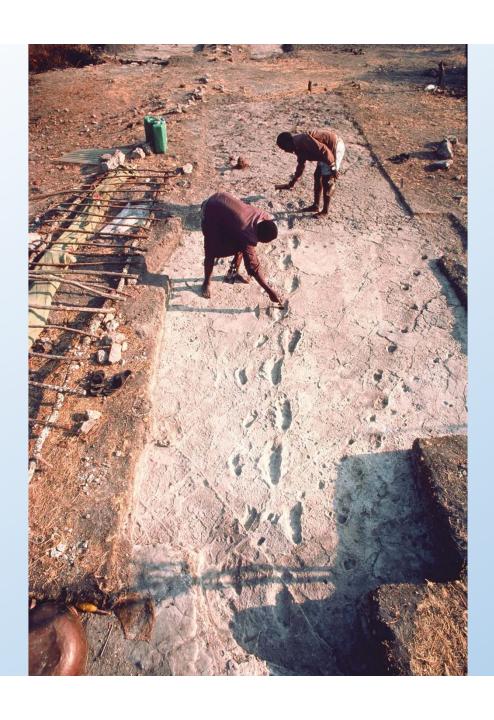


Psyche revived by the kiss of Love, Antonio Canova, 1793

Why studies human body and its relationship to psychology

Definition of Psychology





## The Laetoli footprints



The LH 18 cranium, found in 1976 at Laetoli, Tanzania. Dated to approximately 120,000 years ago, it is considered to be representative of late archaic Homo sapiens.



The footprints at Laetoli are of monumental importance in the record of human evolution.

Laetoli Hominin fossil footprints, Laetoli , Tanzania 3.7 million years

# The sphinx's riddle



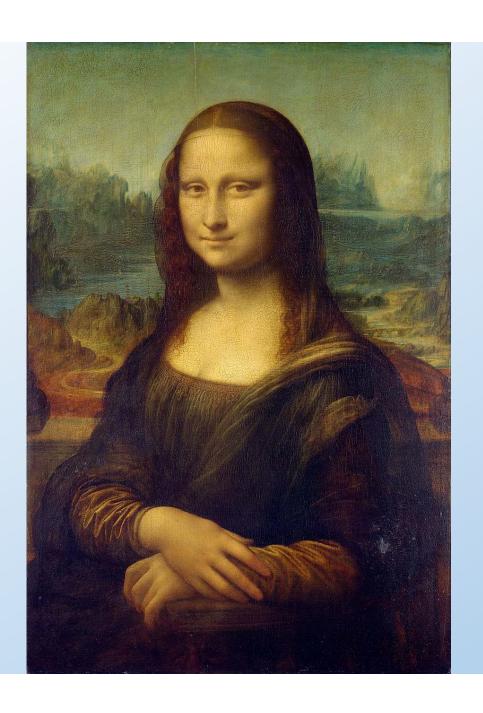
It is not actually a question,
But a warning.



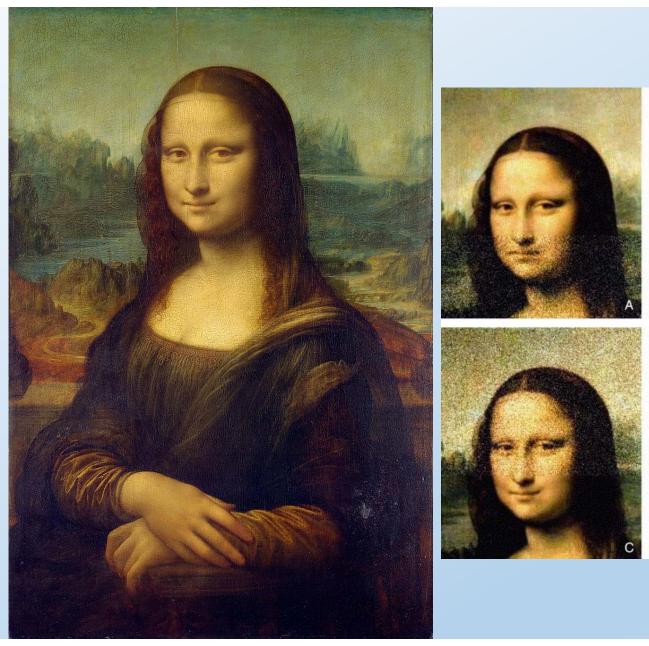


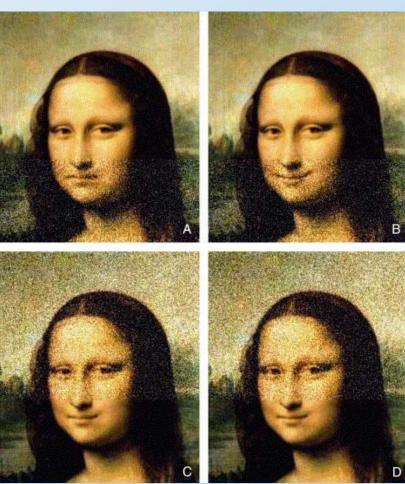
## Perception - Reasoning





Social Psychology



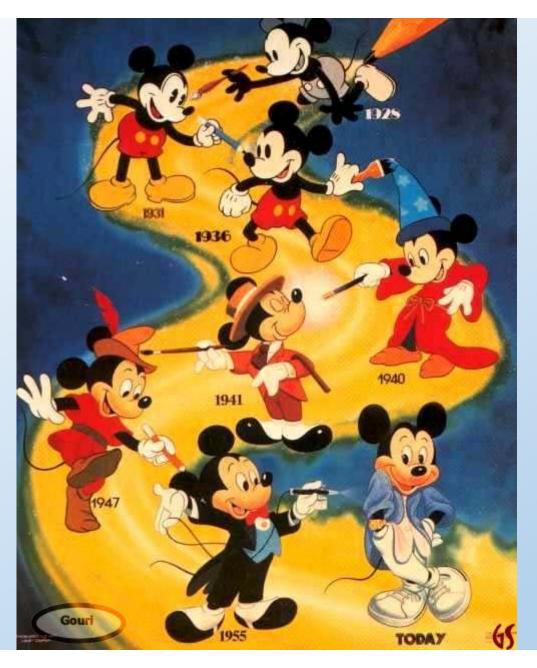


## Attraction: how it comes from?



## Not all attraction is based on sex





Evolution of Mickey Mouse:

80 years

#### **PLANE CRAZY**



DATE: 1928
FUN FACT: The first Mickey Mouse cartoon
ever produced. Mickey is not wearing his
classic shoes or gloves in this short.

#### **MICKEY MOUSE**



DATE: October 3, 1955—March 7, 1996
FUN FACT: Disney's live-action variety show for kids aired on ABC, featuring the Mouseketeers. The ear hats, worn by the Mouseketeers, were named "Mouseke-ears." The show helped many children learn how to spell the word "mouse."
Also, gave the world Britney Spears, Justin Timberlake, Christina Aguilera, and Ryan Gosling.

#### **HOUSE OF MOUSE**

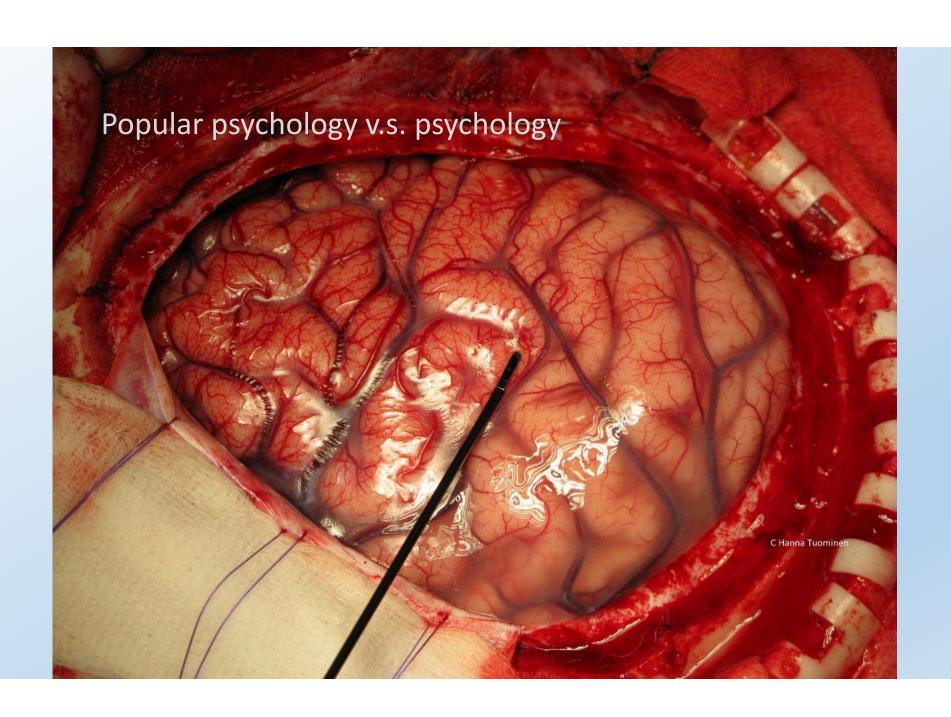


DATE: January 13, 2001—December 24, 2003
FUN FACT: The show's theme song was
performed by Brian Setzer. Huey, Dewey,
and Louie acted as a band during the show,
with names such as The Quackstreet Boys,
The Splashing Pumpkins, and Kid Duck.

### MICKEY MOUSE CLUBHOUSE



DATE: May 5, 2006—present FUN FACT: Excluding Donald, this was the first time that the major characters have appeared on TV in CG.



## 课程提要

Contents	Specific topics
Prelude	Prologue: The Story of Homo sapiens
	The human Evolution
	Under the hood, molecular biology and physiology
The nature of homo sapiens	Psychobiology, the biology of mind
	Neural system
	Supporting systems
	Human sexuality
The history of life: development and evolution	The development of human
	The development of mind
	Intelligence

实验: ???

# The principle of vertebrate

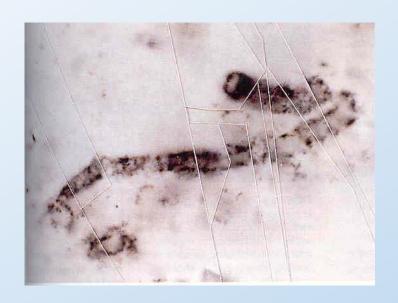
- Moving
  - Jaw
    - limb

## When did life begin?

- Evidence in metamorphic rocks that life existed 3.85 billions years ago
- Low C<sup>12</sup>/C<sup>13</sup> fraction in rock layers suggests life
  - Biological processes prefer C<sup>12</sup> to C<sup>13</sup>
    - Find lower fraction of C<sup>13</sup>
  - Non-biological processes have no preference, so find equal amounts

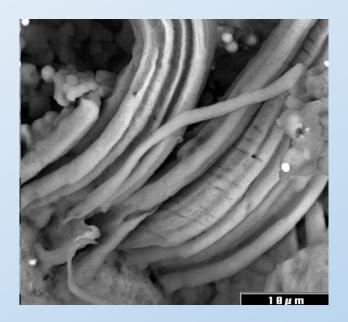


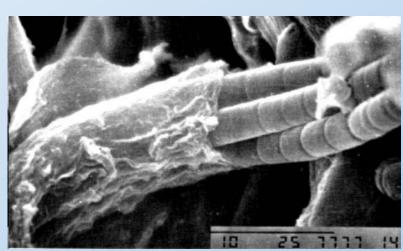
## When did life begin?



- Microfossils dating to 3.5 billion years ago
- Difficult to distinguish from mineral structures
- Analysis shows that some structures contain organic carbon
   -found in at least 3 sites









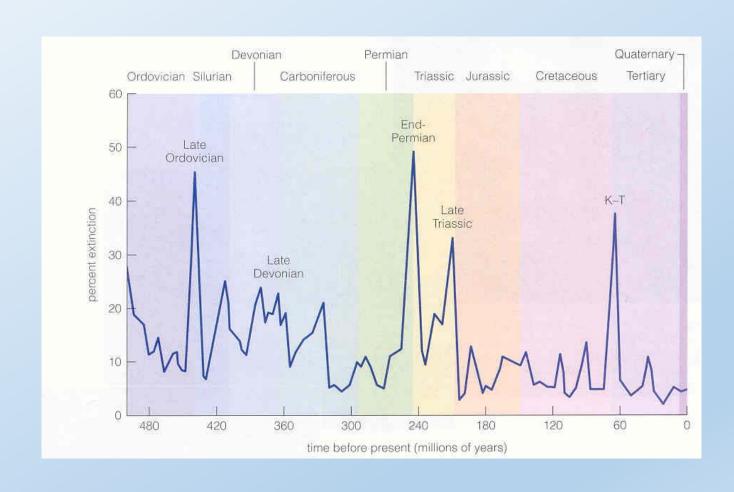
Living cyanobacteria

Microfossils in carbonaceous chondrites

## Where did earth life begin?

- Land is unlikely
  - No O<sub>2</sub>, no ozone: UV destroys molecular bonds
- Shallow ponds
  - Once favored, full of organic material
  - When evaporated, organic chemical concentration increases making it easier to combine complex molecules leading to life
  - Current experiments indicate lack of chemical energy sufficient to support life
- Deep-sea vents/hot springs
  - DNA evidence suggests that early organisms survived in conditions similar to deep-sea vents
  - Plenty of chemical energy available

## Mass Extinctions



## Living Fossils

- Bacteria and Archaea: genetic material NOT separated from rest of cell
- Eukarya: DNA separated from rest of cell by membrane
- Extremophiles (live near deep-sea vents or in hot springs) closest to root of tree of life

