

意识与注意

知觉、意识与思维

perception, conscious, thinking

- 知觉与意识
- 思维

知觉和意识

- 认识外界是一个非常难的任务
- 为此我们维持着一个内在的对世界的判断，简化这个过程
- 意识是一个过程

为什么认知外部世界如此之难

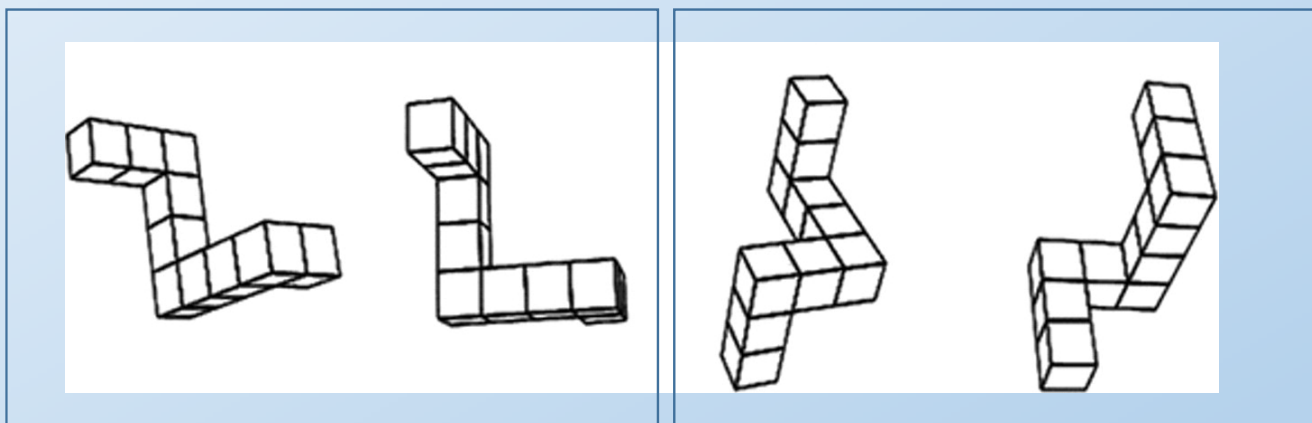
- 我们需要从 2 D 的感觉信息，重建 3 D 的世界
- 理论上是不可能的

我们的解决方法是：借助于参照

什么定义了意识

- 图灵测试
- 镜子测试

思维是一个有结构的过程



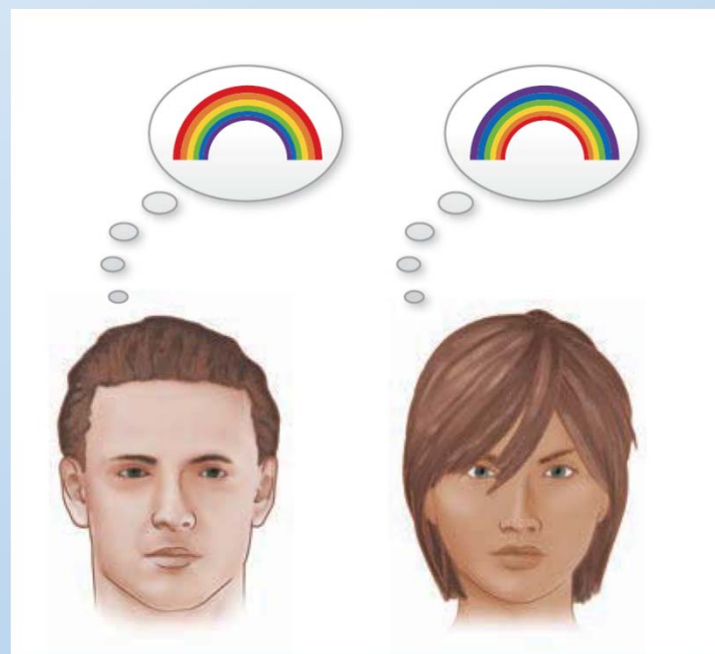
意识

- 意识与语言
- 心理概念与物理属性

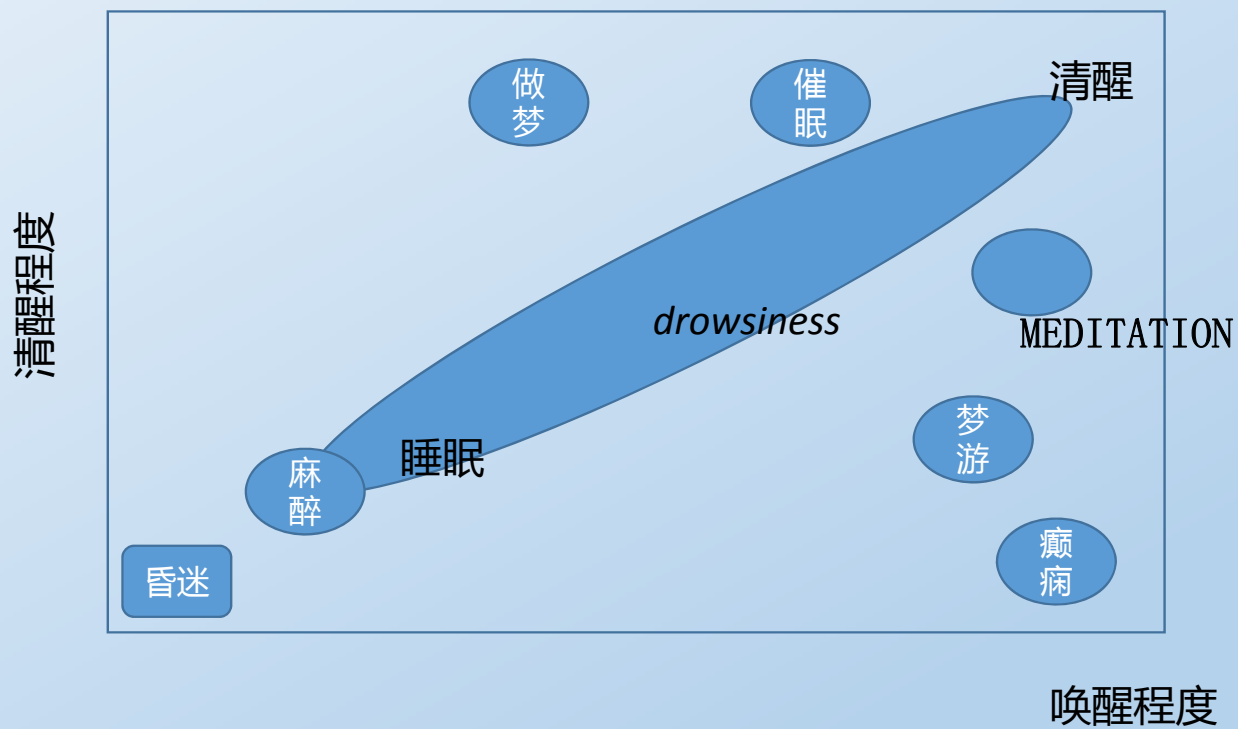


意识

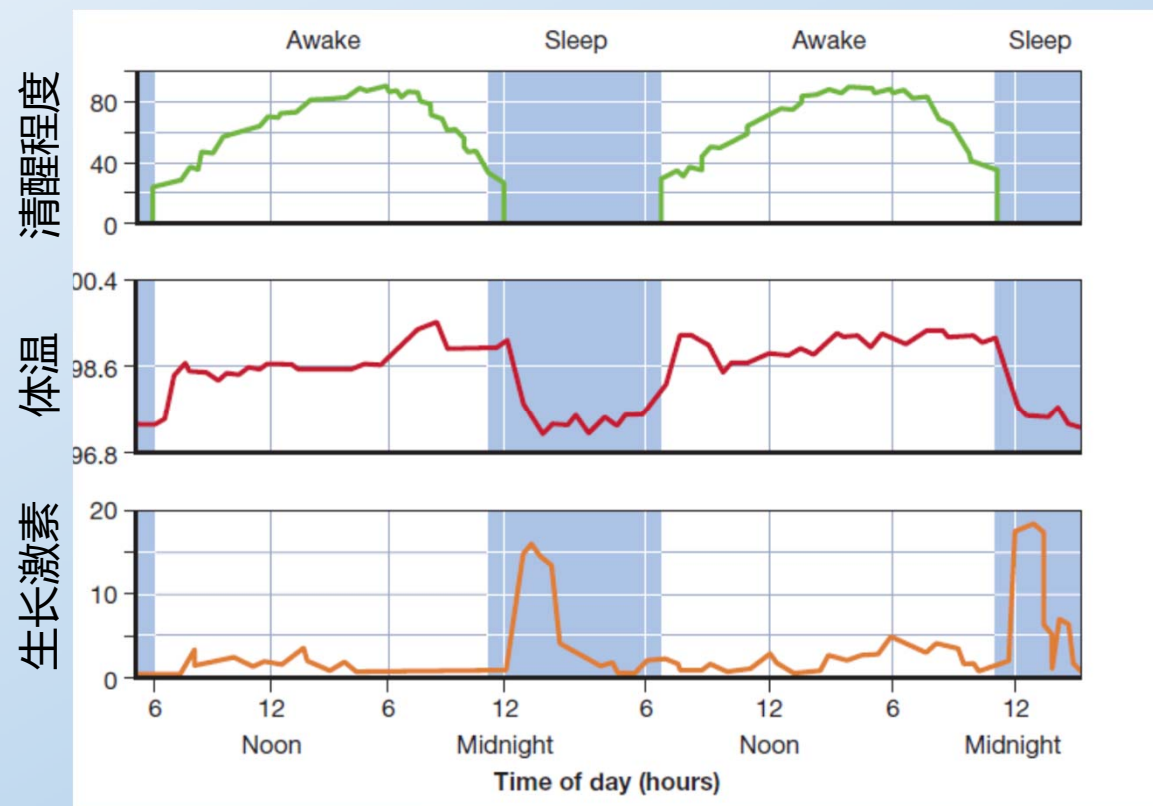
- 意识与语言
- 心理概念与物理属性



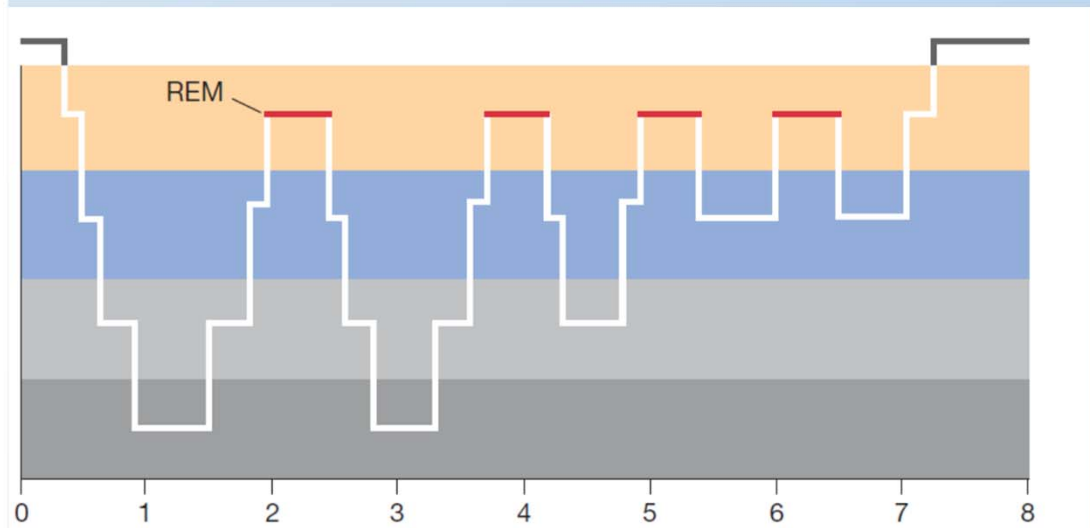
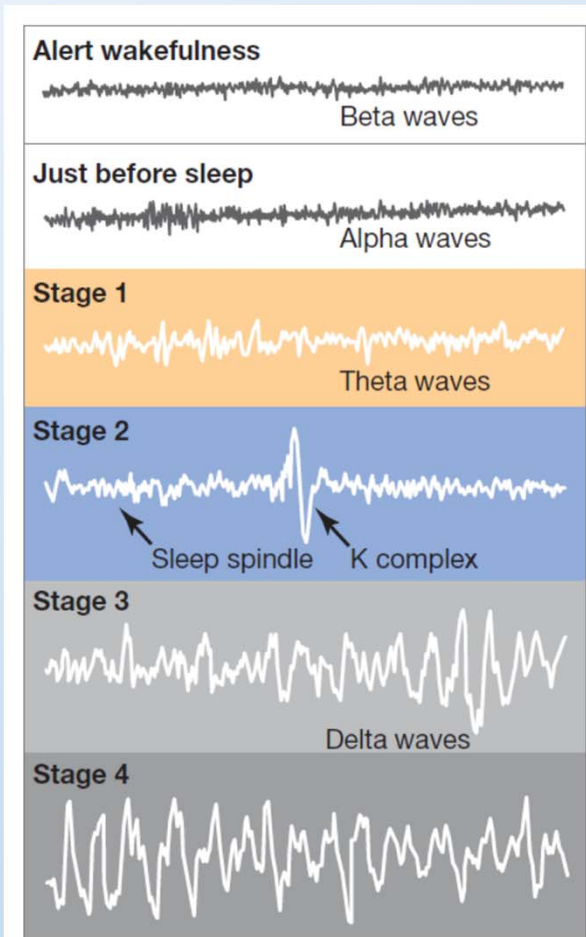
意识的种类



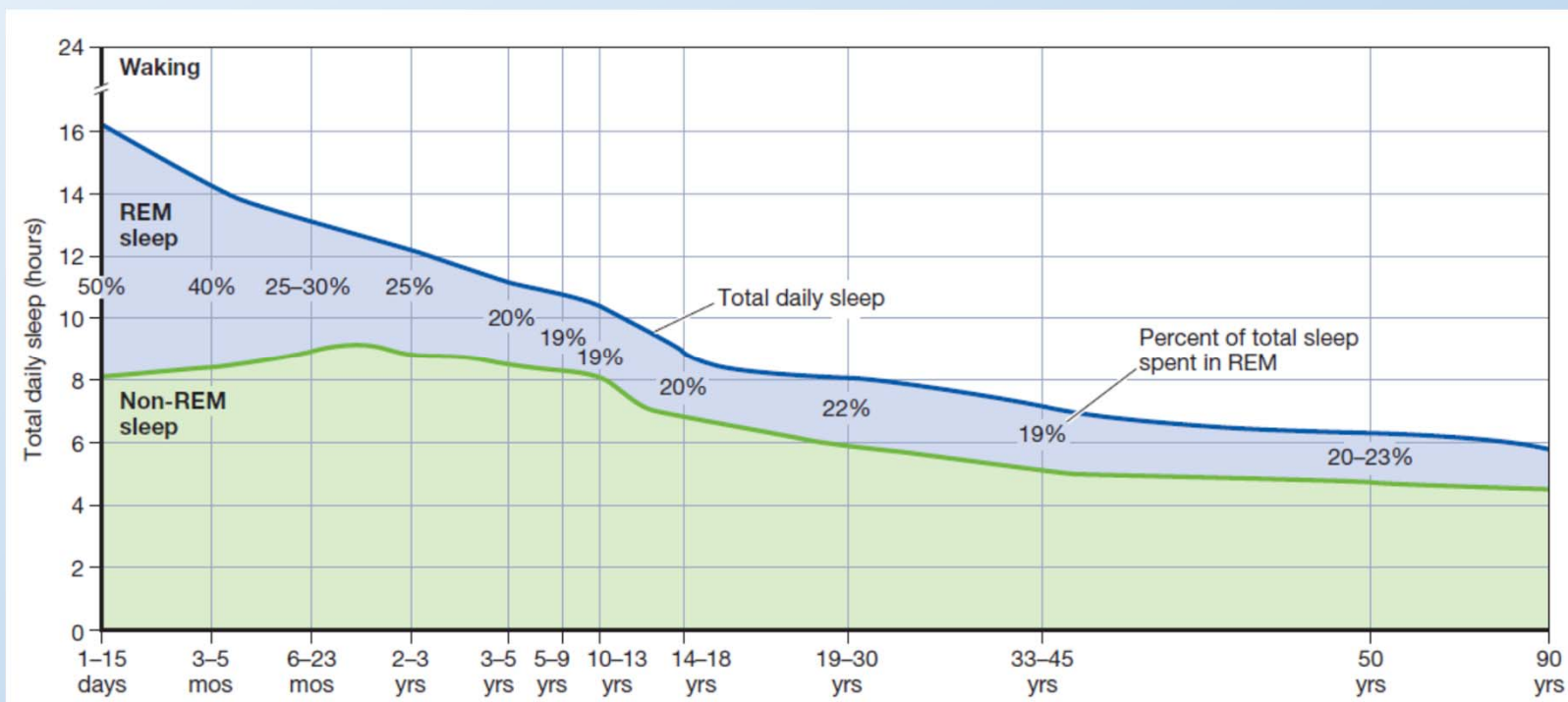
睡眠



睡眠



睡眠



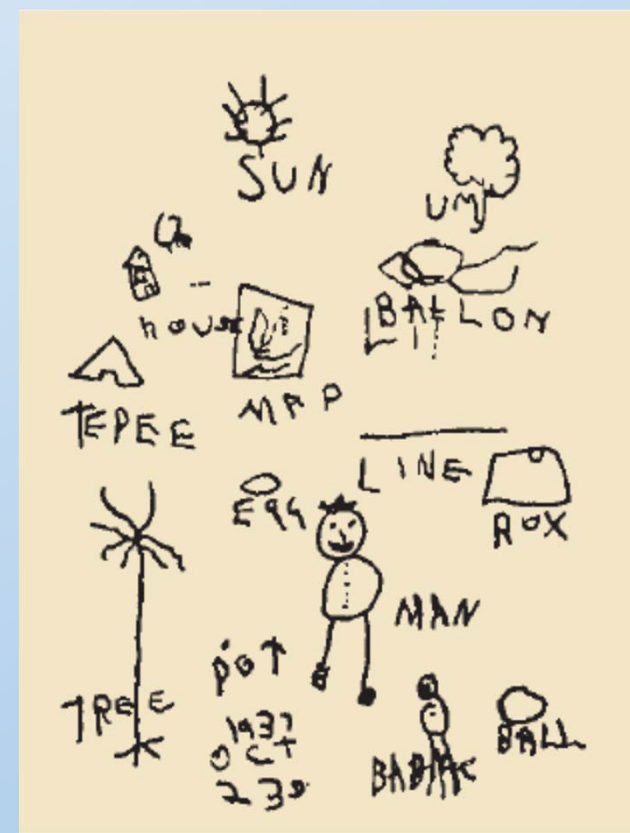
睡眠



催眠

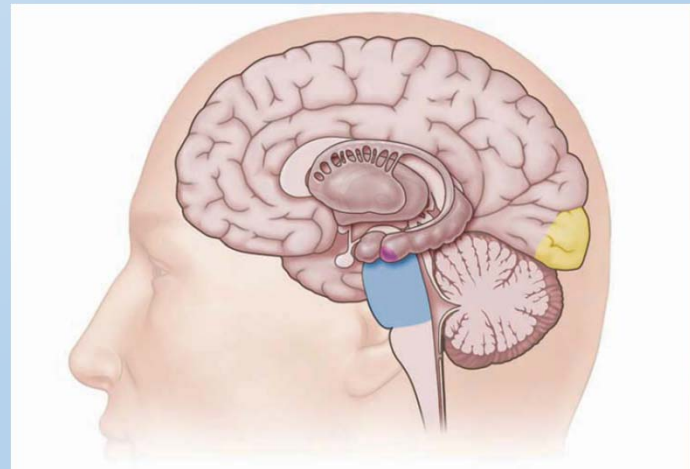




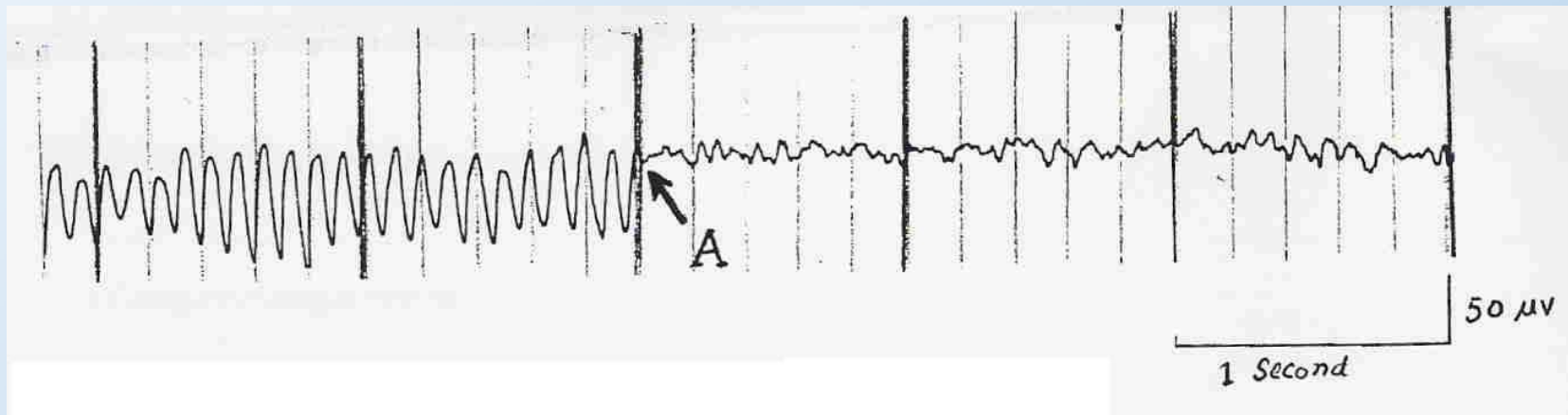


睡眠 - 梦

- 梦 - 发生在任何阶段
- 梦的内容
 - <http://dreambank.net/>
- 梦的原因



Desynchronization or Alpha block



- Cause:
 - Eyes opening (after closure)
 - Thinking by the subject (mathematical calculation)
 - Sound (clapping)

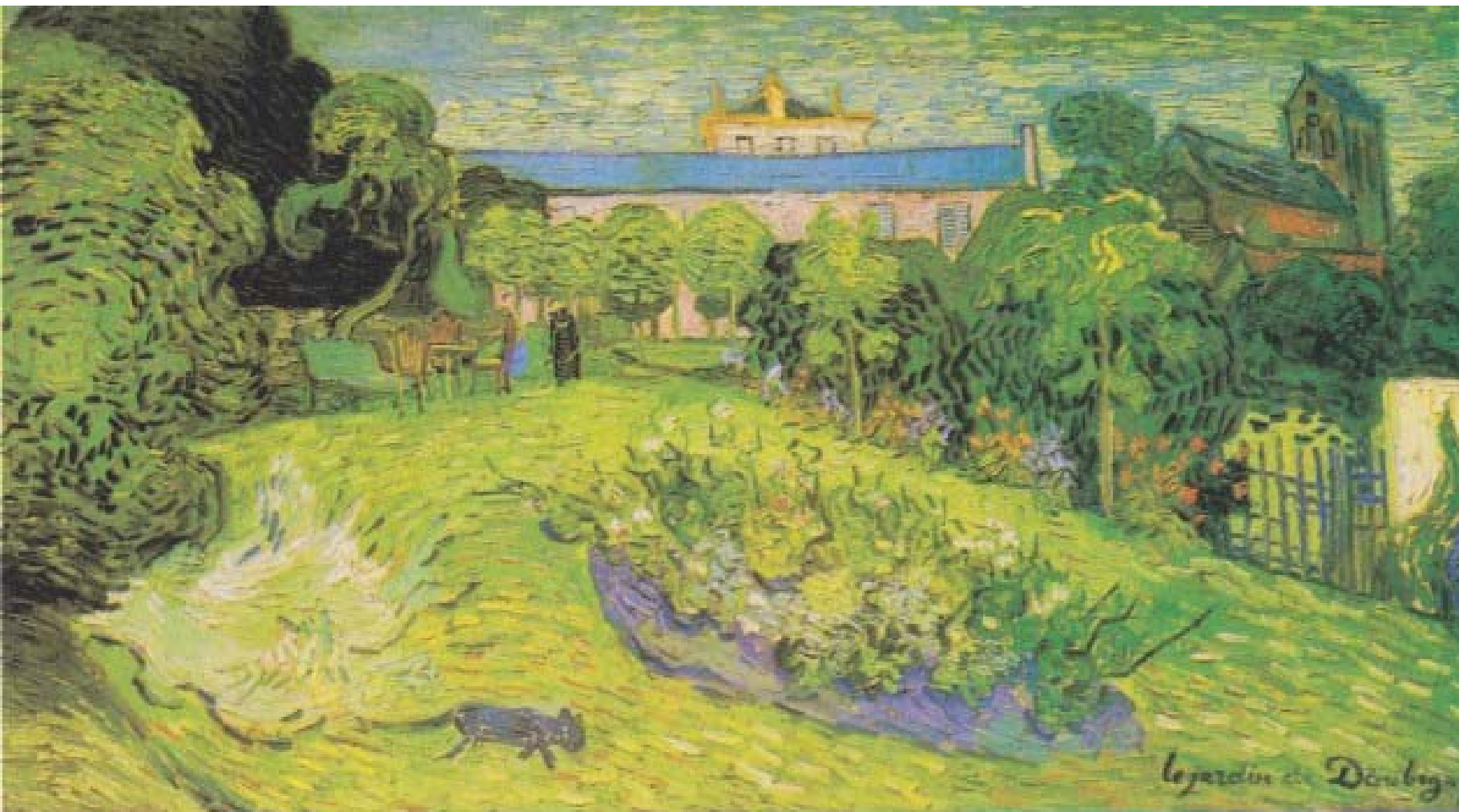
意识状态的改变





Wheatfield with Crows,

Vincent Van Gogh



Daubigny's Garden

Vincent Van Gogh



Riding with Death,
Jean-Michel Basquiat



Constance Mayer
& Pierre-Paul Prud'hon 皮埃尔普吕东



Le Concert

Nicolas De Stael



Untitled (Black On Gray)

Mark Rothko 马克·罗斯科

注意

- 世界里的事物和信息多至我们不可能全部处理；
- 选择性的处理一部分忽视另一部分的过程叫“注意”
 - - 目前还不知道“注意”是否是一个独立的过程
 - - 注意可以是主动的，也可以是无意识的

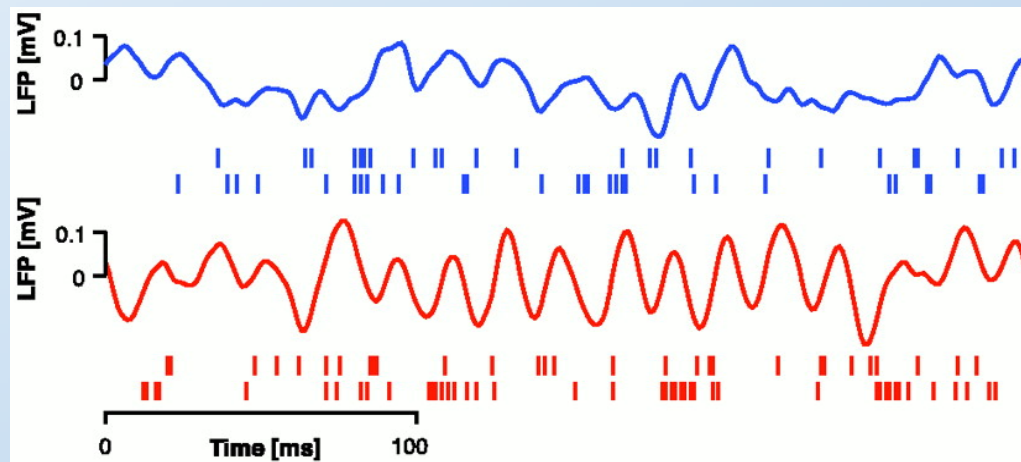
注意的特点

- 注意是非常昂贵的资源
- 注意的对象范围是很小的
- 只有被注意了刺激，才有可能被永久记忆

注意 与同步

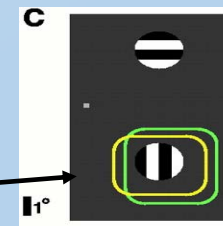
Experiments by Fries et al., 2001.

Simultaneous recordings of MUA and LFP, in primate area V4.



Blue: no attention
Red: attention

receptive fields



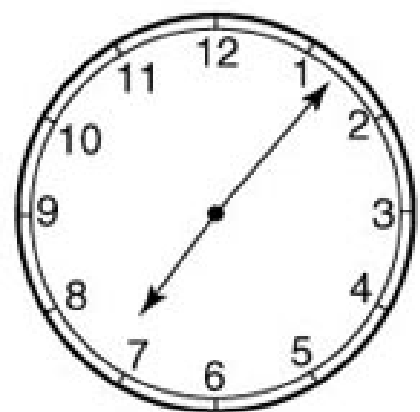
注意失效

Unilateral neglect

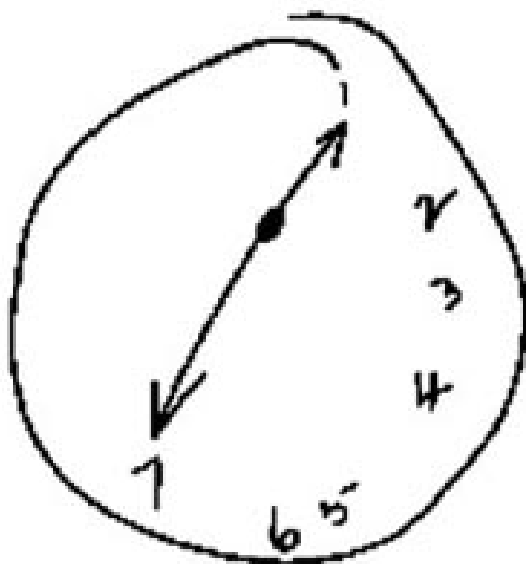
Balint syndrome

Unilateral Neglect

Model



Patient's Drawing



Model



Patient's Drawing

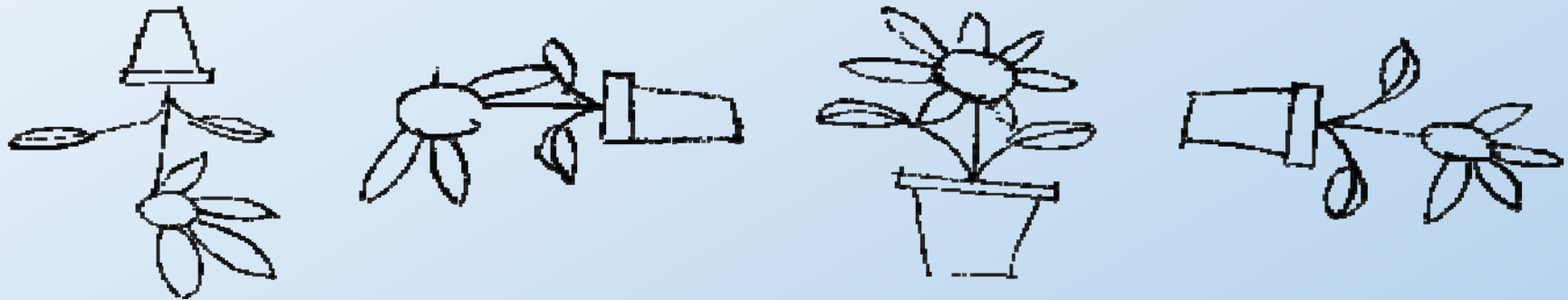


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Unilateral Neglect

1. 感官: 忽视一侧视野(extinction).
2. 运动: 一侧运动很差(manual exploration tasks)
3. 动机: 那侧视野没有什么重要的东西.

Unilateral Neglect: Frames of Reference

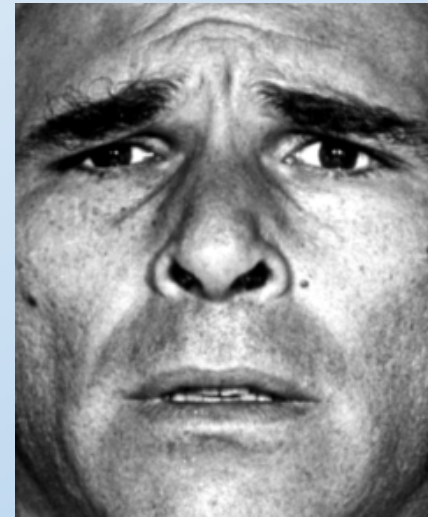
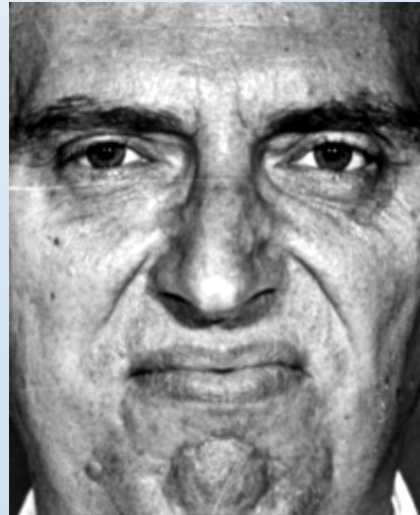


Neglect patient JM's copying of a daisy presented in different orientations.

Spatial or object-centered?

情绪与动机

Ekman's Standardized Emotional Expressions

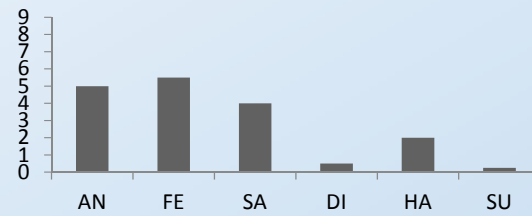


不同情绪的生理特点

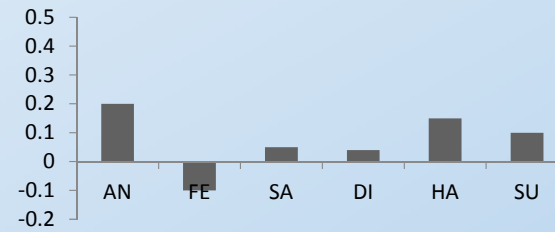
- Anger : ↑ HR, ↑ Finger Temp, ↑ SCL
- Fear: ↑ HR, ↓ Finger Temp, ↑ SCL
- Disgust: no change HR, no change Finger Temp, ↑ SCL
- Sadness: ↑ HR, no change Finger Temp, ↑ SCL

不同情绪的生理特点

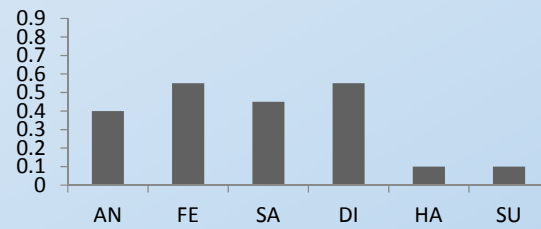
Heart rate



Finger temperature



Skin conductance



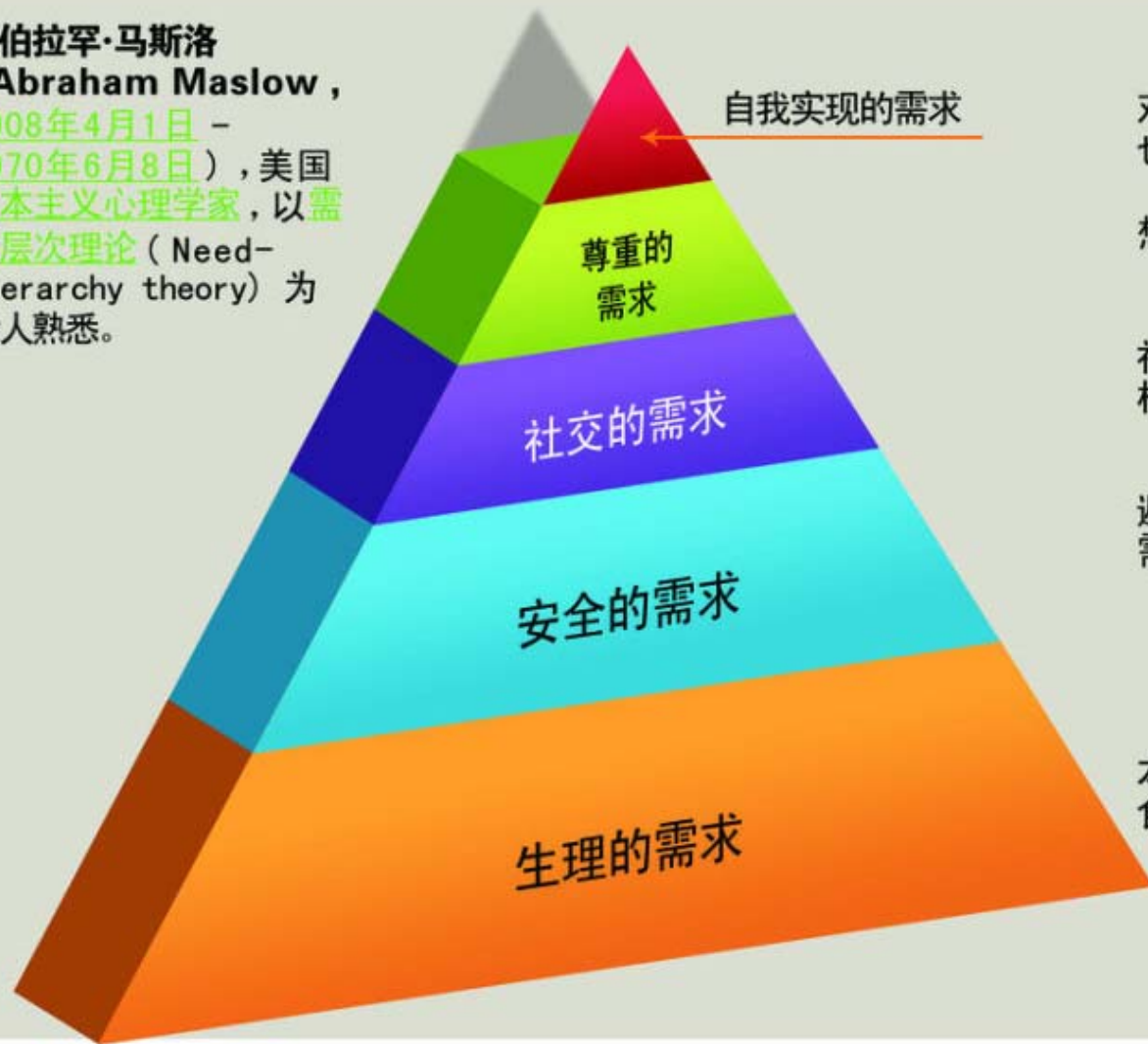
Muscle activity



(Levenson, Ekman, & Friesen, 1990)

马斯洛需求层次理论（模型）

亚伯拉罕·马斯洛
(Abraham Maslow ,
1908年4月1日 -
1970年6月8日) , 美国
人本主义心理学家, 以需
求层次理论 (Need-
hierarchy theory) 为
世人熟悉。



对理想实现等的需要
也称成长需要

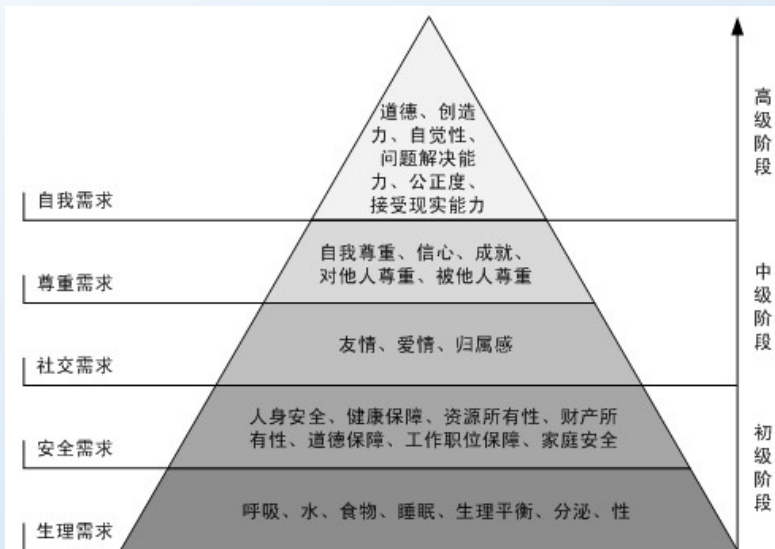
想被他人承认的需要

社会需要, 与他人交流
相关的需要变得更重要

避免对生命构成威胁的
需要

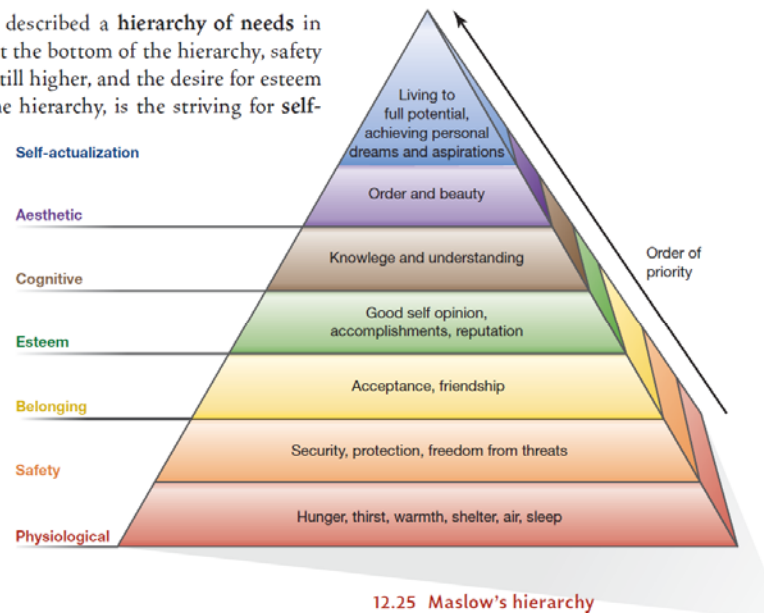
本能层次的需要, 包括
食欲、睡眠、欲望等

马斯洛的理论



...d by Maslow, who described a **hierarchy of needs** in which physiological needs are at the bottom of the hierarchy, safety needs are next, followed by belongingness needs, and the desire for esteem needs is still higher, and the desire for self-actualization is at the top of the hierarchy, is the striving for self-realize oneself to

...ple will strive for self-actualization or artistic achievement. Higher-order needs are more complex and large this is why people who write poetry generally have not eaten for days. If they are not fed out, there are people who survive rather than die. For example, a person who is painting, and a person who has faith regardless of the extent that they are a motive toward self-actualization such as the drive to become a person will become a person beneath it are



12.25 Maslow's hierarchy



动机的理论

本能理论



动机的理论

本能理论



驱力理论



Leptin deficiency

动机的理论

本能理论



驱力理论



Leptin deficiency



Rat with ventromedial hypothalamus lesion

动机的理论

本能理论



驱力理论



Arousal Theory
唤起理论





文化差异

Rubens' s
Venus before a Mirror
(1614-1615)



Rubens' s
Venus before a Mirror
(1614–1615)





Rubens' s
Venus before a Mirror
(1614–1615)

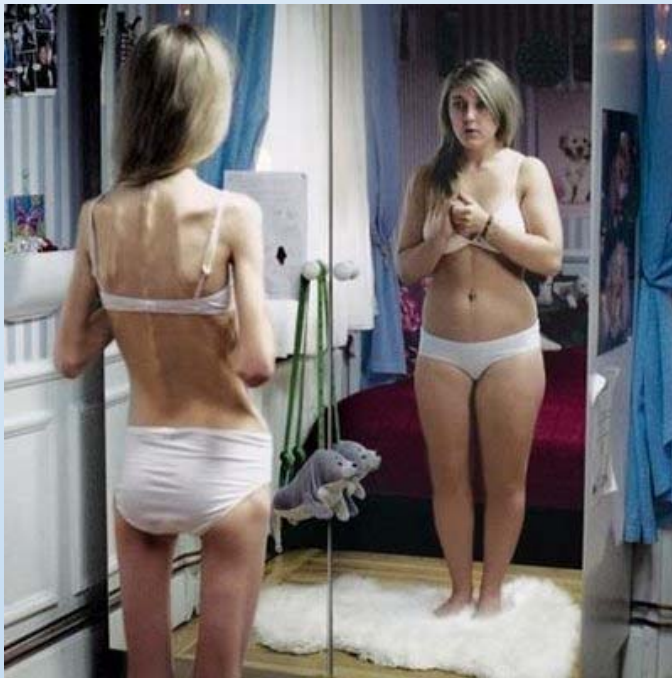




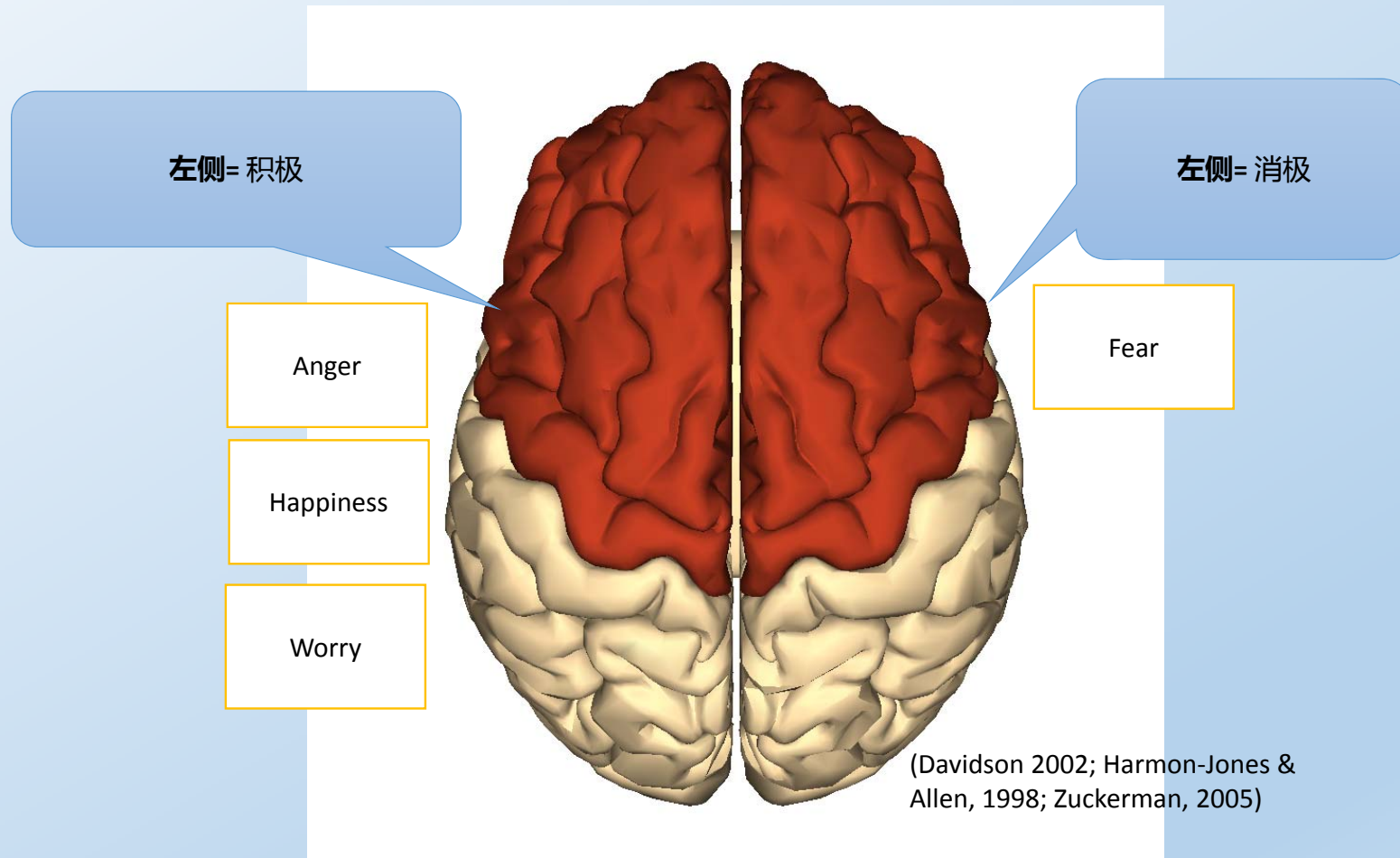
Rubens' s
Venus before a Mirror
(1614–1615)



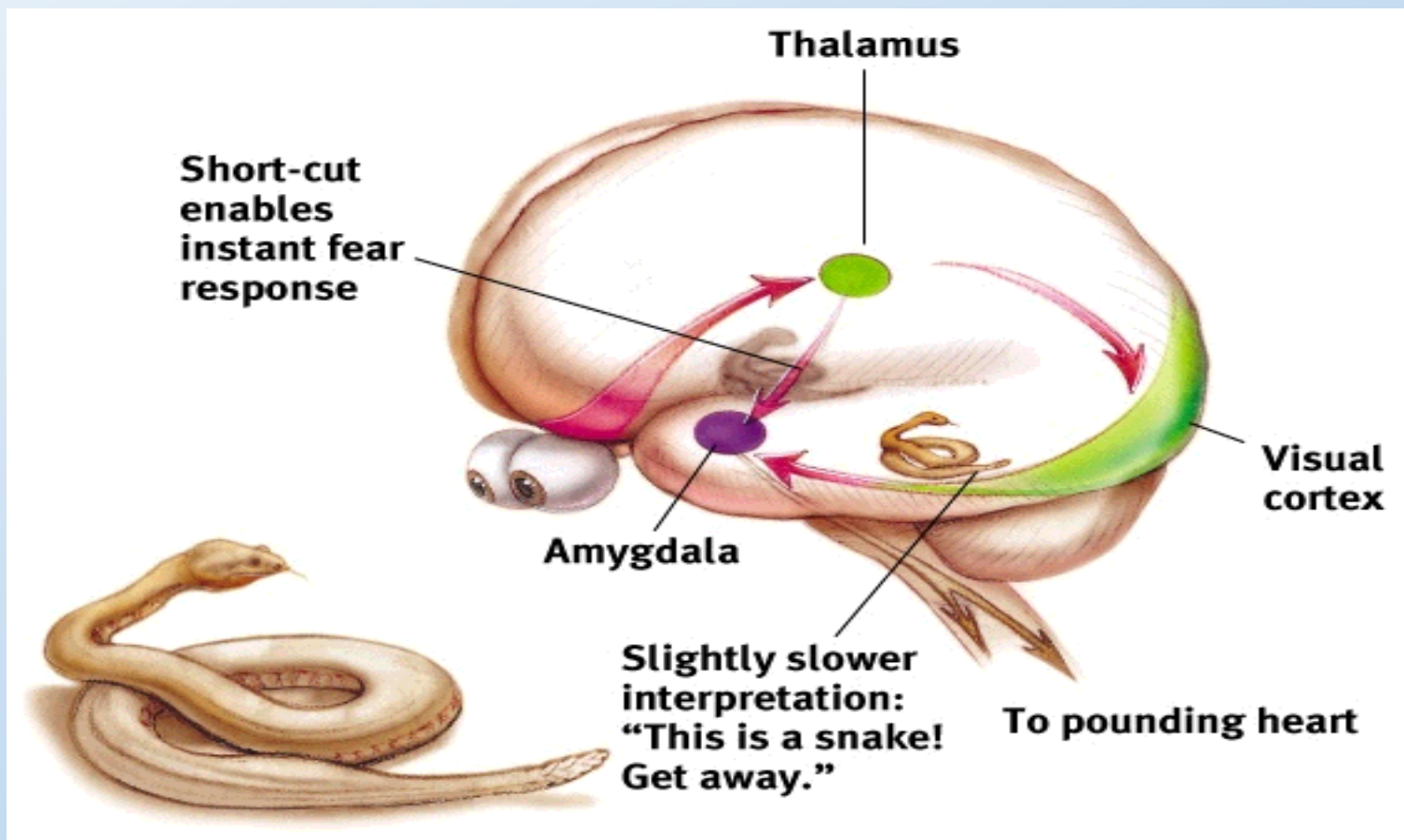
性别差异 - Anorexia Nervosa



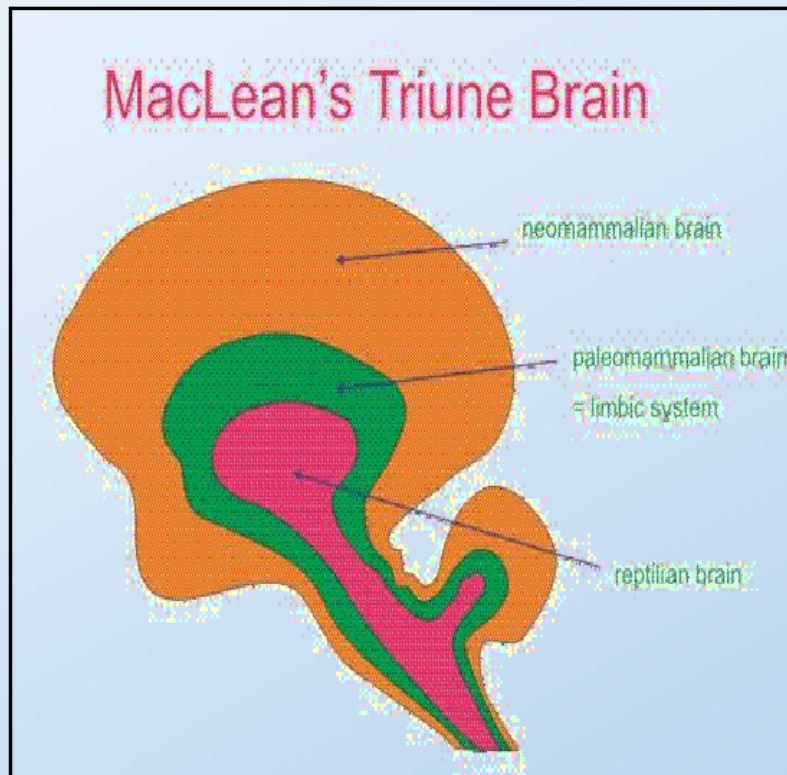
左右半脑



大脑的情绪回路



情绪相关的大脑区域-概论



爬行动物脑:

- 运动
- 基础情绪 (探索, 回避, 攻击, 性)

古哺乳动物脑:

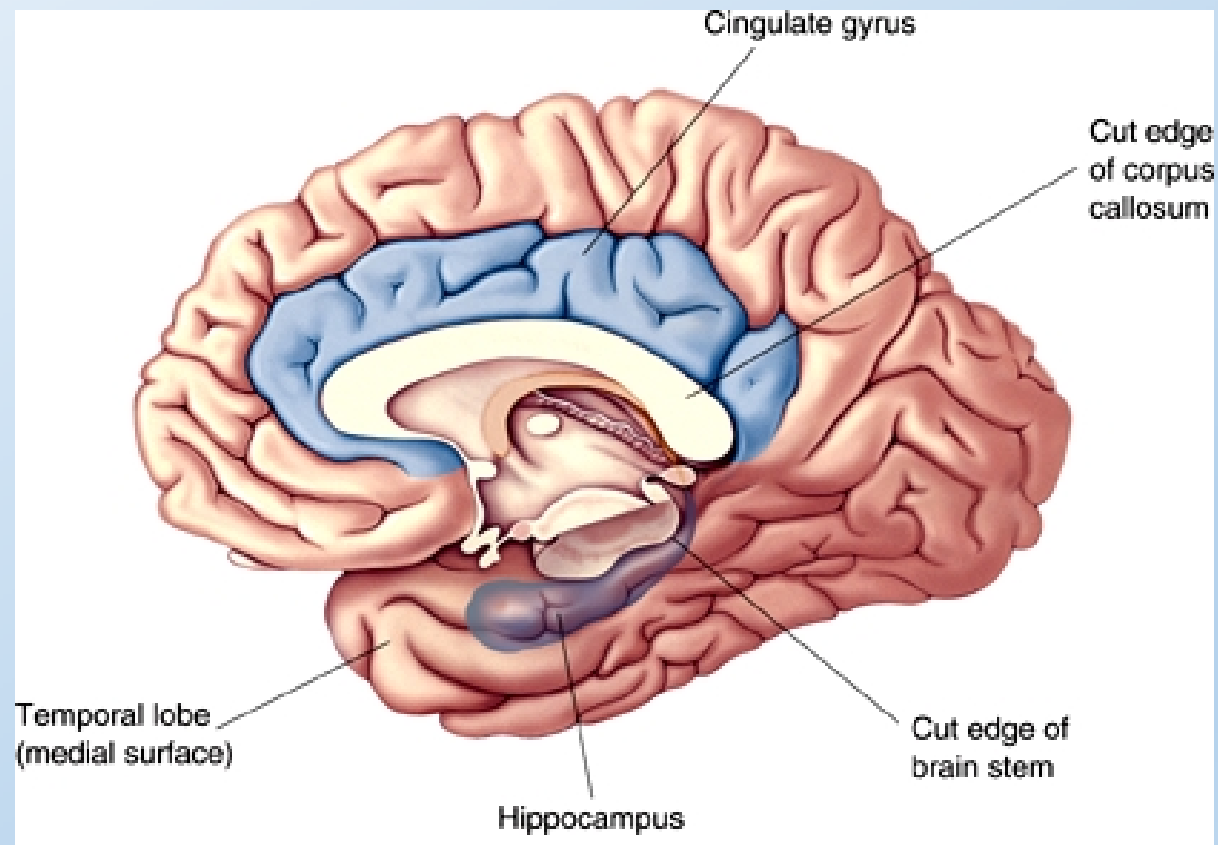
- 记忆, 社会活动

新哺乳动物脑:

- 认知/对情绪的评估

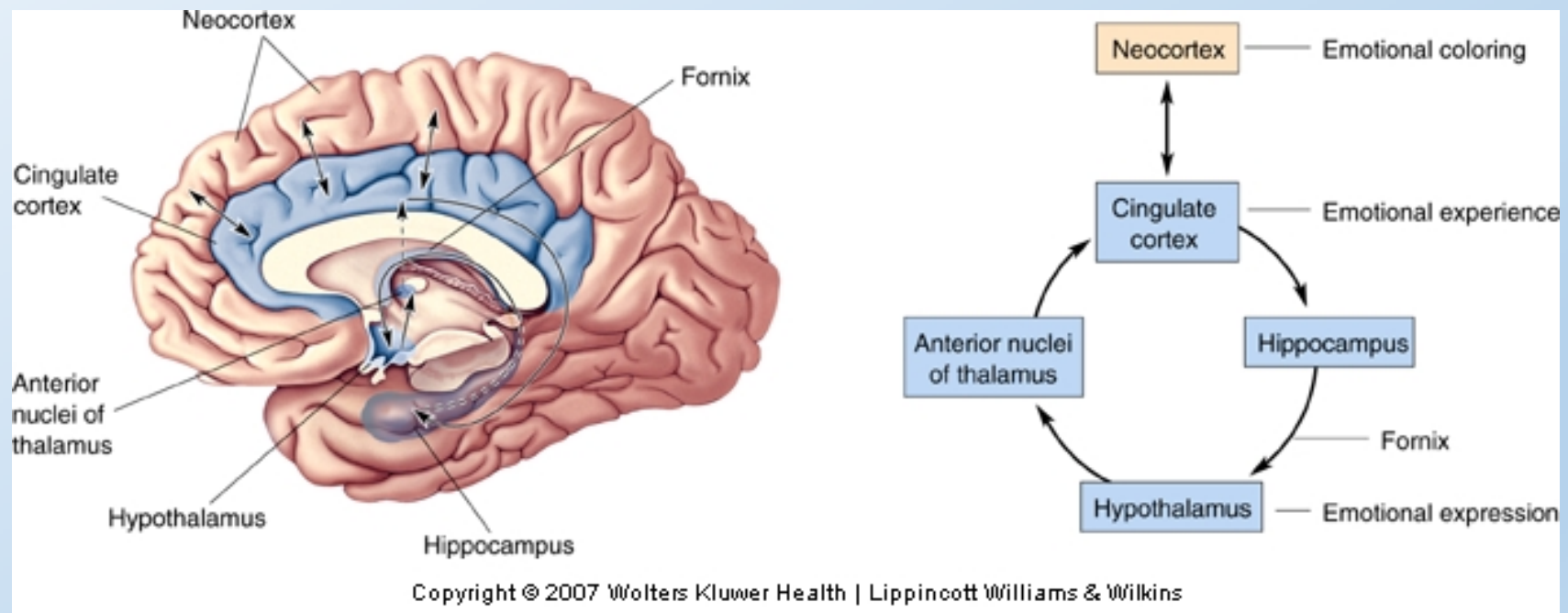
边缘回路，边缘系统

- Broca's Limbic Lobe



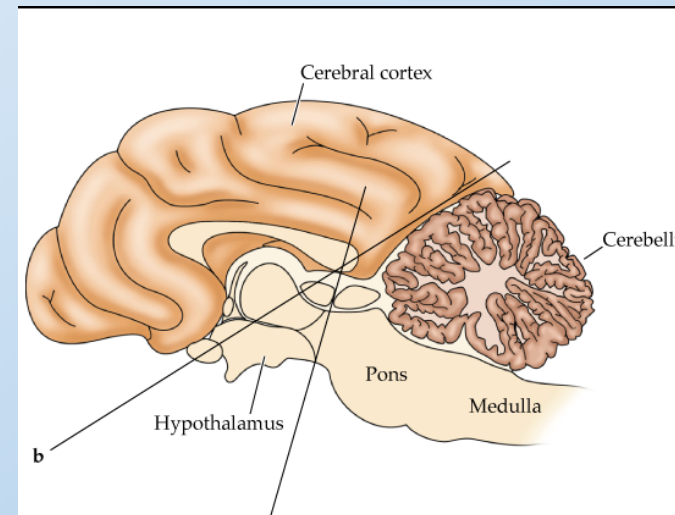
边缘回路，边缘系统

- The Papez Circuit



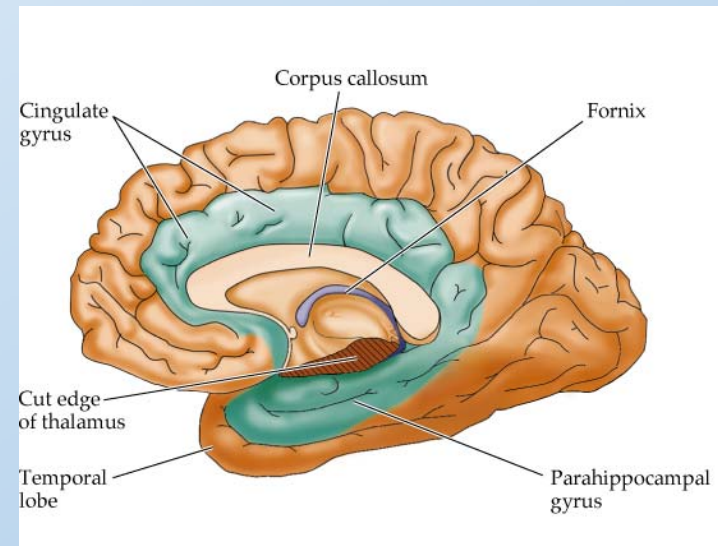
Flynn, 1960s

- 猫的下丘脑:
攻击, 怒



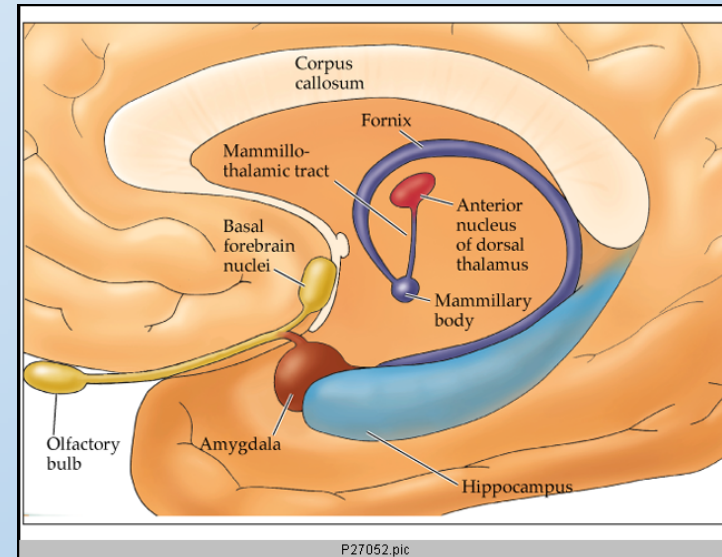
Nucleus Accumbens(伏隔核)

- 奖赏

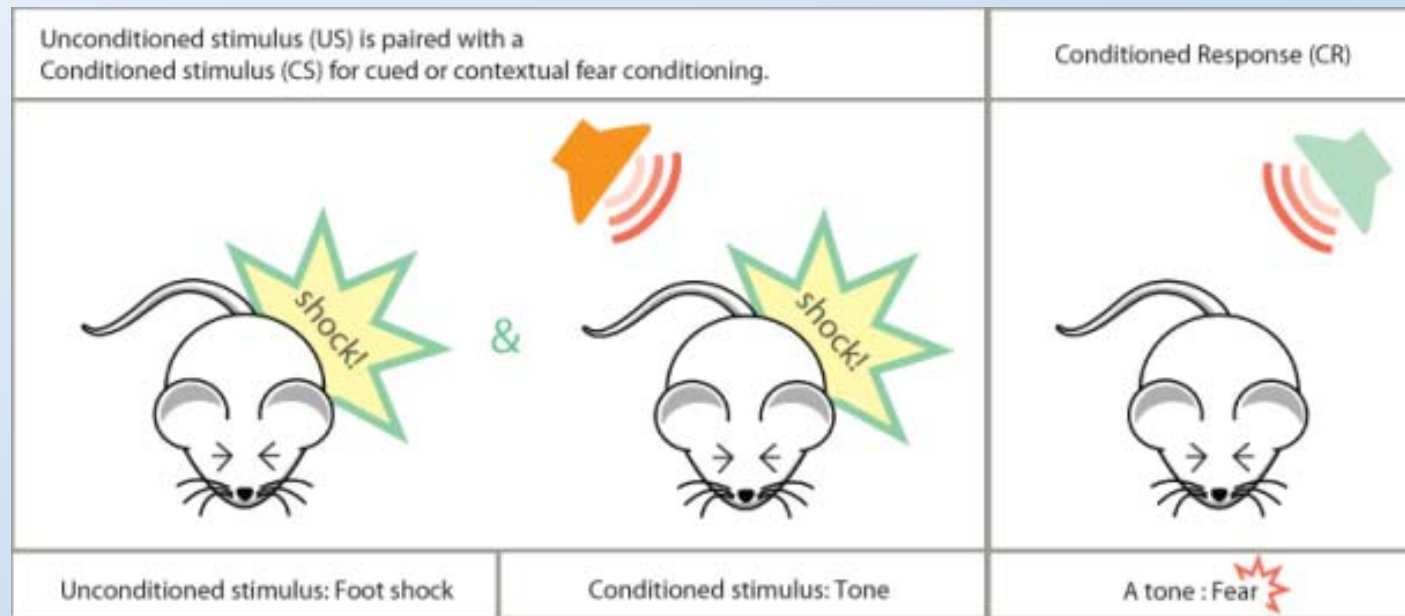


其它相关度较小的脑区

- Hippocampus (海马)
- Olfactory (嗅球)

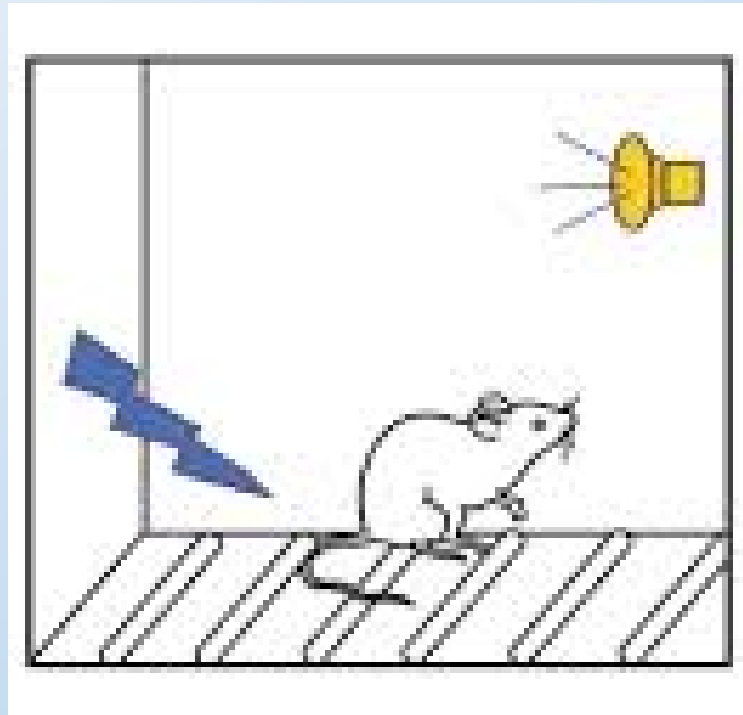


杏仁核 恐惧



[Armony, J.L. \(2013\). Current emotion research in behavioral neuroscience: The role\(s\) of the amygdala. *Emotion Review*, 5, 104-115. doi:10.1177/1754073912457208](#)

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[Armony, J.L. \(2013\). Current emotion research in behavioral neuroscience: The role\(s\) of the amygdala. *Emotion Review*, 5, 104-115. doi:10.1177/1754073912457208](#)

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