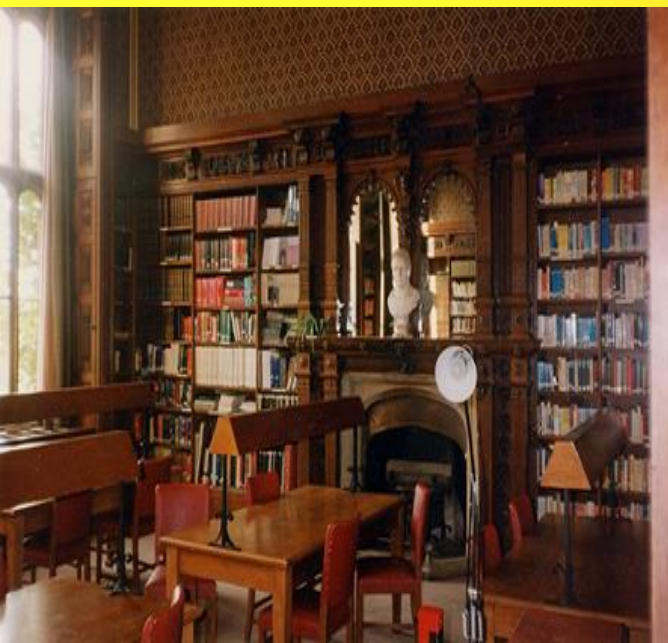
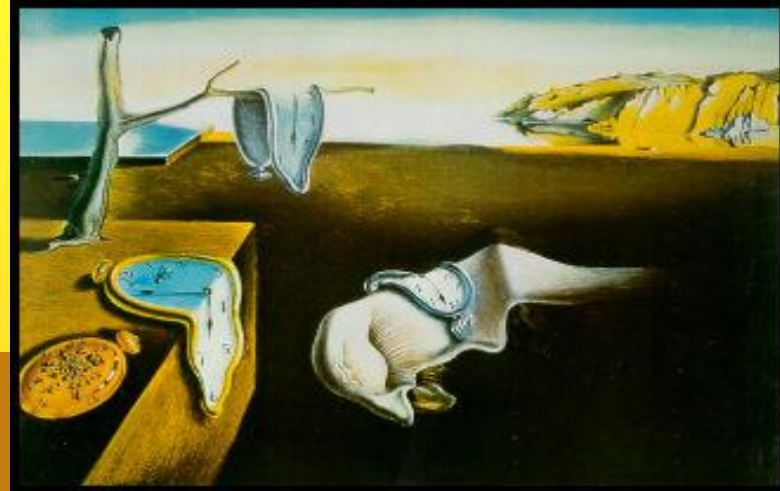


我们都是自己记忆的产物……

心理学及应用——记忆



浙江大学 心理与行为科学系

张萌

记忆过程



“记”

“忆”

Put into memory

Recover from memory

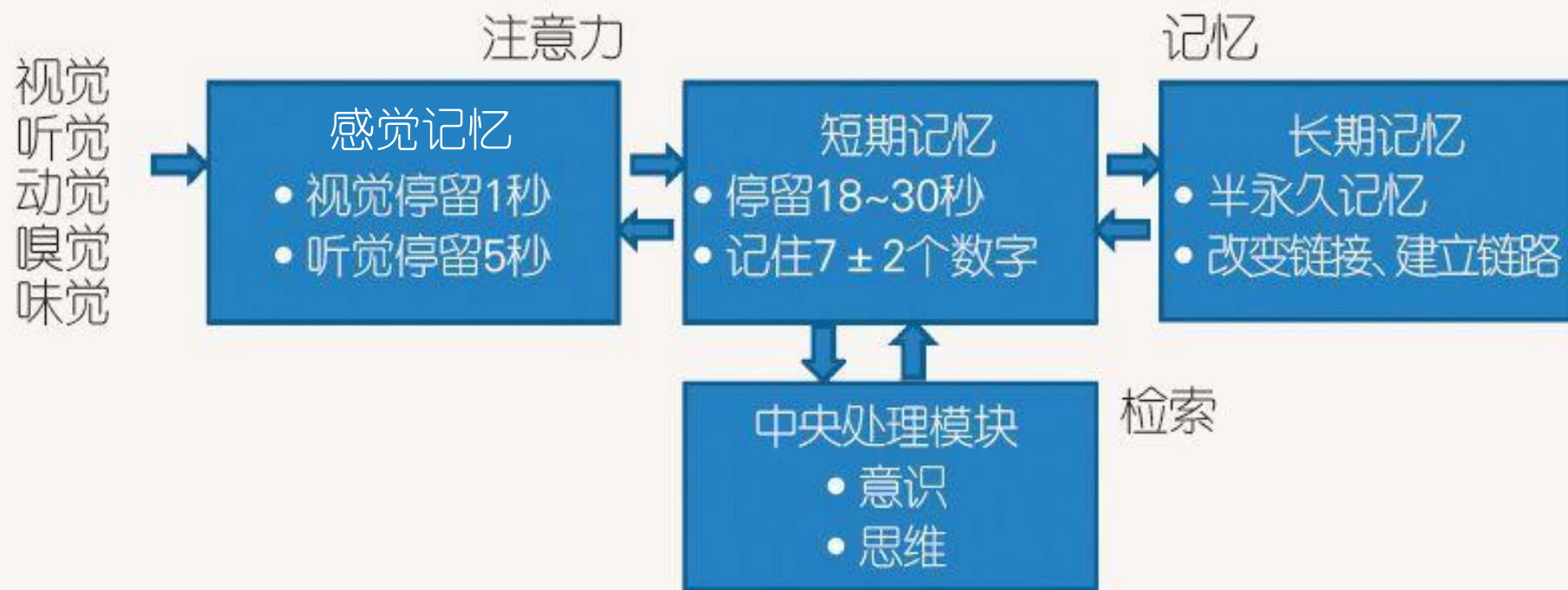
存储

Hold in memory



我们来做一次角色扮演.....

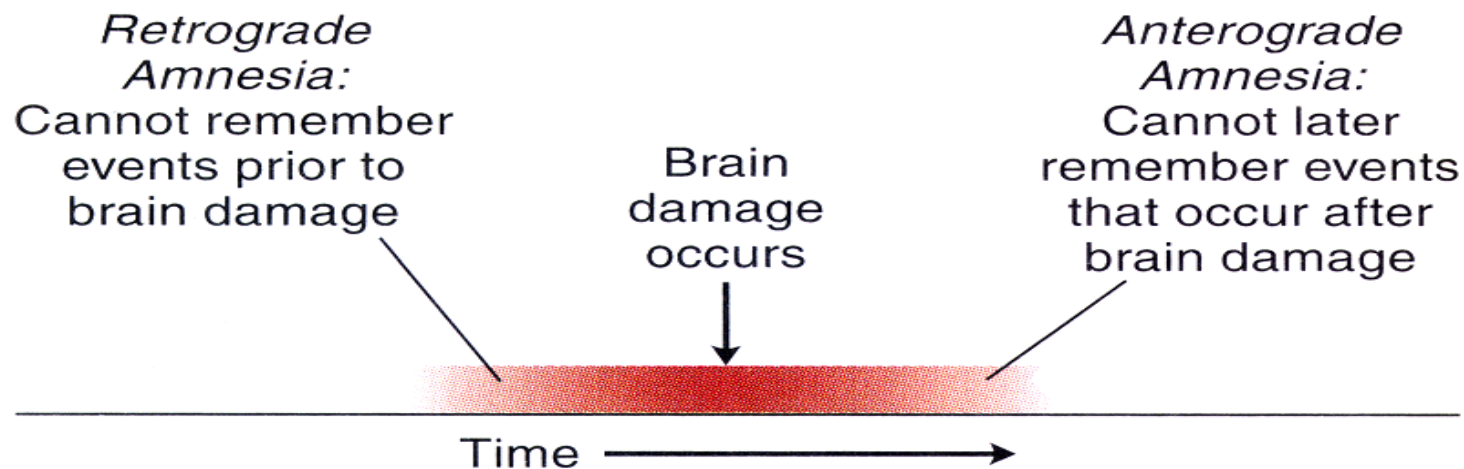
记忆的模型



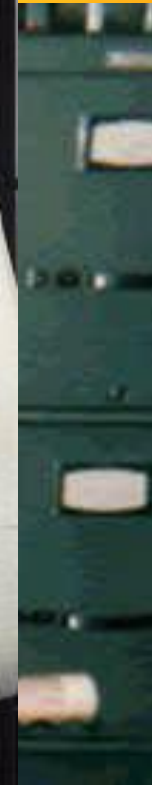
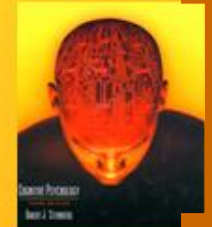
两种失忆症.....

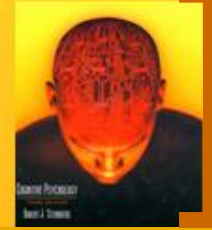


► A Schematic Definition of Retrograde Amnesia and Anterograde Amnesia



[著名





[短时记忆

3 5 7 7 7 0 0 4 4 3 1

短时记忆的容量



- 短时记忆的容量： 7 ± 2 组块 (Chunk)。
- 组块大小随个人的经验组织而有所不同。

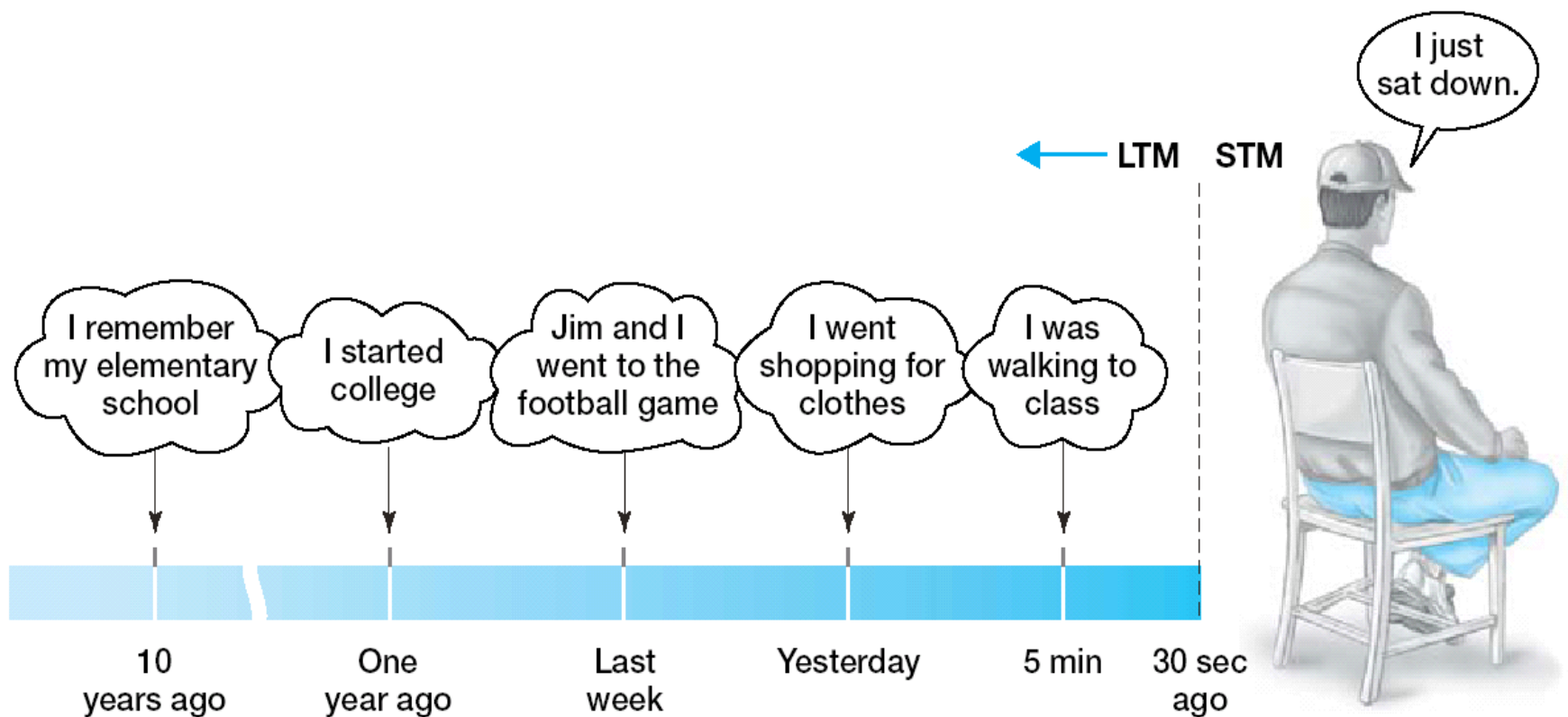
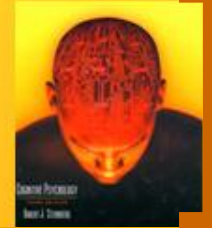
N e w Y o r k S t o c k E x c h a n g e

New York Stock Exchange

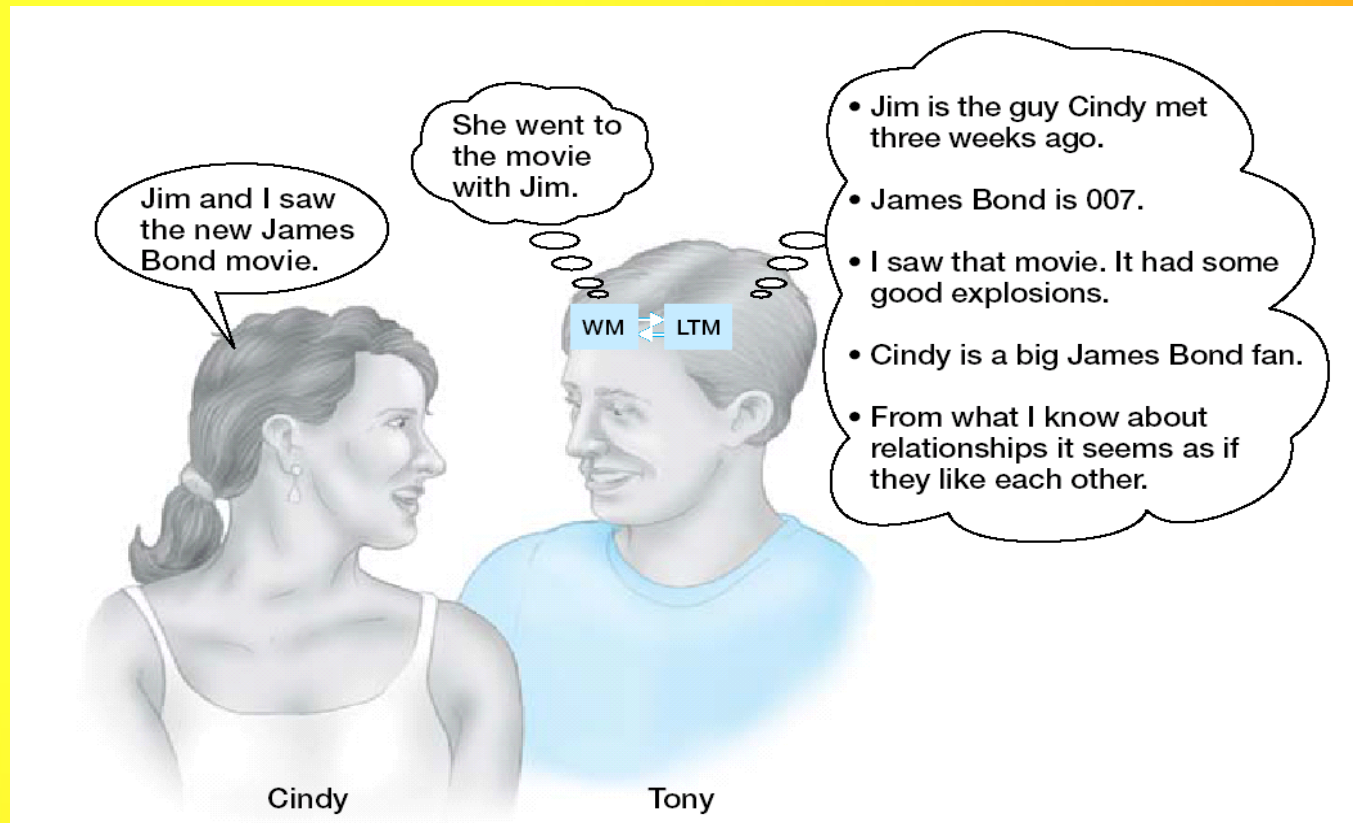
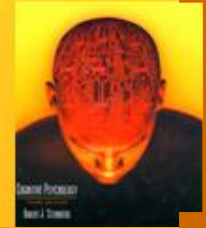
NYSE

- 为什么有些人成为专家？ 专家与新手

长时记忆



Long-term memory covers a span that stretches from about 30 seconds ago to your earliest memories. Thus, all of this student's memories, except the memory "I just sat down," would be classified as long-term memories.



Tony's STM, which is dealing with the present, and his LTM, which contains knowledge relevant to what is happening, work together as Cindy tells him something.

长时记忆的分类：根据内容



- **情景记忆**：对个人亲身经历的、发生在一定时间和地点的事件的记忆。
- **语义记忆**：对各种有组织的知识的记忆。
- **情绪记忆**：以体验过的情绪或情感为内容的记忆。

长时记忆的分类：根据意识性



- **内隐记忆**：人们不能有意意识回忆，却能够在行为中表现出来的经验
- **外显记忆**：在有意识的控制下，过去经验对当前作业产生的有意识的影响



FOX

began with the study of Henry.

关于内隐记忆—HM的故事



► The Mirror-Drawing Task



Source: Adapted from Milner, 1965.

Copyright © 2001 by Allyn & Bacon



离Hushabye山不远...

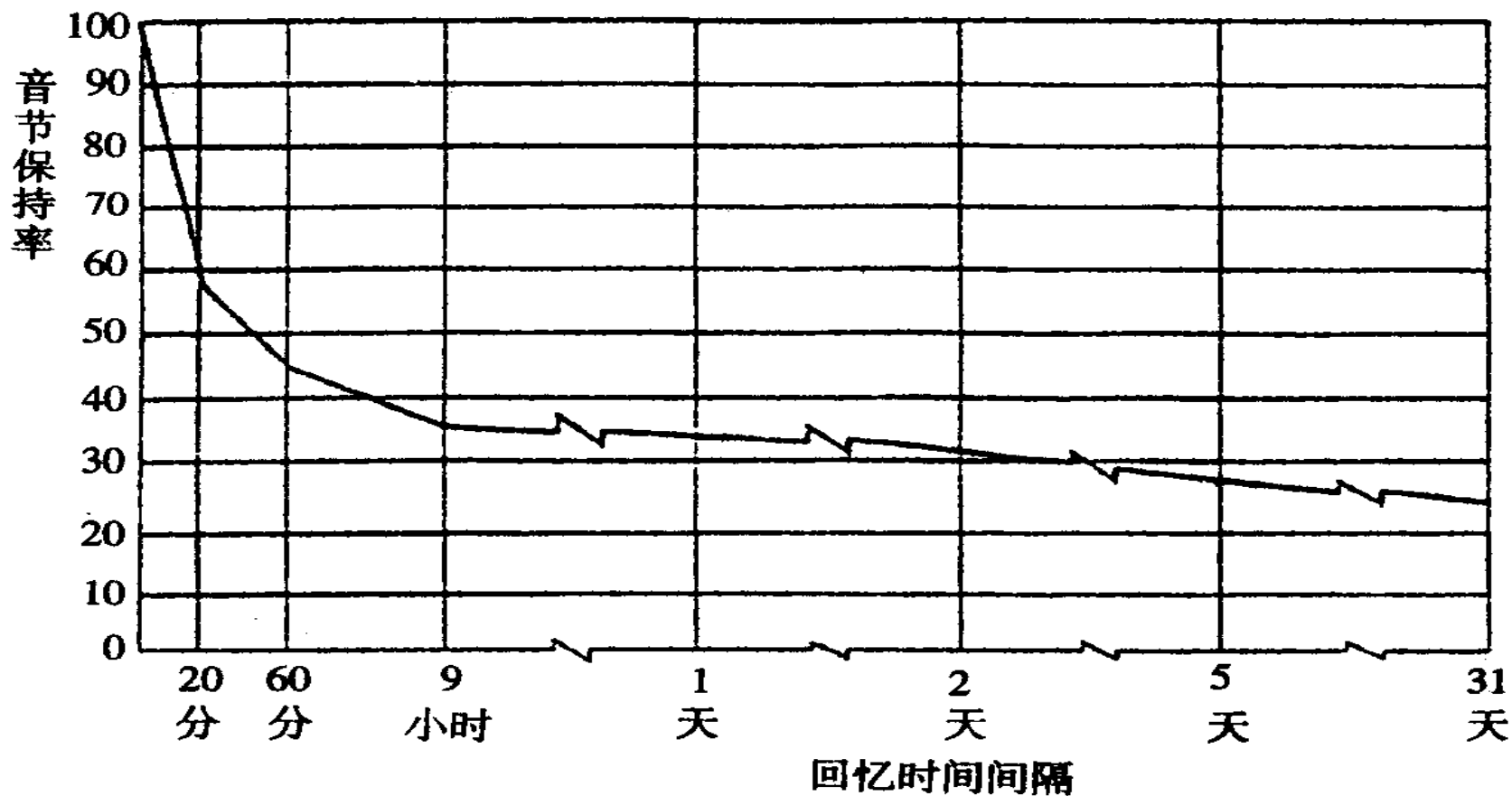
长时记忆与遗忘



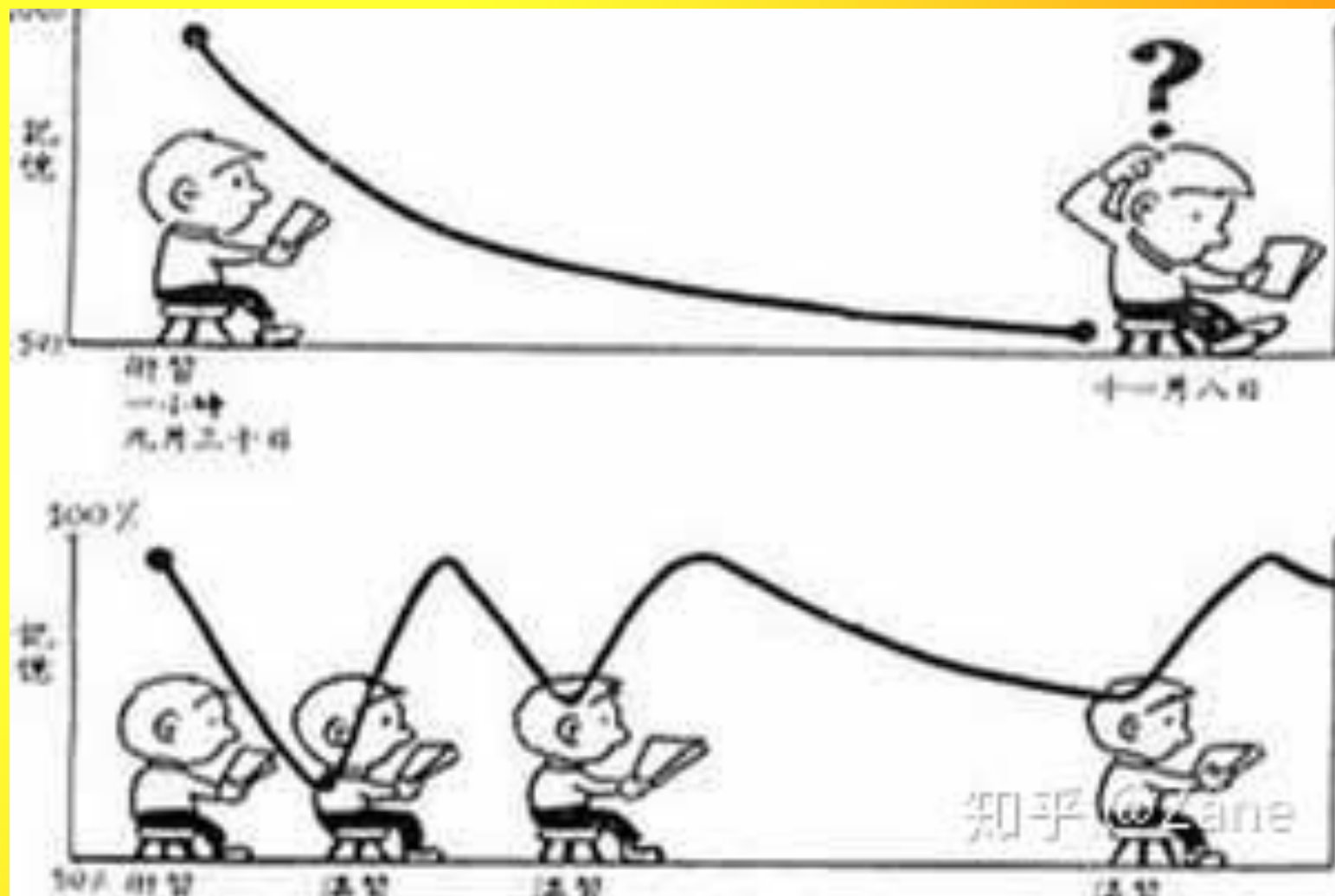
- 回忆 (recall)
- 再认 (recognize)



艾宾浩斯遗忘曲线



对抗遗忘规律的最优解——重复



意义识记优于机械识记

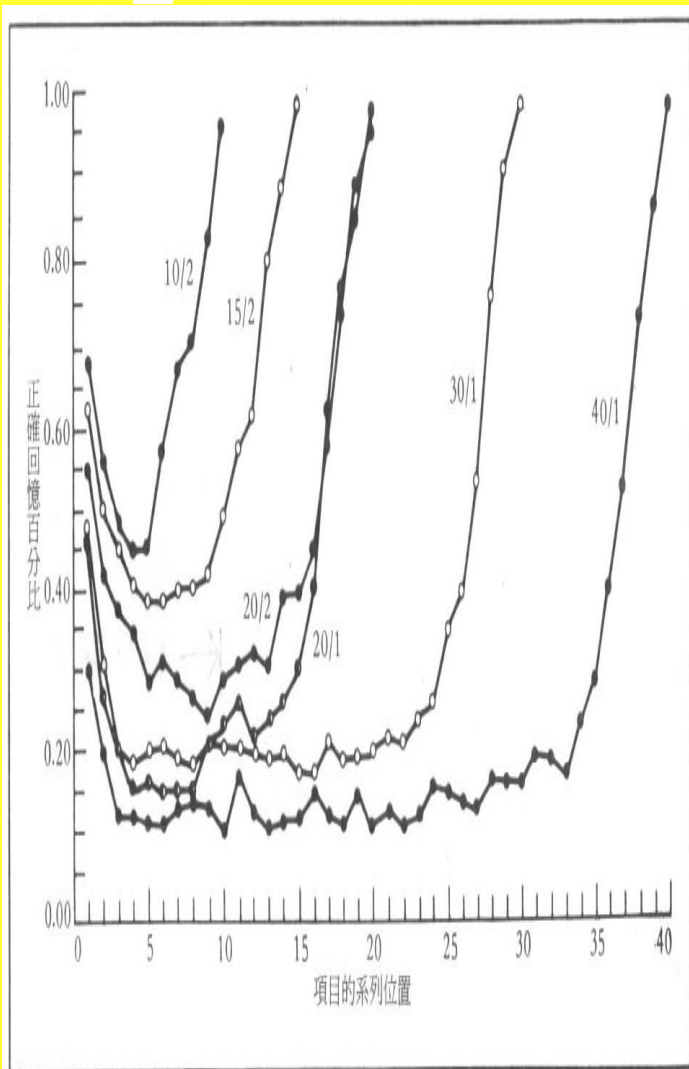


昨日入城市
归来泪满襟
遍身罗绮者
不是养蚕人

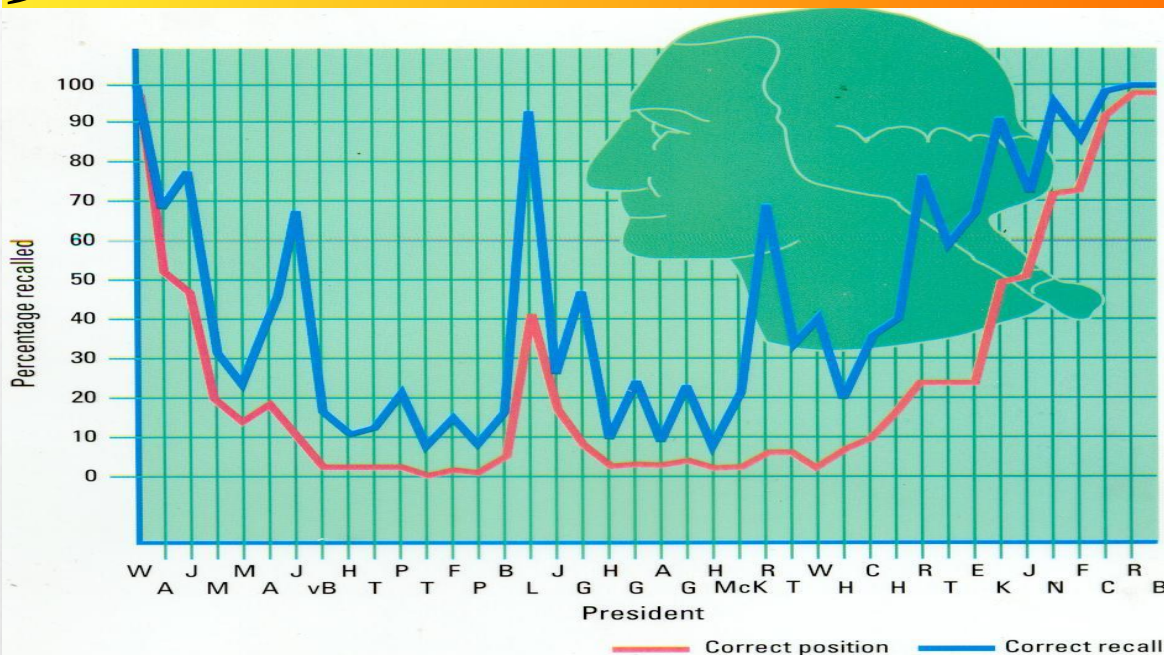
生当作人杰
死亦为鬼雄
至今思项羽
不肯过江东

- 结果表明，第一首由于形象具体，易于理解，所以读6遍就能背诵，第二首则有儿童不懂的典故，不易理解，结果读了14遍才能勉强背诵出。

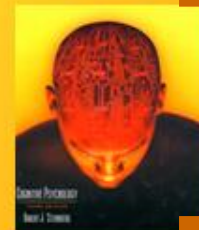
记忆的顺序影响遗忘



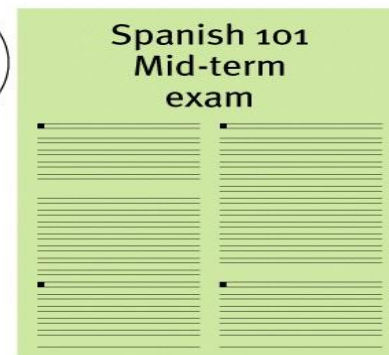
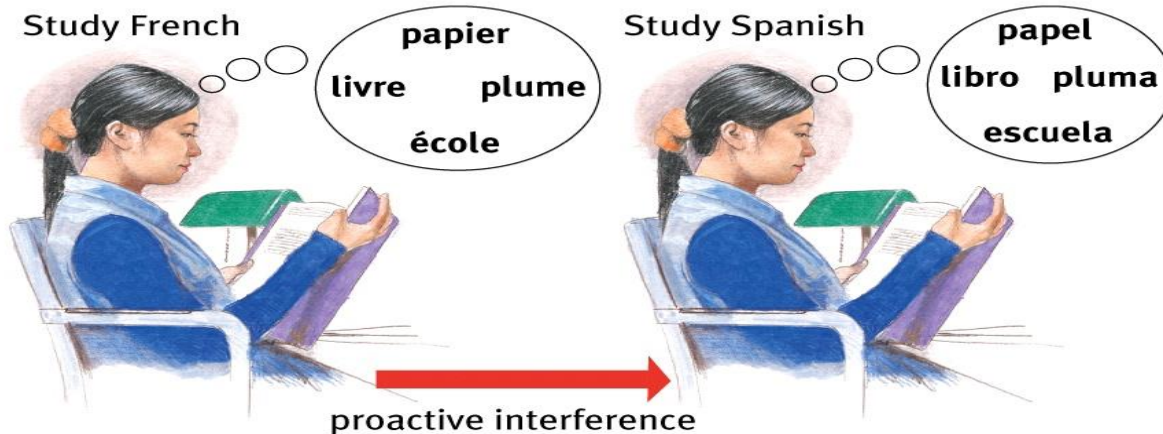
- **系列位置效应**：在回忆材料时，开头、结尾材料记忆好，中间材料记忆较差的现象。
- **近因效应**：最后呈现的材料最易回忆，遗忘较少。
- **首因效应**：最先呈现的材料较易回忆，遗忘较少。



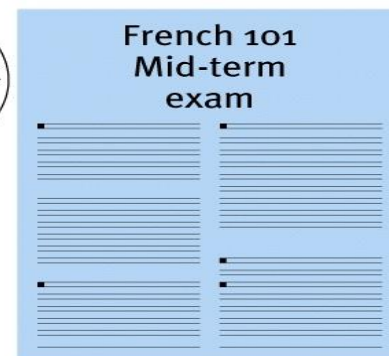
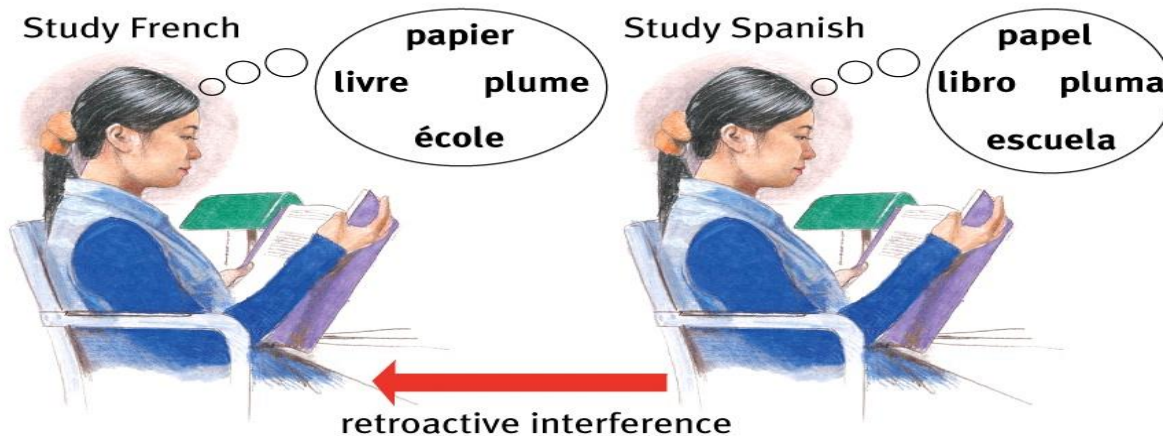
前摄抑制 vs. 倒摄抑制



French, learned beforehand, interferes proactively



Spanish, learned afterward, interferes retroactively



来自环境的影响.....

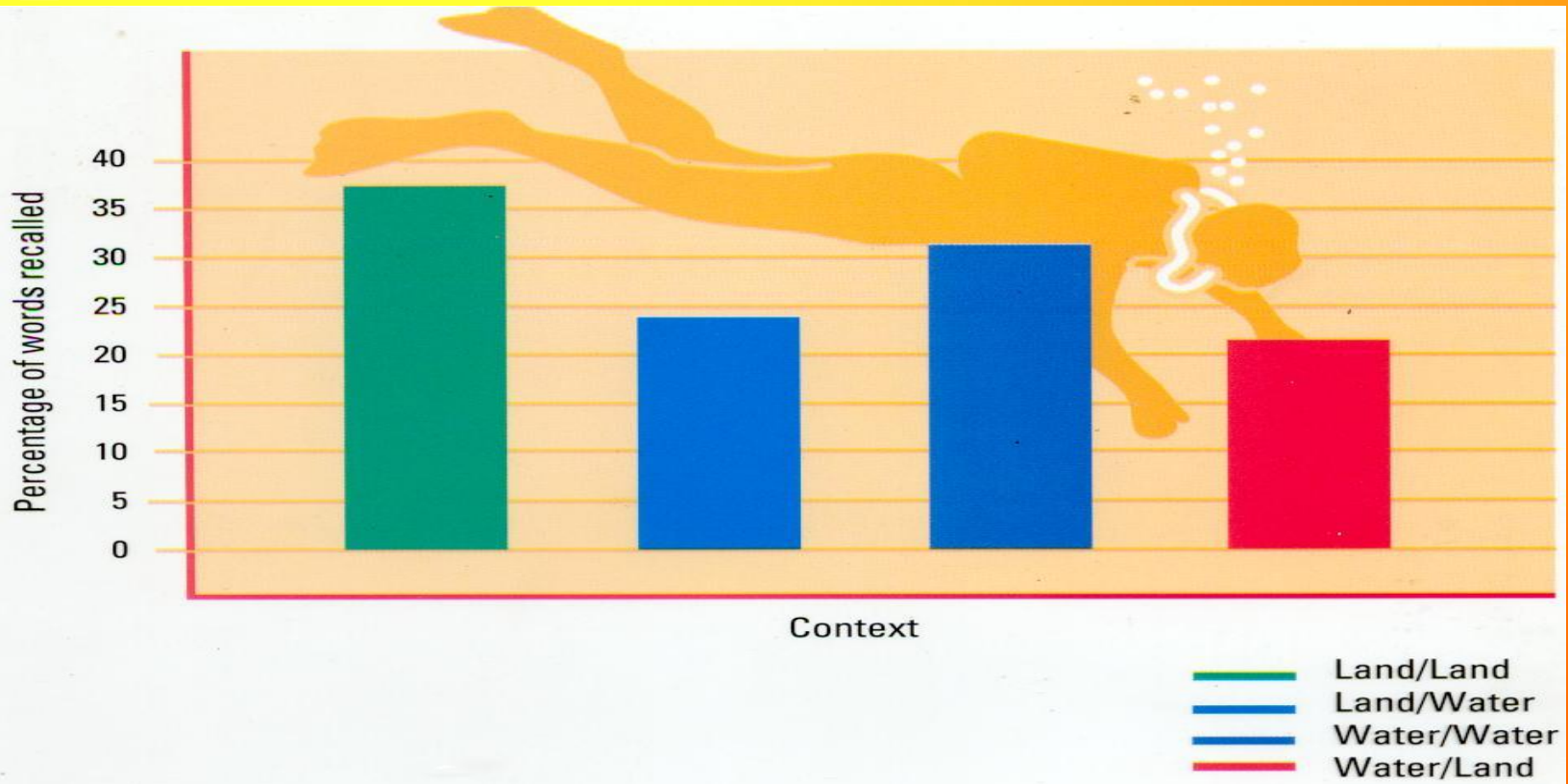


Figure 6.15 Context-dependent memory Whether on land or at sea, deep-sea divers recalled more words when learning and retrieval took place in the same setting. This result illustrates the context dependence of memory (Godden & Baddeley, 1975).

身心状态的影响.....

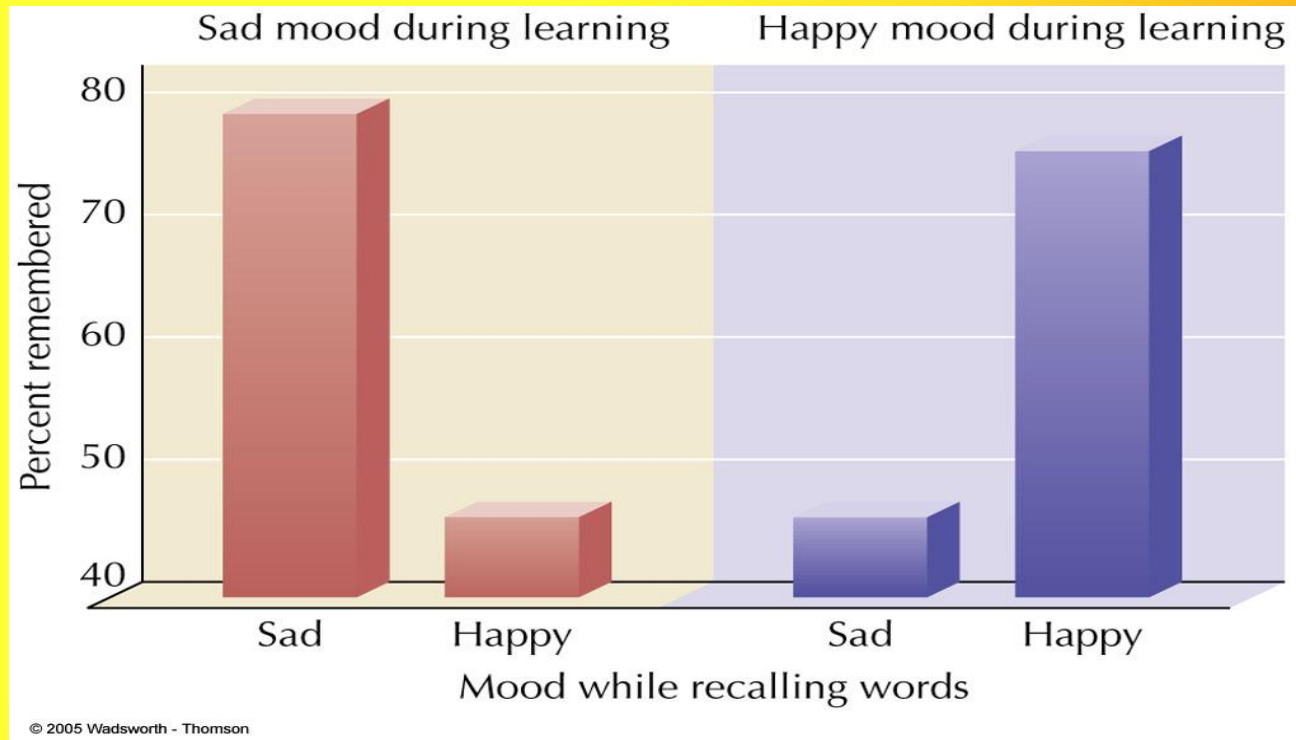
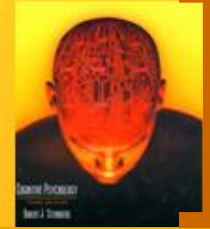


FIGURE 7.12 The effect of mood on memory. Subjects best remembered a list of words when their mood during testing was the same as their mood was when they learned the list.

记忆的重构



Figure 7.11

The effect of leading questions on eyewitness recall. Subjects who were asked leading questions in which cars were described as *hitting* or *smashing* each other were prone to recall the same accident differently one week later, demonstrating the reconstructive nature of memory. (Based on “Reconstruction of Automobile Destruction: An Example of Interaction Between Language and Memory,” by E. F. Loftus and J.C. Palmer, 1974, *Journal of Verbal Learning and Verbal Behavior*, 13, 585–589. Academic Press, Inc. Adapted by permission of the author.)

Leading question asked during witness testimony

Possible schemas activated

Response of subjects asked one week later, “Did you see any broken glass?” (There was none.)

“About how fast were the cars going when they hit each other?”



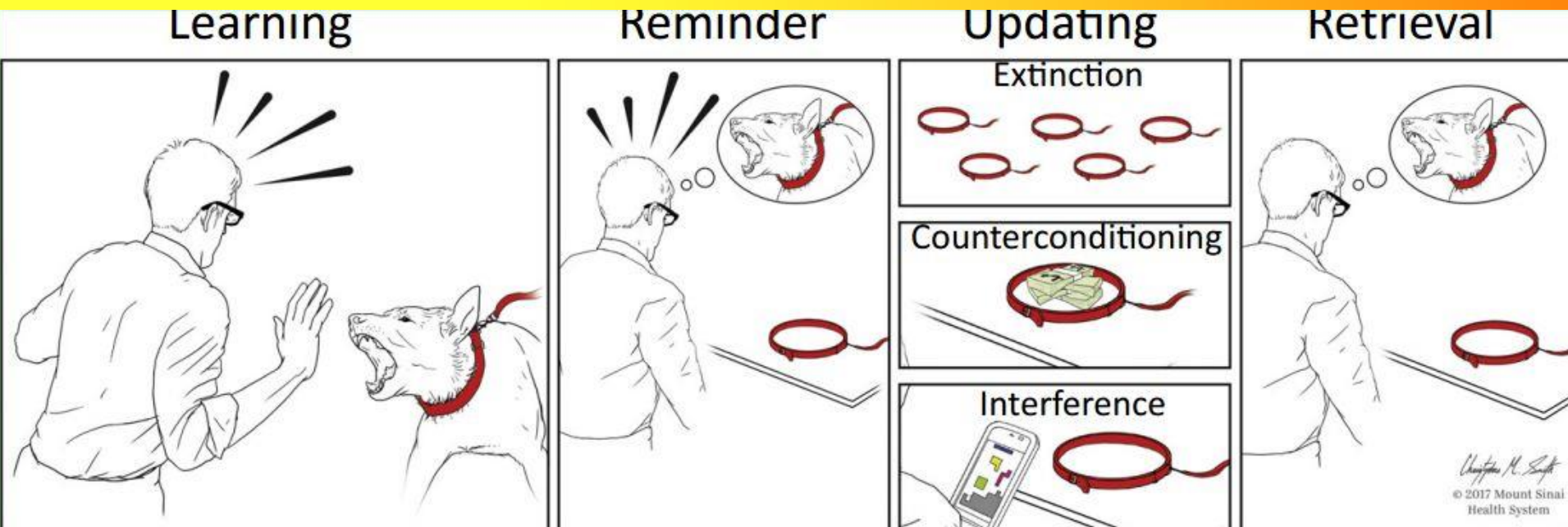
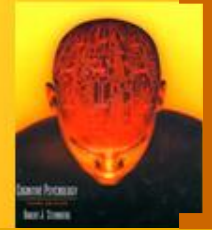
“Yes”—14%

“About how fast were the cars going when they smashed into each other?”



“Yes”—32%

如何修改记忆?



记忆再巩固消除负性记忆 (Lee, Nader, & Schiller, 2017, Trends in Cognitive Sciences)