

The Practice of Mindfulness

覺與悟的練習

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Head of Shaw College, CUHK

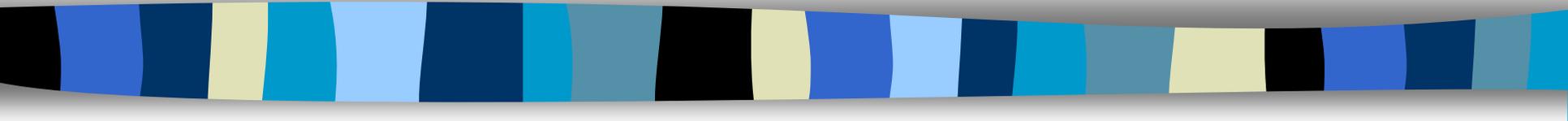
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Key focuses

1. **What** is mindfulness?
2. **How** to practice?
3. **What benefits** will it bring?

What is mindfulness?



Mindfulness = mindful awareness

Mindfulness originates from

Buddhist mental practice 佛學禪修

It aims at enhancing the cognitive
ability of mindful awareness

提升覺與悟的能力

The emergence of mindful awareness



Buddha in India:

Bodhi awareness 菩提覺識

Confucius in China:

Self-reflection 自我反省

Socrates in Greece:

Self-contemplation 自我反思

Buddha and his Buddhism



Buddha = Bodhi + dha
Buddha = the **person** who
has fully developed the
bodhi awareness ability

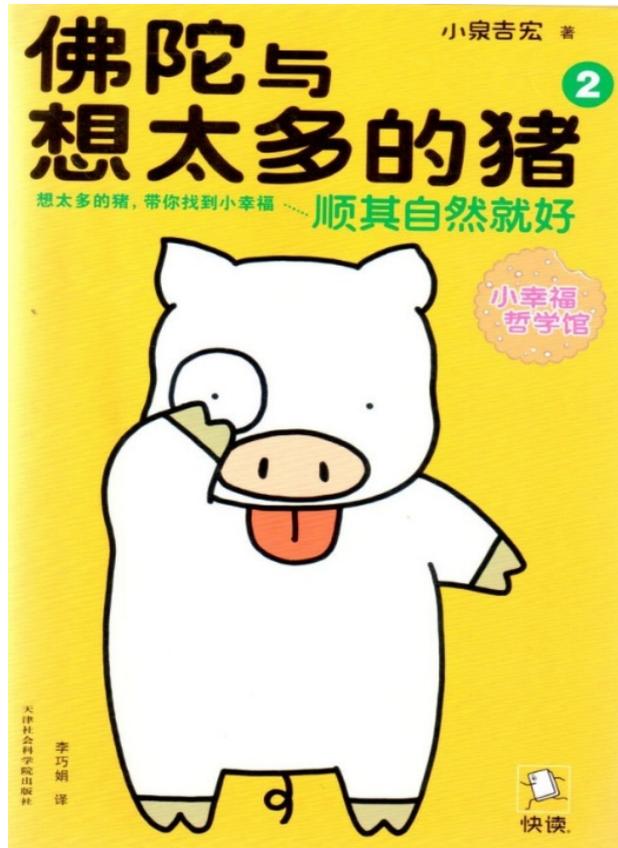
Buddhism = Bodhi + ism
Buddhism = the **ideology**
that advocates **cultivation**
of human's bodhi
awareness through
mental practices

The meaning of 禪悟

mind in action = 禪 = only one

Thinking

想太多



Awareness

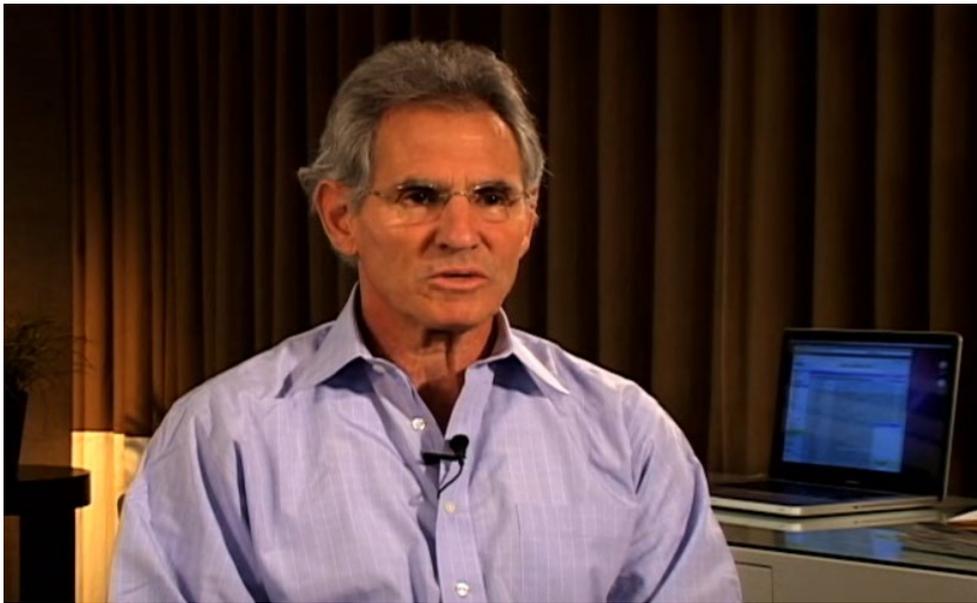
覺太少

Sound-based mindfulness exercise



What is mindfulness ?

Mindfulness is **cultivating mindful awareness** through the practice of

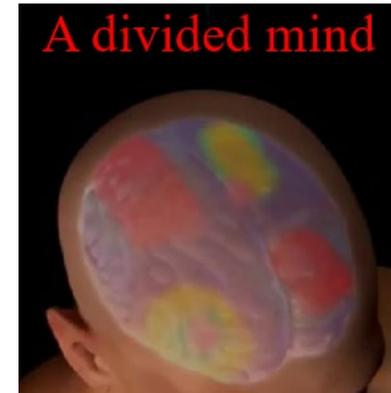
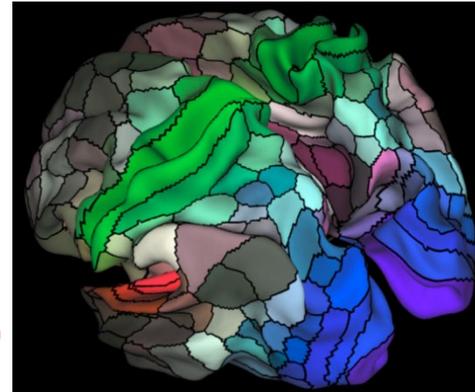


1. paying attention
2. on purpose
3. in the present moment
4. non-judgmentally

Kabat-Zinn. What is Mindfulness? YouTube (2013).

Mental activities during mindfulness practice

1. You intentionally (on purpose),
2. **synchronize the whole brain,**
3. to engage in **awareness mode** through paying attention to certain target (**focused attention**) and sustaining that attention focus as long as required (**sustained attention**),
4. **without any emotional reaction** (non-judgmental).



Tang, Y.Y., Holzel, B.K., & Posner, M.I. (2015). The neuroscience of mindfulness meditation. *Nature Reviews Neuroscience*, 16, 213-225.



“When we understand
how our mind works,
the mindfulness practice
will become easy.”

Thuong Chieu,
12th century Vietnamese Zen Master
cited in Thich Nhat Hanh (2006),
Understanding Our Mind, p.11.

How the mind works in everyday life ?

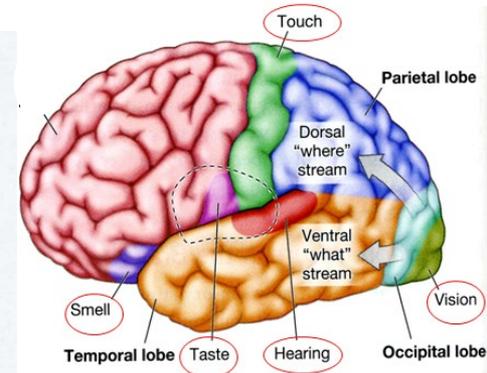
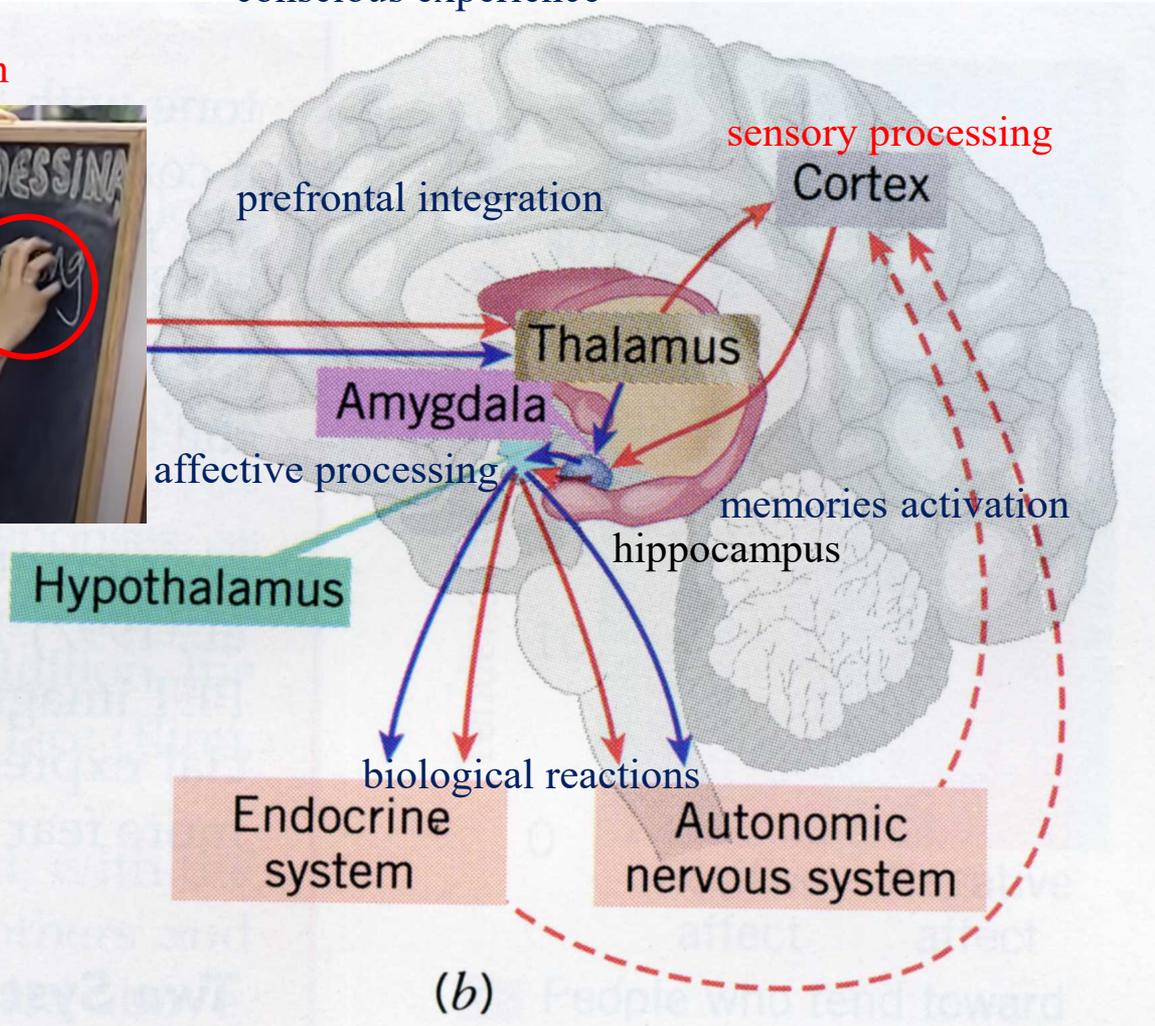


Most horrible sound ever: scratching a blackboard

How the **mind** works in everyday life?

conscious experience

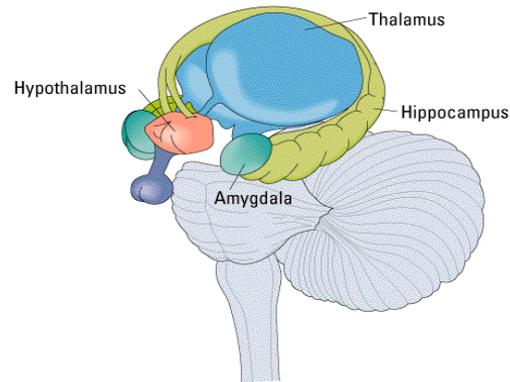
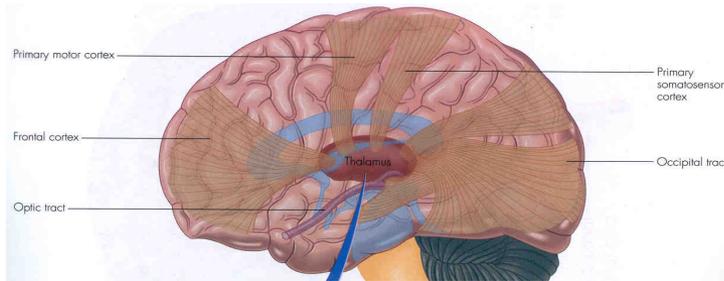
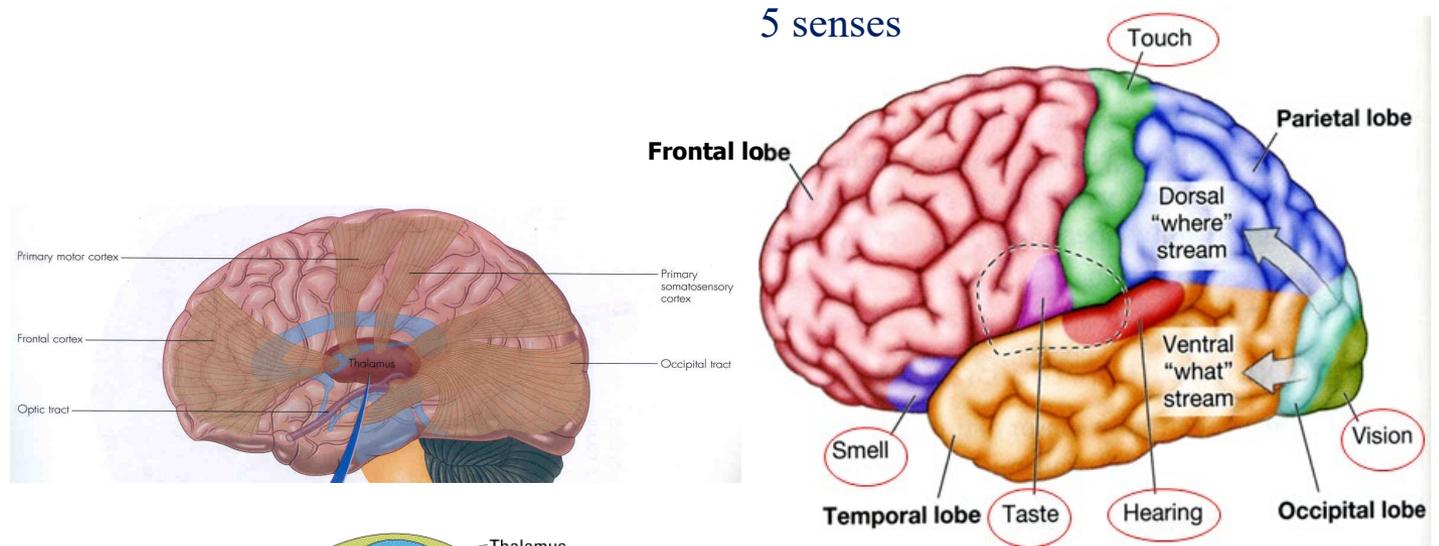
Situation



1. sensory processing
2. affective processing
3. biological reactions
4. memories activation
5. prefrontal integration
6. conscious experience

Phelps, E.A. (2006). Emotion and cognition: Insights from studies of the human Amygdala. *Annual Review of Psychology*, 57, 27-53.

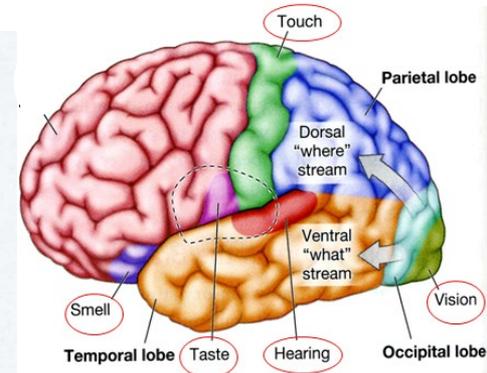
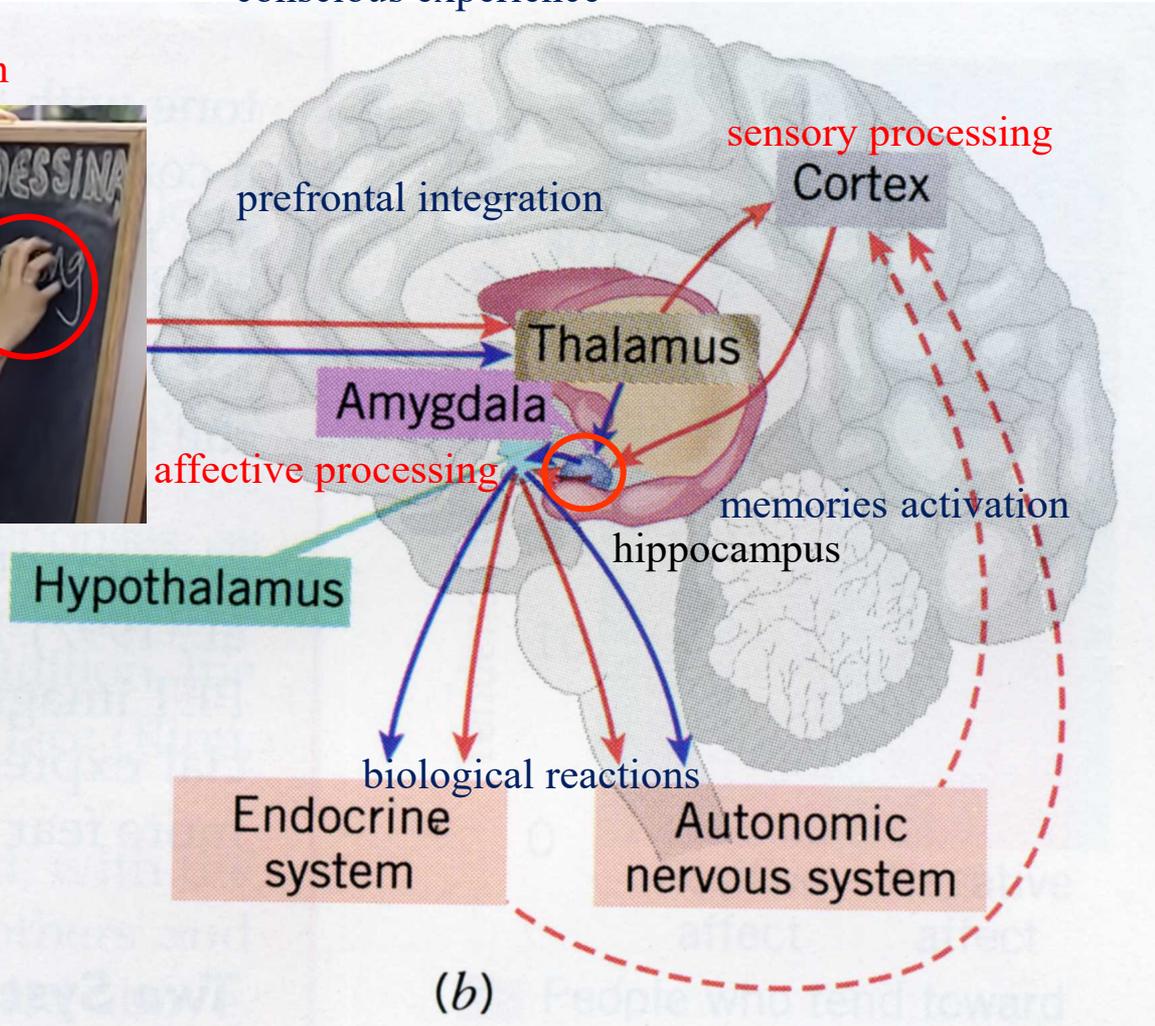
Sensory signals processing



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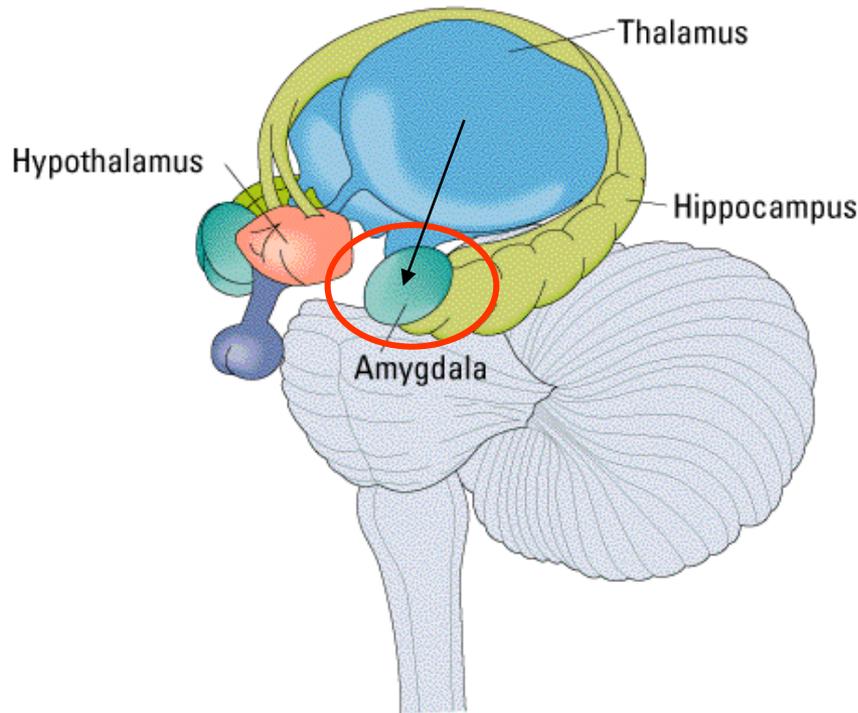
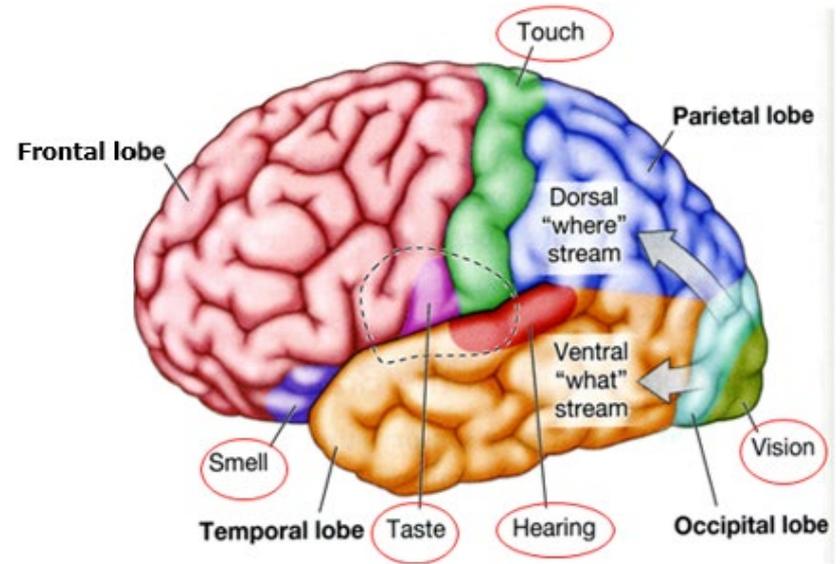
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Affective processing of sensory signals

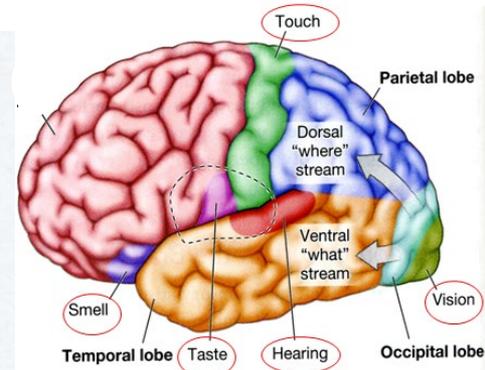
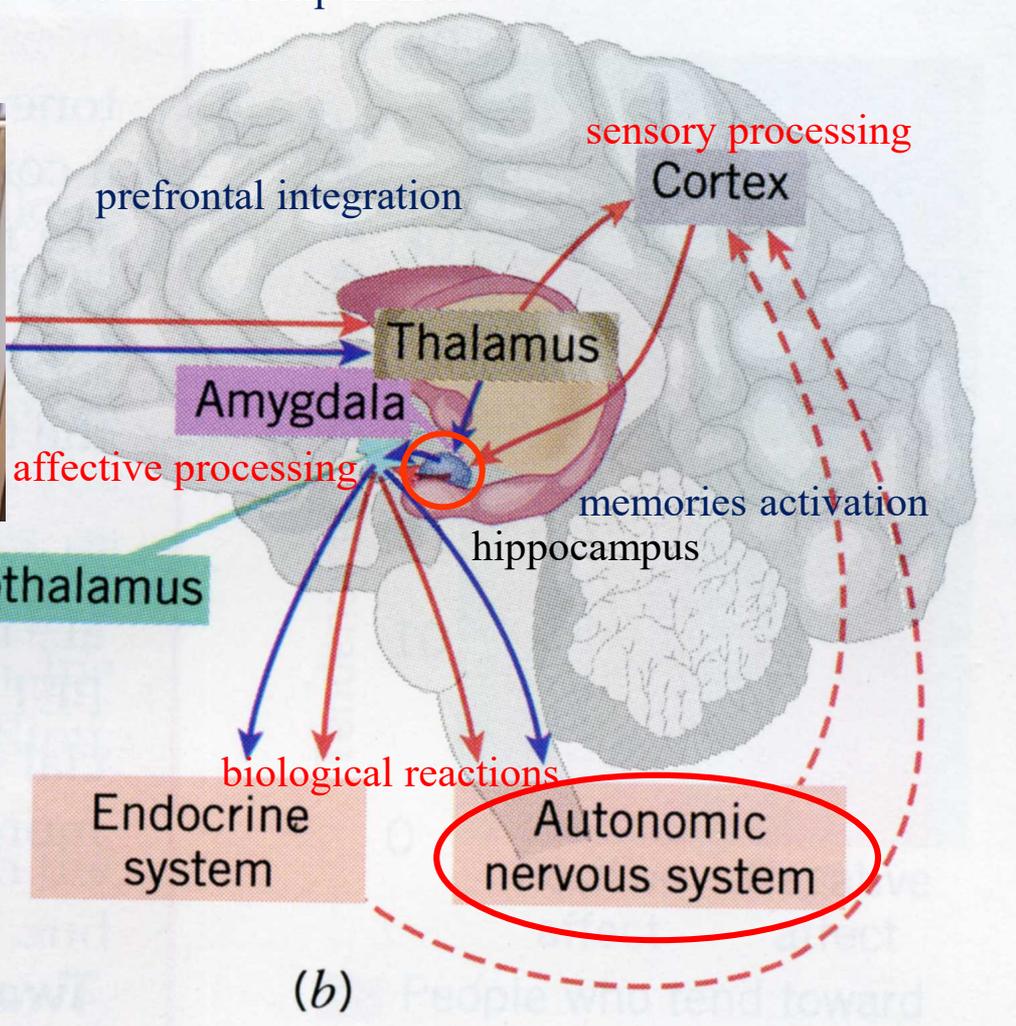


Amy has 3 possible reactions: either **negative**, **positive** or **neutral**

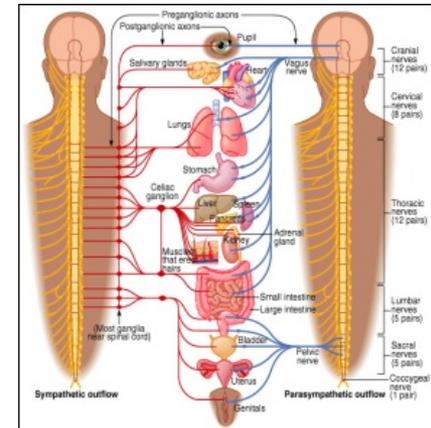
How the **mind** works in everyday life?

conscious experience

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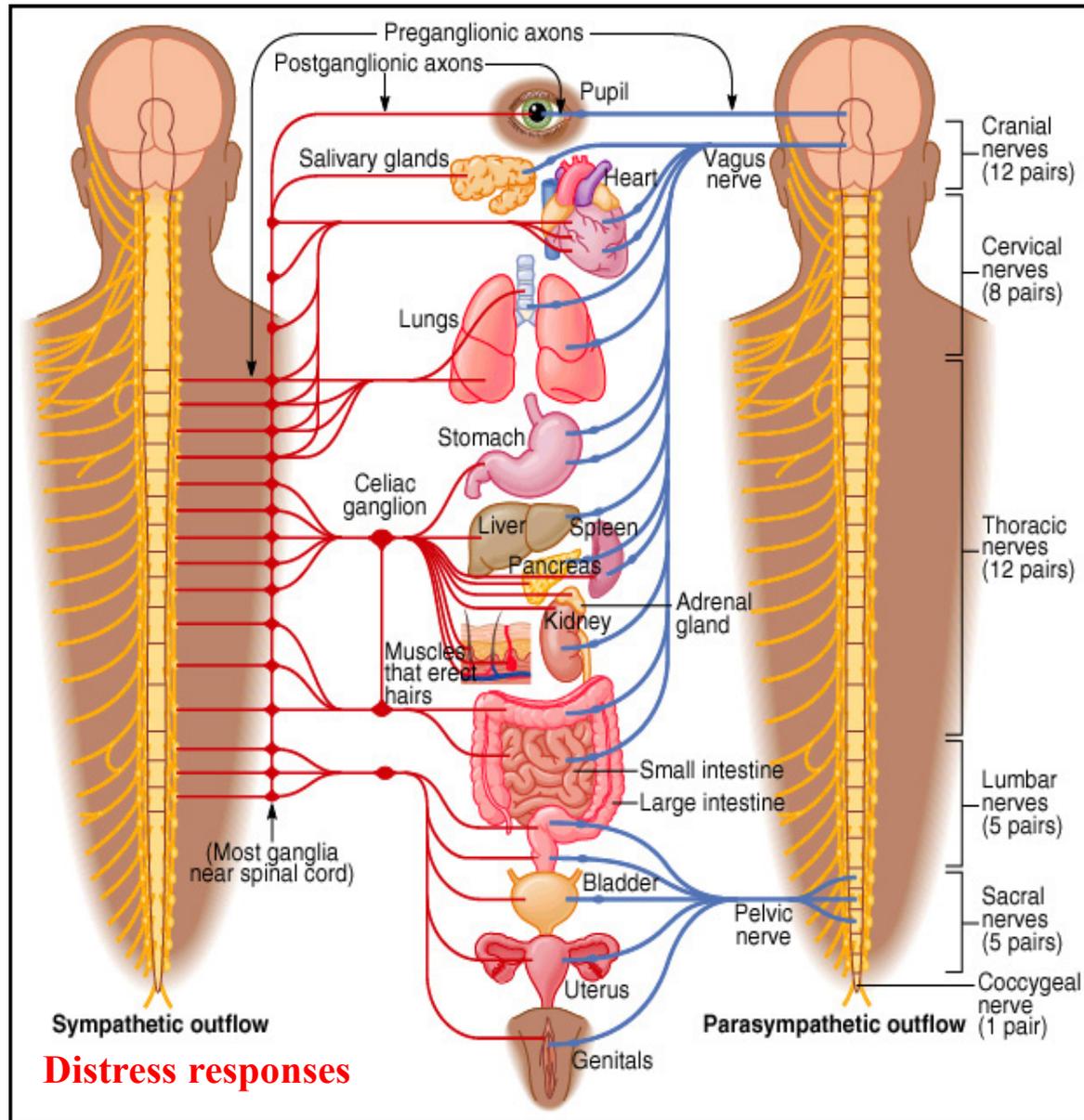


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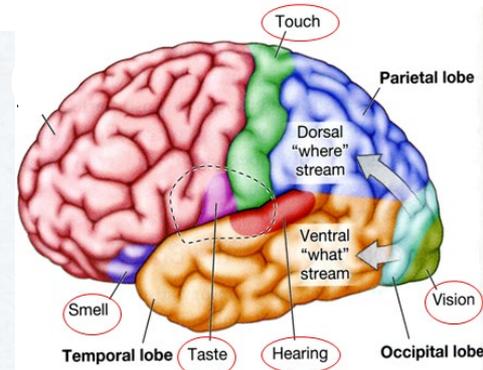
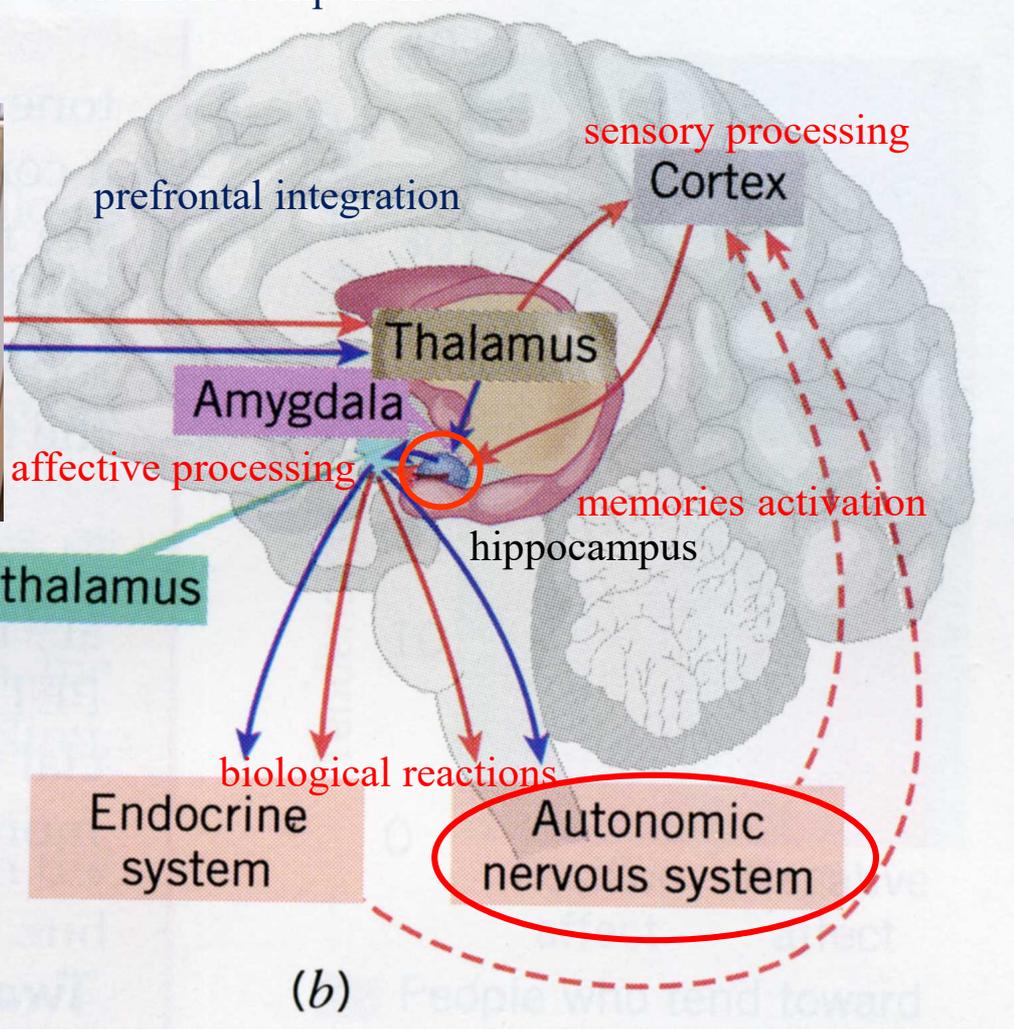
Bodily reactions



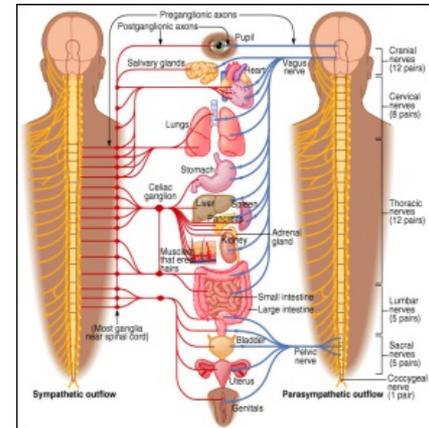
How the **mind** works in everyday life?

conscious experience

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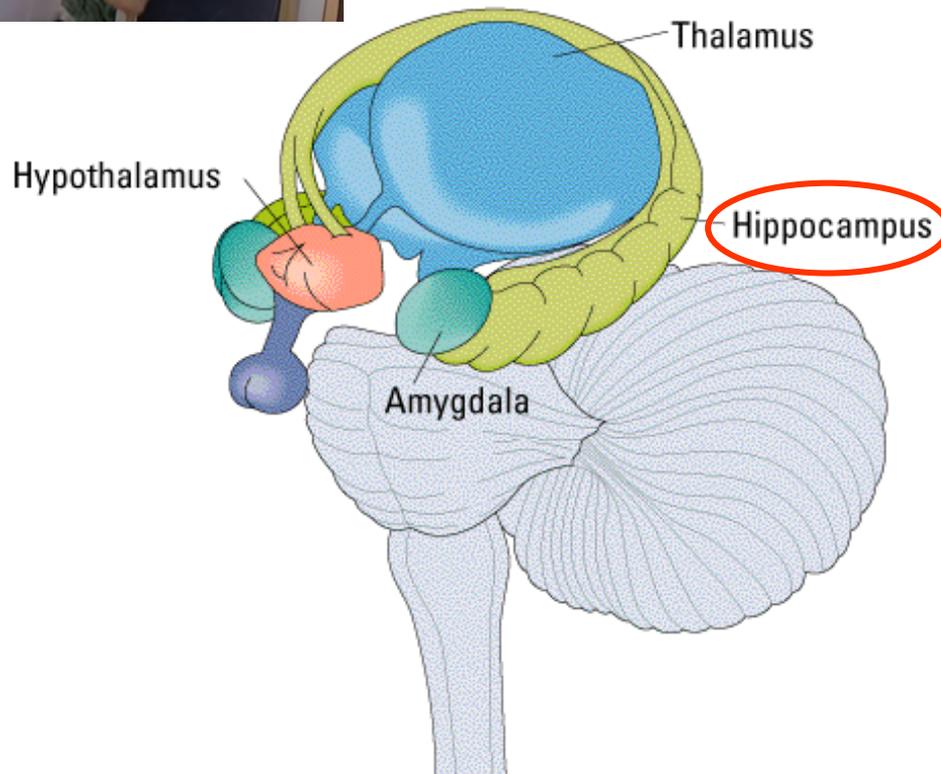


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Memories activation through hippocampus

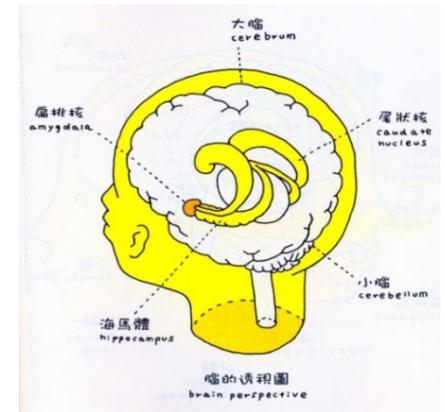
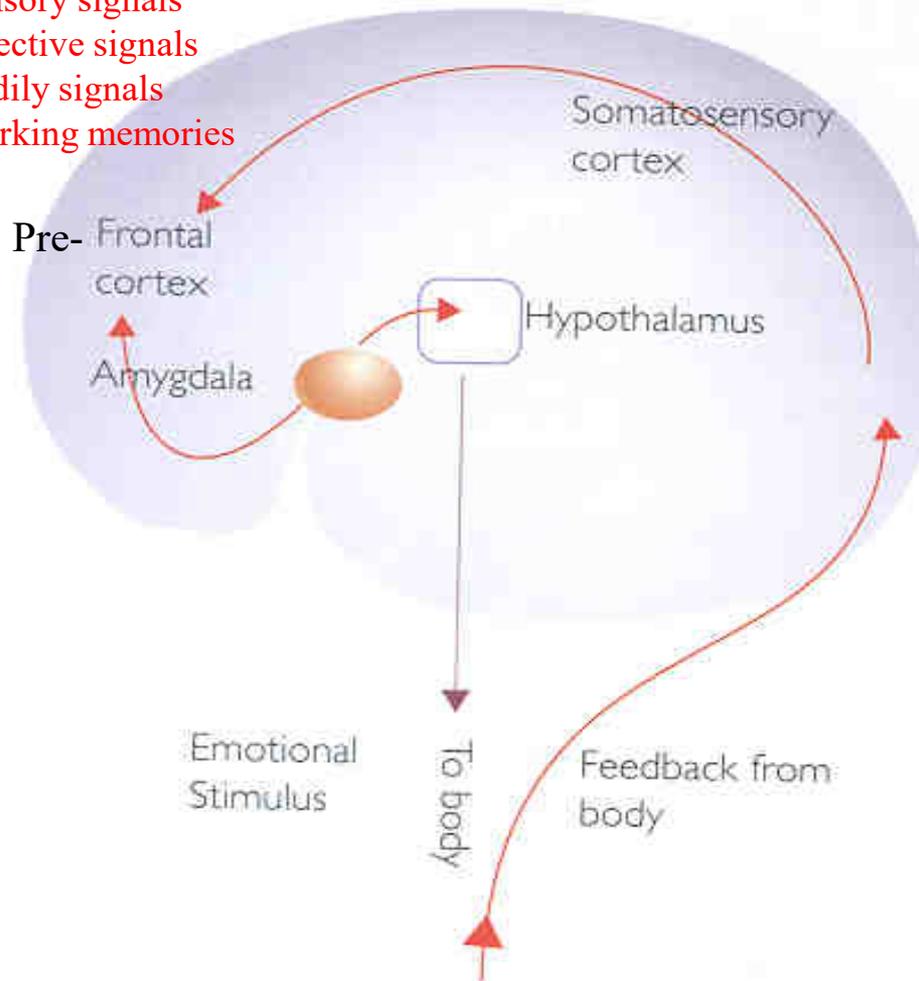


- Hippo is responsible for the creation and retrieval of memory.
- Amy's -ve reaction will activate -ve working memories.

Sending all signals to the **prefrontal cortex** for integration

sensory signals
affective signals
bodily signals
working memories

The prefrontal brain (a global workspace) integrates **sensory, affective, bodily & memory signals** together and gives rise to **thoughts and consciousness**.

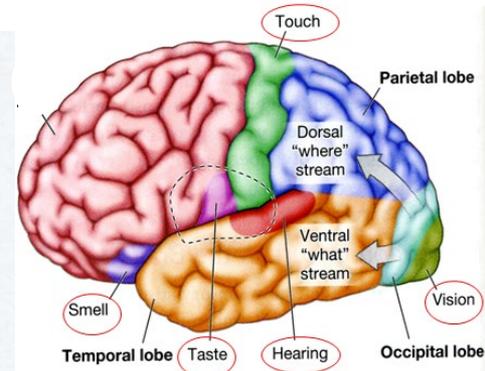
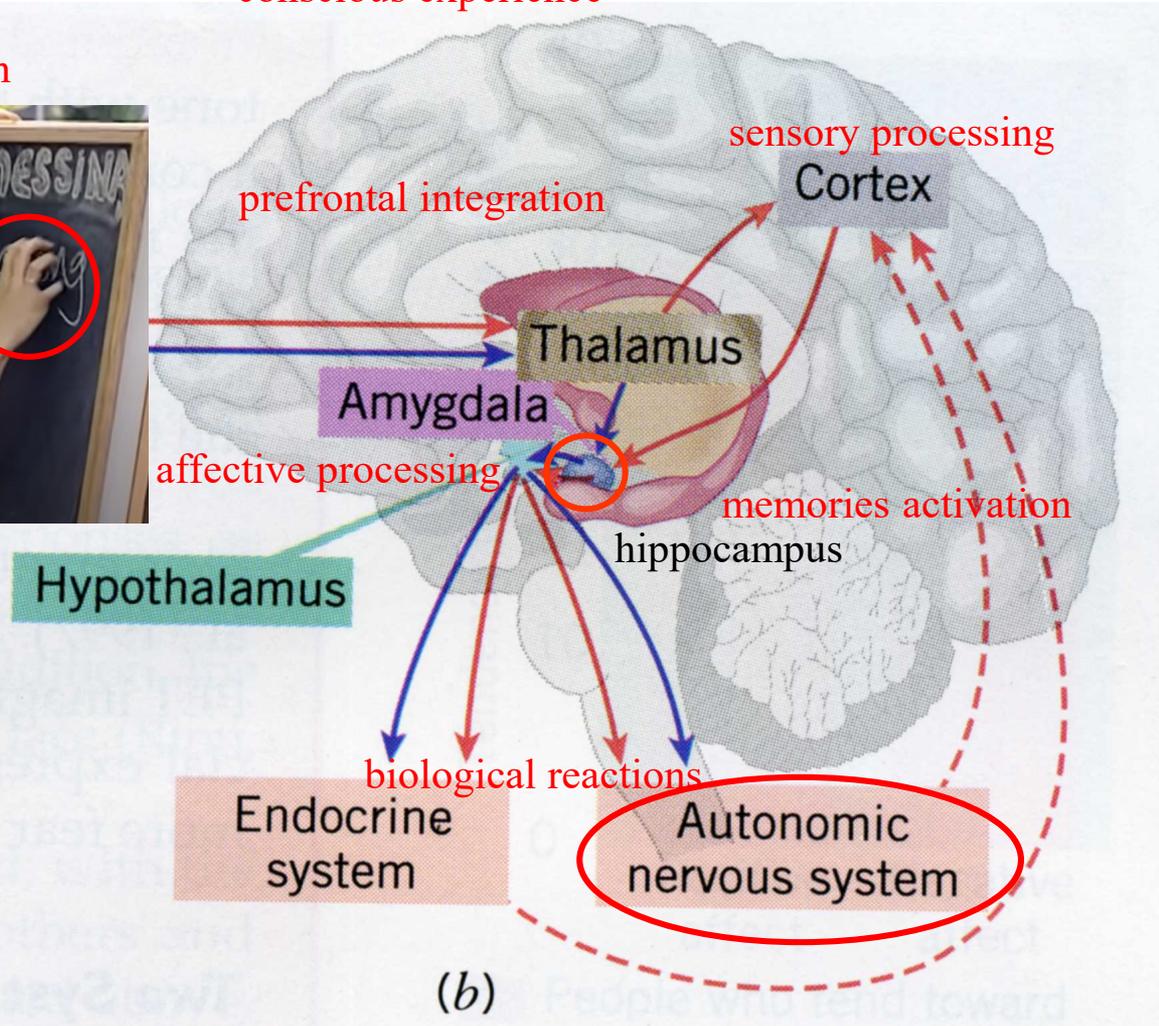


Dehaene, S., & Naccache, L. (2001). Toward a cognitive neuroscience of consciousness: Basic evidence and a workspace framework. *Cognition*, 79, 1-37.

How the **mind** works in everyday life?

conscious experience

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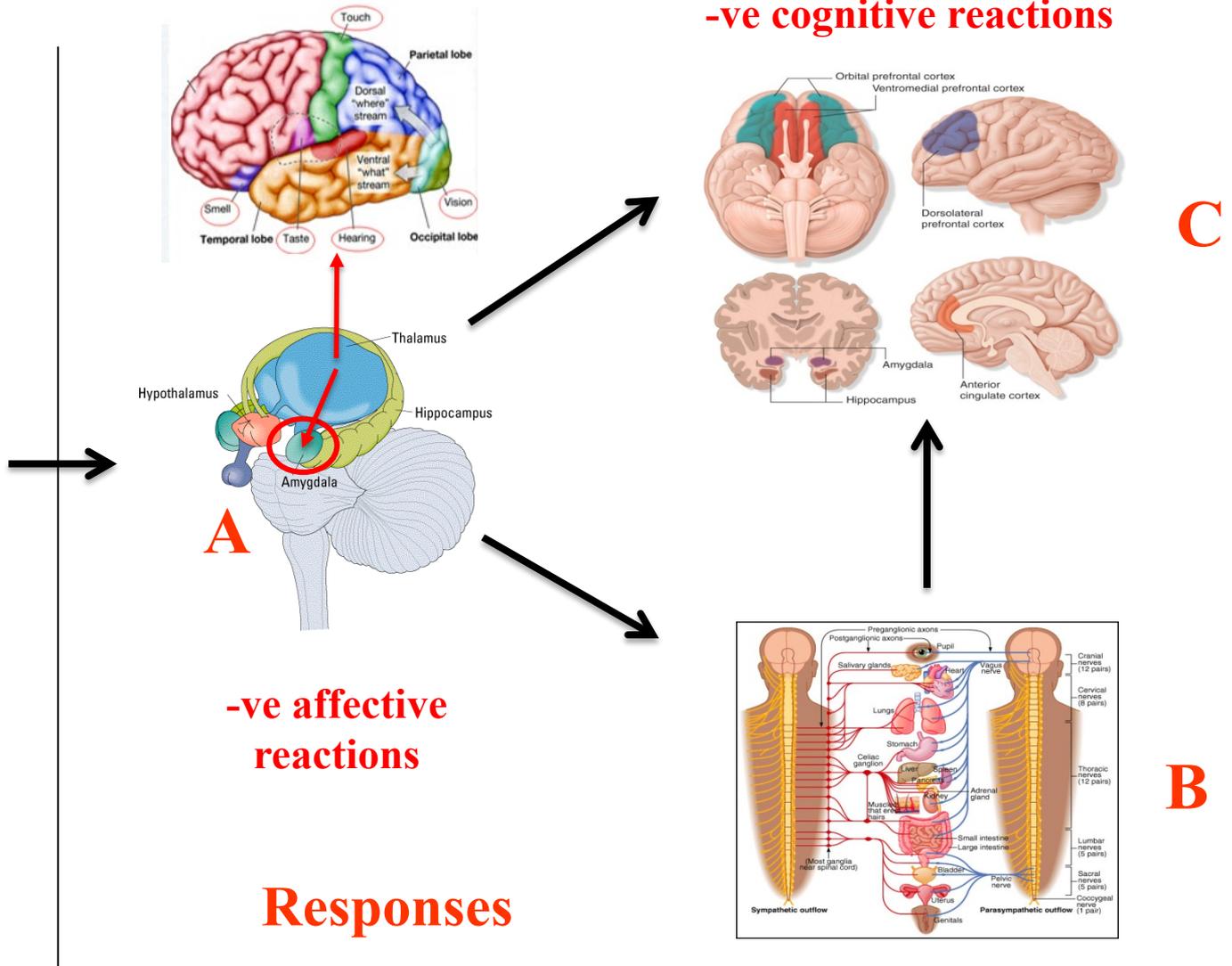
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How the mind works: The S-ABC Model

Stimulation



Stimulation



-ve affective reactions

Responses

-ve bodily reactions

How the **mind** works: the Buddhist model

Reality

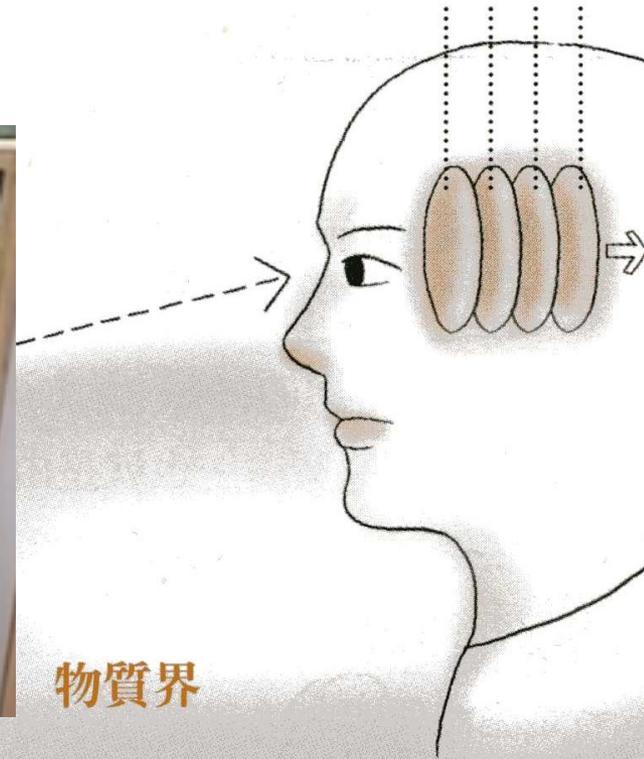
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The **mental version** of reality

受想行識

佛學五蘊心理學



物質界



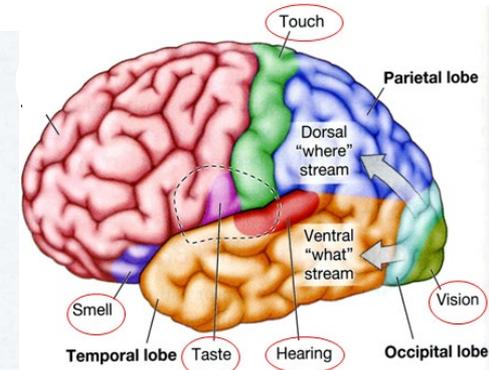
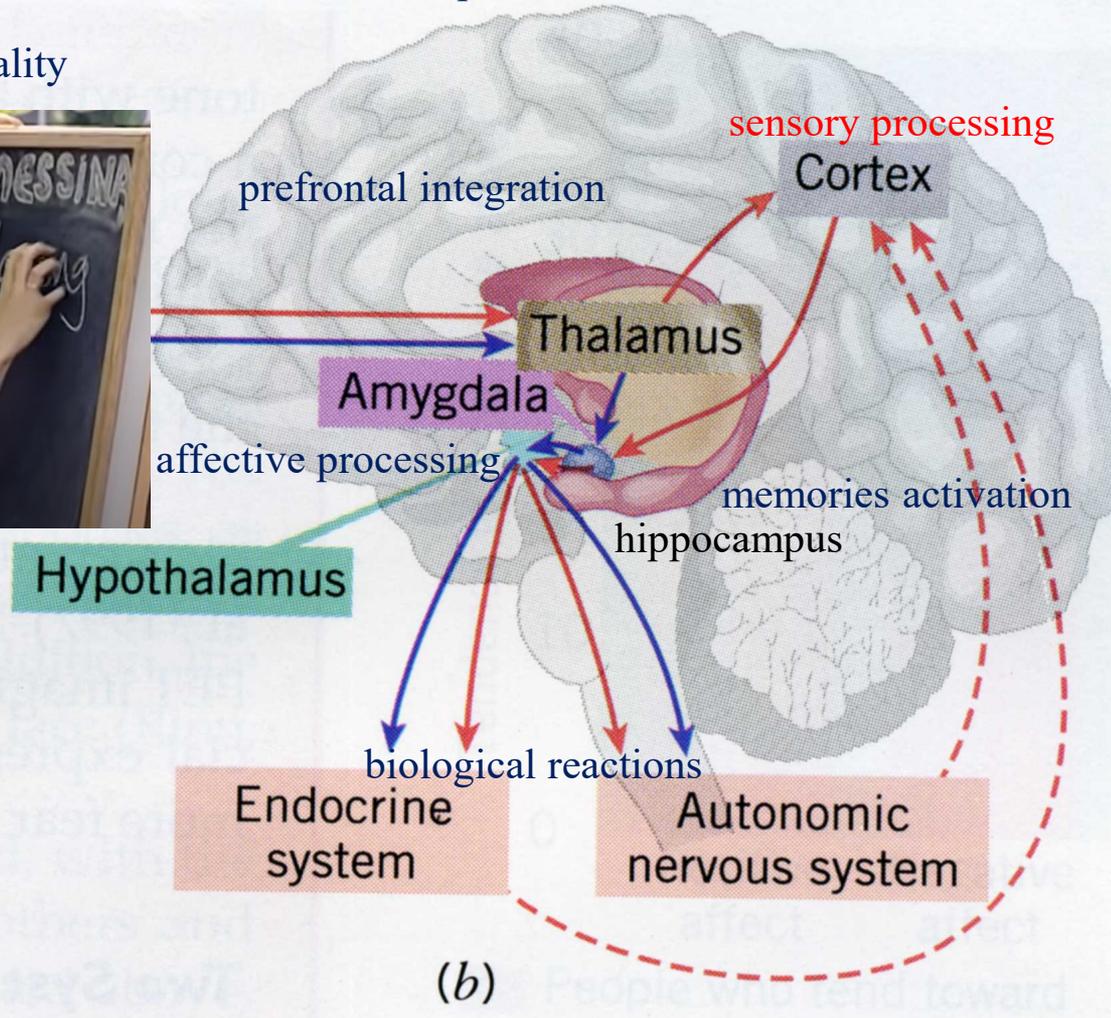
Integrating Buddhism with neuroscience

色

Physical reality



conscious experience



- 受
想
行
識
1. sensory processing
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Consciousness refers to a person's experience of the world, including sensations, feelings and thoughts from moment to moment.

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Undistorted mind-consciousness

Distorted mind-consciousness



悟

迷



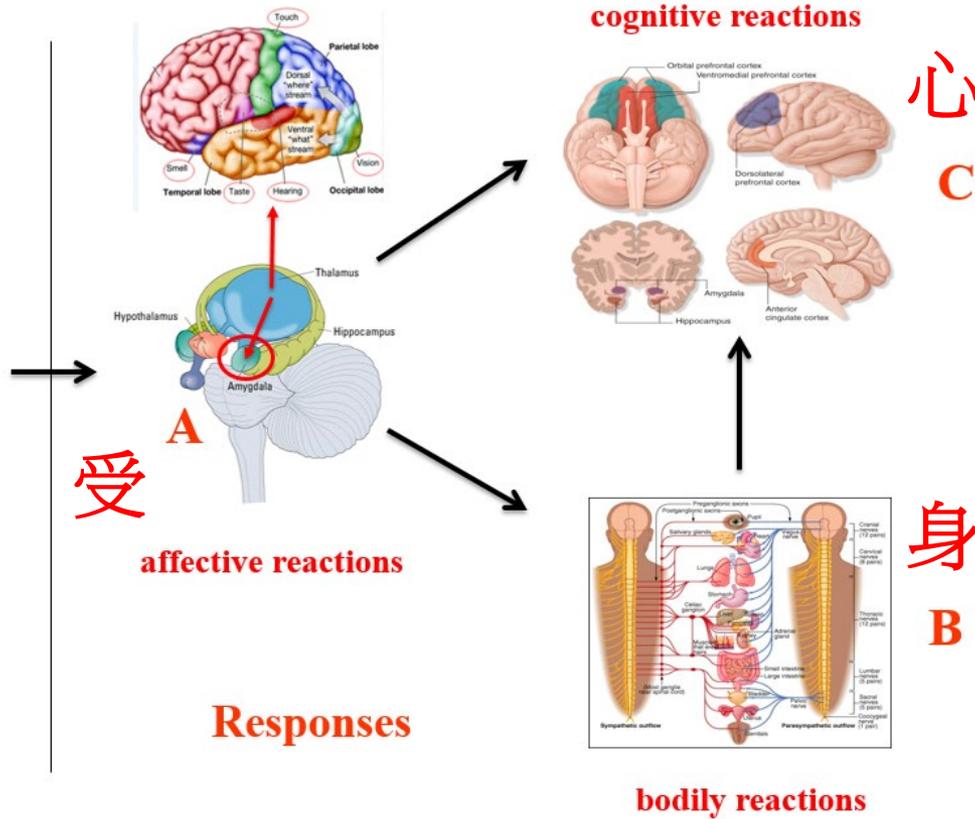
Face mindfulness practice



Face mindfulness practice



Stimulation



Did you noticed any changes in your ABC activities when you see this photo?

How the mind works: the Buddhist model

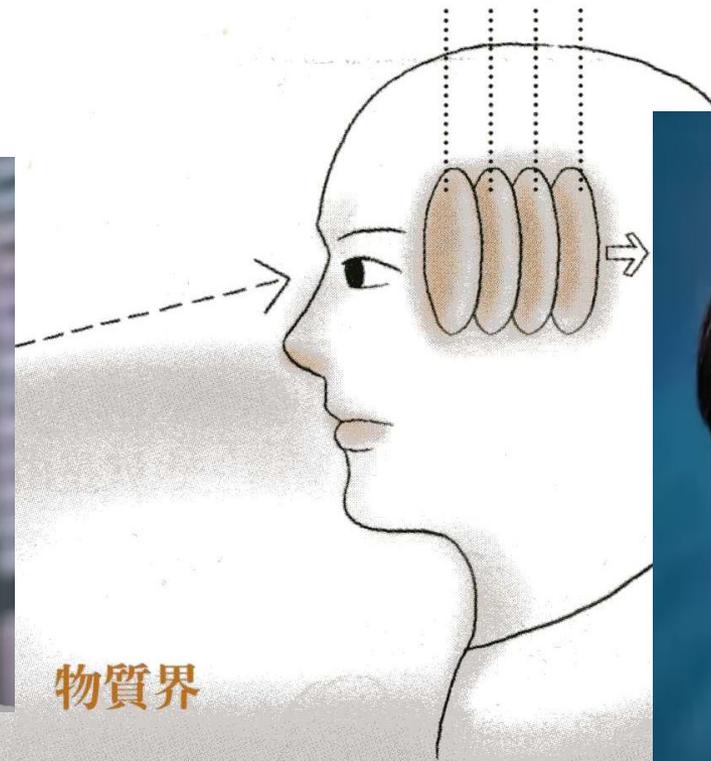
Reality

The mental version of reality

色

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佛學五蘊心理學



物質界



Undistorted mind-consciousness



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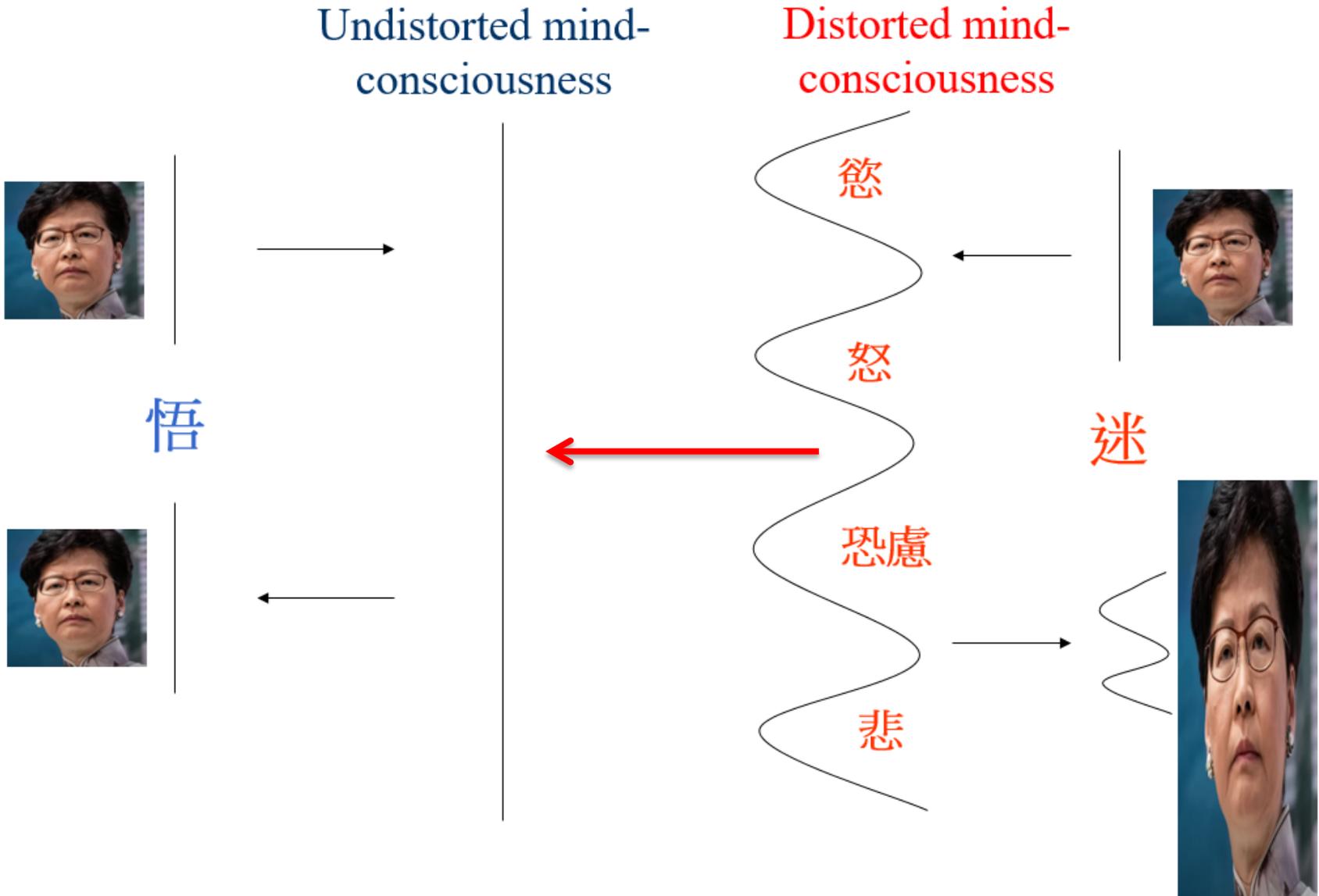
Distorted mind-consciousness



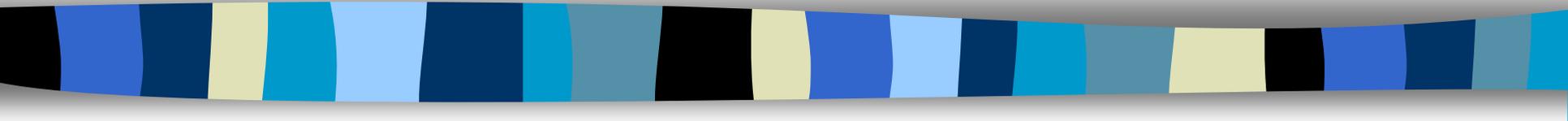
迷



Calming our minds through mindfulness practice



How to practice?



How to cultivate mindful awareness?



四念處經

- 身 ■ Observe **breath/body** sensations
- 受 ■ Observe fleeting **feelings**
- 心 ■ Observe fleeting **thoughts**
- 法 ■ Observe **all phenomena**

釋一行 (1975). 正念的奇跡. Boston, MA: Beacon.

How to maintain a **clear and undistorted**
state of mind-consciousness?

調身

Stretching helps relax body and calm mind

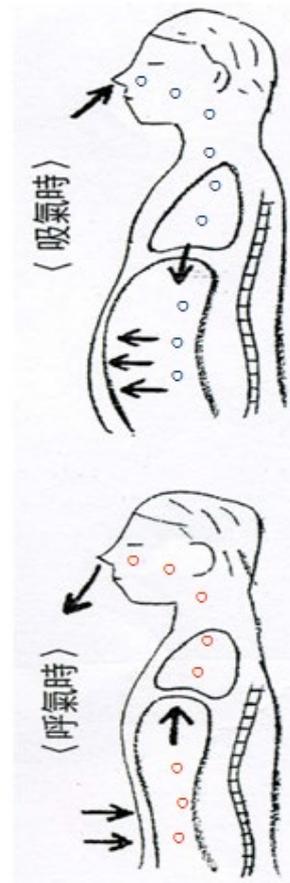


Slow & deep breathing helps calm mind

Diaphragmatic breathing

調息

less than 6 breaths per minute



調心 止定

Breath-counting exercise

數息練習



1. 找個舒適安靜的地方，和一張直背的椅子，幫助你把腰挺直，並支撐住背部及頭部。
2. 坐在椅子上，讓臀部頂著椅背，雙腳自然著地，雙手輕鬆放在扶手或膝蓋上，頭部輕鬆地挺在脖子上，或者靠在椅背上（頭勿垂下），肩膀放輕鬆自然放下。
3. 閉上眼睛，用鼻呼吸。緩慢的吸氣，腹部慢慢脹起，脹至頂點時，慢慢的呼氣，腹部慢慢收縮，並在心中數“一”，下次呼氣數“二”，數至“十”，又從“一”開始。如此持續呼吸，全身肌肉放鬆，**注意力集中於覺知呼吸**。若果分心失數，不用自責，只需覺察分心，再從一開始。



調心

Breath-observing exercise

A synchronized mind



觀照

觀呼吸練習

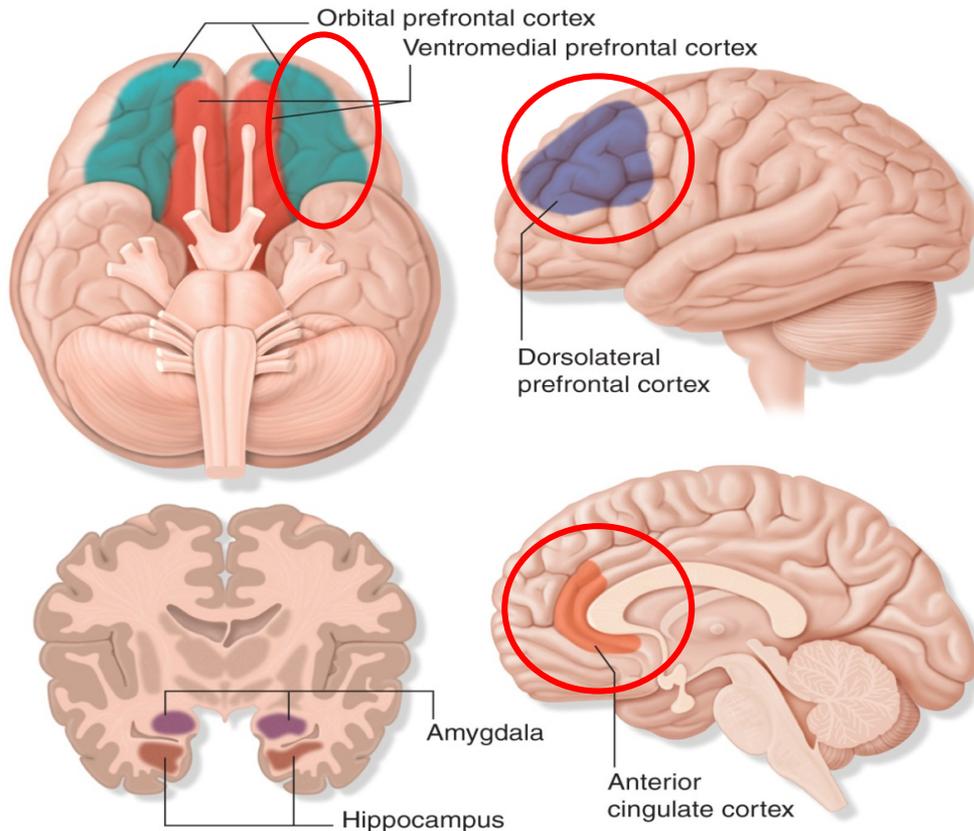
1. 閉上眼睛，全身肌肉放鬆，用鼻呼吸。
2. 緩慢的吸氣，腹部慢慢脹起，吸氣時，心中全程覺察吸氣。
3. 脹至頂點時，慢慢的呼氣，腹部慢慢收縮。呼氣時，心中全程覺察呼氣。
4. 集中注意力於覺察當下呼吸。
5. 若果分心，不用自責，只需覺察分心，之後重回覺察呼吸。



The sequence of events in breath-observing practice

Focused attention 聚焦
Sustained attention 定焦
Out-of-focus 走焦
Awareness of out-focus 覺察走焦
Refocused attention 重新聚焦
Sustained attention 定焦
Out-of-focus 走焦
Awareness of out-focus 覺察走焦
Refocused attention 重新聚焦

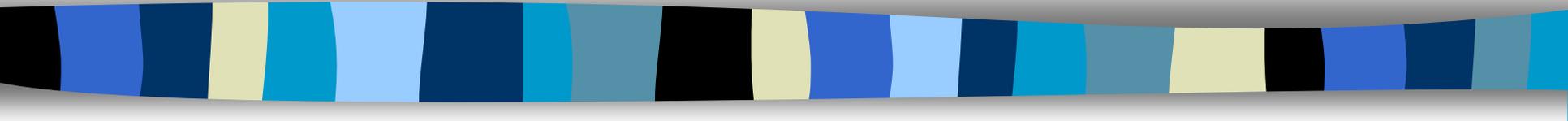
How the **mind** works in mindfulness practices ?



- **CEO (PFC)** mindfully synchronizes the whole brain to **engage in attention control and awareness exercises**
- When distraction occurs, CEO detects that **(awareness)** and switches the mind back to the original task **(refocus mind)**
- With repeated practices, the **mind** will always be in **CEO directed-mode**, rather than **impulse-, emotion-, or habit- driven modes**
- With a calm & clear mind, one can **see reality without distortions** and **initiate appropriate actions**

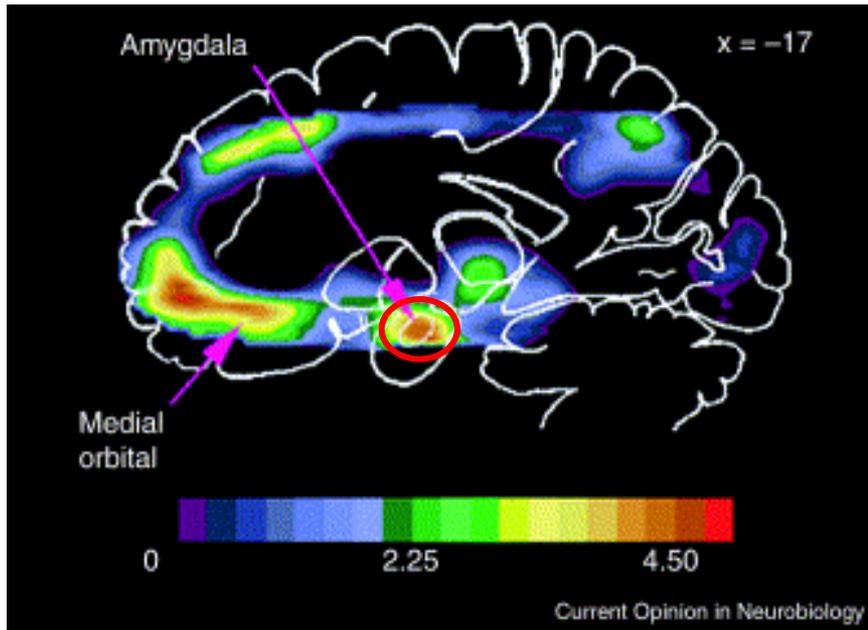
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What benefits will it bring?

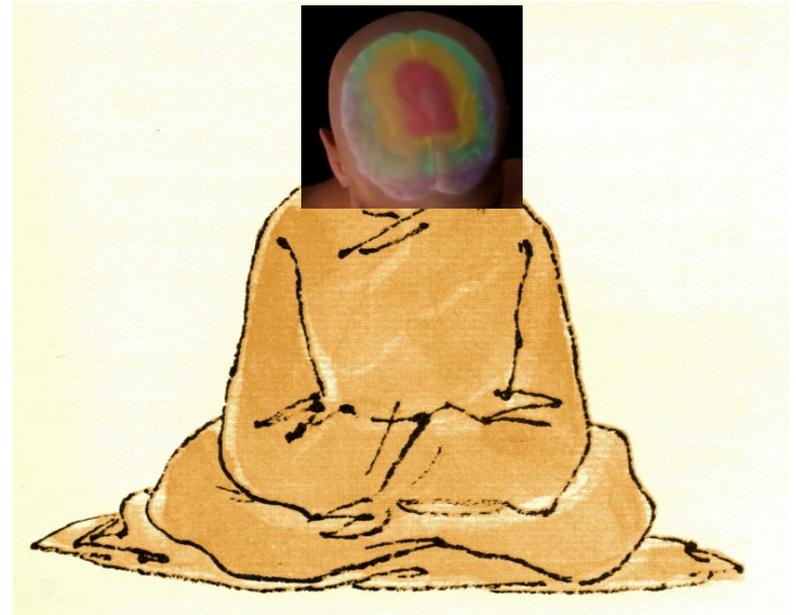


Mindfulness practice enables us to gain control of our minds

Emotion-driven mind



Self-directed clear mind

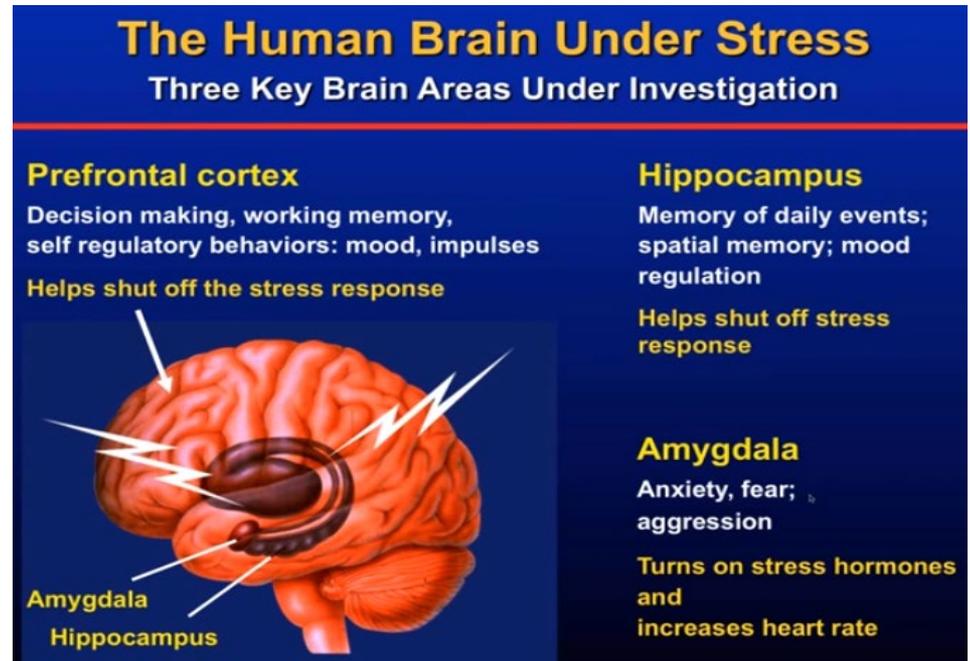


慾 怒 恐 慮 悲

Mindfulness practices **change** brain structures and functions

Chronic distress increase the volume of the **amygdala**, but reduced the volume of the **PFC** and **hippocampus**.

Mindfulness practice has been shown to **reduce amygdala sensitivity**, and **enhance grey-matter density** in the **hippocampus** and **PFC**.



Davidson, R.J., & McEwen, B.S. (2012). Social influences on neuroplasticity: Stress and interventions to promote well-being. *Nature Reviews Neuroscience*, 15, 689-695.

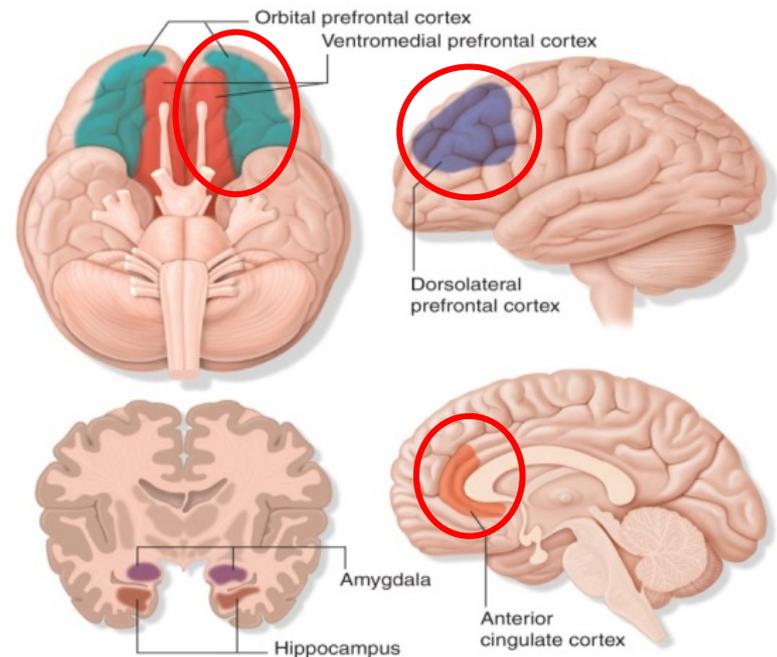
Holzel, B.K. et al. (2010). Stress reduction correlates with structural changes in the amygdala. *Soc. Cogn. Affect. Neurosci.*, 5, 11-17.

Mindfulness Training: Training the 6-pack of the brain



**The Most Important
Muscle Is The One
Between Your Ears!**

@brainchat



Loving-kindness mindfulness meditation



Loving Kindness Meditation. YouTube (2011).

Don't try to calm the storm.

Calm your mind.

The storm will pass!

Buddha