

# When consciousness creates neurons: how to deal with neuroscientific mythologies?

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**In this talk, I will developp the 3 following parts**

- 1. Can we define consciousness ?**
- 2. Neurosciences and cousciousness**
- 3. The pending (and critical) questions.**

我們可以定義意識嗎？

神經科學與意識

待解決(和醜聞)的問題(針對西方人)。



## PART 1



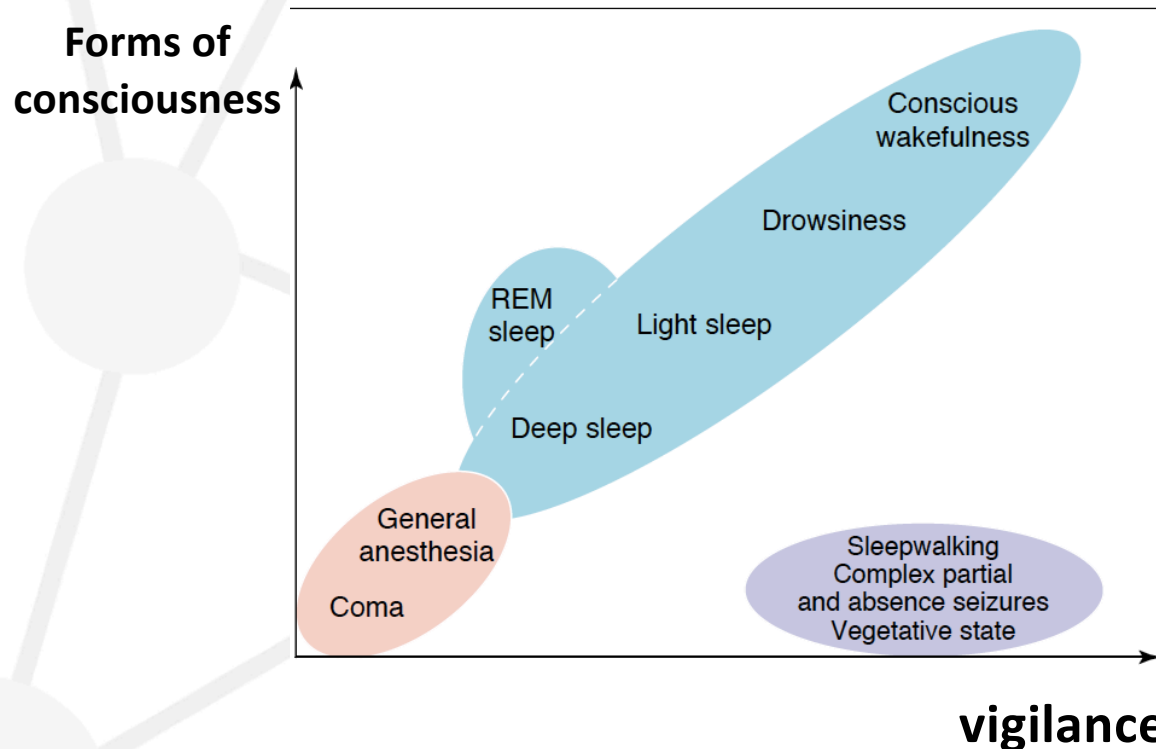
Can we define consciousness ?

我們可以定義意識嗎？

## Consciousness is not vigilance.

Vigilance is constituted by overall functional and dynamic configurations of the brain characterizing its activation state.

Vigilance and consciousness are entangled.



意識不是警惕。

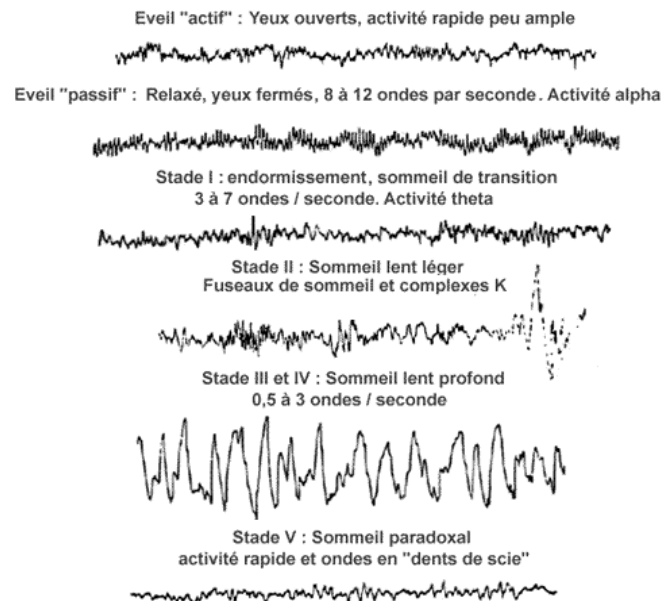
警惕性由表徵其激活狀態的大腦整體功能和動態配置構成。

警惕和意識糾纏不清。  
警惕和意识纠缠不清。

## Vigilance

- Vigilance is assessed by behavioral responses correlated to the structure of the Electroencephalogram.
- Sleep (for example) is a vigilance state.

### ETATS DE VIGILANCE Caractéristiques électro-encéphalographiques



警覺

通過與腦電圖結構相關的行為反應來評估警惕性。

睡眠(例如)是一種警惕狀態。

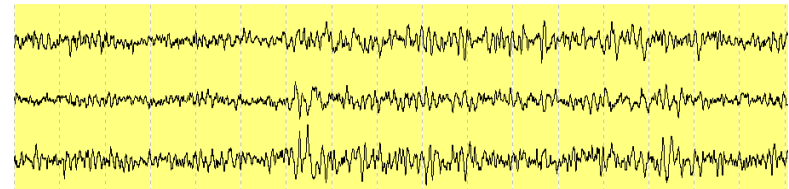
## Consciousness for the neurologist

- For the neurologists, in clinics, the nature of consciousness is attested either by the language, or, when absent, by a basic behavior possibly related to states of vigilance (EEG).
- Consciousness is thought pragmatically as a (quasi) stable state (as in macroscopic thermodynamics), in order to decide the adequate treatments.

### 對神經科醫生的意識

對於神經科醫師而言，在診所中，意識的本質是通過語言證明的，或者在不存在時通過可能與警惕狀態(EEG)有關的基本行為來證明。

為了決定適當的處理方式，在實用上將意識視為(準)穩定狀態(如宏觀熱力學)。



## Consciousness for the neurologist

- The loss of consciousness is attested by the disappearance of any verbal report, or by alterations of basic behaviors (reflexes).
- In this approach, consciousness mainly appears as reflexive consciousness.
- The remaining activity is implicit or unconscious.



### 對神經科醫生的意識

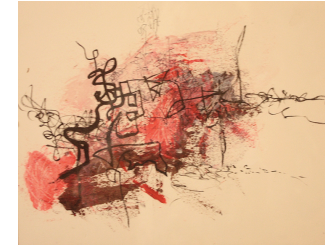
任何口頭報告的消失或基本行為(反射)的改變都證明了意識喪失。

在這種方法中，意識主要表現為反思意識。

剩餘的活動是隱性的或無意識的。

## Consciousness in cognitive sciences.

- In cognitive sciences, and in philosophy of mind, consciousness receives many definitions depending the authors.
- For example consciousness might be divided in
  - Awareness: pure experience.
  - Consciousness: awareness of awareness = reflective awareness, experience of experience.



認知科學意識。

在認知科學和心理哲學中，意識根據作者的不同而有不同的定義。

例如，意識意識被劃分為

- 意識：純粹的經驗。
- 意識：意識意識=反思意識，經驗體驗。



## Consciousness in cognitive sciences.

- Or, some authors define consciousness using 4 concepts:
  - Self-awareness corresponding to the self concept.
  - Consciousness of monitoring which is representation of internal states (internal perception, introspection):....
  - Consciousness of access (consciousness of state): representation of the content of the mental state, serving as a premise for an inference or control of the action.
  - Phenomenal Consciousness: subjective quality of experience (qualia): "the effect it makes ».

認知科學意識。

或者，有些作者使用四個概念來定義意識：

- 與自我概念相對應的自我意識。
- 監視意識是內部狀態的代表(內部感知, 內省):....
- 訪問意識(狀態意識):精神狀態內容的表示, 是推理或控制動作的前提。
- 現象意識:主觀體驗質量(Qualia):“其產生的效果”

## Consciousness in cognitive sciences.

- In cognitive sciences and philosophy of mind there is so much definitions and conceptions of consciousness that one can not have a stable paradigmatic framework.
- But in most of cases, in cognitive science, consciousness appears as a « meta » function, generated by brain.

認知科學中的意識。

在認知科學和心理哲學中，關於意識的定義和概念太多，以至於沒有一個穩定的範式框架。

但是在大多數情況下，在認知科學中，意識表現為大腦產生的“元”功能。

## Consciousness: a flow, not a state

- The notion of state of consciousness is clinical. This is a convenient way of categorizing neurological disorders.
- But consciousness is a flow, that flows constantly (Husserl, Bergson ...).
- It can also be described as a fluent field (Janet, Ey) integrating multiple components: reflexivity, imagination, perceptions, etc.

意識：一種流動，而不是一種狀態

- 意識狀態的概念是臨床的。這是對神經系統疾病進行分類的便捷方法。
- 但是意識是不斷流動的(胡塞爾, 伯格森.....)。
- 它也可以被描述為一個流利的領域(Janet, Hey), 集成了多個組成部分: 反射性, 想像力, 感知力等。



## PART 2



# Neurosciences and consciousness

## 神經科學與意識

## Neurophysiological data are no more than correlates !

- In the current state of knowledge, no neurophysiological theory can explain how a brain formed of neurons produces consciousness.
- Whatever the study device (EEG MRI) it only provides correlates of consciousness.
- What can only predict, on the basis of a neurophysiological configuration and its dynamics, is a phenomenon and not the plenary fact of phenomenality (that there is presence of phenomenon).

神經生理學數據僅是相關的！

在目前的知識狀態下，沒有任何神經生理學理論可以解釋由神經元形成的大腦如何產生意識。

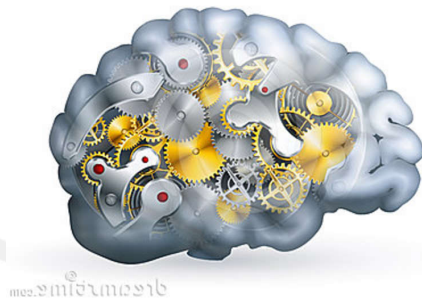
無論使用哪種研究設備（EEG MRI），它都只能提供意識的相關性。

只能根據神經生理形態及其動力學來預測的是現象，而不是現象性的全部事實（存在現象）。



## Neurophysiological data are no more than correlates !

- We have only neurophysiological correlates of mental states, conscious or not.
- We are in the same configuration as Plato's cave. We only see the shadows of brain function.



← - - - - - →  
Only correlates



神經生理學數據僅是相關的！

我們只有精神狀態的神經生理相關性，無論意識狀態與否。  
我們和柏拉圖的洞穴處於同一構造。我們只看到腦功能的陰影。

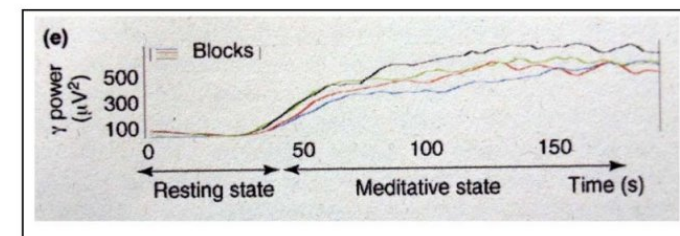
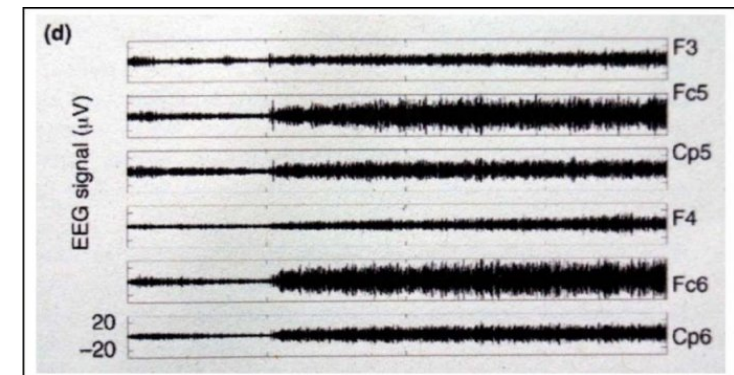
## What kind of correlates ?

- Most often correlates are fast activities of the gamma type (40-100 Hz).
- These are relevant to long-distance links between neurons.
- These are related to synchronization of neuronal activities.

什麼樣的關聯？

最經常相關的是伽馬類型 (40-100 Hz) 的快速活動。

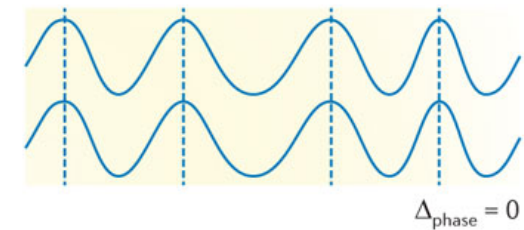
這些與神經元之間的長距離鏈接有關。  
這些與神經元活動的同步有關。



# What kind of correlates ?

- The quality of the binding of each cortical area activity to each other is evaluated on the basis of phase coherence of EEG signal.
- Coherent neurons "pulsate" at the same time.

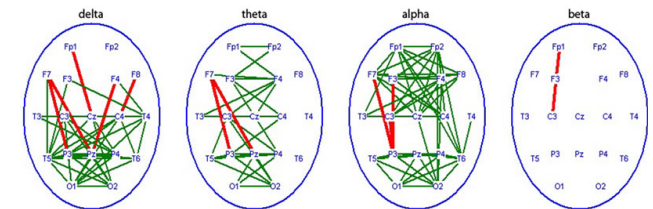
Phase coherence



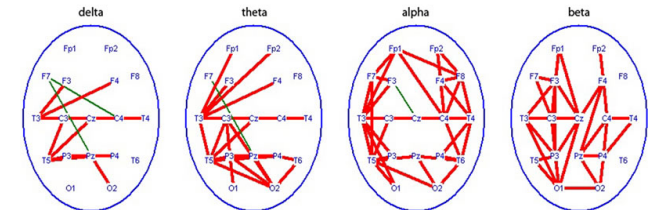
## 什麼樣的關聯？

基於EEG信號的相位相干性來評估每個皮質區域活性彼此結合的質量。  
相干神經元同時“搏動”。

Before rehabilitation



After rehabilitation



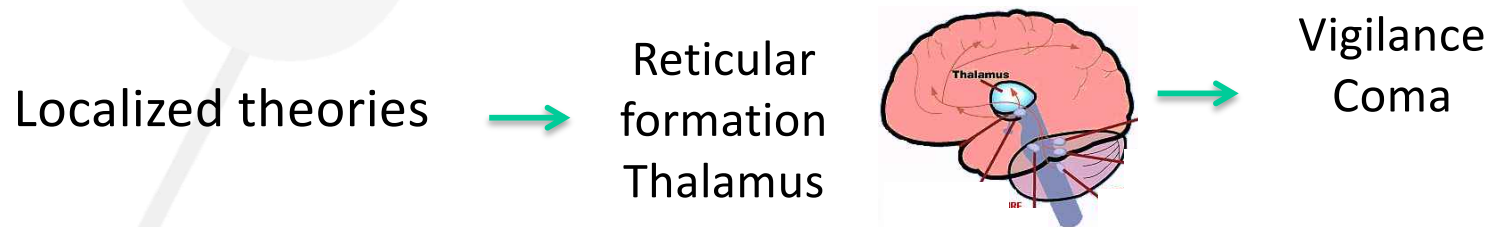
— Increase of coherence  
— Decrease of coherence





# Classification of neurobiological theories of consciousness

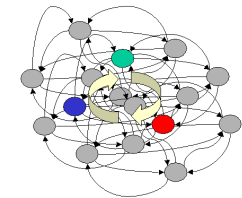
## 神經生物學理論的分類



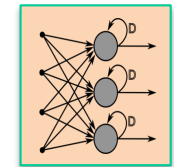
### Generalized theories

Theories of feedback  
or recurrence

First order: consciousness =>  
cyclic activity making a loop  
on itself.

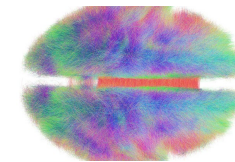


Higher order: consciousness  
requires mental meta-states.

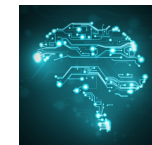


Theories of cognitive  
unification: linking and  
synthesis between  
specialized modules

Structural unification  
(connectome)



Functionnal unification



## First order recurrence theories

- In these theories, consciousness is defined as a recursive process (Lamme).
- Conscious states are resonant states.
- What is unconscious corresponds to weak sensory-motor resonances.
- What is conscious corresponds to amplified motor sensory resonances.

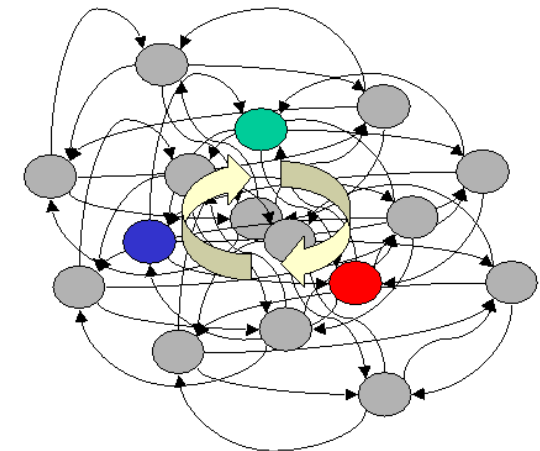
### 一階遞歸理論

在這些理論中，意識被定義為遞歸過程(Lamme)。

意識狀態是共振狀態。

無意識對應於弱的感覺運動共振。

有意識的對應於放大的運動感覺共振。



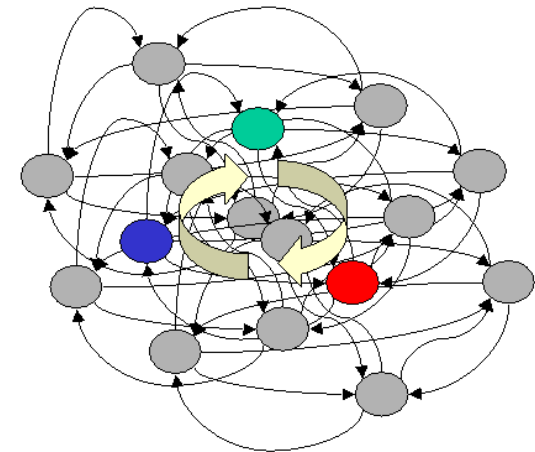
## First order recurrence theories

- Theories of first-order recurrence are not theories of the emergence of consciousness.
- They are theories replacing consciousness by cyclical activities of neurons (eliminativist theories).

### 一階遞歸理論

一階遞歸理論不是意識出現的理論。

它們是用神經元的周期性活動代替意識的理論(消除主義理論)。



## Second order recurrence theories

In these theories (Lau, Rosenthal), the consciousness **emerges** only from the moment when representations of representations develop.

This requires simple neuro-electric recurrences in the sensorimotor areas and recurrences of recurrences in the associative areas.

### 二階遞歸理論

在這些理論(勞, 羅森塔爾)中, 意識僅從表象的表象發展的時刻出現。

這需要在感覺運動區域中進行簡單的神經電複發  
+在相關區域中進行複發。

## Second order recurrence theories

There are 3 levels for generation of consciousness:

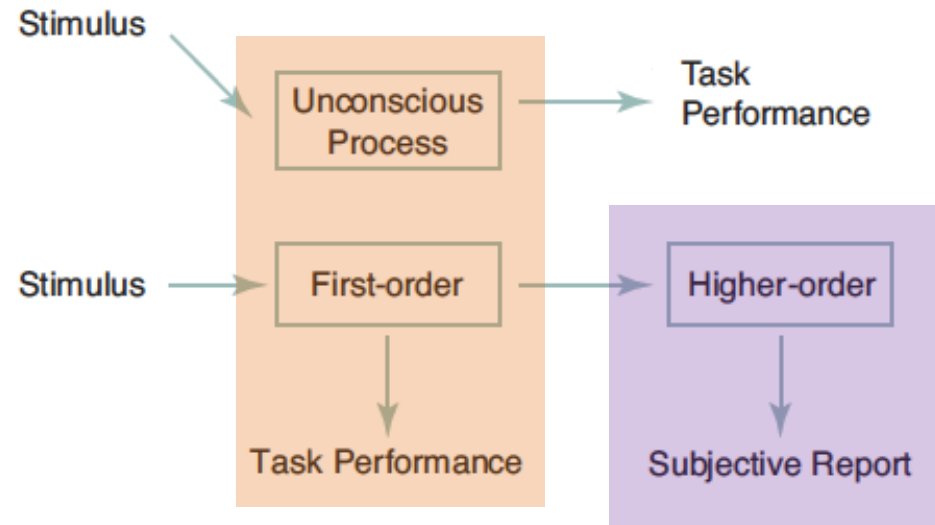
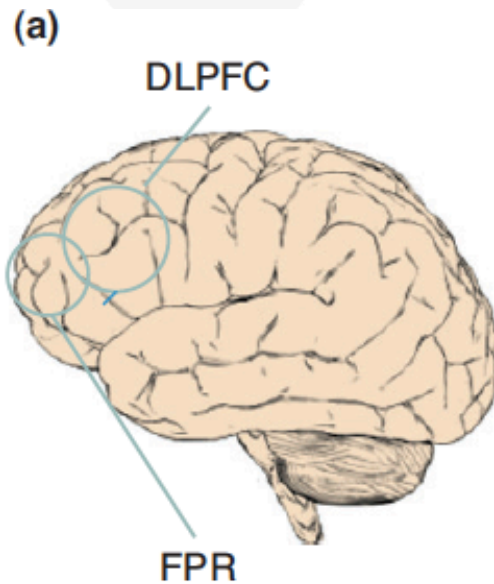
- Primary perceptual representation.
- Representation of the primary perceptual representation => appearance of a reflective consciousness.
- Representation as mine of the meta-representation => consciousness of identity, self-reflexive.

### 二階遞歸理論

意識產生分為三個層次：

- 主要的感知表示。
- 主要感知表示的表示=>反射意識的出現。
- 作為元表示形式的我的表示形式=>身份意識, 自我反省。

## Second order recurrence theories



### Empirical support for higher-order theories of conscious awareness

Hakwan Lau<sup>1,2</sup> and David Rosenthal<sup>3</sup>

*Trends in Cognitive Sciences* August 2011, Vol. 15, No. 8

二階遞歸理論



## Bootstrapping theory (Edelman)

- This is a very interesting theory because it includes some concepts from nuclear physics adapted to conscious processes.
- It should be noted that quantum physics is often used to try to understand consciousness (this is the case with the proposals of Eccles and Penrose for example).
- Very many studies try to explain consciousness with the principles of quantum mechanics. This led to an entire field of work: neuroquantology.
- But in the context of this conference, I will not develop this approach, which would require a lot of time.

### 自舉理論(愛德曼)

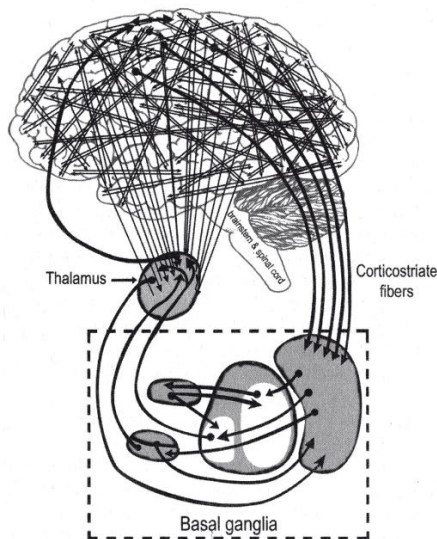
- 這是一個非常有趣的理論，因為它包含了一些來自核物理的概念，這些概念適用於有意識的過程。
- 應當指出，量子物理學經常被用來試圖理解意識（例如，埃克爾斯和彭羅斯的建議就是這種情況）。
- 許多研究試圖用量子力學原理來解釋意識。這導致了整個工作領域：神經量子學。
- 但是在這次會議的背景下，我將不開發這種方法，這將需要很多時間。



## Re-entry and bootstrapping theory



- Edelman's theory combines bootstrapping and a second-order recursive approach.
- The bootstrap (in physics of particles) is self-consistency. A nuclear particle has three different roles: a) a constituent role of compound sets, b) a mediating role of the force responsible for the cohesion of the compound set, c) a compound system role ". (Chew)
- The system is not representational



### 再入和自舉理論

- 愛德曼的理論結合了引導和二階遞歸方法。
- 自舉(在粒子物理學中)是自洽的。核粒子具有三種不同的作用：  
a) 化合物組的組成作用, b) 負責化合物組凝聚的力的中介作用,  
c) 化合物系統作用“。(咀嚼)
- 系統不具有代表性



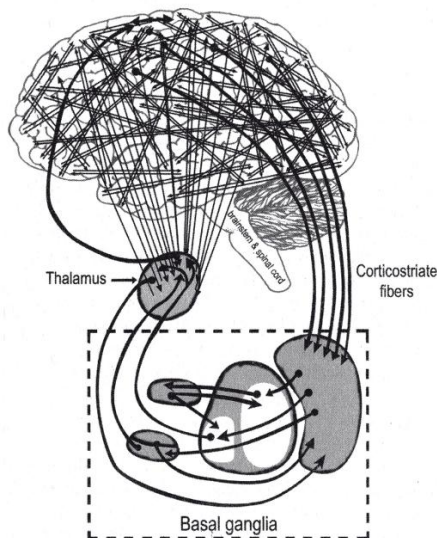
## Re-entry and bootstrapping theory

- Consciousness is the present remembered by reentries of various types.
- "Once the appropriate reentrant circuits are set up in the brain, the bootstrapping process takes place simultaneously and in parallel in all the sensory modalities allowing the construction of a complex scene".

### 再入和自舉理論

意識是各種折返記憶的當下。

“一旦在大腦中建立了適當的折返迴路，引導過程將在所有感覺模態中同時並發地發生，從而構建出複雜的場景。”



## Re-entry and bootstrapping theory

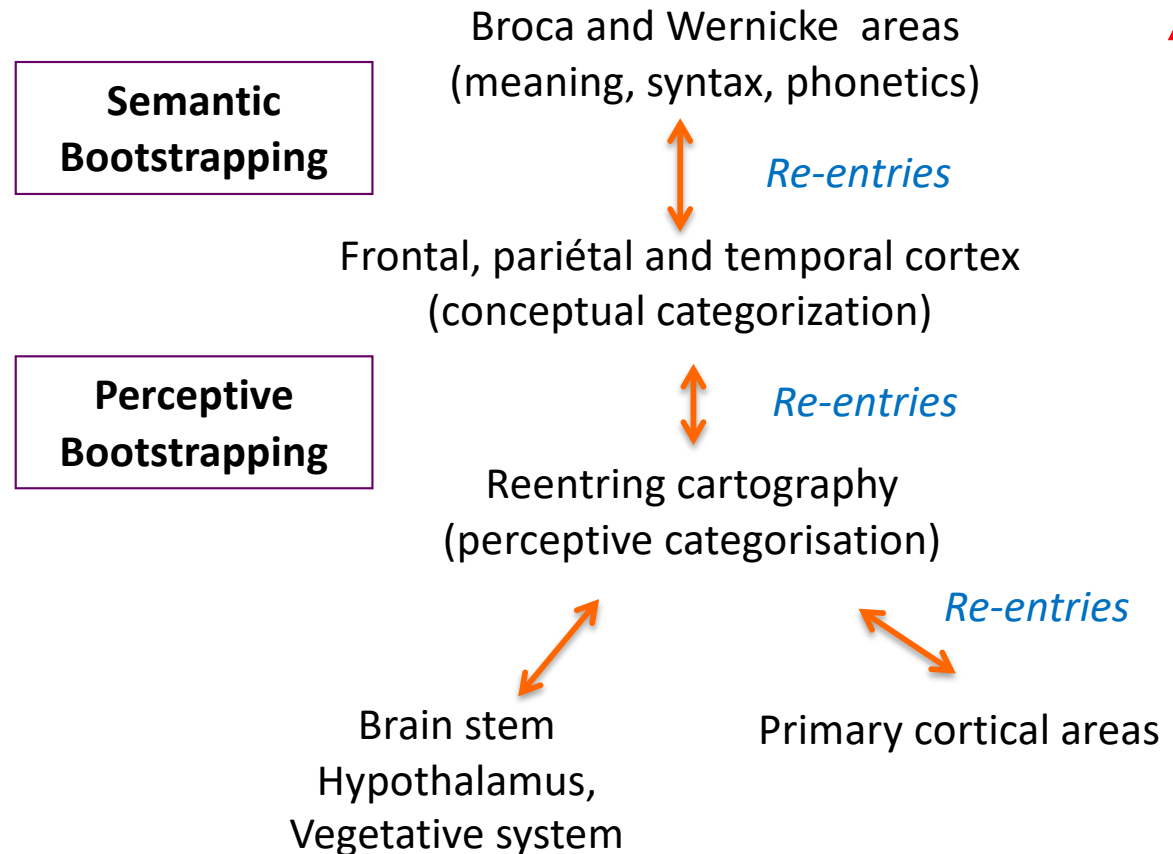
In bootstrapping: «The system (brain) builds useful structures more powerful than those that were initially present ».

再入和自舉理論

在引導過程中：「系統(大腦)構建了比最初存在的結構更強大的有用結構」。

HIGHER ORDER  
CONSCIOUSNESS

Selection of  
neuronal groups



## Global workspace of Baars

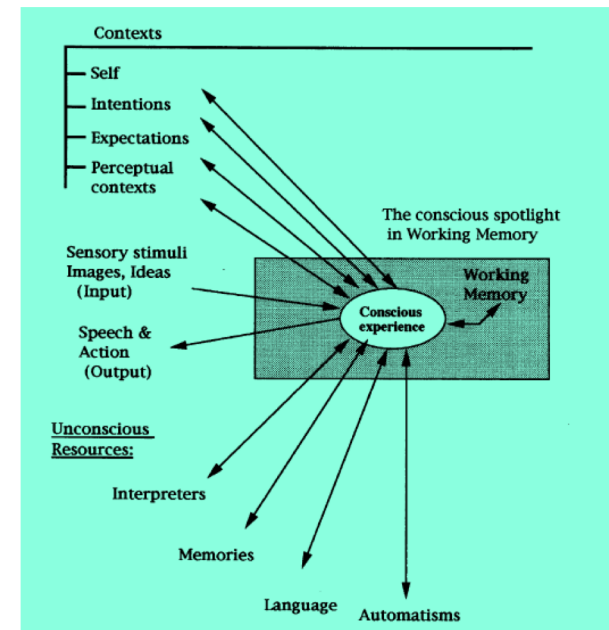


- Consciousness is thought of as a central theater scene where the central actors are initially invisible (unconscious) in their specialized wings and make themselves conscious under the light of reflexivity.
- Involves large-scale synchronized dynamic meta-networks.

### Baars的全球工作區

意識被認為是一個中央劇院場景，在該場景中，中央演員最初在其專用翼中是不可見的（無意識的），並在反射性的照耀下使自己有意識。

涉及大規模同步動態元網絡。

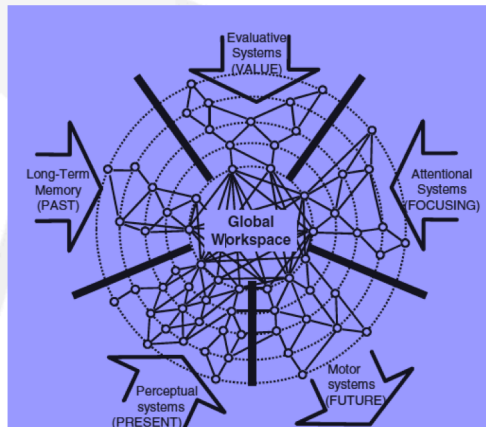


# Global neuronal workspace theory

- Dehaene and Changeux.
- The theory of global neuronal workspace (GNW) theory is a second-order recursive theory.
- Reflexivity and the capacity for connection are thought of as central functions of consciousness.
- Highly dynamic design with extended meta-networks, alternately in training then in fragmentation is proposed.



## 全局神經元工作區理論



Dehaene和Changeux。

全局神經元工作區 (GNW) 理論是二階遞歸理論。

自反性和連接能力被認為是意識的主要功能。

帶有擴展元網絡的高度動態設計，交替訓練然後分段



## Global neuronal workspace theory

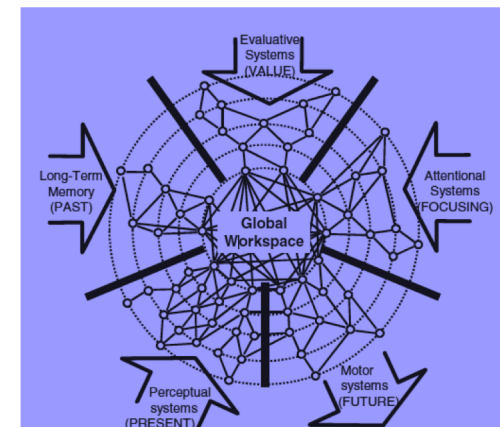
- GNW is in agreement with the notion of James's effective present .
- No a flow of continuous awareness, but cyclically emergent and vanishing moments of unified consciousness.
- Conscious access into the global workspace is based on the ignition of neuronal discharges (synchrony).

### 全局神經元工作區理論

GNW同意詹姆斯有效禮物的概念。

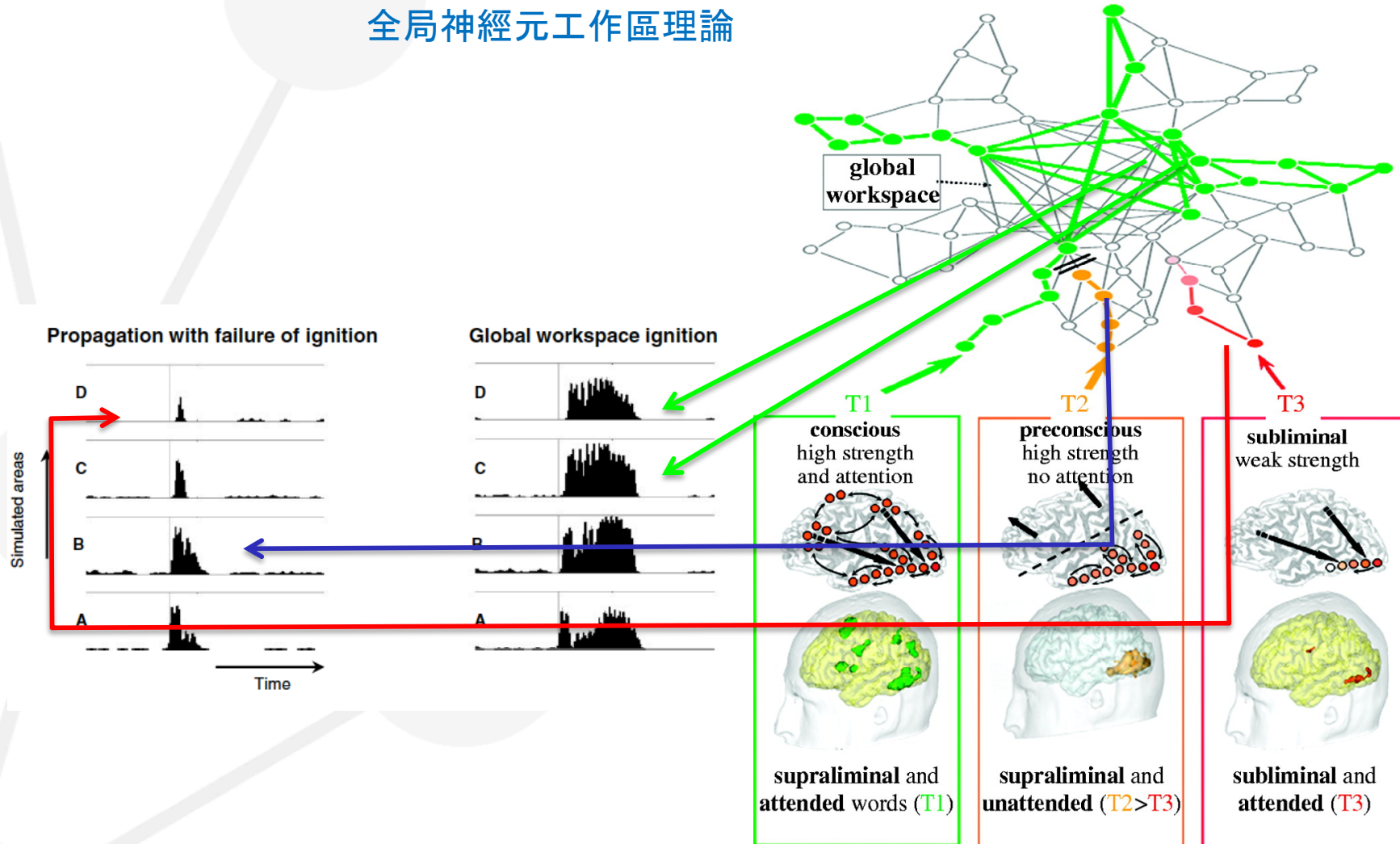
沒有持續的意識流，而是統一意識的周期性出現和消失的時刻

有意識地進入全局工作區是基於神經元放電(同步)的點燃。



# Neuronal global workspace theory

## 全局神經元工作區理論



# Damasio

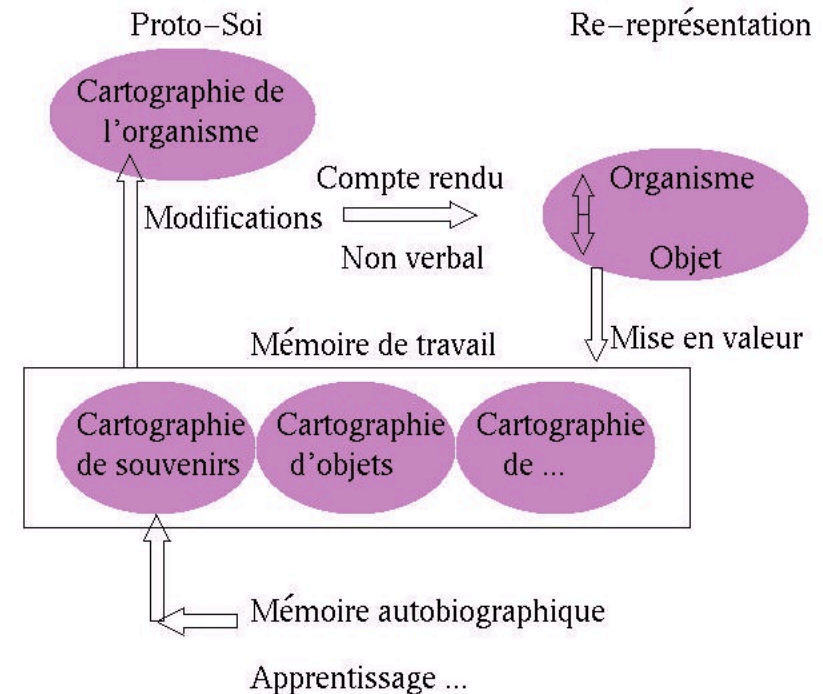


- Damasio starts from a neuropsychological approach to emotions.
- He postulates the superposition of neural cards.
- The criterion of consciousness is reflectivity.

達馬西奧 (Damasio) 從對情緒的神經心理學方法入手。

他假定了神經卡的疊加。

意識的標準是反射率。





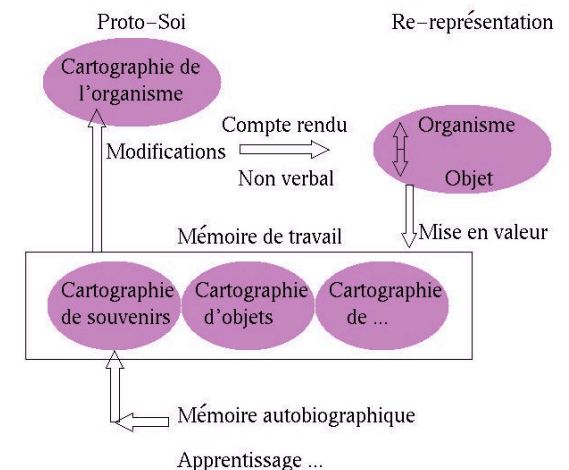
## Damasio

He distinguishes 3 aspects on consciousness

- Proto-self: non-conscious homeostasis and its evaluation.
- Core consciousness: the very feeling of oneself: sensible grasping and an undeveloped form of self-reflection, knowledge of one's own existence.
- Extended Awareness leading to temporal elaboration and autobiographical self.

### 他區分了意識的三個方面

- 自我：無意識的動態平衡及其評估。
- 核心意識：自我的感覺：明智的把握和自我發展的不成熟形式，對自己的存在的了解。
- 擴展意識導致時間上的細化和自傳自我。





## Integrated information theory (Tononi).



- This is a recurrence theory of first order.
- It defines the amount of consciousness associated with each cognitive functioning => definition of a specific neural correlate of each sensitive or volitional quality.

綜合信息論(托尼)。

這是一階遞歸理論。

它定義了與每個認知功能相關的意識量=>每個敏感或自願質量的特定神經相關的定義。

## Integrated information theory (Tononi).



Two key concepts

- Information: as the ability of a functional state to discriminate among several interpretations or responses.
- Integration: the information is unified to allow the verbal or motor response.

綜合信息論(托尼)。

兩個關鍵概念

- 信息: 功能狀態區分幾種解釋或響應的能力。
- 整合: 信息是統一的, 以允許言語或運動反應。

## The theory of micro-consciousness (Zeki)



- Starts from the modularity of visual perceptions.
- Each quale (visual sensation) is associated with a brain region that generates consciousness (color in V4, movement in V5).
- Some patients with visual cortex lesions may be aware of movement without color awareness.
- => The apprehension of the movement in V5 is not unconscious, and the integrative dynamics are not absolutely required, so that the consciousness can be born.

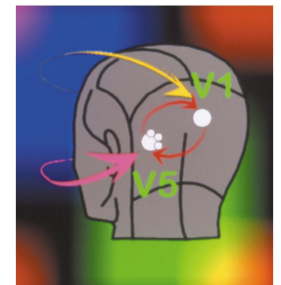
### 微觀意識理論 (Zeki)

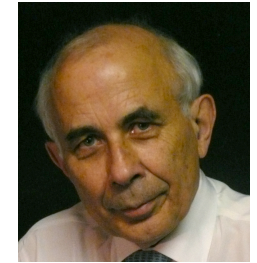
從視覺感知的模塊化開始。

每個品質(視覺感覺)都與產生意識(V4中的顏色, V5中的運動)的大腦區域相關。

一些視覺皮層病變的患者可能沒有顏色意識而意識到運動。

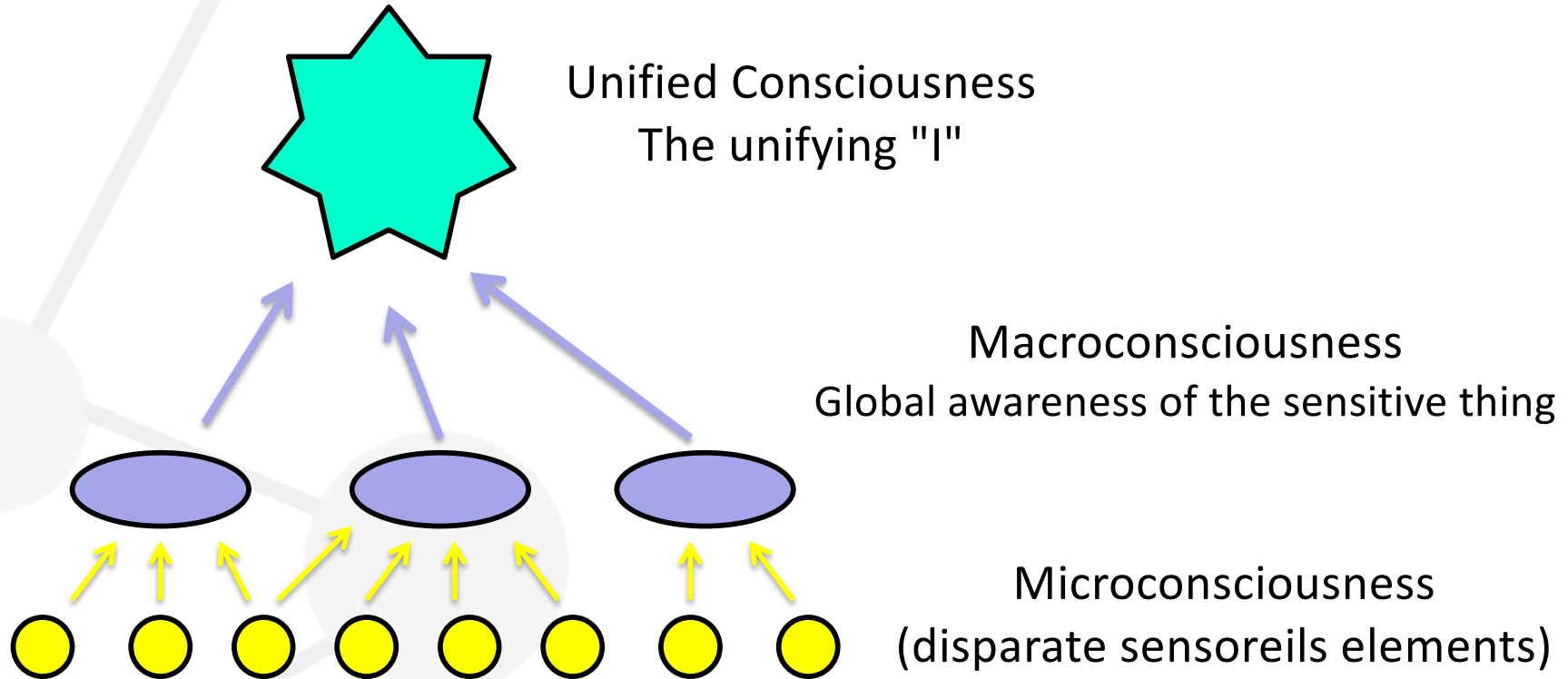
=>在V5中, 對運動的理解並不是無意識的, 並且對集成動力學的要求不是絕對必要的, 這樣才能產生意識。





# The theory of micro-consciousness (Zeki)

微觀意識理論 (Zeki)



## Theory of multiple conscious drafts (Bitbol)



- Derived from the theories of multiple consciences of Zeki.
- The microconsciences are either transcribed in a preverbalisation of lived sequences, or constitute a background atmosphere.
- The preverbalized microconsciences are transcribed in a narrative which is then incorporated in an autobiographical frame.

### 多重有意草案理論 (Bitbol)

源自Zeki的多重良心理論。

微觀良心要么在生命序列的前言中被轉錄，要么構成背景氣氛。

言語化的微觀意識被記述成敘事形式，然後被納入自傳框架中。

## Theory of multiple conscious drafts (Bitbol)



- The verbal report is nothing more than the transcription of the lived sequences that has been elevated to the level of narrative.
- The proposition of multiple consciousness drafts is the most compatible with a phenomenological approach.

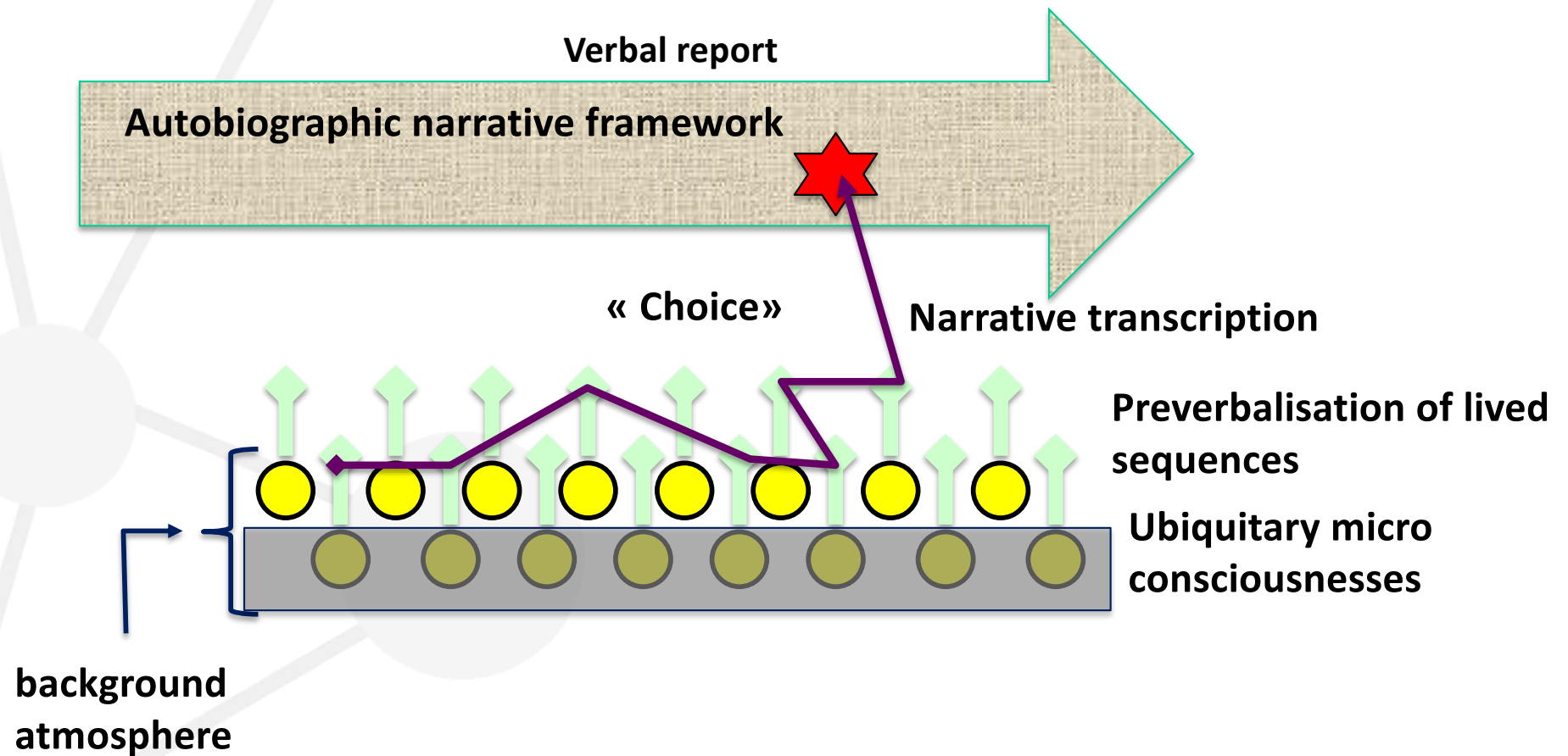
### 多重有意草案理論 (Bitbol)

口頭報告無非是活著的序列的轉錄，已經被提升到敘述的水平。

多重意識草案的主張與現象學方法最兼容。

# Theory of multiple conscious drafts (Bitbol)

多重有意草案理論 (Bitbol)



## About Neuroscientific Mythologies

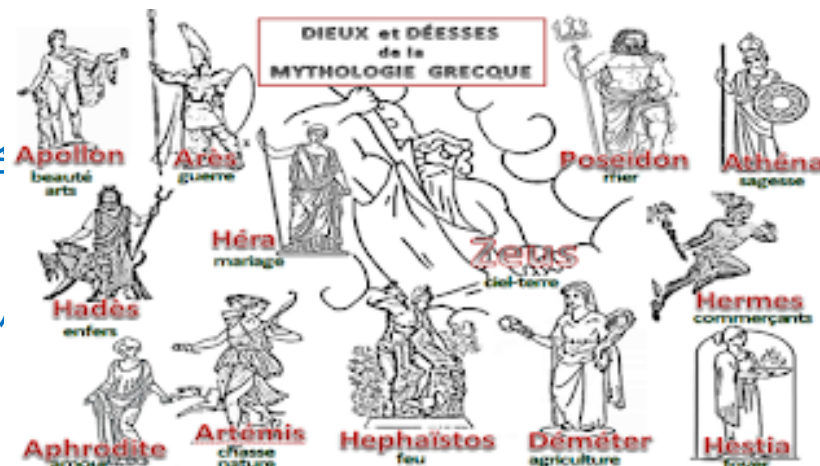
- 1) A first question is: how to choose among this variety of neurobiological propositions on consciousness ?
- 2) If we must choose one, it is because it seems more relevant to us. But on what basis ?
- 3) What are our beliefs whereas a paradigm is a set of scientific beliefs (Kuhn)

### 關於神經科學神話

1) 第一個問題是：如何在意識的各種神經生物學中進行選擇？

2) 如果我們必須選擇一個，那是因為它似乎與我有關。但是在什麼基礎上呢？

3) 我們的信念是什麼，範式是一組科學信念 (Kuhn)





## About Neuroscientific Mythologies

- 4) Each theory draws a different "brain world" operating in a different way. This corresponds to "cerebral mythologies".
- 5) A myth is allegorical expression of an abstract idea; exposition of a theory, of a doctrine in a pictorial form.
- 6) Either we take everything together and consider all these theoretical propositions as true, or we adhere to one of them in a belief set.

### 關於神經科學神話



4) 每種理論都以不同的方式得出一個不同的“大腦世界”。這對應於“大腦神話”。

5) 神話是抽象思想的寓言表達；以圖片形式說明理論，學說。

6) 或者我們把所有東西放在一起，並認為所有這些理論命題都是正確的，或者我們在一個信念集中堅持其中一個。



## PART 3



### The pending (and critical) questions

未決(和醜聞)問題  
(對於西方人)

## Five pending (and critical) questions

1. Why we have a « hard problem » about consciousness ?
2. What is the brain for?
3. Is consciousness a thing ?
4. Consciousness at the origin?
5. Do we have a soul ?

### 未決(和醜聞)問題 (對於西方人)

1. 為什麼我們對意識有一個“難題”？
2. 大腦的作用是什麼？
3. 意識是一件事嗎？
4. 起源的意識？
5. 我們有靈魂嗎？

## Question 1

### 問題1

## Why we have a « hard problem » about consciousness ?

- We have seen that with our exploration systems, we have only correlates, or even just cues of conscious processes.
- Correlates or clues do not explain anything, even if they can describe for example a pathology, or an activation some part in the brain during a task.
- The major question posed to neurosciences is how a brain can create consciousness. In other words, the question is how does consciousness emerge from brain tissue ?

### 為什麼我們對意識有一個“難題”？

- 我們已經看到，在我們的探索系統中，我們僅具有關聯，甚至只是意識過程的線索。
- 相關性或索引什麼也不能解釋，即使它們可以描述例如病理或在任務執行過程中大腦某些部分的激活。
- 神經科學面臨的主要問題是大腦如何產生意識。換句話說，問題是大腦組織的意識如何出現？

## Question 1

### 問題1

## Emergence ?

- In thermodynamics, the laws of macroscopic physic ( $PV = NRT$ ) can be derived from the laws of kinetic theory ( $u_{\text{trans}} = 3 / 2kT$ ). ( $U_{\text{trans}} =$  translational cinetic energy particles)
- **Both laws belong to physics.**
- The laws of macroscopic physic are said slightly emergent.

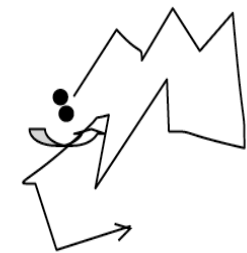
### 緊急情況 ?

- 在熱力學中，宏觀物理定律 ( $PV = NRT$ ) 可以從動力學理論定律 ( $u_{\text{trans}} = 3 / 2kT$ ) 中得出。 ( $U_{\text{trans}} =$  平移電影能量能量粒子)。
- 這兩個定律都屬於物理學。
- 宏觀物理定律被認為是微不足道的。

GAZ PARFAIT  
DIATOMIQUE  
(H<sub>2</sub>...)

Energie cinétique =  
Translation + rotation =  
5/2 kT

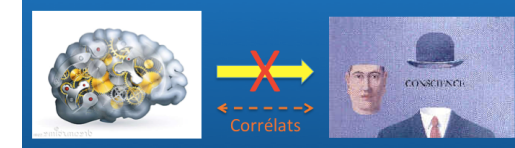
kT



## Question 1

### 問題1

## Emergence ?



- Consciousness (non physical) cannot be an emergent (derived) physical property of the brain (physico-chemical).
- The idea that something of a given nature can cause something of another nature violates the principle of homogeneity of the theoretical syllogism, which is at the root of scientific causality.
- There is no theoretical bridge between neurophysiological functioning and phenomenal consciousness, no designatable or conceivable trait of one that engenders the characteristics of the other.

### 緊急情況 ?

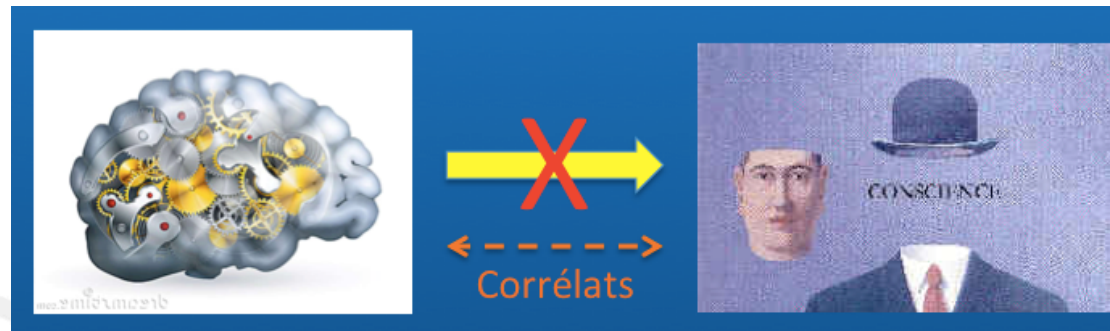
- 意識(非身體的)不能是大腦的新出現的(衍生的)物理屬性(理化的)。
- 給定性質的某種事物可能導致另一種性質的某些觀點違反了科學因果關係的理論上的三段論的同質性原則。
- 在神經生理功能和現象意識之間沒有理論上的橋樑，一個人的可指定或可想像的特徵不具有另一個人的特徵。

## Question 1

### 問題1

# The « hard problem » of consciousness

The "explanatory gap " or the hard problem" of cognitive neuroscience is the impossibility of explaining phenomenal consciousness, ie how a conscious, non-material experience can be caused by the brain, a material object.



### 意識的“難題”

認知神經科學的“解釋性差距”或“難題”是不可能解釋現象意識的，即意識如何通過物質這一實體而引起有意識的非物質體驗。

## Question 2

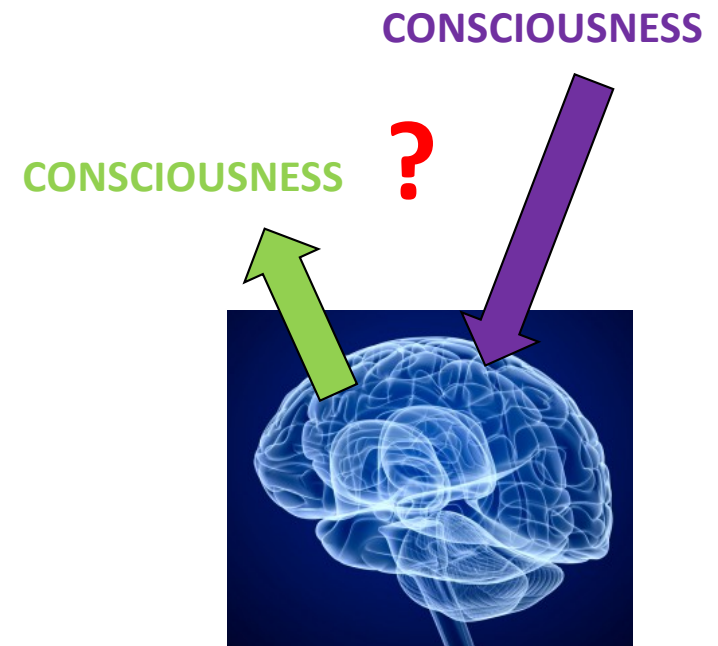
### 問題 2

## What is the brain for ?

- Either we admit that we will ( soon ?) find the means with which a physical system (brain) creates nonphysical consciousness,
- Either we can ask the question whether it is really the brain that could produce consciousness.
- In other words if consciousness comes from elsewhere.

### 大腦是乾什麼的？

我們要么承認，我們(很快?)將找到物理系統(大腦)創造非物理意識的方式，  
 我們可以問一個問題，是否真的是大腦可以產生意識。  
 換句話說，如果意識來自其他地方





## Question 2

### 問題 2

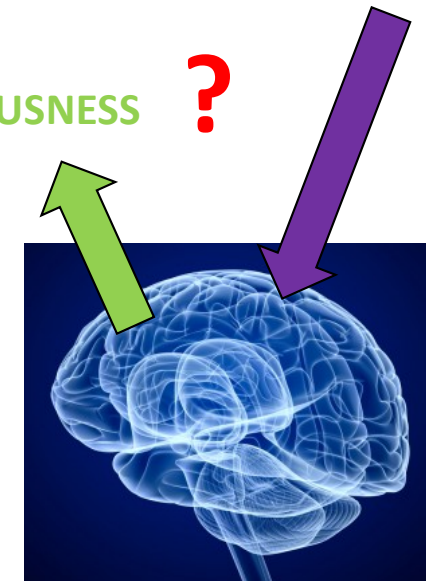
## What is the brain for?

- There is no experiment, no publication that shows that consciousness comes from the brain (or the whole body).
- The "hard problem" may be a false problem.
- The comas and the loss of consciousness do not constitute the proof that the brain produces consciousness.
- Because in the case where the brain would receive an external consciousness, the argument does not hold.

### 大腦的作用是什麼？

- 沒有實驗，也沒有出版物表明意識來自大腦（或整個身體）。
- “難題”可能是一個錯誤的問題。
- 昏迷和意識喪失不構成大腦產生意識的證據。
- 因為在大腦將接受外部意識的情況下，這種論點不成立。

CONSCIOUSNESS ?  
CONSCIOUSNESS

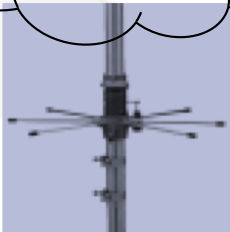


## Question 2

### 問題 2

## What is the brain for?

- Might be the brain a receiving antenna of consciousness?
- Can we imagine a very sophisticated antenna that modulates, adapts or transforms an external consciousness ?



大腦的作用是什麼？

大腦可能是意識的接收天線嗎？

我們能否想像一個非常複雜的天線來調製，適應或轉換外部意識？

## Question 3

### 問題 3

## Is consciousness a thing ?

- If consciousness is an object, a thing, we can put it in front of us (object).
- But who puts it in front of me ? Who experiences consciously to see the consciousness "detached" in front of oneself?
- So, can we objectify (to throw in front) a consciousness?
- Or can we objectify only conscious motor or linguistic behaviors?
- Therefore, what is the value of neuroscientific researchs that treat consciousness as an object of study?

### 意識是一件事嗎？

- 如果意識是一個對象，一個事物，我們可以將它擺在我們面前（對象）。
- 但是誰把它擺在我面前呢？誰有意識地體驗看到自己面前的“分離”意識？
- 那麼，我們可以客觀化（擺在前面）意識嗎？
- 還是我們只能將有意識的運動或語言行為客觀化？
- 因此，將意識作為研究對象的神經科學研究的價值是什麼？

## Question 3

### 問題 3

## Is consciousness a thing ?

- "Conscious experience is not something that can be isolated by denomination or preaching. It is neither an object nor a property nor a phenomenon. And yet she is not nothing!" (Bitbol)

意識是一件事嗎？

“有意識的經驗不能通過宗派或傳教來孤立。它既不是客體，也不是財產，也不是現象。然而，她並不是一無所有！” (Bitbol)



## Question 4

### 問題 4

## Consciousness at the origin ?

- The "hard problem leads to the proposal of many contradictory hypotheses. These hypotheses are interesting as well as problematic.
- Most often, these hypotheses are formulated in the third person, because **consciousness is thought of as an object of study** that can be analyzed as a car or a chair.
- It is systematically omitted that asking the question of consciousness or finding an explanation is already, in itself, a conscious experience.

### 意識源自何處？

- “困難的問題導致提出了許多相互矛盾的假設。這些假設既有趣又有問題。
- 通常，這些假設是由第三人稱提出的，因為意識被認為是可以作為汽車或椅子進行分析的研究對象。
- 系統地省略詢問意識問題或尋找解釋本身本身就是一種意識體驗。

## Question 4

### 問題 4

## Consciousness at the origin?

- It is thus omitted that the question of consciousness is that of the origin of all knowledge.
- The question is not the origin of my consciousness, but how can I account for the fact that my consciousness is at the origin.
- **In fact, not my conscience, but my conscious experience.**

### 意識源自何處？

- 因此，省略了意識問題是所有知識的起源問題。
- 問題不是我的意識的起源，而是我如何解釋我的意識是起源的事實。
- 實際上，不是我的良心，而是我的自覺經驗。

## Question 4

### 問題 4

## Consciousness at the origin?

- "Conscious experience (consciousness) is not an appearing but the integral fact of appearing." (Bitbol)
- This is the prerequisite, "the actual upstream of each investigation and each attribution of meaning to the action".
- The question of the origin of consciousness refers here automatically to the origin of the question. (Bitbol).
- NOT CONSCIOUSNESS (concept) but CONSCIOUS EXPERIENCE

意識源自何處？

“有意識的體驗(意識)不是出現, 而是出現的不可或缺的事實。”(Bitbol)  
這是先決條件, 即“每個調查的實際上游以及對行為的每個含義歸屬”。

意識起源的問題在這裡自動指的是問題的起源。(Bitbol)。

不自覺(概念), 但自覺的經驗



## Question 4

### 問題 4

## When consciousness creates neurons !

- Descartes as well as Husserl raise the problem of the origin of knowledge.
- Knowledge comes from consciousness (cogito)
- Thus it is through multiple conscious experiences that we could build the concept of neuron, and see neurons under the microscope.

### 當意識產生神經元！

- 笛卡爾和胡塞爾都提出了知識淵源的問題。
- 知識來自意識 (cogito)
- 因此，通過多次有意識的體驗，我們可以建立神經元的概念，並在顯微鏡下看到神經元。



## Question 4

### 問題 4

# When consciousness creates neurons !

- Scientific concepts arise from convergent experiences and definitions. They are some residues or abstractions that come from the scientist's experience.
- This include the concept of neurons, brain...
- Any experiment is an experience, but it is not reciprocal.

### 當意識產生神經元！

- 科學概念源於經驗和定義的融合。它們是來自科學家經驗的一些殘差或抽象。
- 這包括神經元，大腦的概念.....
- 任何實驗都是實驗，但不是對等的。

Husserl

Idées directrices pour une phénoménologie



tel gallimard

## Question 4

### 問題 4

## A garment of ideas !

- As Husserl says: « ... So we add to the world of life - to the one who in our life-to-the-concrete world is always given to us as real - a garment of ideas carved in the infinite open of possible experiences, and which fits him well , that of the truths which one calls objectively scientific .... (Husserl Crisis, 60).

### 一個想法的服裝！

正如胡塞爾(Husserl)所說:«...因此, 我們增加了生活世界-在我們從生活到具體的世界中始終被賦予真實的那個人-在無限可能的可能性中刻畫出的思想服裝經驗, 而且很適合他, 一個被客觀地稱為科學的真理.....(胡塞爾危機, 60)。



## Question 5

### 問題 5

## Do we have a soul ?

There are many incomprehensible phenomena which question the problematic of consciousness.

- Near Death Experiments (NDE).
- Synchronies (non-causal relationships).
- The presence of entities (ghosts) of deceased relatives of patients who appear in the psychotherapies.
- etc.

### 我們有靈魂嗎？

許多無法理解的現象質疑意識的問題。

- 臨近死亡實驗(NDE)。
- Synchronies(非因果關係)。
- 心理治療中患者已故親屬的實體(假)的存在。
- 等等

## Question 5

### 問題 5

## Do we have a soul ?

- All these questions pose that of the soul.
- Carl G. Jung asks the question of the soul and life and replaces a mind-body conception of psyche with a body-consciousness-soul design
- For him, the soul "belongs to the fact that there is more obscure and mysterious among all that is given to our conscience to meet"

### 我們有靈魂嗎？

所有這些問題構成了靈魂的問題。

卡爾·榮格 (Carl G. Jung) 提出了關於靈魂和生命的問題，並用一種具有身體意識的靈魂設計取代了心理的一種身心概念。

對他而言，靈魂“屬於這樣一個事實，那就是，在我們的良知見識中，存在著更多晦澀難懂的事物”

## Question 5

### 問題 5

## Do we have a soul ?

C.G.Jung says: "Anyone who wants to study the soul should not confuse it with his own consciousness, otherwise he obscures the object of his research to his own eyes.

On the contrary, we must discover and recognize how different the soul is from consciousness in order to differentiate it ...

Nothing is more immeasurable than the reality of the soul and the realities of our consciousness. To want to measure one by the others would be a serious misunderstanding. "

### 我們有靈魂嗎？

C.G. Jung說：“任何想研究靈魂的人都不應將其與自己的意識相混淆，否則他會將自己的研究對象遮蓋住自己的眼睛。

相反，為了區分它，我們必須發現並認識到靈魂與意識有多麼不同.....

沒有什麼比靈魂的現實和我們的意識的現實更不可估量的了。想要一個人衡量一個人將是一個嚴重的誤會。”

## CONCLUSION

## 結論



## Think differently about consciousness !

- We have to describe consciousness not as an object, but as an experience, as our experience, and to see what it means to be conscious.
- How to describe the conscious experience, its modes, its modalisations, its flow, its contents?
- Phenomenology is the philosophy that goes to the limits of conscious experience and describes it.
  - => **Practice phenomenology and epoche!**

換個角度思考意識！

- 我們必須將意識描述為一種體驗，而不是作為一種對象，作為一種體驗，作為我們的體驗，並觀察意識的意義。
- 如何描述意識體驗，其模式，其形式，其流程，其內容？
- 現象學是一種哲學，被推到有意識的體驗的極限並對其進行描述  
=>練習現象學和短句！

Thank you so much for your attention  
感謝您的關注！





XXX

- XXX

Chinese

