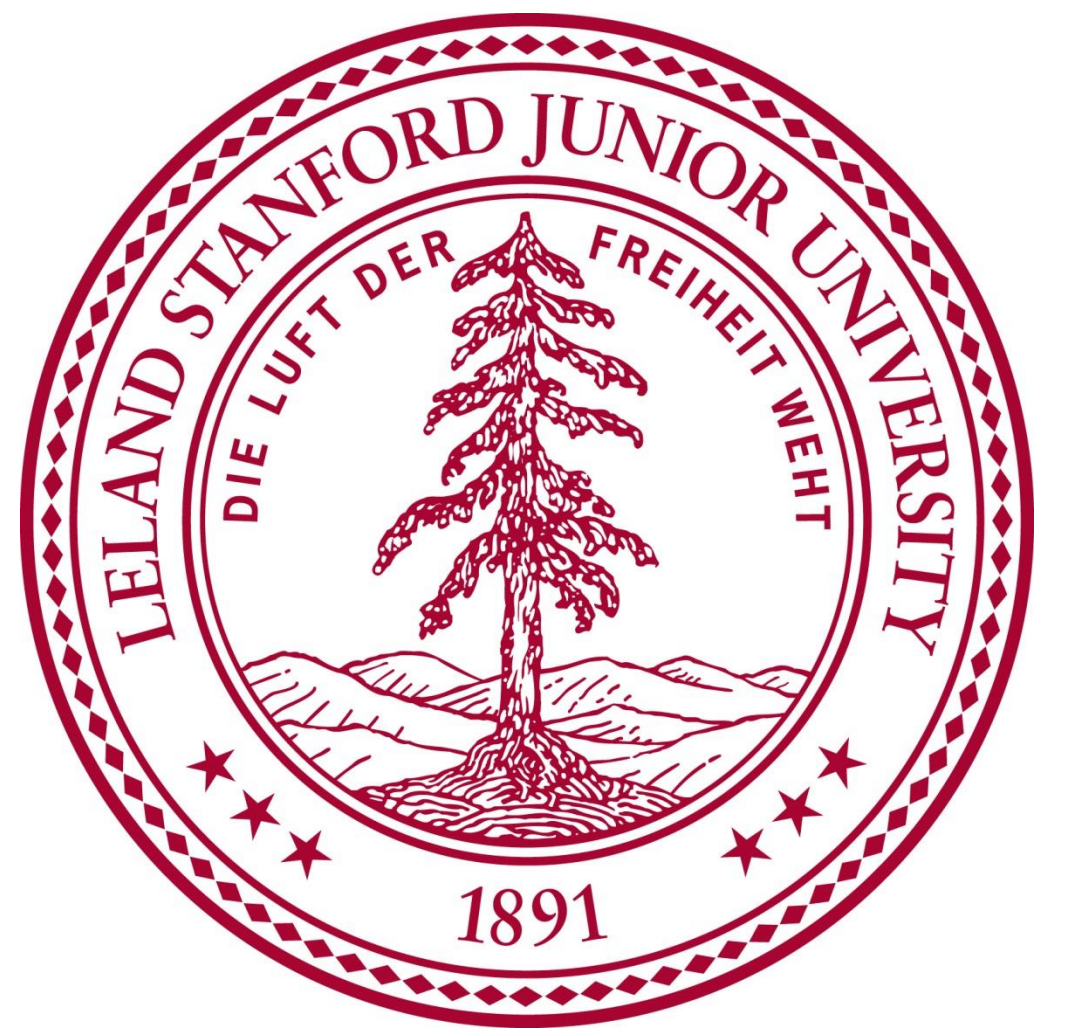


A Model of Consciousness May Explain Spiritually Enlightened States

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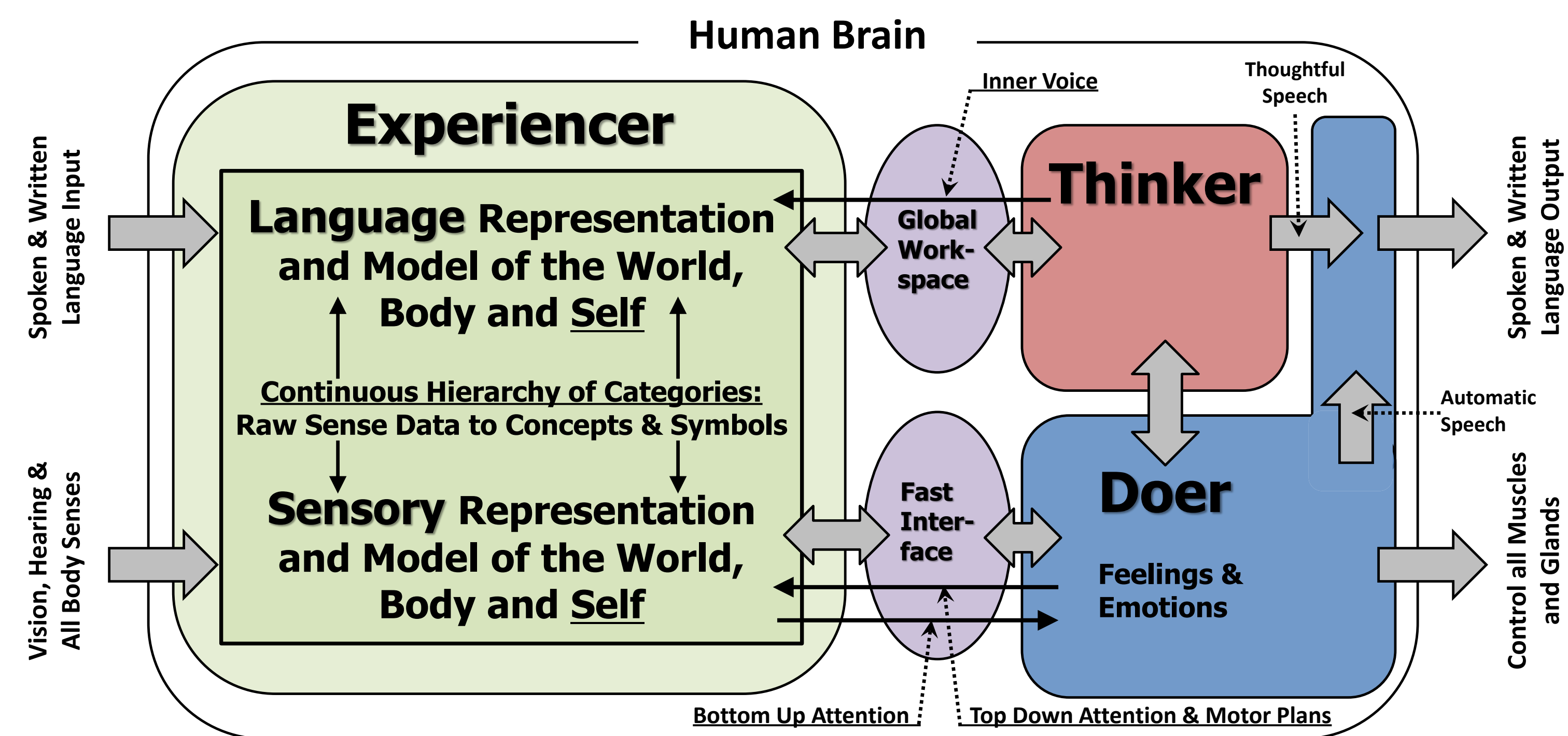
Abstract: A "three-agent model" of the brain may combine with Integrated Information Theory (IIT) to explain enlightened states. IIT says that the conscious part of the brain is the sub-network containing the maximum amount of integrated information. The Thinker-Doer-Experiencer model proposes that transitions from an unenlightened state to one or more enlightened states could be caused by changes in the distribution of the IIT conscious sub-network among the three different agents. In the unenlightened state, the conscious sub-network could be mostly limited to the Thinker and some portions of the Experiencer. Varying the proportions of the conscious sub-network in the Thinker and Doer could explain multiple types of enlightened states. This model may also explain "flow states" and the differences between animal and human consciousness.

Hypothesis: There are Three Agents⁽¹⁾ in the brain:

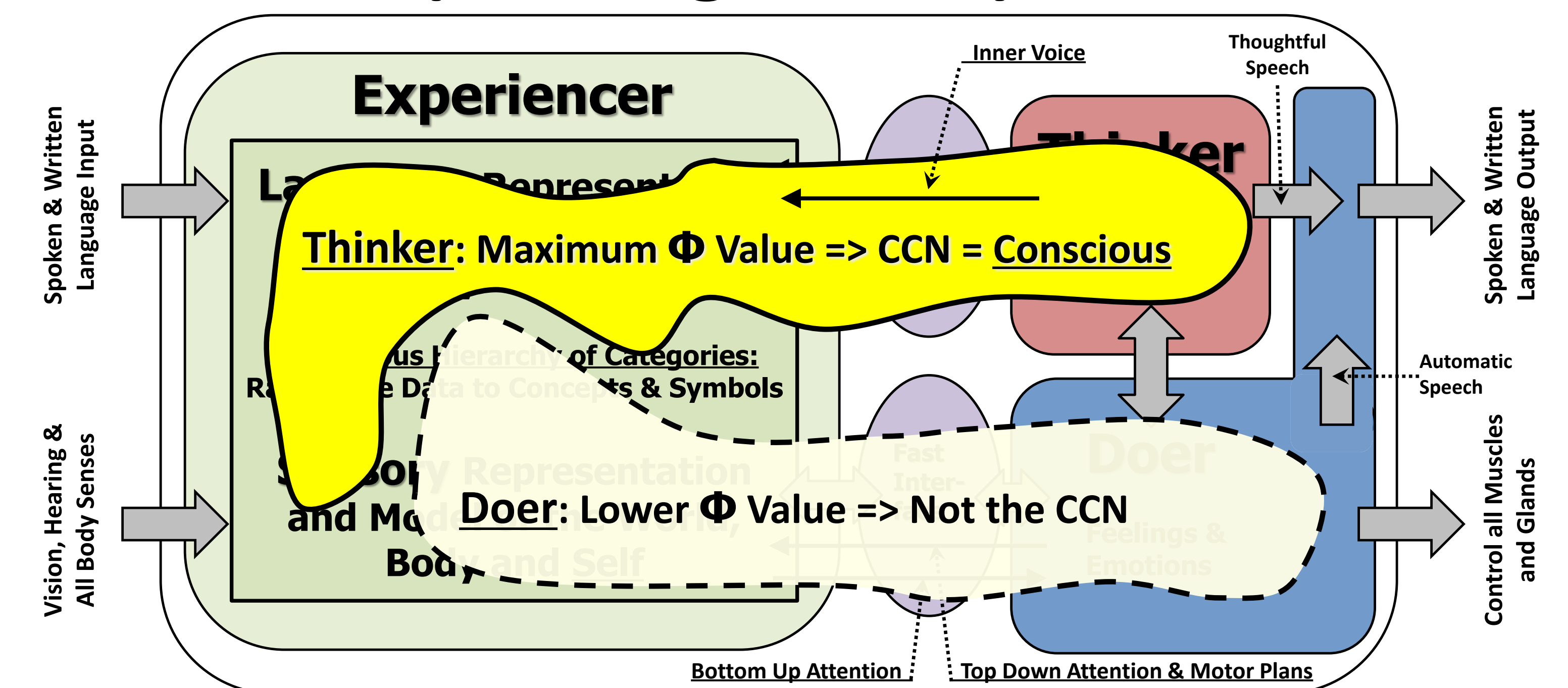
- 1. Thinker** – the executive function which uses language, symbols, concepts and images to solve problems.
- 2. Doer** – controls the body and has emotions.
- 3. Experiencer** – constructs the sensory and language (or conceptual) model of the world and the body.

Psychology's **Dual Process Theory**⁽²⁾ (DPT) provides the most compelling evidence for both the **Thinker** and **Doer** agents:

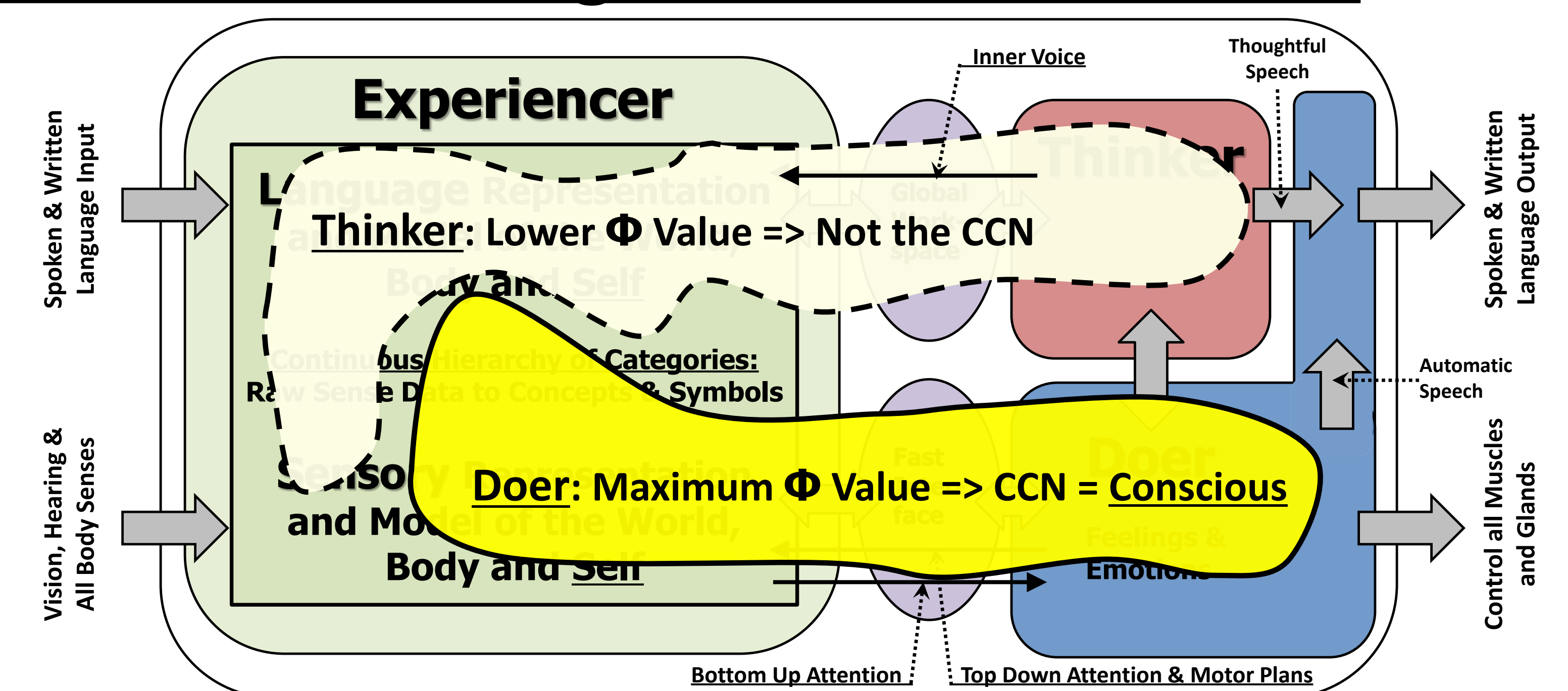
- DPT System 1 (the "**Fast**" subconscious system) is the **Doer**
- DPT System 2 (the "**Slow**" conscious system) is the **Thinker**



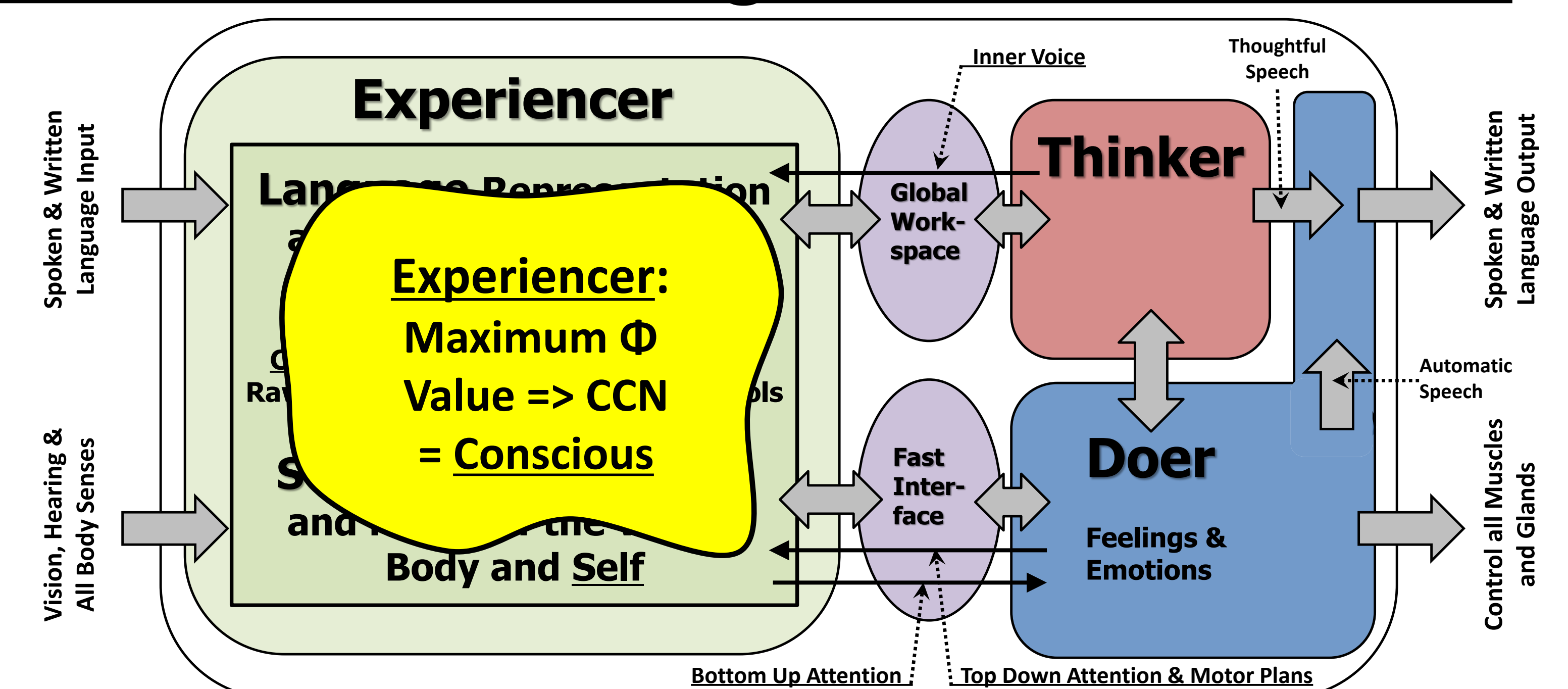
The Modern (Unenlightened) Human CCN:



One Possible Enlightened Human CCN:

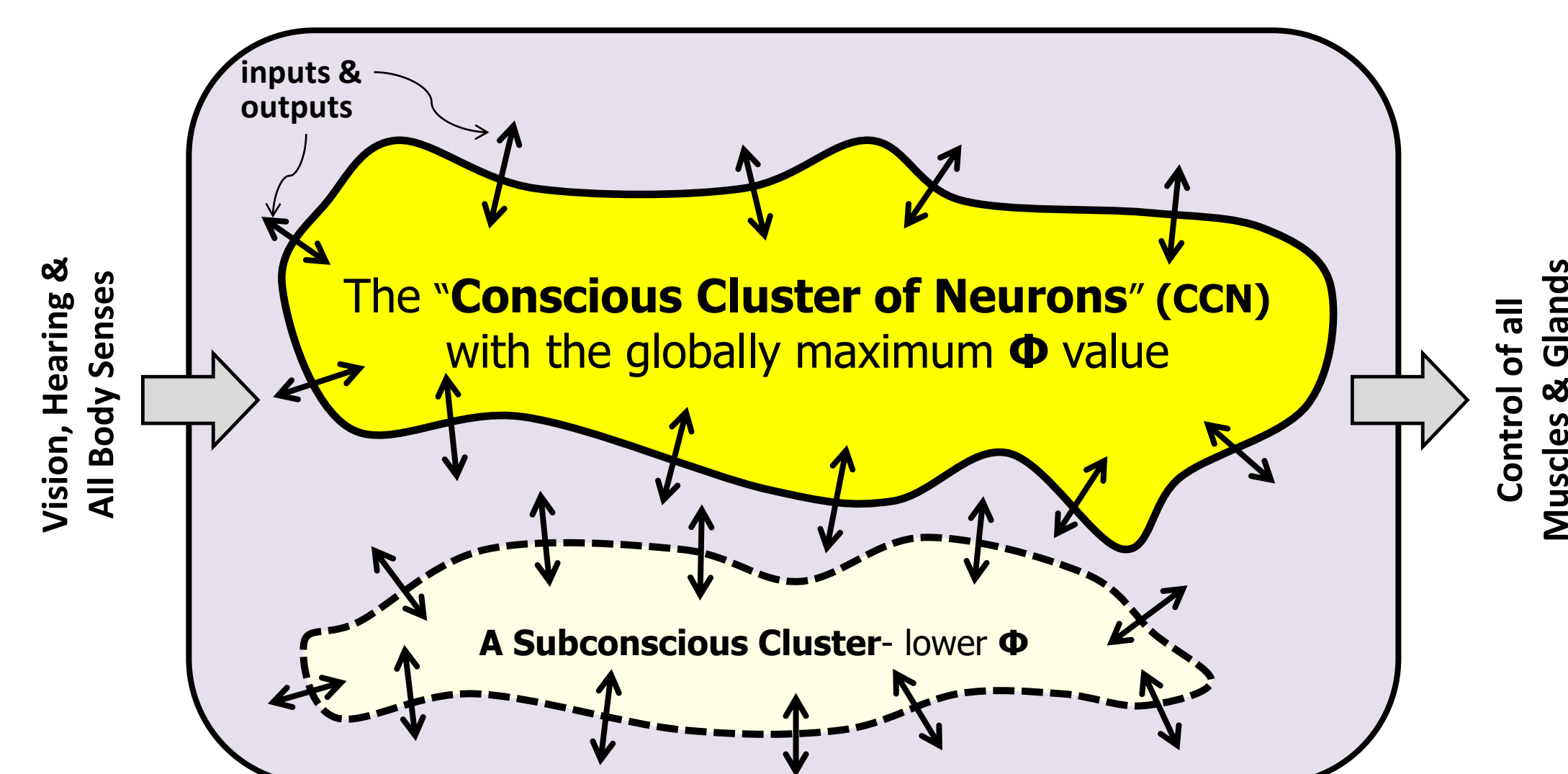


Another Possible Enlightened Human CCN:



Integrated Information Theory⁽³⁾ (IIT)

The symbol Φ represents the amount of integrated information in any given neuron cluster. The "**Conscious Cluster of Neurons**" (CCN) is the set of neurons that have the globally maximum Φ value. Another integrated cluster of neurons with a lower locally maximum Φ value will not be conscious.



⁽¹⁾ A theorem in control theory says that any good agent contains a model of the world. If the agent is active in the world, it would also need a self-model. (Conant & Ashby, Int. J. Sys Sci., 1970, v. 1, No. 2, 89-97)

⁽²⁾ DPT was popularized by Nobel Laureate Daniel Kahnemann: Kahnemann, D. (2011) *Thinking, Fast and Slow* - Also see: Evans, J. & Frankish, K. (2009) *In Two Minds: Dual Processes and Beyond*

⁽³⁾ Giulio Tononi, et al (2014) *From the Phenomenology to the Mechanisms of Consciousness: Integrated Information Theory 3.0*; PLOS Computational Biology