

# The Nature of Consciousness

## Handout [2]

David Chalmers: *Facing Up to the Problem of Consciousness*

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### § Goals:

1. First isolate the hard problem, separating it from other easier problems.
2. Critique of some recent work that uses reductive methods to address consciousness, and argue that these methods inevitably fail to come to grips with the hardest part of the problem.
3. To give a naturalistic account of consciousness that combines nonreductive explanation.

### § The Easy Problem and the Hard Problem:

#### The easy problems of consciousness: [phenomena of awareness]

- \_\_\_ the ability to discriminate, categorize, and react to environmental stimuli;
- \_\_\_ the integration of information by a cognitive system
- \_\_\_ the reportability of mental states
- \_\_\_ the focus of attention
- \_\_\_ the deliberate control of behavior
- \_\_\_ the difference between a wakefulness and sleep

#### The hard problem: [phenomena of consciousness]

\_\_\_ The problems of experience: How is it that these physical systems are subjects of experience? Why and how does our experience arise from a physical basis? Why should physical processing give rise to a rich inner life at all?

[Question: What exactly is the distinction he tries to draw? Why are the easy problems easy and is the hard on hard?]

#### Chalmers' argument:

1. When a phenomenon is functionally definable, we explain the phenomenon by explaining its function.
2. We explain a function by specifying a mechanism that performs the function.
3. This kind of explanation is *reductive* in the sense that the explanation of the mechanism gives the complete story of the phenomenon.
4. But even after we have given a complete explanation of the physical mechanism for conscious experience, we still don't give the complete explanation of conscious experience itself.
5. Therefore, conscious experience is not functionally definable.
6. Therefore, there is an explanatory gap between a functional analysis of conscious experience and the explanation of the experience itself.

### § Some research strategies:

- \_\_\_ 1. to explain something else.
- \_\_\_ 2. to deny that there is anything more to be explained.
- \_\_\_ 3. to claim to be explaining experience.
- \_\_\_ 4. to explain the structure of experience.
- \_\_\_ 5. to isolate the substrate of experience; to identify the sort of process from which consciousness arises.

[Question: Which might be the best strategy?]

[Question: What would count as an explanatory bridge?]

**\* Chalmers' Second Argument:**

1. Given any physical process, it is conceptually coherent that it could be instantiated in the absence of experience.
2. [how do we fill in this missing premise?]
3. Therefore, no mere account of the physical process will tell us why experience arises.

**§ Chalmers' Proposal: Nonreductive Explanation**

1. We will take experience itself as a fundamental feature of the world, alongside mass, charge, and space-time.
2. There are basic psychophysical principles that will not interfere with physical laws, but will be a supplement to a physical theory.
3. The new basic principles postulated by a nonreductive theory give us the extra ingredient that we need to build an explanatory bridge.
4. Naturalistic dualism.

[Question: Are you satisfied with Chalmers' solution to his own problem?]

[Question: Is Chalmers ultimately an epiphenomenalist?]

**§ Toward A Theory of Consciousness**

**1. The principle of structural coherence**

\_\_\_ Awareness is a purely functional notion: it contains cognitively accessible information.

\_\_\_ There is a direct correspondence between consciousness and awareness.

\_\_\_ It is this isomorphism between the structures of consciousness and awareness that constitutes the principle of structural coherence.

\_\_\_ Given the coherence between consciousness and awareness, it follows that a mechanism of awareness will itself be a correlate of conscious experience.

## **2. The principle of organizational invariance**

\_\_\_ This principle states that any two systems with the same fine-grained *functional* organization will have qualitatively identical experiences.

## **3. The double-aspect theory of information**

\_\_\_ There is a direct isomorphism between certain physically embodied information spaces and certain phenomenal (or experiential) information spaces.

\_\_\_ Thus, information (or at least some information) has two basic aspects, a physical aspect and a phenomenal aspect.

**\* a counter-intuitive implication of the double-aspect theory of information.**

**[Question: Do you think that Chalmers has solved the hard problem?]**