

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



**علوم شناختی**

جلسه ۲۷ (الف)

# دو گونه خودآگاهی و مسئله‌ی سخت

**Two Types of Consciousness and the Hard Problem**

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# PART 3: APPLICATIONS



# Chapter 15: The Cognitive Science of Consciousness



# Chapter 15.4: Two types of consciousness and the hard problem



# Block: Two concepts of consciousness

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- **Phenomenal consciousness**

- P-consciousness is experience... We have P-conscious states when we see, hear, smell, taste, and have pains. P-conscious properties include the experiential properties of sensations, feelings...perceptions...thoughts, wants, and emotions.

- **Access consciousness**

- A state is A-conscious if it is poised for direct control of thought and action...a representation is A-conscious if it is poised for free use in reasoning and for direct “rational” control of action and speech.

# The concern from Block

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- The experiments and studies discussed in cognitive science ultimately only inform us directly about the function of A-consciousness but not P-consciousness.
- The real problem of consciousness has to do with P-consciousness.

# Chalmers

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- There is no single problem of consciousness.
- We should make a distinction between a cluster of relatively easy problems and a single, really difficult problem – the hard problem of consciousness.

# Examples of easy problems

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- Explaining an organism's ability to discriminate, categorize, and react to environmental stimuli;
- Explaining how a cognitive system integrates information;
- Explaining how and why mental states are reportable;



# Examples of easy problems (cont.)

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- Explaining how a cognitive system can access its own internal states;
- Explaining how attention gets focused;
- Explaining the deliberate control of behavior;
- Explaining the difference between wakefulness and sleep.

# Easy vs. hard

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- The easy problems are all problems that are recognizable within the basic framework of cognitive science and scientific psychology, for which at least we have some idea of what a solution would look like.
  
- No amount of progress on the easy problems of consciousness will help with the hard problem, i.e., the problem of experience.

# Chalmers on hard problem

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The really hard problem of consciousness is the problem of *experience*. When we think and perceive, there is a whirl of information-processing, but there is also a subjective aspect. As Nagel (1974) has put it, there is *something it is like* to be a conscious organism. This subjective aspect is experience. When we see, for example, we *experience* visual sensations: the felt quality of redness, the experience of dark and light, the quality of depth in a visual field. Other experiences go along with perception in different modalities: the sound of a clarinet, the smell of mothballs. Then there are bodily sensations, from pains to orgasms; mental images that are conjured up internally; the felt quality of emotion, and the experience of a stream of conscious thought. What unites all of these states is that there is something it is like to be in them. All of them are states of experience. (Chalmers, 1995)

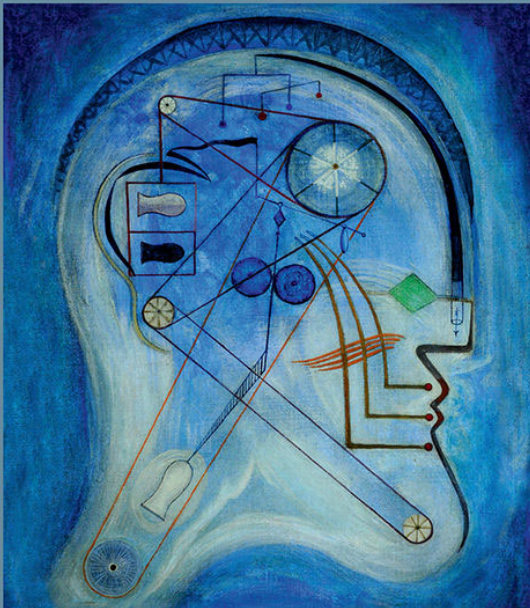


José Luis Bermúdez

## Cognitive Science

An Introduction to the Science of the Mind

Third Edition



José Luis Bermúdez,  
**Cognitive Science:**  
**An Introduction to the Science of the Mind,**  
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**Chapter 15 (Section 15.4)**

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#### Overview

Consciousness is an almost bipolar topic in contemporary cognitive science. On the one hand, we have many exciting experiments and creative theories aiming to understand what consciousness is and how it contributes to cognition. On the other, there are powerful arguments that it is impossible to give an information-processing model of consciousness. This chapter looks at both sides of the debate.

Section 15.1 introduces the challenge of consciousness through Frank Jackson's much-discussed Knowledge Argument. We then consider the differences between conscious and nonconscious information processing. Section 15.2 explores how these are revealed in priming experiments and by studying the behavior of brain-damaged patients. Section 15.3 draws on these findings to explore theories about the function of consciousness. In Section 15.4 we look at two powerful arguments objecting to that whole way of proceeding. According to these arguments,