



علوم شناختی

جلسه ۲۷ (ج) علم شناختی خودآگاهی: نتیجهگیری

The Cognitive Science of Consciousness: Conclusion

کاظم فولادی قلعه دانشکده مهندسی، دانشکدگان فارابی دانشگاه تهران

http://courses.fouladi.ir/cogsci

PART 3: APPLICATIONS



Chapter 15: The Cognitive Science of Consciousness



Chapter 15.6: Conclusion





Two approaches to consciousness

 Mysterians: consciousness is a mystery that we have no idea how to tackle with the tools and methods of cognitive science.

 Cognitive scientists: we have thriving research programs that study different aspects of the conscious mind and how consciousness contributes to action and cognition.





Response to the mysterians

 The so-called hard problem of consciousness will disappear once we have a good enough understanding of the various phenomena lumped together under the label "access consciousness".

Daniel Dennett





The analogy from biology

 Vitalism in biology: in the early 19th century, vitalists believed that the mechanist tools of biology and chemistry were in principle incapable of explaining the difference between living organisms and the rest of the natural world. Thus the proposed "vital force".

 Vitalism has no scientific credibility today. The more that was discovered about the biology and chemistry of living things, the less work there was for a vital force.

 However, the debates about vitalism is important in forcing biologists to develop new models and new experimental tools.



Fall 2021

Prepared by Kazim Fouladi

منبع اصلي

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, 3rd ed., Cambridge University Press, 2020.

Chapter 15 (Section 15.6)



CHAPTER FIFTEEN

The Cognitive Science of Consciousness

OVERVIEW 379

- 15.1 The Challenge of Consciousness: The Knowledge Argument 380
- 15.2 Information Processing without Conscious Awareness: Some Basic Data 382 Consciousness and Priming 382 Nonconscious Processing in Blindsight and Unilateral Spatial Neglect 384
- 15.3 So What Is Consciousness For? 387 What Is Missing in Blindsight and Spatial Neglect 389
- Milner and Goodale: Vision for Action and Vision for Perception 389 What Is Missing in Masked Priming 392
- 15.4 Two Types of Consciousness and the
- 15.5 The Global Workspace Theory of Consciousness 396 The Building Blocks of Global Workspace The Global Neuronal Workspace Theory 397
- 15.6 Conclusion 400

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 muchdiscussed 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,



