

Anatomical and Functional Modularity in Cognitive Science: Shifting the Focus, *Philosophical Psychology* 20 (2007) 175-195

Much of cognitive science is committed to the modular approach to the study of cognition. The core of this approach consists of a pair of assumptions—the anatomical and the functional modularity assumptions—which motivate two kinds of inference: the anatomical and the functional modularity inferences. The legitimacy of both of these inferences has been strongly challenged, a situation that has had surprisingly little impact on most theorizing in the field. Following the introduction of an important, yet rarely made, distinction between two functional concepts—the distinction between cognitive working and cognitive role—this paper analyses these kinds of inference, and refocuses the attention on new aspects of their main limitations. It is argued that both the anatomical and functional modularity inferences can, and do, operate in three distinct modes in contemporary cognitive science, and that seeing this is essential to understanding both the power and the limitations of these methodological tools.