

An Introduction to the Philosophy of Psychology

Psychology aims to give us a scientific account of how the mind works. But what does it mean to have a science of the mental, and what sort of picture of the mind emerges from our best psychological theories? This book addresses these philosophical puzzles in a way that is accessible to readers with little or no background in psychology or neuroscience. Using clear and detailed case studies and drawing on up-to-date empirical research, it examines perception and action, the link between attention and consciousness, the modularity of mind, how we understand other minds, and the influence of language on thought, as well as the relationships among mind, brain, body, and world. The result is an integrated and comprehensive overview of much of the architecture of the mind, which will be valuable for both students and specialists in philosophy, psychology, and cognitive science.

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In memory of my mother, Rene Shaffer Weiskopf (1947–2013), and my aunt, Marti Stelma (1947–2007).

They always gave me books. I wish they were still here so I could give them this one in return.

- DAW

In memory of Fred and Gladys Adams (1924–2012), for letting me pursue things the import of which they did not understand.

- FA





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Preface

Our topic here is psychology, the self-styled science of the mind. Psychology's aim is to explain mental phenomena by describing the underlying processes, systems, and mechanisms that give rise to them. These hidden causal levers underlie all of our mental feats, including our richest conscious perceptions, our most subtle chains of reasoning, and our widest-ranging plans and actions. Although the phenomena of mind are intimately related to events occurring in the brain, these psychological explanations are, we will argue, distinct and autonomous relative to explanations in terms of neural processes and mechanisms. According to the view we present here, psychology and neuroscience are different enterprises. We certainly wouldn't claim that our ever-increasing understanding of how the brain works has nothing to say to psychology: on the contrary, they are complementary, because neuroscience can provide invaluable input to psychological theorizing (and vice versa, a point that we think is not stressed often enough). But our task will be to give a thorough account of the scope, methods, content, and prospects for a distinctive science of our mental lives.

This book is intended for students in philosophy, psychology, and the more cognitively oriented branches of neuroscience, as well as for readers who are merely curious about what these fields might have to contribute to our understanding of the mind. However, we hope that our professional colleagues will also find much to engage with here. So we've done our best to produce a book that holds interest on all levels – for undergraduates, graduates, and researchers alike. We have tried not to presuppose any significant background in any of the sciences that we discuss, and we hope that this book will serve as a useful companion for many of those pursuing the interdisciplinary study of cognition.

Part of our motivation in writing this book was to show philosophy of psychology to be, first and foremost, a branch of philosophy of science, not

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simply an adjunct to the philosophy of mind. This has meant making certain tough choices about what gets included and what gets left on the cutting-room floor. Readers hoping for discussions of the merits of the computational theory of mind or naturalized semantics, for example, will not find them prominently mentioned here. We hope that this omission is understandable, given that they have been widely discussed (nearly to exhaustion) elsewhere. However, that does not mean that metaphysical issues as such have been given short shrift. Rather, where they arise, we have tried to emphasize the consequences that they have for how we design studies and think about the broader implications of theories of cognition. Metaphysical questions about the mind, as they appear here, are always grounded in their relation to scientific practices.

In keeping with this theme, the structure of the book attempts to reflect as much as possible the topics that are actively debated among psychologists, as well as the standard research methods and explanatory strategies they employ. The experiments and theories we discuss, and the styles of argument that we use, should accordingly be ones that are quite familiar to those who know the psychological literature. One of our goals in sticking closely to the science is to give philosophers some sense for how arguments among various theoretical positions are actually decided in psychology. We especially hope to convey just how densely packed with details these arguments can be, and how many different empirical and theoretical commitments they must balance. Indeed, there is much more detail than any single volume could possibly contain, so we have provided extensive references to guide those interested in exploring the literature further.

That is not to say, however, that we have aimed to produce merely a neutral summary of the results. Far from it – we have organized and presented these materials in order to draw substantive conclusions. So this book is intended not only to introduce these debates in some depth but also to stake out positions on the issues, where the evidence seems to warrant it. Where we are taking steps beyond the evidence, we have flagged our views as conjectures to be explored further. We have always aimed to be fair to those we disagree with, but where the results seem to favor a particular view, we have said so emphatically. And we further hope that this will encourage those readers who disagree with us to develop their own views more forcefully by giving them something substantial to resist.



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This book, then, may be thought of as an evenhanded, but opinionated, guide to how philosophers can get started thinking about the fascinating picture of the mind being painstakingly assembled by contemporary psychology. For reasons of space, and so as not to tax the finite appetites of our readers, we could not cover every topic of interest, nor could we cover the ones we do address in the full depth they deserve. Nonetheless, our hope is that this discussion is both fair and sufficient to introduce any curious and motivated reader to the field.



Acknowledgments

Several years ago, when Hilary Gaskin approached me (FA) about writing this book, I canvassed the existing books under the title "Philosophy of Psychology." There were several. After looking at them carefully, and meeting with Hilary at the APA meeting in Baltimore, I discovered that they were mainly traditional philosophy of mind books under a different title. So I decided that I would produce a genuine philosophy of psychology book – one that took seriously the *psychology*.

I also knew that to do this I would need help. So I considered persons who might join me in the writing of this book. I didn't have to look far. In 2007, Dan Weiskopf and I were giving papers at a conference organized by Shaun Gallagher at the University of Central Florida. Dan went first on the topic of embodied cognition. To my horror, as he was giving his paper I had the thought, "He's giving my talk tomorrow." This convinced me that anyone who thought so much like me would be the ideal colleague with whom to produce this book. And I was exactly right in my choice. Dan was the ideal colleague on such a project.

What is more, during the writing of this book, Dan and I both experienced close personal family loss. As a result, Dan took over many of the responsibilities in producing this book that should have fallen to me. For that, I am forever grateful to him.

We are both deeply grateful to Hilary Gaskin, Gillian Dadd, Anna Lowe, and the entire staff at Cambridge University Press for their patience, encouragement, and help.

Thanks are also due to Shaun Gallagher and James Garvey, respectively, for permission to use small portions of material from Adams, F. (2010). Embodied cognition. *Phenomenology and the Cognitive Sciences*, 9(4), 619–628; and Adams, F., & Beighley, S. (2011). The mark of the mental, for a special volume edited by James Garvey of the Royal Institute of Philosophy, *The Continuum Companion to*

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FA. Hockessin, DE

The true beginnings of a thing are impossible to know. But the inception of my own interest in philosophy can, officially at least, be dated with some precision. In the first semester of my freshman year of college I enrolled in Richard Wollheim's introductory class, "The Nature of Mind." I recall little of the specific course content, aside from snippets of Freud and Chomsky, but the lectures were enthralling, full of new tools and vocabulary for thinking about the mind, and Wollheim patiently tolerated my many confused questions after class. I had started college with interests in cell biology and literature. In a fit of youthful enthusiasm, I switched my schedule around to accommodate as many philosophy classes as I could, thereby causing my parents no small amount of alarm. Thanks, then, to Professor Wollheim for an introduction that changed my life. Later coursework with John Searle and the psycholinguist Dan Slobin further convinced me that philosophy could be a productive partner with scientific inquiry and deepened my interests in language and mind. Finally, in my senior year, Bruce Vermazen kindly allowed me to take his graduate seminar on mental causation and encouraged my first attempts at extended philosophical writing. This seems like an appropriate place to say that I'm grateful to them, as well as to all of my early teachers, faculty and graduate assistants alike. Without their guidance, none of this would have been possible.

My sincere thanks to Fred for pitching this project to me, and for the comically accurate account of our meeting above. I'd also like to enthusiastically join him in adding my gratitude to the editorial staff at Cambridge University Press, whose generosity and professionalism have been exceptional. Thanks as well to the chair of the philosophy department at Georgia State University, George Rainbolt, for helping to arrange my teaching schedule in a way that gave me ample time for writing. Discussions with Eric Winsberg helped to frame some of the material on scientific explanation, and Muhammad Ali Khalidi offered helpful comments on a draft of the chapter on nativism. My friends and family have had to endure more than the usual amount of crankiness from me during the drafting of this manuscript, and I thank them for



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