The Brain in a Vat

The scenario of the brain in a vat, first aired thirty-five years ago in Hilary Putnam’s classic paper, has been deeply influential in philosophy of mind and language, epistemology, and metaphysics. This collection of new essays examines the scenario and its philosophical ramifications and applications, as well as the challenges which it has faced. The essays review historical applications of the brain-in-a-vat scenario and consider its impact on contemporary debates. They explore a diverse range of philosophical issues, from intentionality, external-world skepticism, and the nature of truth, to the extended mind hypothesis, reference magnetism, and new versions of realism. The volume will be a rich and valuable resource for advanced students in metaphysics, epistemology, and philosophy of mind and language, as well as for anyone interested in the relations between language, thought, and the world.

Sanford C. Goldberg is Professor of Philosophy and Chair of the Department of Philosophy at Northwestern University, Illinois, and for 2012–15 he was Professorial Fellow in the Department of Philosophy and Eidyn Research Centre at the University of Edinburgh, Scotland. He is the author of Anti-Individualism: Mind and Language, Knowledge and Justification (Cambridge, 2007), Relying on Others: An Essay in Epistemology (2010) and Assertion: A Philosophical Essay on Assertoric Speech (2015). He is also the editor of Internalism and Externalism in Semantics and Epistemology (2007) and Externalism, Self-Knowledge, and Skepticism: New Essays (Cambridge, 2015).
Classic Philosophical Arguments

Over the centuries, a number of individual arguments have formed a crucial part of philosophical enquiry. The volumes in this series examine these arguments, looking at the ramifications and applications which they have come to have, the challenges which they have encountered, and the ways in which they have stood the test of time.

Titles in the series
The Prisoner’s Dilemma
Edited by Martin Peterson
The Original Position
Edited by Timothy Hinton
The Brain in a Vat
Edited by Sanford C. Goldberg
The Brain in a Vat

Edited by
Sanford C. Goldberg
# Contents

<table>
<thead>
<tr>
<th>List of contributors</th>
<th>page vii</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgments</td>
<td>ix</td>
</tr>
<tr>
<td>1. Introduction: Putnam’s reflections on the brain in a vat</td>
<td>1</td>
</tr>
<tr>
<td>Sanford C. Goldberg</td>
<td></td>
</tr>
</tbody>
</table>

## Part I: Intentionality and the philosophy of mind and language

| 2. Putnam on brains in a vat       | 19       |
| Tony Brueckner                     |          |
| 3. How to think about whether we are brains in vats | 27       |
| Gary Ebbs                          |          |
| 4. Brains in vats, causal constraints on reference and semantic externalism | 37       |
| Jesper Kallestrup                  |          |
| 5. Extended minds in vats          | 54       |
| Sven Bernecker                     |          |

## Part II: Epistemology

| 6. Putnam on BIVs and radical skepticism | 75       |
| Duncan Pritchard and Chris Ranalli     |          |
| 7. New lessons from old demons: the case for reliabilism | 90       |
| Thomas Grundmann                      |          |
| 8. BIVs, sensitivity, discrimination, and relevant alternatives | 111      |
| Kelly Becker                         |          |

## Part III: Metaphysics

| 9. Brains in vats and model theory   | 131      |
| Tim Button                          |          |
Contents

10. Realism, skepticism, and the brain in a vat 155  
    Janet Folina

11. Rethinking semantic naturalism 174  
    Igor Douven

12. Internal to what? Contemporary naturalism and Putnam’s  
    model-theoretic argument 190  
    Patricia Marino

13. The model-theoretic argument: from skepticism to  
    a new understanding 208  
    Gila Sher

14. Eligibility and ideology in the vat 226  
    Tim Sundell

Bibliography 251
Index 265
Contributors

**Kelly Becker** is Professor of Philosophy at the University of New Mexico. He has published many articles on epistemology and the philosophy of mind and language, and is the author of *Epistemology Modalized* (2007) and co-editor of *The Sensitivity Principle in Epistemology* (with Tim Black, Cambridge, 2012).

**Sven Bernecker** is Professor of Philosophy at the University of California at Irvine. He is the co-editor of several volumes and the author of *Memory: A Philosophical Study* (2010), *The Metaphysics of Memory* (2008), and *Reading Epistemology* (2006).

**Tony Brueckner** was Professor of Philosophy at the University of California at Santa Barbara. He published more than 150 articles in leading journals and was author of *Essays on Skepticism* (2010) and *Debating Self-Knowledge* (with Gary Ebbs, Cambridge, 2012).

**Tim Button** is University Lecturer and a Fellow of St John’s College, at the University of Cambridge. He is the author of *The Limits of Realism* (2013), and publishes mostly within metaphysics, logic and the philosophy of mathematics.

**Igor Douven** is Research Director of the French National Centre for Scientific Research. He has published extensively in leading journals, on topics in epistemology, metaphysics, philosophy of science and philosophy of language.

**Gary Ebbs** is Professor of Philosophy at Indiana University. He is author of *Rule-Following and Realism* (1997), *Truth and Words* (2009), and *Debating Self-Knowledge* (with Anthony Brueckner, Cambridge, 2012).

**Janet Folina** is Professor of Philosophy at Macalester College. She is the author of *Poincaré and the Philosophy of Mathematics* (1992) and many articles in leading journals on symbolic logic, philosophy of math, and philosophy of science.

**Sanford C. Goldberg** is Professor of Philosophy and Chair of the Philosophy Department at Northwestern University. He is author of *Anti-Individualism: Mind and Language, Knowledge and Justification* (Cambridge, 2007), *Relying on Others: An Essay in Epistemology* (2010), and *Assertion: A Philosophical Essay on Assertoric Speech* (2015).
Thomas Grundmann is Professor of Philosophy at the University of Cologne. He is the author of Analytische Einführung in die Erkenntnistheorie (2008), Der Wahrheit auf der Spur: Ein Plädoyer für den erkenntnistheoretischen Externalismus (2003), Analytische Transzendentalphilosophie: Eine Kritik (1994), and is co-editor of Experimental Philosophy and its Critics (with Joachim Korvath, 2012).

Jesper Kallestrup is Professor of Philosophy at the University of Edinburgh. He is the author of Semantic Externalism (2011), and is co-editor of New Waves in Philosophy of Mind (with Mark Sprevak, 2014) and Being Reduced: New Essays on Reduction and Explanation (with Jakob Hohwy, 2008).

Patricia Marino is Associate Professor of Philosophy at the University of Waterloo. She is the author of Moral Reasoning in a Pluralistic World (2015) as well as many articles in leading journals on topics in ethics, epistemology, the philosophy of sex and love, the theory of truth, and the philosophy of economics.

Duncan Pritchard holds the Chair in Epistemology and is Professor of Philosophy at the University of Edinburgh. He is author of Epistemic Luck (2005), Epistemological Disjunctivism (2012), Epistemic Angst: Radical Skepticism and the Groundlessness of Our Believing (2015) and co-author of The Nature and Value of Knowledge: Three Investigations (with Adrian Haddock and Alan Millar, 2010).

Chris Ranalli is a postdoctoral fellow at the National Autonomous University of Mexico (UNAM). He has authored and co-authored several articles on epistemic luck and skepticism.


Tim Sundell is Assistant Professor of Philosophy at the University of Kentucky. He has published articles on the philosophy of language, aesthetics, metaethics, and philosophical and linguistic methodology.
Acknowledgments

I first encountered Hilary Putnam’s reflections on the brain-in-a-vat (BIV) scenario as a graduate student in one of Sidney Morgenbesser’s courses in the early 1990s. I was quickly convinced of the significance of these reflections. Partly this was due to the power of Putnam’s writing and the provocativeness of his conclusions in *Reason, Truth, and History* (including in the “Brains in a Vat” chapter). But it was also due in part to the twinkle in my teacher’s eyes and the devious look on his face when, on those blustery autumnal days on the seventh floor of Columbia’s Philosophy Hall, Morgenbesser ruminated on what could be said or thought if the BIV scenario were actual. (Then again, maybe it was the way Morgenbesser managed to connect the BIV scenario, now to the centerfield play of Yankees’ great Joe Dimaggio, now to the interpretative debates surrounding the story of the Israelites’ exodus from Egypt, now to the (by then) long-overdue fourth chapter of my dissertation.) But I pondered the BIV scenario even out of the classroom. To this day, one of my most cherished memories from graduate school remains going out to dinner with both Putnam and Morgenbesser (and several others) one evening after Putnam delivered one of his Dewey Lectures (subsequently published by Columbia University Press as *The Threefold Cord: Mind, Body, and World*). Since Putnam was still grappling at the time with the issues surrounding his “internal realism,” those of us at dinner that night had the opportunity to discern the lingering effects of the BIV scenario on Putnam’s thinking. It should come as no surprise, then, that the two greatest debts in my own thinking on these matters are to Hilary Putnam and to Sidney Morgenbesser. (I still can’t read “Brains in Vats” without thinking of those twinkling eyes and that devious grin – let alone Dimaggio and the Israelite exodus.)

I have continued to think about the BIV scenario over the years, during which time I have benefited profoundly from relevant discussions with many people. With apologies to those I have forgotten to name, these people include Kelly Becker, Paul Boghossian, Jessica Brown, Tony Brueckner, Gary Ebbs, Sean Ebels-Duggan, Kati Farkas, Brie Gertler, Alvin Goldman, Peter Graham, Thomas Grundmann, David Henderson, Terry Horgan, Henry Jackman, Jesper Kallestrup, Jennifer Lackey, Jack Lyons, Brian McLaughlin, Susana Nuccetelli, Duncan Pritchard, Baron Reed, Sarah Sawyer, Ernie Sosa, Åsa Wikforss, Crispin Wright, and no doubt others; I would like to express my gratitude to all of them.
As always, I would also like to thank Hilary Gaskin, editor at Cambridge University Press. She suggested the idea for this volume and encouraged me to take it on, and I am grateful to her for her support, encouragement, and patience in seeing this come to fruition. I am also grateful to Rosemary Crawley and to the many other good people at Cambridge University Press, with whom it is always a pleasure to work.

Finally, I would like to thank my wife and best friend, Judy, and my children, Gideon, Ethan, and Nadia, for putting up with me – even during periods in which it seems that all I want to talk about are brains in vats (which, I have learned, is not good dinner conversation).

I dedicate this book, with love, to my father, Allen Goldberg, who, though not a philosopher in the narrow (academic) sense of the word, has pondered central issues in metaphysics and epistemology for longer than I have walked this earth. I continue to remain uncertain, however, whether he knows that he is not a brain in a vat.