

# Phillip Hintikka Kieval (he/him/his)

Department of History and Philosophy of Science  
University of Cambridge  
Free School Lane  
Cambridge, CB2 3RH, United Kingdom

✉: [pzhk2@cam.ac.uk](mailto:pzhk2@cam.ac.uk)

🌐: [phkieval.com](http://phkieval.com)

## Specialization

Philosophy of Science · Philosophy of Machine Learning · Philosophy of Neuroscience · AI Ethics

## Competence

Pragmatism · Feminist Philosophy · Political Philosophy · Logic

## Education

### UNIVERSITY OF CAMBRIDGE

PhD in History and Philosophy of Science

2021-present

Supervisor: Marta Halina    Advisor: Hasok Chang

### UNIVERSITY OF HOUSTON

MA in Philosophy

2019-2021

BA in Philosophy

2015-2019

*Magna Cum Laude* with University Honors and Honors in Major

## Work Experience

### Student Fellow

2022-present

Leverhulme Center for the Future of Intelligence, University of Cambridge

## Awards & Fellowships

Best Student Paper Award, Issues in XAI4, TU Delft, Delft, Netherlands

2022

Gates Cambridge Scholarship, Gates Trust / [Link](#)

2021-present

Graduate Teaching Assistantship, Department of Philosophy, University of Houston

2019-2021

Mellon Research Scholars Fellowship, Andrew W. Mellon Foundation / [Link](#)

2018-2019

## Publications

2. Kieval P. H. (2022b). Permission to believe is not permission to believe at will. *Synthese*, 200(347):

1-12

1. Kieval, P. H. (2022a). Mapping representational mechanisms with deep neural networks. *Synthese*, 200(196): 1-25

## Talks & Presentations

### REFEREED

- |  |                  |
|--|------------------|
| 8. "Automated Exploration, Understanding, and Semantic Opacity,"<br>Philosophy of Science Association 2022<br>Pittsburgh, PA   | 13 November 2022 |
| 7. "Biased-by-design: why algorithms are necessarily value-laden"<br>Graduate Student Workshop on Philosophy of Machine Learning<br>Max Planck Institute for Intelligent Systems in Tübingen   | 19 October 2022  |
| 6. "Biased-by-design: why algorithms are necessarily value-laden"<br>Ethical Issues in AI and Computing Conference Embedded EthiCS @ Harvard<br>in partnership with Social & Ethical Responsibilities of Computing at MIT,<br>Harvard University | 3 June 2022      |
| 5. "Unsupervised Discoveries, Understanding, and Semantic Opacity,"<br>Issues in XAI #4 - Explanatory AI: Between ethics and epistemology<br>TU Delft  | 25 May 2022      |
| 4. "Unsupervised Discoveries, Understanding, and Semantic Opacity,"<br>Rotman Graduate Student Conference 2022: Models and Idealization<br>Rotman Institute of Philosophy  | 13 May 2022      |
| 3. "Unsupervised Discoveries, Understanding, and Semantic Opacity,"<br>4th Annual Scientific Understanding and Representation (SURE) Workshop,<br>Fordham University   | 23 April 2022    |
| 2. "Unsupervised Discoveries, Understanding, and Semantic Opacity,"<br>Philosophy in Informatics VI  | 16 December 2021 |
| 1. "Artificial Achievements,"<br>Rice-UH Graduate Conference, Rice University  | 2 October 2021   |

### INVITED

- |  |                 |
|--|-----------------|
| 2. "Biased-by-design: why algorithms are necessarily value-laden"<br>Gates Day of Research, University of Cambridge  | 7 May 2022      |
| 1. "Unsupervised Discoveries and Semantic Opacity in Data-driven Neuroscience,"<br>Poldrack Lab, Stanford University | 2 February 2022 |

## Teaching

### UNIVERSITY OF CAMBRIDGE

#### SUPERVISOR

PART II, PAPER 6 *Ethics and Politics of Technology*

Lent 2022

### UNIVERSITY OF HOUSTON

#### TEACHING ASSISTANT

PHIL1321 *Logic I*

Spring 2021

PHIL1301 *Introduction to Philosophy*

Fall 2020

PHIL1321 *Logic I*

Spring 2020

PHIL1321 *Logic I*

Fall 2019

#### GRADING ASSISTANT

PHIL1301 *Introduction to Philosophy*

Summer 2020

PHIL1361 *Philosophy and the Arts*

Summer 2020

## Professional Activities

### DIVERSITY AND INCLUSION

Wellness, Inclusion, Diversity, and Equity (WIDE) Committee Member,  
Leverhulme Center for the Future of Intelligence, University of Cambridge

2022-present

Organizing Committee, Cambridge University Minorities and Philosophy ([MAP](#))

2021-present

BIPOC Philosophical Film Series with UH Minorities and Philosophy ([MAP](#))  
funded by The Media and the Moving Image Initiative ([MMI](#))

April 2021

Co-Founder, University of Houston Chapter of Minorities and Philosophy ([MAP](#))

2020

COMPASS: Undergraduate Philosophy Workshop,  
University of Texas at Austin Chapter of Minorities and Philosophy ([MAP](#))

March 2018

Preventing Genocide: Global and Local Workshop and Teach-in (*invited*),  
Hobby School of Public Affairs' Civitas Program and UH Human Rights Series,  
The Honors College at the University of Houston

October 2017

Displaced Populations: Statelessness and Refugee Crises, UH Human Rights Series,  
The Honors College at the University of Houston

April 2017

## TUTORING AND MENTORSHIP

Learning for Purpose Co-director, Gates Cambridge Scholars Council 2021-2022

LAUNCH Tutor for Logic I and Logic II, 2018-2019  
Undergraduate Student Success Center at the University of Houston

LAUNCH Tutor for Writing and Rhetoric, 2018-2019  
Undergraduate Student Success Center at the University of Houston

## Graduate Coursework

### UNIVERSITY OF HOUSTON

Logic and Ontology, <i>James Garson</i>	Spring 2021
Luck and Achievement, <i>Christy Mag Uidhir</i>	Spring 2021
The Problem of Evil, <i>Luis Oliveira</i>	Spring 2021
Philosophy of Science*, <i>Josh Weisberg</i>	Spring 2021
The Meta-problem of Consciousness, <i>Josh Weisberg</i>	Fall 2020
The Methods of Ethics, <i>David Phillips</i>	Fall 2020
Deep Learning, <i>Cameron Buckner</i>	Spring 2020
Temporal Asymmetries, <i>Yael Lowenstein</i>	Spring 2020
Inference and Reference, <i>James Garson</i>	Fall 2019
Doxastic Agency, <i>Luis Oliveira</i>	Fall 2019
Philosophy of Film, <i>Christy Mag Uidhir</i>	Fall 2019

### RICE UNIVERSITY (VISITING STUDENT)

Origins of Mind, <i>Alex Morgan</i>	Fall 2020
Personal Relationship Goods, <i>Elizabeth Brake</i>	Spring 2020

\* = Course audited

## References

**Marta Halina**

Associate Professor

Department of History and Philosophy of Science

University of Cambridge

[mh801@cam.ac.uk](mailto:mh801@cam.ac.uk)

**Cameron Buckner**

Associate Professor

Department of Philosophy

[cjbuckner@uh.edu](mailto:cjbuckner@uh.edu)

**Hasok Chang**

Hans Rausing Professor

Department of History and Philosophy of Science

University of Cambridge

[hc372@cam.ac.uk](mailto:hc372@cam.ac.uk)

**Luis Oliveira**

Assistant Professor

Department of Philosophy

[lrolivei@central.uh.edu](mailto:lrolivei@central.uh.edu)