# **CURRICULUM VITAE**

Philipp Haueis
Abteilung Philosophie
Universität Bielefeld
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# **EMPLOYMENT**

09/2019–02/2020	Visiting Scholar	Center for Philosophy of Science, University of Pittsburgh
10/2018-present	Assistant Professor Akademischer Rat auf Zeit	Department of Philosophy, Bielefeld University
06/2018–09/2018	Visiting Scholar	Institute of Philosophy, Free University Berlin
09/2012–12/2017	Guest Scientist	Research Group Neuroanatomy and Connectivity, Max Planck Institute Human Cognitive & Brain Sciences, Leipzig, Germany
12/2010–12/2012	Research Assistant	Cluster of Excellence "Languages of Emotion" Free University Berlin

## **EDUCATION**

10/2014–03/2018	PhD Student	Berlin School of Mind and Brain, Department of Philosophy, Otto-von-Guericke University Magdeburg  Title: "Meeting the Brain on its own Terms.  Exploratory Concept Formation and Noncognitive Functions in Neuroscience"
		Supervisors: Holger Lyre, Henrik Walter Grade: Summa cum laude
10/2015–11/2015 05/2017–06/2017	Visting Scholar	Philosophy-Neuroscience-Psychology Program Washington University St. Louis Supervisor: Carl Craver
01/2013–06/2013	Visting Scholar	Science in Society Program, Wesleyan University Department of Philosophy, UBC Vancouver Supervisors: Joseph Rouse, Christopher Mole
10/2010–11/2012	Master of Arts	Philosophy, Humboldt-University Berlin
10/2007–08/2010	Bachelor of Arts	Philosophy (major) & economics (minor) Humboldt-University Berlin

## AREAS OF SPECIALIZATION

**PHILOSOPHY OF NEUROSCIENCE:** Epistemology of Neuroscientific Experiments, Functional Analysis and Mechanisms, Organizational Units of the Brain, Conceptual and Tool Development, Multiscale Modeling

**GENERAL PHILOSOPHY OF SCIENCE:** Development, Structure and Normative Evaluation of Scientific Concepts, Epistemology of Experiment, Context of Discovery and Context of Pursuit, Methodology in the Sciences and Humanities

**SCIENCE AND SOCIETY:** Critical Neuroscience, Use of Climate Knowledge for Policymaking, Social Implications of Information and Communication Technologies

## AREAS OF COMPETENCE

PHILOSOPHY OF LANGUAGE: Theories of Concepts, Conceptual Engineering

PHILOSOPHY OF MIND: Animal Cognition, Situated Cognition, Phenomenology

PHILOSOPHY OF CLIMATE SCIENCE: Downscaling Climate Data for Policy Planning

#### **PUBLICATIONS**

## PEER-REVIEWED JOURNAL ARTICLES

- Haueis, P. & Kästner, L. (2022) Mechanistic Inquiry and Scientific Pursuit: The Case of Visual Processing. *Studies in History and Philosophy of Science 93*, 123-135. DOI: 10.1016/j.shpsa.2022.03.007
- Haueis, P. (2022). Descriptive Multiscale Modeling in Data-Driven Neuroscience. *Synthese* 200,129. DOI: 10.1007/s11229-022-03551-y
- Haueis, P. & Slaby, J. (2022). Humanities as Conceptual Practices: The Formation and Development of High-Impact Concepts in Philosophy and Beyond. *Metaphilosophy*. DOI: 10.1111/meta.12551
- Haueis, P. (2021a). A Generalized Patchwork Approach to Scientific Concepts. *The British Journal for the Philosophy of Science*. DOI: 10.1086/716179
- Haueis, P. (2021b). The Death of the Cortical Column? Patchwork Structure and Conceptual Retirement in Neuroscientific Practice. *Studies in History and Philosophy of Science Part A 85*, 101–113. DOI: 10.1016/j.shpsa.2020.09.010

Haueis, P. (2021c). Multiscale Modeling of Cortical Gradients: The Role of Mesoscale Circuits for Linking Macro- and Microscale Gradients of Cortical Organization and Hierarchical Information Processing. *NeuroImage 232*. DOI: 10.1016/j.neuroimage.2021.117846

- Kästner, L. & **Haueis, P.** (2019). Discovering Patterns: On the Norms of Mechanistic Inquiry. *Erkenntnis* 86, 1635–1660. DOI: <u>10.1007/s10670-019-00174-7</u>
- Haueis, P. (2018). Beyond Cognitive Myopia: A Patchwork Approach to the Concept of Neural Function. *Synthese* 195(12), 5373–5402. DOI: 10.1007/s11229-018-01991-z
- Mendes, N. Oligschläger, S. Lauckner, M. Golchert, J. Huntenburg, J., Falkiewicz, M., Ellamil, M. Krause, S. Baczkowski, B. Cozatl, R. Osoianu, A. Kumral, D. Pool, J. Golz, L. Dreyer, M. Haueis, P. Jost, R. Kramarenko, Y. Engen, H. Ohrnberger, K. Gorgolewski, K. Farrugia, N. Babayan, A. Reiter, A Schaare, L. Reinelt, J., Röbbig, J. Uhlig, M., Erbey, M. Gaebler, M. Smallwood, J., Villringer, A. & Margulies, D. (2019). A Functional Connectome Phenotyping Dataset Including Cognitive State and Personality Measures. Scientific Data. DOI: 10.1038/sdata.2018.307
- Haueis, P. (2016). The Life of the Cortical Column. Opening the Domain of Functional Architecture of the Cortex (1955–1981). *History and Philosophy of the Life Sciences* 38(3) DOI: 10.1007/s40656-016-0103-4.
- Haueis, P. (2014). Meeting the Brain on its own Terms. *Frontiers in Human Neuroscience* 8(815), DOI: 10.3389/fnhum.2014.00815
- **Haueis, P.** (2013). Vagueness and Mechanistic Explanation in Neuroscience. *Croatian Journal of Philosophy 38*, 251–275.
- Haueis, P. (2012). The Fuzzy Brain. Vagueness and Mapping Connectivity in the Human Cerebral Cortex. *Frontiers in Neuroanatomy* 6(37), DOI: 10.3389/fnana.2012.00037.
- Haueis, P. (2012). Apollonian Scientia Sexualis and Dionysian Ars Erotica? On the Relation between Michel Foucault's 'History of Sexuality' and Friedrich Nietzsche's 'Birth of Tragedy'. *Journal of Nietzsche Studies 43*(2), 260–282.

#### **BOOK CHAPTERS**

## **Peer-reviewed chapters**

Burnston, D. & Haueis, P. (2021). Evolving Concepts of "Hierarchy" in Systems Neuroscience. In M. Viola and F. Calzavarini (eds.). *Neural Mechanisms: New Challenges in the Philosophy of Neuroscience*. Berlin: Springer (pp. 113–141).

Haueis, P. & Slaby J. (2017). Connectomes as Constitutively Epistemic Objects. Critical Perspectives on Modelling in Current Neuroanatomy. In T. Mahfoud, S. McLean and N. Rose (eds.). *Progress in Brain Research Vol 233: The Making and Use of Animal Models in Neuroscience and Psychiatry*. Amsterdam: Academic Press (pp. 149–177).

## **Invited chapters**

- Burns, R., Margulies, D. & **Haueis, P.** (2019). Of Regions and Networks: Neuroimaging Approaches to Mapping Brain Organization. In: Thibault & A. Raz (ed.), *Casting Light on the Dark Side of Brain Imaging*. Amsterdam: Elsevier (pp. 135-138). https://doi.org/10.1016/B978-0-12-816179-1.00023-2
- Haueis, P. & Slaby, J. (2015). Brain in the Shell. Assessing the Stakes and the Transformative Potential of the Human Brain Project. In J. de Vos and E. Pluth (eds.), *Neuroscience and Critique*. London: Routledge (pp. 117–140).
- Slaby, J., **Haueis, P.** & Choudhury, S. (2012). Neuroscience as Applied Hermeneutics: Towards a Critical Neuroscience of Political Theory, In: F. Vander Valk (ed.), *Essays on Neuroscience and Political Theory: Thinking the Body Politic*. New York: Routledge (pp. 50–73).

#### IN PREPARATION

- Haueis, P. (under review). Exploratory Concept Formation and Tool Development in Neuroscience. *Philosophy of Science*.
- Haueis, P. & Novick, R. (under review). Conceptual Patchworks and Conceptual Housekeeping. To appear in Arabatzis, T. and Bloch-Mullins, C. (eds.) *Concepts, Induction, and the Growth of Scientific Knowledge*. Pittsburgh: University of Pittsburgh Press.

## AWARDS AND SCHOLARSHIPS (SELECTION)

09/2018	Best PhD thesis	Faculty of the Human Sciences Otto-von Guericke University Magdeburg
10/2017-03/2018	Tie-over stipend	Berlin School of Mind and Brain
10/2014-09/2017	PhD scholarship	Studienstiftung des deutschen Volkes
01/2013–06/2013	Research stay after the exam	Studienstiftung des deutschen Volkes Wesleyan University & UBC Vancouver
10/2010 – 11/2012	Scholarship	Studienstiftung des deutschen Volkes

#### **RESEARCH GRANTS**

04/2021 International conference

grant, German Research

Council

Project name: Workshop "The structure and development of

concepts in the life sciences" (Feb 7-9 2022)

Grant sum: 10,600€

08/2018 Research Stipend Center for Philosophy of Science

German Research Council University of Pittsburgh

Project name: Generalizing patchwork approaches to scientific

concepts

Grant sum: 38,400€

10/2017–07/2018 King's Together Award King's College London

Project name: Towards Neuro-Social Science: Exploring Novel

Methods for Multidisciplinary Collaboration

Partner: Tara Mahfoud, Sam McLean, Kris de Meyer, Nikolas

Rose, Johanna Pokorny, Robin Murray, John Strang

Grant sum: 19,800£

04/2016 Independent Social F

Research Foundation

Free University Berlin

Project name: Workshop "Vital Brains: The Making and Use of

Animal Models in Neuroscience and Psychiatry"

Partner: Tara Mahfoud, Sam McLean, and Jan Slaby

Grant sum: 4950£

#### **PRESENTATIONS**

## PEER-REVIEWED CONFERENCE PRESENTATIONS (SELECTION)

2021 "Exploratory Concept Formation and the Norms of Description in Neuroscientific

Discovery"

27<sup>th</sup> Meeting, Philosophy of Science Association November 11–13 2021, Baltimore, USA

"Patchwork Concepts and Operationalism" (with Aaron Novick)

EPSA Conference, September 15-18 2021, University of Turin, Italy

"Norms of Conceptual Development in the Life Sciences" (Panel with Corinne Bloch-Mullins and Uliana Feest)

International Society for History, Philosophy and Social Studies of Biology (ISHPSSB)

Conference Online, July 13-21 2021, Cold Spring Harbor Laboratory

2020 "Exploratory concept formation and tool development in neuroscience: the case of bug detectors and the default mode of brain function"

NeuroTech Conference, January 24–25 2020, Center for Philosophy of Science, University of Pittsburgh

"The concept of hierarchy and the problem of scales in ecosystem modeling"

International Society for History, Philosophy and Social Studies of Biology (ISHPSSB) Conference, July 7–13 2019, University of Oslo, Norway

"Towards a Generalized Patchwork Approach to Scientific Concepts"

3<sup>rd</sup> Conference of the Gesellschaft für Wissenschaftsphilosophie, February 25–27 2019, Cologne, Germany

"Circuit Switching, Gain Control and the Problem of Multifunctionality" (Poster)

26<sup>th</sup> Meeting, Philosophy of Science Association November 1–4 2018, Seattle, USA

"A Patchwork Approach to Endogenous Brain Activity in Resting State Neuroimaging"

7th Biennial Conference of the Society for Philosophy of Science in Practice
June 30–July 2 2018, Gent University, Belgium

"The Multiple Senses of "Hierarchy" in Neuroscience" (with Daniel Burnston).

AISC Midterm Conference July 25–27 2018, University of Genoa, Italy

2017 "Beyond Cognitive Myopia: A Patchwork Approach to Neural Circuit Function"

ISHPSSB conference, July 16-21 2017, University of São Paulo, Brazil

"Mesoscale Concepts and Cortical Function: A Patchwork Approach" (Poster)

23rd Meeting of the Organization for Human Brain Mapping (OHBM), June 25–29 2017, Vancouver, Canada

"Noncognitive Circuit Functions"

2017

44th Philosophy of Science Conference, April 24–28 2017, Inter-University Centre Dubrovnik, Croatia

2016 "What the Brain does by Itself: The Role of Endogenous Activity in Resting State Functional Connectivity Studies" (Poster) 25th Meeting, Philosophy of Science Association November 3-5 2016, Atlanta, USA "Human and Nonhuman Intentionality in the Anthropocene" (Poster) Workshop "Rational Animals?" October 4-6 2016, Ruhr-University Bochum, Germany "Patterns, Mechanisms and the Ontic/Epistemic Distinction" (with Lena Kästner) 6th Biennial SPSP Meeting June 17–19, 2016, Rowan University, Glassboro, USA "What are Organizing Principles in Contemporary Brain Mapping?" 2nd Meeting of the German Society for Philosophy of Science (GWP) March 8-11 2016, Heinrich Heine University Düsseldorf, Germany 2015 "Is the Cortical Column an Organizational Unit of the Cortex?" (Poster) 45th Meeting of the Society for Neuroscience October 16-21, 2015, Chicago, USA "Are Mechanisms the Laws of Neuroscience?" 9th Conference of the German Society for Analytic Philosophy September 14-17 2015, University of Osnabrück, Germany "The Virtues of Exploration: A Philosophical Framework for Resting State 2014 Functional Connectivity and Connectomics Approaches" (Poster) 4<sup>th</sup> Resting State/Brain Connectivity Conference, September 11-13 2014, MIT, USA 2013 "Meeting the Brain on its own Terms" (Panel with Jan Slaby and Daniel Margulies) 4th SPSP Meeting June 26-29 2013, Victoria College, University of Toronto, Kanada 2012 "Does the Brain have Precise Cortical Areas? Questioning Brainhood from a **Practical Perspective** "Persons and their Brains" Conference, July 11-14 2012, St. Anne's College, Oxford, United Kingdom

## OTHER PRESENTATIONS (SELECTION)

2021	"What Do We Know About Neura	al Function At the Mesoscale of Neural Circuits?"	
		Invited Lecture (German Language), May 31, 2021	
		Studium Generale, Johannes-Gutenberg University Mainz	
2020	"A Generalized Patchwork Appro	pach to Scientific Concepts"	
		Lunchtime Talk, February 11 2020	
		Center for Philosophy of Science, University of Pittsburgh	
2017	"A Patchwork Approach to Endo Studies"	genous Brain Activity in Resting State fMRI	
		Institute Colloquium, September 18 2017 MPI Cognitive and Brain Sciences Leipzig	
	"Gain Modification and Gain Control: Two Functional Roles of Gamma Oscillations"		
	Oscillations	March 23 2017 Ernst-Strüngmann Institute Frankfurt	
2015	"Untangling Neural Thickets: Co	nnectomes as Constitutively Epistemic Objects" ÉNP Seminar "New Frontiers", July 21 2015 Institut du Cerveau et de la Moëlle Épinière Paris	
2015	"Do Canonical Microcircuits Imp	ement Predictive Coding?"	
		Graduate workshop, Berlin School of Mind and Brain and LMU Munich, March 11-14 2015, Venice, Italy	
	"Embedded Philosophy of Neuro	science as a Critical Form of Interdisciplinarity"	
		Workshop: "Brains in the Making", March 19–20 2015, Durham University, United Kingdom	
2013	"Neuroscientific Experimentation at the Mesoscale: The Case of the Cortical Column" (Poster)		
	· ,	Workshop "Experimentation in Neuroscience" November 22–23 2013, Center for Philosophy of Science, Pittsburgh, USA	

## **ORGANIZED CONFERENCES AND WORKSHOPS**

February 7–9 2022 Workshop "The Structure and Development of Concepts in

the Life Sciences"

Location: Centre for Interdisciplinary Studies, Bielefeld

University

Partner: Co-organizers: Morgan Thompson, Marie Kaiser;

Speakers: Uljana Feest, Rose Novick, Jo E. Wolff, Ingo Brigandt, Corinne Bloch-Mullins, Catarina Dutilh Novaes,

Link <a href="https://lifescienceconcepts.weebly.com/">https://lifescienceconcepts.weebly.com/</a>

May 25, 2021 Film Screening Virtual Film Screening of In Silico

Partner: Johanna Kißler, Martin Wegrzyn (Psychology, Bielefeld

U.), Noah Hutton (director)

Link: <a href="https://uni-">https://uni-</a>

bielefeld.de/fakultaeten/philosophie/ereignisse/in-silico-

screening/index.xml?\_\_lang=de

July 10 2019 Conference Panel "Concepts and Understanding in Ecology"

Location: ISHPSSB Conference, University of Oslo

Partner: Rose Trappes (co-organizer), speakers: James Justus,

Soazig LeBihan, Samantha Wakil

Link <a href="https://ishpssb2019.tekniskmuseum.no/program/detailed-">https://ishpssb2019.tekniskmuseum.no/program/detailed-</a>

program

July 11–12 2018 Workshop "The Mercurial Life of Drugs"

Location: King's College London

Partner: Tara Mahfoud, Kris DeMeyer, Johanna Pokorny

Link: http://somatosphere.net/2018/10/the-mercurial-life-of-

drugs.html

October 30 2017 Workshop "Towards Neuro-Social Science: Exploring novel

methods for multidisciplinary collaboration"

Location: King's College London

Partner: Tara Mahfoud, Kris DeMeyer, Johanna Pokorny

April 7–8 2016 Workshop "Vital Brains: The Making and Use of Brain Models

in Neuroscience"

Location: Free University Berlin

Partner: Tara Mahfoud, Sam McLean und Jan Slaby
Link: <a href="http://www.hsozkult.de/event/id/termine-30600">http://www.hsozkult.de/event/id/termine-30600</a>

March 9–11 2016 Book Symposium "Articulating the World: Intentionality – Language –

Nature"

Location: Free University Berlin
Partner: Jan Slaby, Jörg Volbers

Link: de.scribd.com/document/291252434/Workshop-

Programme-Articulating-The-World

December 3–4 2015 Workshop "Patterns in Science"

Location: Berlin School of Mind and Brain

Partner: Lena Kästner

Link: <u>mind-and-brain.de/postdoctoral-program/scientific-</u>

events/archive/carl-craver

## **TEACHING**

## **AS INSTRUCTOR**

Winter term 2021	Seminar	Philosophical Writing: Science and Responsibility (in German)
Summer term 2021	Seminar	Experiment and Decomposition in the Life Sciences
	Seminar	Holism in Language, Mind and Science (in German)
Winter term 2020/21	Graduate Seminar	Discovery, Pursuit & Justification in Science (with Lena Kästner)
	Introductory Seminar	Climate Research & Climate Crisis
Summer term 2020	Graduate Seminar	Brain Doping, Genetic Corn, Mass Extinction and Pandemics: Societal Issues in the Life Sciences
	Graduate Seminar	Theories of the Brain: from Freud to Friston (in German)
Summer term 2019	Seminar	The empirical investigation of the mind: cognition and consciousness (in German)
	Seminar	Interpretations Everywhere? On the Relation between the Sciences and the Humanities
Winter term 2018/19	Seminar	Philosophical Writing: Embodiment and Extended Mind
	Graduate Seminar	Concepts and Conceptual Analysis: New Perspectives from Experimental Philosophy, Philosophy of Language and Philosophy of Science (in German)
	Location:	Bielefeld University
Winter term 2015/16 Summer term 2016	Lecture + Seminar	"Cognitive Neuroscience I + II" (in German)
	Location:	Sigmund Freud University Berlin

## AS RESEARCH ASSISTANT (ACTIVE CO-TEACHING)

February 16–20 2015 Graduate Seminar Philosophy of Neuroscience:

The Connectome

Instructor: Jan Slaby

Location: Free University Berlin

June 24 –27 2013 Graduate Seminar Critical Neuroscience

Instructors: Suparna Choudhury, Ian Gold, Laurence Kirmayer,

Amir Raz, Jan Slaby, Allan Young

Location: McGill University Montréal

Summer term 2012 Graduate Seminar Science and Critique (German)

February 21–23 2012 Graduate Seminar Current methodological and philosophical

problems in the neurosciences (German)

Winter term 2012 Graduate Seminar The Philosophy of Ian Hacking

Instructor: Jan Slaby

Location: Free University Berlin

#### PROFESSIONAL TRAINING

May 2021 Anti-Racism Training by Phoenix e.V. for faculty members at

Bielefeld University

#### PROFESSIONAL SERVICE

Reviewer for Biology & Philosophy, BioEssays, BioSocieties, Body & Society, European Journal for Philosophy of Science, History and Philosophy of the Life Sciences, Synthese, Studies in History and Philosophy of Science, International Studies in the Philosophy of Science, Progress in Brain Research, Frontiers in Human Neuroscience

2021 – present Member of the Equal Opportunities Council, Faculty for History,

Philosophy and Theology, Bielefeld University

## RESEARCH NETWORKS AND SCIENTIFIC SOCIETIES

2021 – present	European Philosoph	y of Science A	Association (I	EPSA)	ļ
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2017 – present International Society for the History, Philosophy and Social Studies

of Biology (IHPSSB)

2016 – present Philosophy of Science Association (PSA)

2016 – present Gesellschaft für Wissenschaftsphilosophie (GWP)

2014 – present Neuroscience and Society Network, King's College, London

2014 – 2016	Hubbub Group at the Wellcome Collection, London
2013 – present	Organization of Human Brain Mapping (HBM)
2012 - present	German Society for Analytic Philosophy (GAP)
2011 – present	Society for Philosophy of Science in Practice (SPSP)
2010 – present	Research Group "Critical Neuroscience"
2010 – 2012	Research Group "Bildakt und Verkörperung", Humboldt-
	University Berlin