LINUS T. HUANG

Curriculum Vitae

Division of Humanities & Centre for AI Research Hong Kong University of Science and Technology Clear Water Bay, Hong Kong LinusHuang@ust.hk Philpeople.org/profiles/Linus-Huang +1 (646) 685 4687

EDUCATION

Ph.D.	Unit for the History and Philosophy of Science, University of Sydney, 2017	
M.A.	Department of Philosophy, University of California, Riverside, 2008	

M.S. Cognitive Neuroscience Program, National Yang Ming University, Taiwan, 2006

B.S. School of Medicine, National Yang Ming University, Taiwan, 2004

PROFESSIONAL APPOINTMENT

2023-present	Research Assistant Professor, Division of Humanities & Centre for Al Research, Hong Kong University of Science and Technology
2024-2024	StarTrack Scholar, Social Computing Lab, Microsoft Research Asia
2020-2023	Postdoctoral Fellow, Society of Fellows in the Humanities, University of Hong Kong
2018-2020	Postdoctoral Fellow, Department of Philosophy, University of California, San Diego
2017-2018	Postdoctoral Scholar, Institute of European and American Studies, Academia Sinica, Taiwan
2015-2016	Australian Endeavour Scholar, School of Philosophy, Psychology and Language Sciences, University of Edinburgh & Department of Philosophy and Centre for Theoretical Neuroscience, University of Waterloo

RESEARCH SPECIALTIES

AOS: Philosophy of Artificial Intelligence, Philosophy of Cognitive Science, Philosophy of Mind AOC: Philosophy of Science, Chinese Philosophy, Moral Psychology, Philosophy of Biology

GRANTS, AWARDS, AND FELLOWSHIPS

2024	StarTrack Scholars Fellowship, Microsoft Research Asia	
2023	General Research Fund, Hong Kong SAR Research Grants Council	

2021	Short-Term Research Fellowship, Virtual Clinic on Increasing Fairness in Targeted Advertising, Alexander von Humboldt Institute for Internet and Society
2018	UCSD-Taiwan Postdoctoral Fellowship, Academia Sinica
2018	Short-Term Research Collaboration Fellowships, Academia Sinica
2015	Australian Endeavour Award, Department of Education, Australia (69,000 AUD)
2015	Finalist, Postgraduate Presentation Prize, Australasian Association of Philosophy Annual Conference
2014	Royston George Booker and Herbert Johnson Travel Grant, University of Sydney
2014	University of Sydney Postgraduate Award, University of Sydney
2013	Postgraduate Research Support Scheme, University of Sydney
2012	Postgraduate Research Prize for Outstanding Academic Achievement, University of Sydney
2012	Summer Seminar Fellowship, Big Questions in Free Will Project, Florida State University
2012	Summer School Fellowship, Tubingen International Summer School: How do we make decisions? Perspectives from philosophy and science, University of Tubingen.
2011	University of Sydney International Scholarship, 2011-2014, University of Sydney
2007	Taiwan Merit Scholarship, 2007-2009, National Science Council, Taiwan (70,000 USD)
2006	Dean's Distinguished Fellowship Award, University of California, Riverside

PUBLICATIONS

Books

Bechtel, W., & <u>Huang</u>, L. <u>T.</u> *Philosophy of Neuroscience*. Cambridge: Cambridge University Press.

Refereed Journal Articles

- accepted Sechman, M., & <u>Huang, L. T.</u>* Towards a Mechanistic Account of Embodied Implicit Bias: Heterarchical Control Network and Its Implications for Intervention. *Topoi: An International Review of Philosophy.* (* corresponding author, accepted with minor revisions).
- accepted <u>Huang, L. T.</u>, Hung, T.-W., & Lin, Y.-T. The Dynamics of Personal Autonomy: A Comprehensive Framework for Evaluating Human-Carebot Interactions. *Asian Journal of Philosophy.* (Accepted with minor revisions).
- 2024 <u>Huang, L. T.</u>, Papyshev, G, & Wong, J. Democratizing Value Alignment: From Authoritarian to Democratic AI Ethics. *AI and Ethics.*
- Huang, L. T., Chen, H.-Y., Lin, Y.-T., Huang, T.-R., Hung, T.-W. Ameliorating Algorithmic Bias, or Why Explainable Al Needs Feminist Philosophy. *Feminist Philosophy Quarterly*.
- Chen, H.-Y., Yu, L.-A., & <u>Huang, L. T.</u>* To Mask or Not to Mask: Epistemic Injustice in the COVID-19 Pandemics. *Techné: Research in Philosophy and Technology*. (* corresponding author)
- 2021 <u>Huang, L. T.</u> More Dynamical and More Symbiotic: Cortico-Striatal Models of Resolve,

- Suppression, and Routine Habit. Behavioral and Brain Sciences.
- 2021 <u>Huang, L. T.</u>, Bich, L, & Bechtel, W. Model Organisms for Studying Decision-Making: A Phylogenetically Expanded Perspective. *Philosophy of Science*.
- 2021 <u>Huang, L. T.</u> Can massive modularity explain human intelligence? Information control problem and implications for cognitive architecture. *Synthese*.
- Lin, Y.-T., Hung, T.-W., & <u>Huang, L. T.</u>* Engineering Equity: How AI Can Help Reduce the Harm of Implicit Bias. *Philosophy & Technology*. (* corresponding author)
- Carruthers, G., Carls-Diamante, S., <u>Huang L. T.</u>, Rosen, M., & Schier, E. How to operationalise consciousness. *Australian Journal of Psychology*, 71(4), 390-410.
- Schwitzgebel, E., <u>Huang, L. T.</u>, Higgins, A., & Gonzalez-Cabrera, I. The insularity of Anglophone philosophy. *Philosophical Papers*, 47(1), 21-48.
- Schwitzgebel, E., Rust, J., <u>Huang, L. T</u>., Moore, A. T., & Coates, J. Ethicists' courtesy at philosophy conferences. *Philosophical Psychology*, *25*(3), 331–340.

Refereed Conference Proceedings

- 2020 <u>Huang, L. T.</u>, & Bechtel, W. A Phylogenetic Perspective on Distributed Decision-Making Mechanisms. In *Proceedings of the 42th Annual Conference of the Cognitive Science Society*. Austin, TX: Cognitive Science Society.
- Bechtel, W., & <u>Huang, L. T.</u> Decentering Cognition. In *Proceedings of the 42th Annual Conference of the Cognitive Science Society*. Austin, TX: Cognitive Science Society.
- 2015 <u>Huang, L. T.</u> Reconceptualizing the computational problem of response selection. In *Proceedings of the 10th Conference of the Australasian Society of Cognitive Science*. Melbourne: Australasian Society of Cognitive Science.
- 2014 <u>Huang, L. T.</u> The nativist input problem. In *Proceedings of the 36th Annual Conference of the Cognitive Science Society*. Austin, TX: Cognitive Science Society.

Web-Based Writing

Eren, E., Sekwenz, M-T., <u>Huang, L. T.</u>, & Rzepka, S. Improving Fairness in Ad Display to Users [Blog Post]. In Birner, N., Hod, S., Kettemann, M. C., Pirang, A., & Stock, F. (Eds.), *Increasing Fairness in Targeted Advertising* [The Ethics of Digitalisation Clinics Report, 1]. Alexander von Humboldt Institute for Internet and Society. https://graphite.page/fair-targeted-ads/

Work In Progress

No Bias, No GAN: Generative Models Necessarily Produce Widespread, Unexpected, and Uninterpretable Biases (under review).

Hegemonic Machines (under preparation).

Neurodemocracy (under preparation).

PRESENTATIONS

Refereed Conference Oral Presentations

- Towards a Mechanistic Account of Embodied Implicit Bias, European Society for Philosophy and Psychology Annual Meeting, Grenoble, France, July 2-5.
- The Dynamics of Personal Autonomy: A Comprehensive Framework for Evaluating Human-Carebot Interactions, 10th Biennial Meeting of the Asia-Pacific Philosophy of Science Association, Hanoi, July 21-22
- Model Organisms for Studying Decision-Making: A Phylogenetically Expanded Perspective, Biennial Meeting of the Philosophy of Science Association, Baltimore, MD, November 11-14.
- The Promise and Perils of Explainable AI: Lessons from Feminism, Workshop on Feminism, Social Justice and AI, Waterloo, ON, July 26-28.
- Against the "Pyramid Scheme" of Executive Function: Empirical and Conceptual Challenges, Society for Philosophy and Psychology Annual Meeting, La Jolla, CA, July 10-13.
- Neurodemocracy: Self-Organization of the Embodied Mind, Australasian Society for Philosophy and Psychology 2018 meeting, Sydney, NSW, December 5-7
- Neurodemocracy: Self-Organization of the Embodied Mind, the 26th Biennial Meeting of the Philosophy of Science Association, Seattle, WA, November 1-4.
- 2014 Reconceptualizing the Computational Problem of Response Selection. Conference of the Australasian Society of Cognitive Science, Melbourne, VIC, December 8-10.
- The Nativist Input Problem. Annual Conference of the Cognitive Science Society, Québec, QC, July 23-26.
- The Nativist Input Problem. Society for Philosophy and Psychology Annual Meeting, Providence, RI, June 12-15.
- Moral Psychology and Moral Development in Xunzi. American Philosophical Association Central Division Meeting, Chicago, IL, April 16-19.

Selected Invited Talks

- Hegemonic Machines: How Generative AI Normalizes Oppression, Departmental Colloquium, Department of Cultural and Religious Studies, Chinese University of Hong Kong, January 9.
- No Bias, No GAN: Generative Models Produce Widespread, Unexpected, and Uninterpretable Biases, 2024 International Symposium on Al and Humanities Research, Taiwan, November 29.
- Dynamic Value Alignment: Enhancing User Autonomy Through Multi-agent, Moral Foundations Theoretical Framework, Microsoft Research Asia TAB Workshop: Shaping the Future with Societal AI, November 14.
- Hegemonic Machines: How Generative AI Normalizes Oppression, Departmental Colloquium, Department of Philosophy and Religion, Peking University, China, November 5.
- No Bias, No GAN: Generative Models Produce Widespread, Unexpected, and Uninterpretable Biases, International Workshop on The Philosophy & Ethics of AI, Taiwan, September 7.

2024	No Bias, No GAN: Generative Models Produce Widespread, Unexpected, and Uninterpretable Biases, International Workshop on The Philosophy & Ethics of AI, Taiwan, September 7.
2023	Why Explainable AI needs Feminist Philosophy, Department of Philosophy, University of Adelaid, August 29.
2024	No Bias, No GAN: Generative Models Produce Widespread, Unexpected, and Uninterpretable Biases, Philosophy of AI in Asia Conference, Hong Kong, March 21.
2023	Why Explainable AI needs Feminist Philosophy, Department of Philosophy, Chulalongkorn University, December 18.
2023	Why Explainable AI needs Feminist Philosophy, Department of Psychology, National Taiwan University, April 11.
2021	Why Explainable AI needs Feminist Philosophy, Hong Kong Institute for the Humanities and Social Sciences, University of Hong Kong, September 7.

TEACHING EXPERIENCE

Courses Taught as a Sole Instructor

Introduction to Ethics of AI and Data Science (Hong Kong University of Science and Technology, Fall 2023)

Philosophy and Cognitive Science (University of Hong Kong, Fall 2022)

Philosophy of Artificial Intelligence (University of Hong Kong, Fall 2021)

Courses Taught as a Teaching Assistant

Introduction to Critical Thinking (University of California, Riverside, Fall 2009, Winter 2010)

Reason, Belief, and Truth (University of California, Riverside, Spring 2008)

Contemporary Moral Issues (University of California, Riverside, Winter 2008)

Evil (University of California, Riverside, Fall 2007)

Teaching Certificate

Building Al Knowledge and Skills for Curriculum Development, City University of Hong Kong, 2023 Teaching Development Program, Faculty of Arts and Social Sciences, University of Sydney, 2014

COURSES PREPARED TO TEACH

Lower Level Courses

Logic

Critical Thinking

Introduction to Ethics of AI and Data Science

Philosophical Introduction to AI

Philosophy and Human Nature

Introduction to Chinese Philosophy

Upper Level Courses

Philosophy of Mind

Philosophy of Science

Philosophy of Cognitive Science

Philosophy of Neuroscience

Philosophy of Artificial Intelligence

Philosophy of Biology

Moral Psychology

Special Topics Courses

Implicit Bias

SERVICE

Service to Department

Co-Chair, Meaning and Reality in Social Context Conference, Academia Sinica, January 2019

Equity Officer and HPS Liaison, Philosophy Student Committee, University of Sydney 2014-5

Organizer, Minorities and Philosophy Initiative University of Sydney Chapter, 2014-5

Service to Profession

Steering Committee Member, ACM Fairness, Accountability, and Transparency Conference, 2023-Present

Advisor, Academic Placement Data and Analysis, 2020-Present

Peer Reviewer, MIT Press, 2024

Peer Reviewer, Routledge, 2024

Peer Reviewer, ACM Fairness, Accountability, and Transparency Conference, 2022

Peer Reviewer, Society for Philosophy and Psychology Annual Meeting, 2020

Symposium Organizer, Biennial Meeting of the Philosophy of Science Association, 2018

Graduate Mentor, Minorities and Philosophy Initiative, 2014-2015

Peer Reviewer, *Philosophical Psychology*, 2014 Peer Reviewer, *Journal of Chinese Philosophy*, 2010

Peer Reviewer, Philosophy of Science, 2009

LANGUAGES

Mandarin Chinese, native fluency in reading, writing, and speaking Classical Chinese, intermediate fluency in reading

PROFESSIONAL MEMBERSHIPS

Association for Computing Machinery, 2023-Present
Society of Philosophy and Psychology, 2008-Present
Cognitive Science Society, 2013-Present
American Association of Philosophy Teachers, 2015-Present
Philosophy of Science Association, 2018-Present

REFERENCES

William Bechtel UC Distinguished Professor Department of Philosophy University of California San Diego, CA 92093, USA Phone: +1 (858) 822-4461 Email: wbechtel@ucsd.edu

Eric Schwitzgebel Professor, Philosophy Department of Philosophy University of California Riverside, CA 92521, USA Phone: +1 (951) 827-4288

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Dominic Murphy Professor, History and Philosophy of Science Unit for the History and Philosophy of Science University of Sydney Sydney, NSW 2006, Australia Phone: +61 2 9351 3762

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Robert Rupert Professor, Philosophy Department of Philosophy University of Colorado Boulder, CO 80309, USA Phone: +1 (303) 735-0988

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Bryce Huebner Associate Professor, Philosophy Department of Philosophy Georgetown University Washington DC, 20057, USA Phone: +1 (202) 687-7487

Email: bryce.huebner@georgetown.edu

Peter J. Graham (Teaching Reference)
Associate Dean for Student Academic Affairs
College of Humanities, Arts, and Social Sciences
Professor, Philosophy
Department of Philosophy
University of California
Riverside, CA 92521, USA

Phone: +1 (323) 252-7063 Email: peter.graham@ucr.edu

Graduate Courses Taken

Philosophy				
Metaphysics and Epistemology				
Philosophy of Science	Philosophy of Psychology			
Philosophy of Cognitive Science	Philosophy of Mind			
Philosophy of Neuroscience	Consciousness			
Theory of Mind	Perception			
Philosophy of Language	Epistemology			
Naming and Necessity	Logic			
Philosophy of Biology*	Philosophy of Psychiatry*			
Value Theory				
Free Will and Responsibility	Habermas			
Caring and Practical Reason	Velleman			
Multiculturalism	Moral Psychology*			
Empirical Approach to Moral Psychology				
History of Philosophy				
Moral Philosophy of Hume and Kant	Aristotle's Ethics			
20th-Century Analytic Philosophy	Asian Philosophy* (Offered by Comp. Lit. Dept.)			
Asian Philosophy (Offered by Philosophy Dept.)	Classical Chinese* (Language Course)			
Freud*	Existentialism*			
Cognitive and Computational Neuroscience				
Cognitive Neuroscience	Theory of Computability			
Intentionality and Perception	Consciousness and Perception			
Computational Neuroscience*	Social Psychology*			
* Audit				