# Dean McHugh

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# Areas of specialisation

BROAD Logic, philosophy of language, philosophy of science, causation.

NARROW Philosophical logic, conditionals, modality, semantics.

# Employment

- Fulbright Visiting Scholar. November 2025–April 2026. Department of Philosophy, New York University, supervised by Kit Fine.
- Postdoctoral Researcher, July 2025—present. Department of Linguistics, University of Edinburgh. Part of the Communicating Causality project, supervised by Dan Lassiter.
- Postdoctoral Researcher, July 2023–June 2025. Institute for Logic, Language, and Computation (ILLC) and the Department of Philosophy, University of Amsterdam.

# Education

- PhD Logic. ILLC, University of Amsterdam, 2018–2023.
   Defended May 2023. Supervised by Katrin Schulz and Sonja Smets.
- MSc Logic. ILLC, University of Amsterdam, 2016–2018.
- Visiting student. University of Toronto, 2014–2015.
- BA Philosophy and English Literature, Trinity College Dublin. 2012–2016.

## **Publications**

### Articles

- 2025 Disjunctions of Universal Modals and Conditionals. *The Connectives in Logic and Language*. Springer. doi:10.1007/978-3-031-86054-6\_4
- New Experimental Evidence Against the Similarity Approach to Conditionals. Proceedings of Semantics and Linguistic Theory 34. With Tomasz Klochowicz. doi:10.3765/e03b4146
- 2024 A Problem for Downward Closure in the Semantics of Counterfactuals. Selected Reflections in Language, Logic, and Information, Springer. doi:10.1007/978-3-031-50628-4\_II

- 2023 Exhaustification in the semantics of *cause* and *because*. *Glossa*. doi:10.16995/glossa.7663
- 2022 Aboutness and Modality.

  \*Proceedings of the 23rd Amsterdam Colloquium. doi:10.21942/uva.21739718
- 2020 Are Causes Ever Too Strong? Downward Monotonicity in the Causal Domain. *Monotonicity in Logic and Language*, Springer. doi:10.1007/978-3-662-62843-0\_7
- 2019 Negation and Alternatives in Conditional Antecedents.

  \*Proceedings of the 22nd Amsterdam Colloquium.\*\* With Alexandre Cremers.

  \*Link to proceedings.\*\*
- 2018 Diagrammatic Definitions of Causal Claims, Springer. doi:10.1007/978-3-319-91376-6\_32

#### Dissertations

- 2023 Causation and Modality. University of Amsterdam PhD Thesis.
  Supervisor: Katrin Schulz, Promotor: Sonja Smets. Examined by: Maria Aloni,
  Ivano Ciardelli, Huub Dijstelbloem, Thomas Icard, Angelika Kratzer, Joris Mooij,
  Floris Roelofsen.
- 2018 *Counterfactuals and the Logic of Imaginative Content*. MSc Thesis. Supervisor: Katrin Schulz. ILLC, University of Amsterdam.
- 2016 A typed truthmaker semantics of ground. BA Thesis.
  Supervisors: Peter Simons and J.T.M. Miller. Trinity College Dublin.

# Scholarships and Grants

- Fulbright Scholarship. Awarded by Fulbright Ireland, visiting the New York University Philosophy Department during the 2025/26 academic year. Project title: *The Meaning of 'Why?*' Supervised by Kit Fine. Fulbright.ie.
- PhDs in the Humanities grant, project PGW.18.028.

  Foundations of Mechanistic Reasoning: the structure of asking 'how'. Promoter: Sonja Smets; supervisor: Katrin Schulz. Dutch Research Council. Highly competitive grant awarded to approximately 3% of applicants. €225,000

### **Awards**

- I. The 2024 Amsterdam AI Thesis Award was awarded to a Bachelor Thesis I supervised, by Puck Voorham. December 2024.
- 2. Best Presentation. European Summer School in Logic, Language and Computation (ESSLLI) 2019 Student Session.
- 3. Gold Medal. Class of 2016. Trinity College Dublin.

- 4. Wray Travelling Scholarship, 2016. Trinity College Dublin.
- 5. Arthur Aston Luce Memorial Prize, 2016. Trinity College Dublin.
- 6. Undergraduate Awards 2015, Highly Commended.
- 7. Lilian Mary Luce Memorial Prize, 2014. Trinity College Dublin.
- 8. Henry Stewart Macran Prize, 2014. Trinity College Dublin.
- 9. Cotter Prize in Modern Languages, 2014. Trinity College Dublin.
- 10. Dean of Students' Roll of Honour, 2014. Trinity College Dublin.
- II. John Issac Beare Prize in Philosophy, 2013. Trinity College Dublin, Ireland.
- 12. Trinity College Dublin Entrance Scholar, 2012.

# Research visits

- University of Padova. October 2024.
- Institut Jean-Nicod, École normale supérieure, Paris. October 2024.
- Institut Jean-Nicod, École normale supérieure, Paris. March 2024.

### Presentations

#### Peer-reviewed abstracts

- 1. Truthmaker semantics for causal sufficiency. *Truthmaker Semantics and Modal Logic*. Ruhr-Universität Bochum, Germany, 4–8 August 2025.
- 2. The parts of *only*. *Semantics and Linguistic Theory* (SALT) 35. Harvard University, 20–22 May 2025. Joint work with Keny Chatain.
- 3. On the nature of reasons why. 7th Asian Workshop on Philosophical Logic (AWPL 2025). Jadavpur University, Kolkata. 6–8 February 2025.
- 4. On the logic of reasons for. 11th Indian Conference on Logic and its Applications (ICLA 2025). Indian Statistical Institute, Kolkata. 3–5 February 2025.
- 5. Analyses of difference-making. *American Philosophical Association* (APA), Eastern Division. New York, 8–11 January 2025.
- 6. New Experimental Evidence against the Similarity Approach to Conditionals. *Semantics and Linguistic Theory* (SALT) 34. University of Rochester, New York, May 28-30, 2024. Joint work with Tomasz Klochowicz.
- 7. A Dynamic Interpretation of Structural Causal Models. *Formal Methods and Science in Philosophy V*, Dubrovnic, 16–18 May 2024.

- 8. Wide Scope Simplification: Free choice effects from disjunctions of conditionals. *The* 4th Tsinghua Interdisciplinary Workshop on Logic, Language, and Meaning (TLLM IV), Tsinghua University, Beijing, March 30-31, 2024.
- 9. A new test for discrimination: the existential *but-for* test. *Causality for Ethics and Society*, Munich Centre for Mathematical Philosophy (MCMP), 24–25 July 2023.
- 10. A new test for discrimination: the existential *but-for* test. *CEPDISK'23 Conference on Discrimination*, Aarhus University, 12–13 October 2023.
- Unraveling Sartorio's Difference-Making Principle. Fourteenth International Tbilisi Symposium on Logic, Language and Computation (TbILLC 2023). 18–22 September 2023.
- 12. Aboutness and Modality. 23rd Amsterdam Colloquium. 19–21 December 2022.
- 13. Imagining a different world: defining sufficiency using truthmaker semantics. *Logic4Peace*. 22–23 April 2022.
- 14. Because lexicalizes a focus-sensitive exhastification operator that violates Economy. Generative Linguistics in the Old World (GLOW) 44. 15 April 2021.
- 15. Are causes ever too strong? Downward left monotonicity in the causal domain. Second Tsinghua Interdisciplinary Workshop on Logic, Language, and Meaning (TLLM 2020): Monotonicity in Logic and Language, Beijing. 17–20 December 2020.
- 16. How to cause the inevitable. *10th European Congress of Analytic Philosophy* (ECAP 10), University of Utrecht. 24–28 August 2020.
- 17. Negation and alternatives in conditional antecedents. 22nd Amsterdam Colloquium. 18–20 December 2019.
- 18. How to cause the inevitable. *OSZW 2019* (annual conference of the Dutch Research School in Philosophy). 15–16 November 2019.
- 19. A problem for inquisitive semantics of conditionals. *ESSLLI 2019 Student Session.* 5–16 August 2019. **Awarded Best Presentation.**
- 20. The foundations of mechanistic reasoning. *University of Amsterdam Philosophy Symposium*. 28 February 2019.
- 21. Winning Questions: Inquisitive semantics and the lottery paradox. *Fifth LSE Graduate Conference in Philosophy of Probability*, London School of Economics. 2–3 June 2017. Joint work with Grzegorz Lisowski and Max Rapp.
- 22. Paradoxical predicates. *Cool Logic*, ILLC, University of Amsterdam. 2 December 2016.
- 23. Imagining things otherwise. *PLM Masterclass with Timothy Williamson*, Institute of Advanced Study, University of London. 18–19 November 2016.

### Invited presentations

- I. To be announced. "If...then..." Once Again: New Perspectives on the Logic, Truth Conditions, and Probabilities of Conditionals. Ruhr-Universität Bochum, Germany, 28 July–1 August 2025.
- Disjunctions of modals and conditionals: A solution to Zimmerman's problem. Meaning, Logic, and Cognition Seminar, ILLC, University of Amsterdam. 28 February 2025.
- 3. Local Modals. Meaning in Language Colloquium Series, Heinrich-Heine-Universität Düsseldorf, 11 December 2024.
- 4. New Experimental Evidence against the Similarity Approach to Conditionals. University of Padua, 21 October 2024. Joint work with Tomasz Klochowicz.
- 5. Figure–Ground relations in conditionals. *COCOA Seminar*, Online, 11 October 2024.
- 6. Modality disordered. *Linguae Seminar*, Institut Jean Nicod, École normale supérieure, Paris, 21 March 2024.
- 7. A dynamic interpretation of structural causal models. *COCOA Seminar*, Online, 23 February 2024.
- 8. Conditional perfection in the semantics of causal claims. *Colloquium on Empirical English Linguistics*, Humboldt University, Berlin, 18 January 2024.
- 9. Because. University of Massachusetts Amherst Seminar, 7 December 2023.
- 10. Exhaustification in the semantics of *cause* and *because*. *Meaning*, *Logic and Cognition* (*MLC*) *Seminar*, ILLC. 5 November 2021.
- Negation and counterfactuals in conditional antecedents. LSE Conditionals Seminar, London, with Alexandre Cremers. 26 February 2021.
- 12. Newcomb's problem: an introduction to decision theory.  $\Phi$ -Math Group, ILLC, University of Amsterdam. 29 January 2021.
- 13. The Limits of Causal Graphs: Density. *Logic Seminar*, Charles University, Prague. 23 November 2020.
- 14. Causality, magic, and tense-modal interaction. *UMass Amherst Semantics Seminar*. 9 October 2020.
- 15. Homogeneity and domain restriction in the semantics of causal claims. *Meaning, Logic and Cognition (MLC) Seminar*, ILLC, University of Amsterdam. 8 May 2020.
- 16. Causality = time + modality + effective difference-making. *Logic and Interactive Rationality (LIRA) Seminar*. 5 March 2020.
- 17. Actual causality in dynamical systems. *Workshop on Statistical Inference*, University of Amsterdam. 3 December 2019.

- 18. Exclusification in conditional antecedents. *Crete Summer School in Linguistics* (CreteLing) Poster Session. July 2019.
- 19. Negation and alternatives in conditional semantics. *Inquisitive Semantics Seminar*, ILLC, University of Amsterdam. March 2019.
- 20. The foundations of mechanistic reasoning. *University of Amsterdam Philosophy Symposium*. 28 February 2019.
- 21. Paradoxical predicates. *Cool Logic*, ILLC, University of Amsterdam. 2 December 2016.
- 22. What does it mean to call something fundamental? *Carlow College Philosophy Colloquium*.
- 23. Identical Effects: Retrodeterminism and the Principles of Physics. *Trinity College Dublin Metaphysical Society*.
- 24. Believing for the better. *Colloquium on the Uses of Philosophy*, University of Limerick.

# Teaching

#### Lecturer

#### 1. Logical Analysis

BA Philosophy & Minor in Logic and Computation, University of Amsterdam. 2023.

An introduction to logic for undergraduate students. The goal of this course is to teach skills and knowledge that are useful for an analytical approach to philosophy. Essentially this course is about extending one's philosophical toolbox, adding tools that are regularly used in analytical approaches to philosophy of language, metaphysics, philosophy of mind, but also, for instance, analytical ethics.

#### 2. Philosophical Foundations of Explanation

MSc Logic, University of Amsterdam. 2024.

What principles underlie our practice of giving and interpreting explanations? We approach this question using tools from philosophy, logic and linguistics. In particular, we will discuss what the words cause and because mean, and what information we take into account when we interpret them; that is, what information a causal model should contain. Along the way we will discuss new developments in the semantics of conditionals, evaluating proposals based on similarity, premise semantics and truthmaker semantics.

#### 3. Philosophy of Language

MA Philosophy & MSc Logic, University of Amsterdam. Co-taught with Elsbeth Brouwer. 2023.

This course provides an introduction to the contemporary analytical philosophy of language. We will discuss cognitivist, platonist and realist conceptions of meaning, and study a variety of topics, such as semantic externalism, translatability of language, communicative action and language acquisition. These subjects will be studied through primary texts of authors such as Frege, Wittgenstein, Putnam, Grice, Butler, Davidson and Quine.

4. Causal Inference: philosophical theory and modern practice MSc Logic & MA Philosophy, University of Amsterdam. 2022.

In the first part of the course we study analyses of causation, both historical and contemporary. We will learn about the substantial progress researchers have recently made analysing causality. Among the questions we will consider are:

- How do we build a causal model of a scenario?
- What does the word "cause" mean?
- How do we imagine hypothetical alternatives to reality?
- 5. Hypothetical Reasoning: its development and impact MSc Logic, University of Amsterdam. 2020.

This course investigates the development and moral implications of hypothetical reasoning. The course will consist of lectures on moral responsibility, causation, and applications in the law, as well as individual supervision for students to develop their own projects.

#### Supervision

- I. Master Thesis supervisor of Frank Goossens, March–June 2024, with Thom van Gessel.
- 2. Bachelor Thesis supervisor of Juliette Calf. April–June 2024.
- 3. Bachelor Thesis supervisor of Puck Voorham. April–June 2024. **Winner of the 2024 Amsterdam AI Thesis Award.**
- 4. Supervisor of individual project by Flip Lijnzaad, MSc Logic, September–October 2024.
- 5. Supervised fifteen students as part of the project *Philosophical Foundations of Explanation*, with each student giving a presentation and writing a final paper. January–February 2024.
  - Supervised Louis Bunt, Flavia Caradonna, Simon Chiu, Sarah Dukic, Arun Ganguly, Swapnil Ghosh, Frank Goossens, Laura Hernández Martín, Ruiting Jiang, Flip Lijnzaad, Mees Lursen, Kirti Singh, Alex Stan, and Ştefan Zotescu.
- 6. Supervisor of individual project by Frank Goossens, MSc Logic, September–October 2023, with Jean Wagemans.

7. Supervised ten student projects as part of *Hypothetical Reasoning: its development and impact*, with each student giving a presentation and writing a final paper. January–February 2020.

Supervised Billy Chan, Gerson Foks, Angelica Hill, Flavia Nährlich, Nachiket Sakhadeo, Grace Shao, Arie Soeteman, Laura Vetter, and Tianwei Zhang.

# Teaching assistant

- I. Philosophical Logic, MSc Logic (2021, 2022)
- 2. Causal Inference, MSc Logic (2019, 2020, 2021)
- 3. Causality and Common Sense reasoning, BA Artificial Intelligence (2019)
- 4. Causality, Decision Making and Games, BA Artificial Intelligence (2018)

### Sample of student feedback from course evaluations

"Dean is just an amazing lecturer. He explains complicated things in a very accessible way, provides illustrative examples, makes sure that people are following him through the class, his slides are perfectly structured. I might go on all day with the qualities."

"I loved his accessibility, availability, clarity, passion for what he teaches."

"The lecturers were amazingly structured, and Dean explained complex topics in a really clear manner. I appreciated how the lecturers went beyond the readings we had done for the session, helping us both to take review the concepts we had read and take a critical stance on the arguments."

"Dean was very patient and friendly and could explain everything very clearly. He showed great empathy towards students, which was very welcome during this course."

"He does a phenomenal job ... Give that man a raise."

Complete course evaluations available upon request.

# Outreach

- 1. Outreach activity, teaching logic to Italian high-school students, with a presentation on semantic paradoxes. University of Amsterdam. 12 February 2025.
- 2. Interview with Lab42 magazine about applications of my PhD research. 2022.
- Interview for the podcast Talk That Science on applications of semantics and causal inference to law, with Nicolien Janssens, Thijmen Nuninga, and Nikki Weststeijn. 2021.
- 4. Talk at the ILLC Open Day, an event to showcase ILLC research to the public. 4 October 2019.
- 5. Interview for the podcast *Logically Speaking*, on paradoxes and decision theory, with Max van den Broek. 2017.

- 6. Philosophical Logic Explained for a Teenager. A non-technical introduction to philosophical logic. *The Junior Philosopher*. Project for HubSpot. 2016.
- 7. Interview in *University of Toronto News* for research on metaphysics. 2015.

# Community Service

Peer review (\* indicates multiple reviews)

Erkenntnis\*, Journal of Logic, Language and Information\*, Journal of Semantics, Journal of Philosophical Logic\*, Linguistics and Philosophy\*, Philosophical Studies, Semantics and Pragmatics, Sinn und Bedeutung\*, Synthese, ESSLLI Student Session\*, and The Amsterdam Colloquium\*, the Amsterdam AI Thesis Awards, Prix JCJC (Jeunes chercheurs et jeunes chercheuses).

# Organisational Experience

- I. Programme Committee, Amsterdam AI Thesis Awards. 2024.
- 2. ESSLLI Student Session co-chair, with Alexandra Mayn. 2022.
- 3. ILLC Diversity Committee member. The Diversity Committee takes concrete steps to promote diversity and inclusivity at the ILLC, by informing the community, directly organising training activities, outreach events and maintaining the ILLC Code of Conduct. 2021–2022.
- 4. Logic & Language co-chair, with Jonathan Pesetsky. ESSLLI Student Session. 2020 & 2021.
- 5. Co-organiser, with Milica Denić and Giorgio Sbardolini. *Meaning, Logic and Cognition Seminar* and *DIP Colloquium*, ILLC. 2019–2023.
- 6. Organiser, Causal Inference Lab, University of Amsterdam. 2018–2023.
- 7. Co-organiser, *Cool Logic*, University of Amsterdam. A bi-weekly seminar by and for students of the ILLC. 2016–2023.
- 8. Co-organiser, with Floris Roelofsen, Patty den Enting, Peter van Ormondt, Julian Schlöder and Katrin Schulz. *22nd Amsterdam Colloquium*, 18–20 December 2019.
- 9. Editor, Icarus Magazine. Trinity College Dublin. 2015–2016.

### Extra-curricular Experience

- I. Volunteer supporting LGBTQIA asylum seekers. De Regenboog Groep (*The Rainbow Group*), Amsterdam, 2024–present.
- 2. Volunteer, Cooking at the Kloof, Amsterdam, 2023-present.
- 3. Delegate representing Trinity College Dublin Students' Union. Union of Students of Ireland National Student Congress. 2013, 2014.
- 4. Student representative (representing 1,200 students). Trinity College Dublin Students' Union. 2012–2014.
- 5. Delegate representing Union of Students of Ireland. European Students' Union 25th International Student Convention. 2013.
- 6. Literacy and Numeracy Tutor, On Your Mark Programme. Toronto Women's Centre, in partnership with St Michael's College, University of Toronto. 2014–2015.
- 7. Literacy and Numeracy Tutor, *Teach and Learn* Programme. Trinity College Vincent de Paul, tutoring women of an itenerant Travelling Community. 2013–2014.

8. Student mentor. Student2Student Programme, Trinity College Dublin. 2013–2014.

# Languages

English: native • Irish: advanced • Dutch: advanced • French: intermediate • German: beginner

# References

## Katrin Schulz

PhD supervisor
Associate professor in experimental methods in AI and Logic
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### Sonja Smets

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