BRENDAN SHEA, PHD

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EDUCATION

- University of Illinois at Urbana-Champaign
 - o MA (2005) and PhD (2011) in Philosophy
 - o Grad Certificate (2020) in Instructional Design
 - o MS (expected 2024) in Computer Science
- Harvard University, Extension, Grad. Certificate in Computer Programming (2021)
- Winona State University, Minnesota, BA (2002) in English: Writing, magna cum laude

AREAS OF RESEARCH AND TEACHING EXPERTISE

Applied Ethics (esp. Bioethics and AI Ethics), Data Science, Logic, Philosophy of Science

PRIMARY ACADEMIC APPOINTMENT

Professor of Philosophy (2013-) and Computer Science (2021-), Rochester Community and Technical College

- Courses Taught (Philosophy): Bioethics (x37), Logic (x27), Ethics (x18), Philosophy of Religion (x3), Introductory Philosophy (x3), Business Ethics (x3), Ethics at the Movies (x2), Philosophy and World Religions, Science Fiction and Philosophy
- Courses Taught (Humanities): Compassion Studies (x2), Western Canon 1: Greek, Roman, and Middle Ages
- Courses Taught (Computer Science): Database and SQL (x3), Intro to Computer Science
- "Learning is Forever" Courses Taught (Non-Credit): Philosophy of Mind, Philosophy of Sex and Gender, The Political Philosophy of Plato and Aristotle, Buddhist Philosophy (x2), Philosophy and Climate Science, The Ethics of Migration Policy, Neuroethics, The Vienna Circle, Plato's Early Dialogues, History and Philosophy of Science, Healthy Thinking: How Philosophy Can Help Us Reason Well in a Time of Sickness, Ethics of Artificial Intelligence, Tanks and Thomas Aquinas: The Ethics of War
- Professional Service: Outstanding Educator Selection Committee (2018-2020), Academic Affairs and Standards Council (2016-), Faculty Instructional Development Grant Committee (2014-18), Various Search Committees
- Sabbatical Leave (2020-21). Project: "Logic Pedagogy in Philosophy, Mathematics, and Computer Science."

I have experience teaching online, hybrid, and face-to-face classes. On student evaluations (n = 1927), my mean instructor rating is 4.54 out of 5 ($\sigma = .71$), and my mean course rating is 4.32 out of 5 ($\sigma = .92$). I was named RCTC's Outstanding Educator of the Year for 2017-2018.

I have written **Open-Educational Resources** for many of my classes at RCTC, which have replaced textbooks.

Previous and Secondary Appointments

Chair, Academic Affairs and Standards Council, Rochester Community and Technical College (2018-2020). I chaired this committee of faculty, deans, and upper-level administrators. The purpose of the Council is to provide direction for the College president in all matters included in academic affairs, including course outlines, award requirements, academic standards, course and program components, and the inventory of course and program offerings.

Resident Fellow, Minnesota Center for Philosophy of Science, University of Minnesota-Twin Cities (2015-). I am a member of the Center Discussion Group.

Public Member, Institutional Biosafety Committee, Mayo Clinic-Rochester (2015-). This committee evaluates the risk posed by research involving recombinant DNA and determines the appropriate precautions that should be taken.

Vice President (2018) and President (2019) of the Minnesota Philosophical Society. I was the lead organizer for the Minnesota Philosophical Society Conference in Fall 2018 at RCTC, and was responsible for securing a location for the Fall 2019 conference.

Visiting Assistant Professor, Winona State University (2012-2013). Courses Taught: Critical Thinking (x4), Introductory Philosophy, Classical Philosophy, Inductive Reasoning, Philosophy of Biology.

Assistant Editor, Science-Technology-Medicine Division, Human Kinetics Publishers (2010-2012). I edited undergraduate- and graduate-level textbooks and online ancillaries related to exercise physiology, biomechanics, physical activity epidemiology, quantitative and qualitative research methodology, sport management, professional ethics, and the philosophy and psychology of sport.

Teaching Assistant and Graduate Instructor, University of Illinois (2003-2010).

- Courses Taught as Lead Instructor: Informal Logic (x2), Intro. to Philosophy, Intro. to Ethics
- Courses Taught as Teaching Assistant: Formal Logic (x10), Intro. to Philosophy (x2), Biomedical Ethics (x2), Ancient Philosophy
- Tutor: History of Science I, History of Science II
- Professional Service: Library Committee (2009-10), University of Illinois Philosophy Graduate Conference Committee Member, Referee, and Respondent (2003-2011)

PUBLICATIONS

JOURNAL ARTICLES

- 1. (2015). "Evolution and Neuroethics in the Hyperion Cantos." Journal of Cognition and Neuroethics 3:3. 139-162.
 - O Uses scenarios drawn from science fiction, paired with arguments drawn from evolutionary neuroscience, to argue for the permissibility of moral enhancement in specific contexts.
- 2. (2013) "Two Concepts of Law of Nature." Prolegomena 12:2: 413-442.
 - o Characterizes the differences between laws in fundamental physics and other branches of science.

BOOKS

- 3. (2022). A Little More Logical: Reasoning Well About Science, Ethics, Religion, and the Rest of Life. Rochester, MN: Thoughtful Noodle Books. 255 pp. https://philpapers.org/rec/SHEALM
 - O A Little More Logical is a comprehensive guide to critical thinking and logical reasoning. It covers a wide range of topics, from the basics of logic to more advanced concepts such as moral reasoning, probability, and scientific reasoning. The book includes numerous fictional vignettes, examples, "Minds that Mattered", and case studies to illustrate the key concepts.
 - O This is a free, Creative-Commons licensed books (released under my imprint Thoughtful Noodle Books) which are free for students and faculty to use and adapt. As of Summer 2023, it has been downloaded > 500 times.

ENCYCLOPEDIA ENTRIES AND REVIEW ARTICLES

- 4. (2016) "Karl Popper: Philosophy of Science." *The Internet Encyclopedia of Philosophy*, ISSN 2161-0002, http://www.iep.utm.edu/pop-sci/. (Refereed)
 - o Provides a detailed overview of Karl's Popper's philosophy of science.
- 5. (2013) Contributor to R. Arp (ed.), 1001 Ideas that Changed the Way We Think. (New York: Simon & Schuster). (Invited)
 - Philosophy of Science Entries: Anthropic Principle, Binding Problem, Coherence Theory of Truth, Counterfactuals, Correspondence Theory of Truth, Deflationary Theory of Truth, Naming and Necessity (Kripke), Pragmatic Theory of Truth

 Applied Ethics Entries: Gene Therapy, Neoconservativism, Principles of Biomedical Ethics (Beauchamp/Childress), Reaganomics, Small is Beautiful: Economics as if People Mattered (Schumacher), Theory of Communicative Action (Habermas)

BOOK REVIEWS

- 6. (2022). Review of Paul Thagard, Bots and Beasts: What Makes Machines, Animals, and People Smart? (MIT Press, 2021). In: Teaching Philosophy 45:2, 263-266.
- 7. (2019). Review of Joseph Agassi. Ludwig Wittgenstein's Philosophical Investigations: An Attempt at a Critical Rationalist Appraisal (Springer, 2018). In: Notre Dame Philosophical Reviews 9-17-2019.
- 8. (2019). Review of Martin Peterson. *The Ethics of Technology: A Geometric Analysis of Five Moral Principles.* (Oxford, New York: Oxford University Press, 2017). In: *Philosophy in Review* 39:2. 94-96.
- 9. (2015). Review of Daniel Dennett, *Intuition Pumps and Other Tools for Thinking* (New York: W.V. Norton, 2013). Reason Papers 37:2. 216-221.

CHAPTERS IN EDITED VOLUMES

- 10. (Forthcoming 2024). "AI Ethics: The Principled Approach." In: Rudow, B. (ed). Ethics and Artificial Intelligence in Fiction. (with Joseph Swenson)
- 11. (2022) "Let it Go? Elsa, Stoicism, and the 'Lazy Argument'." In: W. Irwin (ed.). *AndPhilosophy.com: The Blackwell Philosophy and Popular Culture Series*. https://andphilosophy.com/2022/05/07/let-it-go-elsa-stoicism-and-the-lazy-argument/
- 12. (2021) "House of Cards as Philosophy: Democracy on Trial." In: Johnson, D.K. (ed), *The Palgrave Handbook of Popular Culture as Philosophy* (New York: Palgrave Macmillan). 1-22. https://doi.org/10.1007/978-3-319-97134-6_37-1.
- 13. (2019) "The Wrong Thinking in Conspiracy Theories." In: R. Greene and R. Robison-Greene (eds.), *Conspiracy Theories: Philosophers Connect the Dots* (Chicago: Open Court), 193-203.
 - Offers an original account of the specific inductive failures that characterize many conspiracy theories, drawing on both Hume's "Of Miracles" and Kahneman and Tversky's work on reasoning under uncertainty.
- 14. (2018) "Paradigm Shift: A 'Strange' Case of a Scientific Revolution." In: W. Irwin and M. White (eds), Dr. Strange and Philosophy: The Other Book of Forbidden Knowledge. The Blackwell Series in Popular Culture and Philosophy. (Hoboken: Wiley), 139-150.
 - O Uses the fictional experience of Dr. Strange to motivate Kuhn's distinction between normal and revolutionary science, and to explore how the Kuhnian notion of a "paradigm" might be used to capture the *scientific* character of Strange's "mystical" experiences.
- 15. (2017) "The Problem of Evil in Virtual Worlds." In: Mark Silcox (ed.), Experience Machines: The Philosophy of Virtual Worlds (Lanham, MD: Rowman & Littlefield). 137-155.
 - O Considers the moral relevance of various formulations of the problem of evil to the creation of virtual worlds that contain strongly intelligent virtual agents. Argues for constraints on the creation of such worlds.
- 16. (2016) "Not So Human, After All?" In: C. Lewis and K. McCain (eds.), Red Rising and Philosophy (Chicago: Open Court), 15-25.
 - O Introduces and evaluates several major concepts of biological *species*, and applies these to the question of determining what it takes to be "human" in the context of (hypothetical) widespread genetic engineering.
- 17. (2015) "Democracy is So Overrated". In: J. Hackett (ed.), House of Cards and Philosophy: Underwood's Republic. The Blackwell Series in Popular Culture and Philosophy. (Hoboken: Wiley), 141-152.
 - O Considers the real-world relevance of Frank Underwood's attack on the (fictional) government in *House of Cards*. Explores arguments by four famous critics of democracy: Plato, Hobbes, Hegel, and Marx.
- 18. (2015) "The Medical Ethics of Miracle Max." In: R. Greene and R. Greene (eds.) The Princess Bride and Philosophy: Inconceivable! (Chicago: Open Court), 193-203.
 - O Uses the example of "Miracle Max" to introduce the ideas of Principilism as they apply to medical ethics. Provides an introduction to the four principles of autonomy, nonmaleficence, beneficence, and justice.
- 19. (2015) "Climbing the Ladder of Love." In: A. Barkman (ed.), *Downton Abbey and Philosophy*. (Chicago: Open Court), 249-259.

- o Explores how the conceptions of love detailed in Plato's *Symposium* can illuminate the sorts of romantic relationships portrayed in this period drama.
- 20. (2014) "Leonard Cohen as a Guide to Life: Stoics, Skeptics, and Epicureans." In: J. Holt (ed.), Leonard Cohen and Philosophy. (Chicago: Open Court), 3-14.
 - O Uses selected Cohen songs to examine the core problems of Hellenistic philosophy. Includes substantive discussions of Epictetus, Lucretius, Sextus Empiricus, and Hypatia of Alexandria.
- 21. (2014) "You Can't Choose Your Family: Impartial Morality and Personal Obligations in *Alias*." In: P. Brace and R. Arp (eds.), *The Philosophy of J.J. Abrams*. (Lexington, KY: University Press of Kentucky), 173-189.
 - O Discusses the problem of reconciling personal obligations with impartial theories of morality with special reference to the work of Peter Railton, Frank Jackson, and Marilyn Friedman.
- 22. (2014) "Runaway Memes." In: N. Michaud (ed.), Jurassic Park and Philosophy (Chicago: Open Court), 21-29.
 - o Provides an overview of evolutionary theory and explains how this can be applied to human culture via *memes*.
- 23. (2013) "Do Good Games Make Good People?" In K. Decker (ed.), Ender's Game and Philosophy (Hoboken: Wiley-Blackwell), 89-99.
 - o Proposes novel criteria for evaluating a game's quality, and examines (and rejects) the thesis that games build "character."
- 24. (2012) "What Makes Jeopardy! a Good Game?" In: S. Young (ed.), Jeopardy! and Philosophy. (Chicago, IL: Open Court Publishing). 27–39.
 - o Explains and extends Bernard Suit's definition of "game," using Jeopardy! as a special case.
- 25. (2010) "Three Ways of Getting it Wrong: Induction in Wonderland." In R. Davis (ed.), *Alice in Wonderland and Philosophy*. (Hoboken: Wiley-Blackwell). 93–107.
 - O Uses Alice's adventures to examine the relationship between Hume's Problem of Induction, the problem of underdetermination of theories, and Quine's argument for the indeterminacy of reference.
- 26. (2009) "To Bite or not to Bite: Twilight, Immortality, and the Meaning of Life." In R. Housel and J. Wisnewski (eds.), *Twilight and Philosophy*. (Hoboken: Wiley-Blackwell). 79–93.
 - o Presents an extended argument that an immortal life is not desirable. Considers arguments by Lucretius, Leo Tolstoy, Bernard Williams, and Martha Nussbaum.

OTHER PUBLICATIONS

Please contact me at brendanpshea@gmail.com to request pre-prints or post-prints.

SELECTED PRESENTATIONS

- 1. (2023) AI Ethics: Principles and Fictions. Pop Culture Association Annual Conference. San Antonio TX.
- 2. (2022) Healthy Thinking in Age of Sickness. Student Success Day. Rochester Community and Technical College. Rochester, MN.
- 3. (2021) The Ethics of Artificial Intelligence. RCTC Annual Lecture Series (Nov 4). Rochester, MN.
- 4. (2019) The Four Principles at 40: What is Their Role in Introductory Bioethics Classes? Minnesota Philosophical Society Annual Conference (Oct 26). Cambridge, MN.
- 5. (2017) "Confucius and Socrates on the Philosophy of Education." Student Success Day. Rochester Community and Technical College. Rochester, MN.
- 6. (2016) "Inclusive Pedagogies in Introductory Logic." AAPT International Workshop-Conference on Teaching Philosophy; Saginaw, MI.
- 7. (2015) "Evolution and Neuroethics in the Hyperion Canon." Center for Cognition and Neuroethics. Flint, MI.
- 8. (2015) "Why Study the Humanities?" Student Success Day. Rochester Technical and Community College. Rochester, MN.
- 9. (2014) "Empathy and the Moral Imagination." First Unitarian Universalist Church. Rochester, MN.
- 10. (2013) "Singing About Suffering: The Problem of Evil in Popular Music." Popular Culture Association Annual Conference. Washington, DC.
- 11. (2013) "How to Avoid Fallacies and Succeed in College." Student Success Day. Rochester Technical and Community College. Rochester, MN.

- 12. (2013) "Darwin on the Problem of Evil." Winona State University Secular Humanist Club. Winona, MN.
- 13. (2012) "Green, Blue, and Grue: Two Problems With Predicting." Winona State University. Winona, MN.
- 14. (2010) "Much Ado About Nothing: A Bayesian Argument for Ontological Antirealism." Society of Student Philosophers Annual Conference. University of Texas at Austin. Austin, TX.
- (2018) RCTC Outstanding Educator of the Year. Nominee for MN State Educator of the Year.
- (2017) National Endowment for the Humanities, Summer Institute Participant (w/ Stipend), Macalester College (MN), "Teaching the Religions of the World"
- (2017) RCTC Faculty Instructional Development Grant, "How to Write a Philosophy Paper" (w/ Tim O'Neill and David Jones)
- (2014-2018) Top 10% in Both Instructor AND Course Ratings Nationwide (IDEA Student Evaluations):
 - o Logic (Spring 2015, Spring 2018, Fall 2018)
 - o Ethics (Spring 2015, Fall 2014 x 2)
 - o RCTC stopped using IDEA evaluations in 2019
- (2010) Caton Prize for the best paper in philosophy at the University of Illinois
- (2005-2019) List of Teachers Ranked as Excellent by Their Students, University of Illinois:
 - o Formal Logic (Fall 2009)
 - o Introduction to Philosophy (Spring 2005, Fall 2007)
- (2006-2007) Philosophy Department Dissertation Fellowship, University of Illinois
- (2002 Fall) Top Graduating Senior in English Department, Winona State University
- (1998) National Merit Scholar

OTHER PROFESSIONAL EXPERIENCE

Journal Refereeing (2013-). I have served as a referee for articles in *Philosophies, International Studies in Philosophy of Science, Prolegomena, Social Sciences, Journal of Psychology and Theology,* and *Journal for General Philosophy of Science.*

Consultant for Cengage Publishing, Aplia.com, Oxford University Press, and McGraw Hill (2007-2012). I reviewed and suggested changes to the online content for several editions of Patrick Hurley's *A Concise Introduction to Logic*. I have also served as a reviewer for a number of other textbooks on logic and critical thinking, introductory philosophy, and biomedical ethics

Home and Community Options and Residential Developers (2000-2010). I worked closely with adults with developmental disabilities, autistic spectrum disorders, schizophrenia, organic brain syndrome, Angelman syndrome, Alzheimer's disease, and related conditions. I helped develop and implement programs to help individuals develop independent living skills and to ensure health and well-being.

Professional Organizations. I am (or have been) a member of the American Philosophical Association, the American Association of Philosophy Teachers, the International Society for History of Philosophy of Science, the Philosophy of Science Association, and the Society for Applied Philosophy.

LANGUAGES

English (native), Spanish (basic)

DISSERTATION ABSTRACT: CONCEPTS OF LAW OF NATURE

Laws of nature have played a central role in many areas of philosophy, including the philosophy of science, philosophy of religion, and metaphysics, since at least the time of Descartes. In my dissertation, I argue that that the facts about laws are *primitive* and *irreducible*. I begin by defending my methodology (a version of Carnapian explication), then go on to distinguish between *strong laws* and *weak laws*. I argue against (1) the "Humean" view that laws reduce to non-modal facts concerning particular entities and (2) the "law necessitarian" view that laws reduce to facts about essences, natures, or dispositions. Along the way, I consider the cogency of philosophical appeals to *intuition*, *parsimony*, and *methodological naturalism*. To support my thesis, I consider a variety of evidence from current and historical scientific practice. While

my primary topic is laws of nature, the dissertation should also be of interest to those concerned with philosophical methodology or the appropriate relation between philosophy and science. (This dissertation is available online at https://www.ideals.illinois.edu/bitstream/handle/2142/26076/SHEA_BRENDAN.pdf.)

REFERENCES

Available upon request.