

Curriculum Vitae of
John F. Horty

Philosophy Department
University of Maryland
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Education

University of Pittsburgh: PhD in Philosophy, 1986. Dissertation: *Some Aspects of Meaning in Mathematical Language* (supervisor: Nuel Belnap)

Oberlin College: BA in Philosophy and Classics, 1977

Professional Experience

Professor, Philosophy Department and Institute for Advanced Computer Studies, and Affiliate Professor, Computer Science Department, University of Maryland, 1999-present (Assistant Professor, 1989-94; Associate Professor, 1994-98)

Editor, *Journal of Philosophical Logic*, 2008-present

Visiting Associate Professor, Philosophy Department, University of Pittsburgh, 1993

Research Scientist, Computer Science Department, Carnegie Mellon University, 1986-89

Honors and Awards

Graduation with Highest Honors, Oberlin College, 1977

Phi Beta Kappa, Oberlin College, 1977

Florence Frew Prize in Classics, Oberlin College, 1977

Andrew Mellon Fellowship, University of Pittsburgh, 1980

Paper selected for *Philosopher's Annual* ("Ten Best Papers"), 1995

National Science Foundation Grants, 1990-91, 1990-93, 1997-2000

National Endowment for Humanities Fellowships, 1993-94, 2004-05

Research and Teaching Interests

Philosophical Logic
Logic and Artificial Intelligence
Cognitive Science
Philosophy of Language
Practical Reasoning
Ethics

Publications

Books

1. *Agency and Deontic Logic*. Oxford University Press (2001; paperback, 2009), xiv+192 pp. Also available in Oxford Scholarship Online.
2. *Frege on Definitions: A Case Study of Semantic Content*. Oxford University Press (2007), xiv+176 pp. Also available in Oxford Scholarship Online.
3. *Reasons and Defaults*. Oxford University Press (under contract for publication in 2011).

Articles

1. A skeptical theory of inheritance in nonmonotonic semantic networks (J. Horty, R. Thomason, and D. Touretzky). In *Proceedings of the Sixth National Conference on Artificial Intelligence (AAAI-87)*, Morgan Kaufmann Publishers (1987), pp. 358–363.
*** Nominated for Best Paper Award, AAAI-87.
2. A clash of intuitions: the current state of nonmonotonic multiple inheritance systems (D. Touretzky, J. Horty, and R. Thomason). In *Proceedings of the Tenth International Joint Conference on Artificial Intelligence (IJCAI-87)*, Morgan Kaufmann Publishers (1987), pp. 476–482.
3. A calculus for inheritance in monotonic semantic nets (R. Thomason, J. Horty, and D. Touretzky). In *Proceedings of the Second International Symposium on Methodologies for Intelligent Systems*, North-Holland Publishing Company (1987), pp. 280–287.
An extended version appears as Technical Report CMU-CS-86-138, Computer Science Department, Carnegie Mellon University (1986), 24 pp.
4. Mixing strict and defeasible inheritance (J. Horty and R. Thomason). In *Proceedings of the Seventh National Conference on Artificial Intelligence (AAAI-88)*, Morgan Kaufmann Publishers (1988), pp. 427–432.
5. Logics for inheritance theory (R. Thomason and J. Horty). In *Proceedings of the Second International Workshop on Nonmonotonic Reasoning*, M. Reinfrank, J. de Kleer, M. Ginsberg, and E. Sandewall (eds.), Springer Verlag Lecture Notes in Artificial Intelligence, vol. 346, Springer Verlag (1989), pp. 220–237.
6. A skeptical theory of inheritance in nonmonotonic semantic networks (J. Horty, R. Thomason, and D. Touretzky). *Artificial Intelligence*, vol. 42 (1990), pp. 311–348.
An extended version including implementational details appears as Technical Report CMU-CS-87-175, Computer Science Department, Carnegie Mellon University (1987), 62 pp.
7. A skeptical theory of mixed inheritance. In *Truth or Consequences: Essays in Honor of Nuel Belnap*, J.M. Dunn and A. Gupta (eds.), Kluwer Academic Publishers (1990), pp. 267–281.
8. Boolean extensions of inheritance networks (J. Horty and R. Thomason). In *Proceedings of the Eighth National Conference on Artificial Intelligence (AAAI-90)*, The MIT Press (1990), pp. 633–639.
9. Reasoning about ignorance: a note on the Bush-Gorbachev problem (S. Kraus, D. Perlis, and J. Horty). *Fundamenta Informaticae* (Special Issue on Logics for Artificial Intelligence), vol. 15 (1991), pp. 325–332.
10. Conditionals and artificial intelligence (J. Horty and R. Thomason). *Fundamenta Informaticae* (Special Issue on Logics for Artificial Intelligence), vol. 15 (1991), pp. 301–323.

11. A credulous theory of mixed inheritance. In *Inheritance Hierarchies in Knowledge Representation and Programming Languages*, M. Lenzerini, D. Nardi, and M. Simi (eds.), John Wiley and Sons Press (1991), pp. 13–28.
12. A skeptic’s menagerie: conflictors, preemptors, reinstaters, and zombies in nonmonotonic inheritance (D. Touretzky, R. Thomason, and J. Horty). In *Proceedings of the Twelfth International Joint Conference on Artificial Intelligence (IJCAI-91)*, Morgan Kaufmann Publishers (1991), pp. 478–483.
13. Frege on the psychological significance of definitions. *Philosophical Studies* (Special Issue on Definitions), vol. 69 (1993), pp. 113–153.
14. View updates in stratified disjunctive databases (J. Grant, J. Horty, J. Lobo, and J. Minker). *Journal of Automated Reasoning*, vol. 11 (1993), pp. 249–267.
15. Deontic logic as founded on nonmonotonic logic. *Annals of Mathematics and Artificial Intelligence* (Special Issue on Deontic Logic in Computer Science), vol. 9 (1993), pp. 69–91.
16. Nonmonotonic techniques in the formalization of commonsense normative reasoning. In *Proceedings of the Second Symposium on Logical Formalizations of Commonsense Reasoning*, V. Lifschitz, J. McCarthy, L. Morgenstern, and Y. Shoham (eds.), American Association for Artificial Intelligence Press (1993).
17. Moral dilemmas and nonmonotonic logic. *Journal of Philosophical Logic*, vol. 23 (1994), pp. 35–65.
A preliminary version appears in *Proceedings of the First International Workshop on Deontic Logic in Computer Science*, J.–J. Ch. Meyer and R.M. Wieringa (eds.), Free University of Amsterdam (1991), pp. 212–231.
18. Some direct theories of nonmonotonic inheritance. In *Handbook of Logic in Artificial Intelligence and Logic Programming, Volume 3: Nonmonotonic Reasoning and Uncertain Reasoning*, D. Gabbay, C. Hogger, and J. Robinson (eds.), Oxford University Press (1994), pp. 111–187.
19. The deliberative stit: a study of action, omission, ability, and obligation (J. Horty and N. Belnap). *Journal of Philosophical Logic*, vol. 24 (1995), pp. 583–644.
*** Selected for *The Philosopher’s Annual: Volume 18–1995* (“Ten Best Papers of 1995”), P. Grim, P. Ludlow, G. Mar, and P. Williams (eds.), Ridgeview Publishing Company (1997), pp. 205–266.
20. Intentions as filters. In *Proceedings of the AAAI Fall Symposium on Rational Agency*, M. Fehling, D. Perlis, M. Pollack, and J. Pollock (eds.), American Association for Artificial Intelligence Press (1995), pp. 86–91.
21. Agency and obligation. *Synthese*, vol. 108 (1996), pp. 269–307.
22. Combining logics of agency and obligation. In *Deontic Logic, Agency, and Normative Systems: Proceedings of the Third International Workshop on Deontic Logic in Computer Science*, M. Brown and J. Carmo (eds.), Workshops in Computing Series, Springer Verlag (1996), pp. 98–122.
23. Nondeterminism and dominance: foundations of planning and qualitative decision theory (R. Thomason and J. Horty). In *Proceedings of the Sixth Conference on Theoretical Aspects of Rationality and Knowledge (TARK-96)*, Y. Shoham (ed.), Morgan-Kaufmann Publishing Company (1996), pp. 229–250.
24. Nonmonotonic foundations for deontic logic. In *Defeasible Deontic Logic*, D. Nute (ed.), Kluwer Academic Publishers (1997), pp. 17–44.
25. Evaluating options in a context (J. Horty and M. Pollack). In *Proceedings of the Seventh Conference on Theoretical Aspects of Rationality and Knowledge (TARK-98)*, I. Gilboa (ed.), Morgan-Kaufmann Publishing Company (1998), pp. 249–262.
26. Formal theories of commonsense reasoning. In *Routledge Encyclopedia of Philosophy*, Routledge and Kegan Paul (1998), pp. 451–453.

27. A unifying algorithm for conditional and probabilistic planning (N. Onder, M. Pollack, and J. Horty). In *Proceedings of the AIPS'98 Workshop on Integrating Planning, Scheduling and Execution in Dynamic and Uncertain Environments*, A. Kott (ed.), American Association for Artificial Intelligence Press (1998), pp. 106–112.
28. Plan management issues for cognitive robotics (M. Pollack and J. Horty). In *Proceedings of the AAAI Fall Symposium on Cognitive Robotics*, C. Baral, K. Konolige, G. Lakemayer, R. Reiter, and M. Shanahan (eds.), American Association for Artificial Intelligence Press (1998), pp. 76–83.
29. There's more to life than making plans: plan management in dynamic, multi-agent environments (M. Pollack and J. Horty). *AI Magazine*, vol. 20 (1999), pp. 71–84.
30. Precedent, deontic logic, and inheritance. In *Proceedings of the Seventh International Conference on Artificial Intelligence and Law (ICAIL-99)*, Association for Computing Machinery Press (1999), pp. 63–72.
31. Adjustable autonomy for a plan management agent (M. Pollack, I. Tsamardinos, and J. Horty). In *Proceedings of the AAAI Spring Symposium on Adjustable Autonomy*, American Association for Artificial Intelligence Press (1999).
32. Merging plans with quantitative temporal constraints, temporally extended actions, and conditional branches (I. Tsamardinos, M. Pollack, and J. Horty). In *Proceedings of the Fifth International Conference on Artificial Intelligence Planning and Scheduling (AIPS-2000)*, American Association for Artificial Intelligence Press, pp. 264–272.
*** Winner of Outstanding Student Paper Award, AIPS-2000.
33. Evaluating new options in the context of existing plans (J. Horty and M. Pollack). *Artificial Intelligence*, vol. 127 (2001), pp. 199–220.
34. Argument construction and reinstatement in logics for defeasible reasoning. *Artificial Intelligence and Law*, vol. 9 (2001), pp. 1–28.
35. Nonmonotonic logic. In *The Blackwell Guide to Philosophical Logic*, L. Goble (ed.), Blackwell Publishers (2001), pp. 336–361.
36. Theory and semantics: the two stits (J. Horty and N. Belnap). In *Facing the Future: Agents and Choices in Our Indeterministic World*, by N. Belnap, M. Perloff, and M. Xu, Oxford University Press (2001), pp. 29–39.
37. Skepticism and floating conclusions. *Artificial Intelligence*, vol. 135 (2002), pp. 55–72.
A preliminary version appears in *Working Notes of Common Sense 2001: The Fifth International Symposium on Logical Formalizations of Commonsense Reasoning*, E. Davis, J. McCarthy, L. Morgenstern, and R. Reiter (eds.), Courant Institute of Mathematical Sciences, New York University (2001), pp. 156–167.
38. Review of *The Structure of Values and Norms*, by S. O. Hansson, Cambridge University Press, 2001. In *Notre Dame Philosophical Reviews* (June, 2002).
Available online at <http://ndpr.nd.edu/review.cfm?id=1142>
39. Reasoning with moral conflicts. *Nous*, vol. 37 (2003), pp. 557–605.
40. The result model of precedent. *Legal Theory*, vol. 10 (2004), pp. 19–31.
41. Right actions in perspective. In *Modality Matters: Twenty-Five Essays in Honour of Krister Segerberg*, H. Lagerlung, S. Lindström, and R. Sliwinski (eds), Uppsala Philosophical Studies, vol. 53, Uppsala University Press (2006).
42. Reasons as defaults. *Philosophers' Imprint*, vol. 7, no. 3 (2007), 28 pp.
43. Defaults with priorities. *Journal of Philosophical Logic*, vol. 36 (2007), pp. 367–413.
44. Double time reference in the evaluation of actions. In *The Dynamic Turn in Epistemology*, P. Girard, M. Marion and O. Roy (eds.), Springer (forthcoming).

Invited Conference Presentations (selected)

Invited speaker. Advances in Modal Logic '98 (AiML'98). Uppsala, Sweden. October 1998. Title: Modal logics of agency.

Keynote speaker. Fifth International Workshop on Deontic Logic in Computer Science (DEON'2000). Toulouse, France. January 2000. Title: Agency and deontic logic.

Invited speaker. American Philosophical Association, Eastern Division Meeting. New York. December 2000. Title: Planning and rationality: A computational perspective.

Invited speaker. Workshop on Logics for Action. Uppsala University. Uppsala, Sweden. November 2001. Title: A modal logic for action.

Keynote speaker. Ninth International Workshop on Nonmonotonic Reasoning (NMR-2002). Toulouse, France. April 2002. Title: Skepticism and floating conclusions.

Invited speaker. Workshop on Philosophical Logic and Applications. Graduate Center, City University of New York. September 2002. Title: Floating conclusions.

Invited speaker. Workshop on the Formal Philosophy of Action. University of Southern California. Los Angeles, California. March 2004. Title: Double time reference in the evaluation of actions.

Keynote speaker. Workshop on Logic and Reasoning in the Law. Danish Research School in Philosophy, Roskilde University. Roskilde, Denmark. September 2004. Title: The result model of precedent.

Invited speaker. Conference on Moral Particularism. University of Texas. Austin, Texas. February 2006. Title: Reasons as defaults.

Invited speaker. Logical Methods in Exact and Social Sciences: A Conference to Commemorate the 70th Birthday of Rohit Parikh. City University of New York. December 2006. Title: Right actions in perspective

Invited speaker. Conference on Mathematical Methods in Philosophy. Banff International Research Station. Banff National Park, Canada. February 2007. Title: to be determined.

Keynote speaker. Society for Exact Philosophy, Thirty Fifth Annual Meeting. Vancouver, Canada. May 2007. Title: Reasons as defaults.

Invited speaker. Dynamic Logic Montréal. University of Quebec. Université du Québec à Montréal. Montreal, Canada. June 2007. Title: Right actions in perspective.

Invited speaker. Symposium on Artificial Normative Systems. Utrecht, The Netherlands. September 2007. Title: Reasoning with prioritized imperatives—where are we?

Keynote speaker. RUC-ILLC Workshop On Deontic Logic. Danish Research School in Philosophy, Roskilde University. Roskilde, Denmark. November 2007. Title: to be determined.

Fellowships, Grants, Contracts

Fellowships

National Endowment for Humanities, Fellowship for University Teachers, 1993-94. Project title: *Studies in the Logic of Agency*.

National Endowment for Humanities, Fellowship for University Teachers, 2004-05. Project title: *Reasoning with Normative Generalizations*.

Grants and Contracts

National Science Foundation grant IST-8700705, 1987-89, \$262,877 (with R. Thomason and D. Touretzky). Project title: *Logical Foundations of Inheritance Reasoning and Knowledge Update*.

National Science Foundation grant IRI-8907122, 1990-91, \$61,533 (with D. Perlis). Project title: *Nonmonotonicity: Scope and Ignorance*.

National Science Foundation grant IRI-9003165, 1990-93, \$377,173 (with R. Thomason and D. Touretzky). Project title: *Inheritance Theory: Logic and Knowledge Bases*.

National Science Foundation grants IRI-9619562 and IRI-9619579, 1997-2000, \$361,327 (with M. Pollack). Project title: *Plan Management in Dynamic Environments*.

Defense Advanced Research Projects Agency contract F30602-00-2-0621, 2000-04, approximately \$850,000 (with M. Pollack). Project title: *A Formal Theory of Agent Based Computing*.

Academic Service

Professional Service

Conference and Workshop Chairs:

Co-chair, Program Committee, AAAI Spring Symposium in Artificial Intelligence (Reasoning about Mental States: Formal Theories and Applications), Stanford, California, March 1993.

Local Arrangements Chair, Fourth International Conference on Artificial Intelligence and Law (ICAIL-95), College Park, Maryland, May 1995.

Co-chair, Program Committee, Sixth International Workshop on Deontic Logic in Computer Science (DEON-02), London, England, May 2002.

Chair, Program Committee, Workshop on Logic, Rationality, and Interaction (LORI-2009), Chongqing, China, October 2009.

Conference and Workshop Committees:

Program Committee, First International Workshop on Logic Programming and Nonmonotonic Reasoning, Washington, DC, July 1991.

Program Committee, Tenth National Conference on Artificial Intelligence (AAAI-92), San Jose, California, June 1992.

Program Committee, IJCAI-93 Workshop on Conditionals in Knowledge Representation, Chambéry, France, August 1993.

Program Committee, Third International Workshop on Deontic Logic in Computer Science (DEON-96), Lisbon, Portugal, January 1996.

Program Committee, Fourteenth National Conference on Artificial Intelligence (AAAI-97), Providence, Rhode Island, August 1997.

Program Committee, Fourth International Workshop on Deontic Logic in Computer Science (DEON-98), Bologna, Italy, January 1998.

Program Committee, Seventh International Conference on Theoretical Aspects of Rationality and Knowledge (TARK-98), Evanston, Illinois, June 1998.

Program Committee, Fifteenth National Conference on Artificial Intelligence (AAAI-98), Madison, Wisconsin, July 1998.

Program Committee, IJCAI-99 Workshop on Practical Reasoning and Rationality, Stockholm, Sweden, July 1999.

Program Committee, NSF Workshop on Logic-based Artificial Intelligence, sponsored by the NSF, Washington, DC, June 1999.

Program Committee, Ninth International Workshop on Nonmonotonic Reasoning (NMR-2002), Toulouse, France, April 2002.

Program Committee, Eighteenth International Joint Conference on Artificial Intelligence (IJCAI-03), Acapulco, Mexico, August 2003.

Program Committee, Seventh International Workshop on Deontic Logic in Computer Science (DEON-04), Madeira, Portugal, May 2004.

Program Committee, Tenth International Workshop on Nonmonotonic Reasoning (NMR-2004), Whistler, British Columbia, Canada, June 2004.

Program Committee, Third North American Summer School on Logic, Language, and Information (NASSLLI-2004), UCLA, Los Angeles, June 2004.

Program Committee, Tenth International Conference on Theoretical Aspects of Rationality and Knowledge (TARK-05), Singapore, June 2005.

Program Committee, Eighth International Workshop on Deontic Logic in Computer Science (DEON-06), Utrecht, The Netherlands, July 2006.

Program Committee, First International Conference on Computational Models of Legal Argument, Liverpool, England, September 2006.

Program Committee, Eighth International Symposium on Logical Formalizations of Commonsense Reasoning (Commonsense-07), Stanford, California, March 2007.

Program Committee, 3rd Multidisciplinary Workshop on Advances in Preference Handling (M-PREF 2007, held in conjunction with VLDB-07), Vienna, Austria, September 2007

Program Committee, Ninth International Workshop on Deontic Logic in Computer Science (DEON-08), Luxembourg, July 2008.

Program Committee, Workshop on Logic and Intelligent Interaction, European Summer School of Logic, Language, and Information (ESSLI-08), Hamburg, Germany, August 2008.

Program Committee, Ninth International Symposium on Logical Formalizations of Commonsense Reasoning (Commonsense-09), Toronto, Canada, May 2009.

Program Committee, Workshop on Logical Methods and Social Concepts, European Summer School of Logic, Language, and Information (ESSLI-09), Bordeaux, France, July 2009.

Manuscript Reviewing:

Cambridge University Press
 Kluwer Academic Publishers
 The MIT Press
 Oxford University Press
 John Wiley and Sons Press
ACM Transactions on Computational Logic
Artificial Intelligence
Cognitive Science
Computational Intelligence
International Journal of Uncertainty, Fuzziness, and Knowledge-based Systems
Journal of Experimental and Theoretical Artificial Intelligence
Journal of Logic and Computation
Journal of Logic, Language, and Information
Journal of Philosophical Logic
 Nous
 Notre Dame Journal of Formal Logic
 Studia Logica
 Synthese

Proposal Reviewing:

The National Science Foundation (NSF)
 The European Science Foundation (ESF)
 The Netherlands Organization for Scientific Research (NWO)
 The Israel Science Foundation (ISF)

University Service (at University of Maryland)

Faculty advisor, Summer Program in Computer Science for High School Students, Institute for Advanced Computer Studies, 1990
Library Representative, Philosophy Department, 1989-90
Faculty Search Committee, Computer Science Department, 1991
Scheduling and Curriculum Committee, Philosophy Department, 1992
Undergraduate Advising Staff, Philosophy Department, 1992
Departmental Meeting Secretary, Philosophy Department, 1992
Faculty Search Committee, Philosophy Department, 1992
Salary Committee, Philosophy Department, 1995, 1996, 1999, 2000
Fellowship Committee, Institute for Advanced Computer Studies, 1998, 1999
Faculty Search Committee, Philosophy and Linguistic Departments, 1997
Chair Search Committee, Philosophy Department, 2000
Chair, Committee to Restructure Graduate Program, Philosophy Department, 1999-2000
Salary Committee, Institute for Advanced Computer Studies, 2000
Chair, Chair's Advisory Committee, Philosophy Department, 2000-03
Graduate Affairs Committee, Philosophy Department, 2000-03
Chair, Faculty Search Committee, Philosophy Department, 2001-02
Chair, Promotion and Tenure Committee, Philosophy Department, 2002-03
University Senate Representative, Institute for Advanced Computer Studies, 2003-04
Philosophy Department Chair Review Committee, College of Arts and Humanities, 2005
Chair, Graduate Affairs Committee, Philosophy Department, 2004-07
Course Scheduling Committee, Philosophy Department, 2004-07
Director of Graduate Studies, Philosophy Department, 1990-92, 1995-96, 1998, 2000, 2004-2007
Chair, Philosophy Department, 2009-