

Curriculum Vitae

BRIAN SKYRMS

Distinguished Professor of Logic and Philosophy of Science & Economics
University of California, Irvine

Professor of Philosophy
Stanford University

Education:

BA. (Economics)	Lehigh University	1960
BA. (Philosophy)	Lehigh University	1961
MA. (Philosophy)	University of Pittsburgh	1962
Ph.D. (Philosophy)	University of Pittsburgh	1964

Employment:

Asst. Professor	Cal. State. U. Northridge	1964-65
Asst. Professor	University of Delaware	1965-66
Visiting Asst. Prof.	University of Michigan	1966-67
Asst. Professor	University of Illinois,	1967-68
Assoc. Professor	Chicago	1968-70
Professor		1970-80
Professor	University of California, Irvine	1980-97
Professor of Economics		1997-
UCI Distinguished Professor of Philosophy		1997-
UCI Distinguished Professor of Social Science Logic and Philosophy of Science		1999-
Professor of Philosophy	Stanford University	2007 -

Interdisciplinary Research Affiliations:

Interdisciplinary Program in History and Philosophy of Science (Director) (UCI)
Institute for Mathematical Behavioral Science (Governing Board) (UCI)
Center for the Scientific Study of Ethics (UCI)
Symbolic Systems (Stanford)

Some Lectures:

October 2013 Wesley Salmon Lecture, University of Pittsburgh
April 2013 Keynote: Games, Interactive Rationality and Learning, University of Lund
August 2011 World Economics Congress Beijing
July 2011 ATP Lectures University of Lisbon (3 lectures)
June 2011 Keynote: Rationality Decision Network, London School of Economics
April 2011 Author Meets Critics on *Signals* Pacific Div. APA.
October 2010 Ernest Nagel Lectures Carnegie-Mellon University (3 lectures)

November 2008 Alberto Coffa Lecture Indiana University
July 2008 Jack Smart Lecture Australian National University
November 2007 Tanner Lecture on Human Values, University of Michigan
October 2006 Presidential Address Philosophy of Science Association
May 2006 Hans Reichenbach Lecture, UCLA
June 2005 Ludwig Wittgenstein Lectures, University of Bayreuth (5 lectures)
Sept. 2004 Game Theory, Ethics and Social Norms, University of Trento (6 lectures)
Nov. 2003 Alasdair McIntyre Lecture, Duke University
March 2001 Presidential Address, American Philosophical Association (Pacific)
May 2000 Lakatos Prize Lecture, London School of Economics

Honors:

Extraordinarius Award U. C. Irvine 2011
Synthese Distinguished Paper Award 2010 for “Trust, Risk and the Social Contract”
President Philosophy of Science Association 2004-2006
Paul Silverman Award in Foundations of Ethics 2006
Elected Fellow of the American Association for the Advancement of Science 2004
UCI Distinguished Lectureship for Research 2001-2002
President American Philosophical Association (Pacific) 2000-2001
Lakatos Prize for Evolution of the Social Contract 1999
Elected to National Academy of Sciences 1999
Elected to American Academy of Arts and Sciences 1994
Fellow at the Center for Advanced Study in the Behavioral Sciences.....1993-94
President's Research Fellow in the Humanities 1993-94
Guggenheim Fellow.....1987-88
Humanities Council Senior Fellow and Old Dominion Fellow
Princeton University.....1987
Distinguished Alumnus Award for Excellence
University of Pittsburgh.....1986

Governing Boards:

Western Center of the American Academy of Arts and Sciences 2000-2006
American Philosophical Association 1987-1990; 1999-2002
Philosophy of Science Association 1990-1991
Institute for Mathematical Behavioral Sciences, UCI 1998- present

Editorial Boards:

Proceedings of the National Academy of Sciences
Erkenntnis
Philosophy and Phenomenological Research
American Philosophical Quarterly
Nous

Journal of Logic Language and Information
Theory and Decision
Theoria
Philosophical Studies
Risk, Decision and Policy
Stanford Encyclopedia of Philosophy
Topics in Contemporary Philosophy (Book Series)

Books:

1. Choice and Chance: An Introduction to Inductive Logic 1st ed. (Dickenson: Belmont, California, 1966) 162 pp.
 - 1b. Introduzione alla Logica Induttiva (Societa Editrice il Mulino: Bologna, 1974) 245 pp. [Italian Translation of 1a by C. Chiffirino].
 - 1c. Escolha e Acaso (Cultrix/USP: Sao Paulo, 1971) [Portugese Translation of 1a by L. Hegenberg and O. Silveira da Mota].
 - 1d. Choice and Chance: An Introduction to Inductive Logic 2nd revised ed. (Wadsworth: Belmont, California, 1975) 220 pp.
 - 1e. Choice and Chance: An Introduction to Inductive Logic 3rd revised ed. (Wadsworth: Belmont, California, 1986) 217 pp.
 - 1f. Einführung in die Inductive Logik (Peter Lang: Basel, 1989) [German Translation of 1e by G. Dorn].
 - 1g. Choice and Chance: An Introduction to Inductive Logic 4th revised ed. (Wadsworth: Belmont, California, 2000).
2. Causal Necessity (Yale University Press: New Haven, 1980) 201 pp.
3. Pragmatics and Empiricism (Yale University Press: New Haven, 1984) 143 pp.
4. The Dynamics of Rational Deliberation (Harvard University Press: Cambridge, Mass., 1990) 199 pp.
5. Evolution of the Social Contract (Cambridge University Press: Cambridge, 1996) 146 pp.
6. The Stag Hunt and the Evolution of Social Structure (Cambridge University Press: Cambridge, Mass., 2004) 149 pp.
 - 6b. La Caza del Ciervo y la Evolución de la Estructura Social (Melusina, 2007).
7. Signals: Evolution, Learning and Information (Oxford University Press: 2010) 199 pp.
 - 7a Chinese tr. by Yuanlin Guo. (Peoples Publishing House, forthcoming 2014).
8. From Zeno to Arbitrage: Essays on Quantity, Coherence and Induction (Oxford University Press: 2012).
9. Social Dynamics (Oxford University Press, forthcoming)

Edited Books:

1. Causation, Chance and Credence [edited with William Harper] (Kluwer: Dordrecht, 1988) 284 pp.
2. Causation in Decision, Belief Change and Explanation [edited with William Harper] (Kluwer: Dordrecht, 1988) 252 pp.
3. Existence and Explanation [ed. with Wolfgang Spohn and Bas van Fraassen] (Kluwer: Dordrecht, 1991) 264pp.
4. Logic, Methodology and Philosophy of Science IX - Proceedings of the 9th International Congress of Logic, Methodology and Philosophy of Science [edited with Dag Prawitz and Dag Westerstahl] (Elsevier: Amsterdam, 1994) 989 pp.
5. Probability and Conditionals [edited with Ellery Eells] (Cambridge University Press: Cambridge, 1994) 207 pp.
6. The Dynamics of Norms [edited with Cristina Bicchieri and Richard Jeffrey] (Cambridge University Press: New York, 1997) 222 pp.
7. The Logic of Strategy [edited with Cristina Bicchieri and Richard Jeffrey] (Oxford University Press: New York, 1999) 208pp.

Articles:

1. "Falsifiability and the Logic of Experimental Tests" Methodos XIV (1962) 1-13.
2. "Professor Grünbaum and Teleological Mechanisms" Philosophy of Science XXXI (1964).
3. "Necessity, the A Priori and Unexpressible Statements" with E. Sosa) Philosophical Studies XVI (1965) 65-74.
4. "On Failing to Vindicate Induction" Philosophy of Science XXXII (1965) 235-268.
5. "Nomological Necessity and the Paradoxes of Confirmation" Philosophy of Science XXXIII (1966) 230-249.
6. "The Explication of 'X knows that p'" The Journal of Philosophy LXIV (1967) 373-389.

7. "A Methodological Problem in the Evaluation of Explanations" (with N. Rescher) Nous (1968) 121-129.
8. "Comments on Ackerman's 'Problems'" in Philosophical Logic ed. Davis, Hockney and Wilson (Reidel: Dordrecht, 1968) 152-157.
9. "A Neglected Logical Lapse in Reichenbach's Pragmatic Justification of Induction" Methodology and Science 1 (1968) 155-159.
10. "Return of the Liar: Three Valued Logic and the Nature of Truth" American Philosophical Quarterly VII (1970) 153-161.
11. "Notes on Quantification and Self-Reference" in The Liar ed. R. Martin (Yale University Press: New Haven, 1971) 67-74.
12. "Contraposition of the Conditional" Philosophical Studies 26 (1974) 145-147.
13. "The Goodman Paradox" in Readings in Philosophical Analysis ed. Feigl, Sellars and Lehrer (Appleton, Century Crofts: N.Y., 1972).
14. "Physical Laws and the Nature of Philosophical Reduction" in Minnesota Studies in the Philosophy of Science VI ed. Maxwell and Anderson (University of Minnesota Press: Minneapolis, Minn., 1975) 496-529.
15. "Definitions of Semantical Reference and Self-Reference" Notre Dame Journal of Formal Logic XVII (1976) 147-148.
16. "Supervaluations: Identity, Existence and Individual Concepts" The Journal of Philosophy LXV (1968) 477-482.
17. "Possible Worlds, Physics and Metaphysics" Philosophical Studies 30 (1976) 323-332.
18. "Resiliency, Propensity and Causal Necessity" The Journal of Philosophy LXXIV (1977) 704-713.
19. "An Immaculate Conception of Modality" The Journal of Philosophy LXXV (1978) 368-387.
20. "The Prior Propensity Account of Subjunctive Conditionals" in IFs ed. Harper et al (Reidel: Dordrecht, 1980) 259-265.
21. "Higher Order Degrees of Belief" in Prospects for Pragmatism: Essays in Honor of F.P. Ramsey ed. D.H. Mellor (Cambridge University Press: Cambridge, 1980).
22. "Statistical Laws and Personal Propensities" in PSA 1978 vol. 2 ed. Asquith and Hacking (Philosophy of Science Assn.: East Lansing, Michigan, 1982).

23. "Counterfactual Definiteness and Local Causation" Philosophy of Science 49 (1982) 43-50.
24. "Mates Quantification and Intensional Logic" Australasian Journal of Philosophy 59 (1981) 177-188.
25. "Tractarian Nominalism" Philosophical Studies 40 (1981) 199-206.
26. "Conditional Probabilities, Taxicabs and Martingales," The Behavioral and Brain Sciences (1981) 331-32.
27. "Causal Decision Theory" The Journal of Philosophy LXXIX (1982) 695-711.
28. "Zeno's Paradox of Measure" in Philosophy, Physics and Psychoanalysis ed R. Cohen et. al. (Reidel: Dordrecht, 1983) 233-254.
29. "Maximum Entropy Inference as a Special Case of Conditionalization" Synthese 63 (1985) 55-74.
30. "Intensional Aspects of Semantical Self-Reference" in Recent Essays on Truth and the Liar ed R. Martin (Oxford University Press:Oxford,1984) 119-131.
31. "EPR: Lessons for Metaphysics" in Causation and Causal Theories (Midwest Studies in Philosophy,vol.IX) ed H.Wettstein (University of Minnesota Press: Minneapolis, 1984) 245-255.
32. "Three Ways to Give a Probability Assignment a Memory" in Testing Scientific Theories (Minnesota Studies in the Philosophy of Science Vol. X) ed John Earman (University of Minnesota Press: Minneapolis,1983).
33. "A Bayesian Theory of Conditionals" (abstract) Proceedings of the International Congress on Logic,Methodology and Philosophy of Science (University of Salzburg: Salzburg, 1983).
34. "Pragmatics and the Principle of Empiricism" in The Heritage of Logical Positivism" ed. N. Rescher (University Press of America: New York, London, 1985) 23-28.
35. "Ultimate and Proximate Consequences in Causal Decision Theory" Philosophy of Science 52 (1985) 608-611.
36. "EPR and the Metaphysics of Causation" in Symposium on the Foundations of Modern Physics:50 Years of the EPR Gedanken Experiment ed. P. Lakki and P. Mittelstadt (World Scientific Publishing Co.:Singapore,1986) 609-623.
37. "Deliberational Equilibria" Topoi 5 (1986) 59-67.
38. "Coherence" in Scientific Inquiry in Philosophical Perspective ed. N. Rescher (University of Pittsburgh Press: Pittsburgh, 1987) 225-242.

39. "Dynamic Coherence" in Advances in the Statistical Sciences: Vol.II Foundations of Statistical Inference ed. I.B. MacNeill and G. Umphrey (Reidel:Dordrecht,1987) 233-243.
40. "Dynamic Coherence and Probability Kinematics" Philosophy of Science 54 (1987) 1-20.
41. "Presuppositions of Induction" in The Philosophy of Logical Mechanism ed. Merilee Salmon (Kluwer: Dordrecht, 1990) 285-319.
42. "The Value of Knowledge" in Scientific Theories [Minnesota Studies in the Philosophy of Science vol. 14] ed. C.W. Savage (University of Minnesota Press: Minneapolis, 1990) 245-266.
43. "On the Principle of Total Evidence with and without Observation Sentences" in Logic, Philosophy of Science and Epistemology: Proceedings of the 11th International Wittgenstein Symposium (Holder-Pichler-Tempsky: Vienna, 1987) 187-195.
44. " Introduction to Probability and Causation" in Causation,Chance and Credence ed. Harper and Skyrms (Kluwer: Dordrecht, 1988).
45. "Introduction to `Three Theorems of Metaphysics' Synthese 81 (1989) 203-205.
46. "Probability and Causation" in Journal of Econometrics (1988), 53-68.
47. "Deliberational Dynamics and the Foundations of Bayesian Game Theory" in Epistemology [Philosophical Perspectives vol.2] ed. J.E.Tomberlin (Ridgeview: Atascadero, California, 1988) 345-367.
48. "Updating, Supposing and MAXENT" in Theory and Decision 22 (1987) 225-246.
49. "Conditional Chance" in Probability and Causality: Essays in Honor of Wesley Salmon ed. J.Fetzer (Reidel:Dordrecht,Holland,1988) 161-178.
50. "Correlated Equilibria and the Dynamics of Rational Deliberation" Erkenntnis 31,(1989) 347-364.
51. "Quantification, Modality and Semantic Ascent" in Causality, Method and Modality ed. G. G. Brittan, Jr. (Kluwer: Dordrecht, 1991) 175-183.
52. "Ratifiability and the Logic of Decision" in Philosophy of the Human Sciences ed. P. French et. al. (Midwest Studies in Philosophy v. 15) (University of Notre Dame Press: Notre Dame, Indiana, 1990) 44-56 .
53. "Inductive Deliberation, Admissible Acts, and Perfect Equilibrium" Foundations of Decision Theory edited by M. Bacharach and S. Hurley (Blackwell: Oxford, 1991) 220-241.
54. "Models of Dynamic Deliberation and the Theory of Games" for Theoretical Aspects of

Reasoning About Knowledge: Proceedings of the Third Conference (TARK 1990) ed. R. Parikh (Morgan Kaufmann: Los Altos, California, 1990) 185-200.

55. "Stability and Chance" in Existence and Explanation ed. W. Spohn, et. al. (Kluwer: Dordrecht, 1991) 149-161.

56. "Carnapian Inductive Logic for Markov Chains" Erkenntnis 35 (1991) 439-460.

57. "Deliberation and Games" in Economics and Artificial Intelligence (Express-Tirages: Paris, 1990) 159-164.

58. "Coherence, Probability and Induction" in Rationality in Epistemology ed. E. Villanueva (Ridgeview: Atascadero, California, 1992) 215-226.

59. "Theories of Probability" in A Companion to Epistemology ed. J. Dancy and E. Sosa. Basil Blackwell: Oxford.

60. "Analogy by Similarity in HyperCarnapian Inductive Logic" in Philosophical Problems of the Internal and External Worlds: Essays On the Philosophy of Adolf Grunbaum ed. Earman et al. (University of Pittsburgh Press: Pittsburgh 1993) 273-282.

61. "Adaptive and Inductive Deliberational Dynamics" in Economics and Cognitive Science ed. P. Bourguine and B. Walliser (Pergamon Press: Oxford, 1992) 93-107.

62. "Logical Atomism and Combinatorial Possibility" The Journal of Philosophy 90 (1993) 219-232.

63. "Equilibria and the Dynamics of Rational Deliberation" in Knowledge, Belief and Strategic Interaction ed. C. Bicchieri et al. (Cambridge: Cambridge University Press, 1992 93-106).

64. "Chaos in Game Dynamics" Journal of Logic, Language and Information 1, (1992) 111-130.

65. "Bayesian Projectibility" in Grue: Essays on the New Riddle of Induction ed. D. Stalker. (Chicago: Open Court, 1994) 241-262.

66. "A Mistake in Dynamic Coherence Arguments?" Philosophy of Science 60 (1993) 320-328.

67. "Carnapian Inductive Logic for a Value Continuum" in The Philosophy of Science (Midwest Studies in Philosophy Volume 18) ed. H. Wettstein (University of Notre Dame Press: South Bend, Indiana) 78-89.

68. "Chaos and the Explanatory Significance of Equilibrium: Strange Attractors in Evolutionary Game Dynamics" PSA 1992, Volume 2 374-394.

69. "Deliberational Correlated Equilibria" (with Peter Vanderschraaf) Philosophical Topics 21 (1993) 191-227.

70. "Strict Coherence, Sigma Coherence and the Metaphysics of Quantity" Philosophical Studies 77 (1995) 39-55.
71. "Adams Conditionals" in Probability and Conditionals ed. Eells and Skyrms Cambridge University Press: Cambridge, 1994 13-26.
72. "Resiliency and Laws in the Web of Belief" (with Karel Lambert) in Laws of Nature Essays on the Philosophical, Scientific and Historical Dimensions ed. F. Weinert. de Gruyter: Berlin, New York, 1995 139-156.
73. "Darwin meets The Logic of Decision" Philosophy of Science 61 (1994), 503-528.
74. "Sex and Justice" The Journal of Philosophy 91 (1994) 305-320.
75. "Mutual Aid" In Modeling Rationality and Morality, and Evolution ed. P. Danielson (Vancouver Studies in Cognitive Science) Oxford: Oxford University Press (1998), 376- 405.
76. "Introduction to the Nobel Symposium on Game Theory" Games and Economic Behavior 8 (1995) 3-5.
77. "Evolution of an Anomaly" Protosociology 12 (1998) 192-211.
78. "Convergence in Radical Probabilism" in PSA 1994 ed. Hull, D., Forbes, M. and Burian, R. M., East Lansing, Michigan: Philosophy of Science Association, (1995), 349-353.
79. "The Structure of Radical Probabilism" Erkenntnis 45 (1997) 285-297.
80. "Game Theory, Rationality and Evolution" in Proceedings of the 10th International Congress of Logic, Methodology and Philosophy of Science. ed. M. L. Dalla Chiara, K. Doets, D. Mundici, J. van Bentham. Amsterdam, Kluwer (1997) 73-86.
81. "The Shadow of the Future" In Rational Commitment and Social Justice ed. C. Morris. New York: Cambridge University Press (1998) 12-21.
82. "Inductive Logic and Bayesian Statistics" in Statistics, Probability and Game Theory: Papers in Honor of David Blackwell IMS Lecture Notes - Monograph Series 30 (1996) 321-336..
83. "Game Theory" (with Peter Vanderschraaf) In Handbook of Defeasible Reasoning and Uncertainty Management: Volume 1 - Quantified Representation of Uncertainty and Imprecision ed. D. Gilles and P. Smets, Dordrecht, Kluwer (1998) 391-439.
84. "Bayesian Subjunctive Conditionals for Games and Decisions" In Game Theory, Experience and Rationality ed W. Leinfellner and E. Kohler. Dordrecht, Kluwer (1998) 161-172.
85. "The Social Contract Naturalized" In Justice, Political Liberalism and Utilitarianism: Themes

from Harsanyi and Rawls . ed. M. Fleurbaey, M. Salle and J. Weymark. New York: Cambridge University Press (2008).

86. "Parametric Conditionals, Stalnaker Conditionals, Natural Families, and General Bayesian Conditionals: What is Needed for Decision Theory?" co-authored with Peter Woodruff and Gary D. Bell. forthcoming in The Role of Pragmatics in Contemporary Philosophy: Proceedings of the 20th International Wittgenstein Symposium ed. P. Weingartner, G. Schurz and G. Dorn. Vienna: Verlag Holder-Pichler-Tempsky.

87. "Precis of Evolution of the Social Contract" and "Reply to Critics" Philosophy and Phenomenological Research 59 (1999) 217-220;243-254.

88. "Subjunctive Conditionals and Revealed Preference" Philosophy of Science 65 (1998) 545-574.

89. "Salience and Symmetry-Breaking in the Evolution of Convention" Law and Philosophy 17 (1998) 411-418.

90. "Evolution of Inference" in Dynamics in Human and Primate Societies: Agent-Based Modeling of Social and Spatial Processes, ed. T. Kohler and G. Gumerman. Santa Fe Institute Studies in the Sciences of Complexity. New York: Oxford University Press (2000), 77-88.

91. "Theories of Counterfactual and Subjunctive Conditionals in Contexts of Strategic Interaction" Research in Economics 53 (1999) 275-291.

92. "Truth Dynamics" In Circularity, Definition and Truth edited by A. Chapuis and A. Gupta. New Delhi: Indian Council of Philosophical Research (2000) 355-364.

93. "Convergence to a Signaling System Equilibrium" In Rationality, Rules and Structure. Ed. J. Nida-Rumeln and W. Spohn. (Reidel:Dordrecht) (2000)

94. "Game Theory, Rationality, and Evolution of the Social Contract" Journal of Consciousness Studies (Special Issue on Evolutionary Origins of Morality ed. L. Katz.) 7 (2000) 269-284.

95. "Adaptive Dynamic Models and the Social Contract" Journal of Consciousness Studies (Special Issue on Evolutionary Origins of Morality ed. L. Katz.) 7 (2000) 335-339.

96. "Bargaining with Neighbors: Is Justice Contagious?" (with Jason Alexander) The Journal of Philosophy 96 (1999) 588-598.

97. "Stability and Explanatory Significance of Some Simple Evolutionary Models" Philosophy of Science (March, 2000) 94-113.

98. "A Dynamic Model of Social Network Formation" (with Robin Pemantle) Proceedings of the National Academy of Sciences of the U.S.A. 97 (2000) 9340-9346.

99. "Altruism, Inclusive Fitness, and 'The Logic of Decision'" Philosophy of Science 69 (2002) S104-S111.
100. "The Stag Hunt" Presidential Address of the Pacific Division of the American Philosophical Association, in Proceedings and Addresses of the APA. 75 (Nov. 2001) 31-41.
101. "Signals, Evolution and the Explanatory Power of Transient Information" Philosophy of Science 69 (2002) 407-428.
102. "Learning to Take Turns" (with Peter Vanderschraaf) Erkenntnis 59 (2003) 311-348.
103. "Time to Absorption in Discounted Reinforcement Models" (with Robin Pemantle) *Stochastic Processes and their Applications* 109 (2004) 1-12.
104. "Network Formation by Reinforcement Learning: the Long and the Medium Run" (with Robin Pemantle) *Mathematical Social Sciences* 48 (2004) 315-327
105. "Discovering 'Weight, or the Value of Knowledge' (2006) In *Cambridge and Vienna: Frank P. Ramsey and the Vienna Circle* Berlin: Springer, 55-65.
106. "Learning to Network" (with Robin Pemantle) (2010) In *Probability in Science*. Ed. E. Eells and J. Fetzer. Berlin: Springer, 277-286.
107. "Dynamics of Conformist Bias" *Monist*. 88 (2005) 260-269.
108. " Diachronic Coherence and Radical Probabilism" (2006) *Philosophy of Science* (Special Issue for PSA 2004) 73: 959-968.
109. "Trust, Risk, and the Social Contract" (2008) *Synthese* 169:21-25.
110. "Evolution of Moral Norms" (with William Harms) (2008) In *Oxford Handbook on the Philosophy of Biology* ed. M. Ruse. Oxford: Oxford University Press 434-450.
111. "Presidential Address: Signals" (2008). *Philosophy of Science* 75:489-500.
112. "Dynamic Networks and the Stag Hunt: Some Robustness Considerations" (2007) *Biological Theory* 2: 1-3.
113. "Evolutionary Dynamics of Lewis Signaling Games" (with Simon Huttegger, Rory Smead and Kevin Zollman) (2010) *Synthese* 172: 177-191. DOI: 10.1007/s11229-009-9477-0.
114. "Emergence of Information Transfer by Inductive Learning" (with Simon Huttegger) (2008) *Studia Logica* 89: 237-256.
115. "Learning to Signal: Analysis of a Micro-Level Reinforcement Model" (with Raffaele Argiento, Robin Pemantle and Stanislav Volkov) (2009) *Stochastic Processes and their*

Applications 119: 373-319.

116. “Evolution and the Social Contract” (2009) In *The Tanner Lectures on Human Values* 28. Salt Lake City: University of Utah Press, 47-63.

117. “Groups and Networks: Their Role in the Evolution of Cooperation” (2009) In *Games, Groups and the Global Good* Ed. Simon Levin. Berlin: Springer, 105-114.

118. “Evolution of Signaling Systems with Multiple Senders and Receivers” *Philosophical Transactions of the Royal Society B.* (2009) 364: 771-779. doi:10.1098/rstb.2008.0258.

119. “The Flow of Information in Signaling Games” (2010) *Philosophical Studies* 147: 155-165. doi: 10.1007/s11098-009-9452-0.

120. “Evolutionary Dynamics of Collective Action in N-person Stag-Hunt Dilemmas” (with Jorge Pacheco, Francisco Santos and Max Souza) (2009) *Proceedings of the Royal Society B.* 276: 315-321. doi:10.1098/rspb.2008.1126.

121. “Evolutionary Considerations in the Framing of Social Norms” with (Kevin Zollman) (2010) *Philosophy, Politics and Economics* 9: 265-273.

122. “Pragmatics, Logic and Information Processing” (2010) In *Language, Games and Evolution.* Ed. A. Benz. (Berlin: Springer Verlag) 177-187.

123. “Common Knowledge, the Cooperative Principle and Adaptive Dynamics” (2009) In *Why We Cooperate* (Cambridge, Mass., MIT Press.)

124. “Emergence of a Signaling Network with *Probe and Adjust*” (with Simon Huttegger) (2013) In *Cooperation and its Evolution* Ed. B. Calcott, R. Joyce and K. Sterelny. Cambridge, Mass.: MIT Press, 265-274.

125. “The Core Theory of Subjunctive Conditionals” (2013) *Synthese* 190:923-928. doi: 10.1007/s11229-012-0193-9.

126. “Co-evolution of pre-play signaling and cooperation” (with Francisco Santos and Jorge Pacheco) (2011) *Journal of Theoretical Biology* 274: 30-35. [doi:10.1016/j.jtbi.2011.01.004](https://doi.org/10.1016/j.jtbi.2011.01.004) .

127. “Evolutionary Dynamics of Collective Action” (with Jorge Pacheco, Francisco Santos and Max Souza) (2011) In *The Mathematics of Darwin’s Legacy* Ed. F. Cholub and J. Rodriguez. Basel: Springer, 119-138.

128. “Inventing New Signals” (with Jason McKenzie Alexander and Sandy L. Zabell) (2012) *Dynamic Games and Applications* 2:129-145 doi:10.1007/s13235-011-0027-2.

129. “Aspects of Naturalizing the Social Contract” (2012) In *Complexity and Institutions: Markets, Norms and Corporations* Ed. M. Aoki, K. Binmore, S. Deakin and H. Gintis. New

York: Palgrave Macmillan 124-145.

130. "Learning to Signal with 'Probe and Adjust'" (2012) *Episteme* 9: 139-150.

131. "Natural Social Contracts" (2013) *Biological Theory* 8:179-184.

132. "Probe and Adjust in Information Transfer Games" (with Simon Huttegger and Kevin Zollman) (2013) *Erkenntnis* (online version March 2013).

In Progress:

"Grades of Inductive Skepticism" Wesley Salmon Lecture.

"Learning to Signal with Two Kinds of Trial and Error" for a festschrift for Patrick Suppes.

Reprints:

6a. "The Explication of 'X knows that p' "[reprint of 6] in Knowing: Essays in the Analysis of Knowledge ed. Roth and Gallis (Random House: N.Y.,1970).

6b. "The Explication of 'X knows that p' " Also reprinted in Epistemology: Critical Concepts in Philosophy ed. R. Neta (Routledge, forthcoming)

25a. "Tractarian Nominalism" [reprinted of 25 as an appendix] in Armstrong, D. M. A Combinatorial Theory of Possibility (Cambridge University Press, Cambridge, 1989).

25b. "Tractarian Nominalism" Also reprinted in Analytical Metaphysics. ed. M. Tooley (Garland, forthcoming).

62a. "Logical Atomism and Combinatorial Possibility" [reprint of 62] in The Philosopher's Annual v.XVI - 1993 ed. Grim, P., Mar, G. and Williams, P.(Atascadero: Ridgeview, 1995) 219-232.

68.a "Chaos and the Explanatory Significance of Equilibrium: Strange Attractors in Evolutionary Game Dynamics" [a slightly expanded version of 68] The Dynamics of Norms ed. C. Bicchieri et al. (Cambridge University Press: New York) 199-222.

74a. "Sex and Justice" [reprint of 74] in The Philosopher's Annual v.XVII -1994 ed. P. Grim et. al. Atascadero: Ridgeview. 217-232.

56a. "Carnapian Inductive Logic for Markov Chains" [reprint of 56] in The Legacy of the

Vienna Circle: Modern Reappraisals ed. S Sarkar. New York: Garland 1996, 331-352.

17a. "Possible Worlds, Physics and Metaphysics" [reprint of 17] in Analytical Metaphysics. ed. M. Tooley New York:Garland 1999.

101a "Signals, Evolution and the Explanatory Power of Transient Information" [reprint of 101] in Evolution, Rationality and Cognition: A Cognitive Science for the twenty-first century. ed. A. Zalhao. Routedge: N. Y. 2005, 61-81.

100a. "The Stag Hunt" [reprint of 100] In Jean-Jacques Rousseau Ed. Timothy O'Hagen. Hampshire: Ashgate 2007.

108a. "Diachronic Coherence and Radical Probabilism" [reprint of 108] In Bruno de Finetti, Radical Probabilist. Ed. Maria Carla Galavotti. London: College Publications 2009, 85-96.

108b "Diachronic Coherence and Radical Probabilism" [reprint of 108] In Degrees of Belief Ed. Franz Huber and Christoph Schmidt-Petri. Synthese Library. Berlin:Springer Verlag 2009, 253-261.

98a "A Dynamic Model of Social Network Formation" with Robin Pemantle. [reprint of 98 with added "Postscript 2008] In Adaptive Networks Ed. Thilo Gross and Hiroki Sayama. Springer Verlag 2009, 231-251.

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