### VITA

# Philip E. Mirowski

DATE:	July 2008
AGE:	56
ADDRESS:	Department of Economics and Policy, And Faculty Fellow, Reilly Center for the History and Philosophy of Science 400 Decio Hall, University of Notre Dame Notre Dame, Indiana 46556
PHONE: FAX:	office (574) 631-7580 home (574) 273-1983 574 631 8209
SECRETARY:	Tori Davies, (574) 631-4646
INTERNET:	Philip.E.Mirowski.1@nd.edu
CITIZENSHIP:	USA

DEGREES:	Michigan State University	B.A. Economics 1973
	University of Michigan	M.A. Economics 1976
	University of Michigan	PhD Economics 1979

#### ACADEMIC EXPERIENCE:

Carl Koch Professor of Economics and the History and Philosophy of Science, University of Notre Dame, 1990-

Visiting Fellow, All Souls College, Oxford University, Hilary term, 2008.

Visiting Faculty Fellow, International Center for Advanced Studies, New York University, Sept 2004- May 2005.

Visiting Professor, Universidad de la Republica, Montevideo, Uruguay, Oct-Nov. 2003.

Visiting Professor, University of Aix-Marsailles, France, May 2001

Visiting Professor, University of Trento, Italy, May 2000.

Visiting Professor, University of Modena, Italy, May 1998

Visiting Professor, Université de Paris I -- Sorbonne, March- May 1997; March 2001.

Visiting Professor, Tinbergen Institute, University of Amsterdam and Erasmus University, Holland, February-May 1991 Visiting Associate Professor, Yale University, 1987-88
Associate Professor, Tufts University 1985-90
Visiting Associate Professor, University of Massachusetts-Amherst, 1984-85
Assistant Professor, Tufts University, 1981-84
Assistant Professor, University of Santa Clara, Santa Clara California, 1978-81
Research Associate, Institute of Labor and Industrial Relations, University of Michigan, 1976-7.

#### FELLOWSHIPS, HONORS AND AWARDS

National Institute of Health Fellowship, 1974-1977

National Endowment for the Humanities, Interpretative Research Grant #Rh-20810-87, "Mathematics as a Means of Metaphor Transfer" 1987-89.

National Science Foundation, SBER-9601056, "Economics of Science" 1997

#### Who's Who in America; Who's Who in the Midwest

Elected Vice-President, History of Economics Assn., 1999

Invited Scholar-in-Residence, Santa Fe Institute, December 2001.

Fullbright Senior Researcher Fellowship, Oct-Nov. 2003

International Center for Advanced Studies Fellowship, New York University, 2004-5.

Ludwig Fleck Prize, in recognition of *Effortless Economy of Science*? Society for the Social Studies of Science, 2006.

Seng Foundation Grant, Project on Materials Transfer Agreements and the Commercialization of Science, 2006

Fellowship, All Souls College, Oxford University, Hilary Term 2008

## **PUBLICATIONS**

#### **BOOKS**:

[1] The Birth of the Business Cycle, New York: Garland Publishers, 1985.

[2] (editor) The Reconstruction of Economic Theory, Hingham, Massachusetts: Kluwer-Nijhoff, 1986.

[3] Against Mechanism: Protecting Economics From Science, Totawa, New Jersey: Rowman & Littlefield, 1988.

[4] More Heat Than Light: Economics as Social Physics, New York: Cambridge University Press, 1989.

French translation: Paris: Economica, 2001.

[5] (Editor) Edgeworth on Chance, Economic Hazard, and Statistics. Savage, MD: Rowman & Littlefield, 1994.

[6] (Editor) Natural Images in Economics: Markets Read in Tooth and Claw. New York: Cambridge University Press, 1994.

[7] (Editor) **The Collected Economic Works of William Thomas Thornton.** 5 volumes. London: Chatto & Pickering. 1999.

[8] Machine Dreams: Economics becomes a Cyborg Science. New York: Cambridge University Press, 2002.

[9] Science Bought and Sold: The New Economics of Science. (editor, with Esther-Mirjam Sent), 2002, Chicago: University of Chicago Press.

[10] The Effortless Economy of Science? Durham: Duke University Press, 2004.

[11] ScienceMart<sup>™</sup>: Understanding the Era of Globalized Commercialized Science. Harvard University Press, forthcoming.

[12] (editor, with Wade Hands), Agreement on Demand: Postwar Price Theory. Durham: Duke University Press, 2006.

[13] (editor, with Dieter Plehwe), **The Road from Mont Pèlerin: the Making of the Neoliberal Thought Collective**, Harvard University Press, forthcoming.

[14] Everyday Neoliberalism. New York: Verso, forthcoming.

[15] (editor) The Oxford Handbook of the Economics of Science. Oxford University Press, forthcoming.

### **ARTICLES IN BOOKS AND OTHER COLLECTIONS:**

[1] "Institutions as Solution Concepts in a Game Theory Context" in Larry Samuelson, editor, **Microeconomic Theory**, Hingham, Massachusetts: Kluwer-Nijhoff, 1986. Reprinted in Geoff Hodgson, editor, **The Economics of Institutions**. Cheltenham: Elgar, 1993.

[2] "Paradigms, Hard Cores and Fuglemen in Modern Economic Theory" in P. Mirowski, editor, **The Reconstruction of Economic Theory**.

[3] "Mathematical Formalism and Economic Explanation" in P. Mirowski, editor, The Reconstruction of Economic Theory.

[4] "The Philosophical Bases of Institutionalist Economics" in Marc Tool, editor, Institutional Economics, Vol. I, Armonk, NY: Sharpe, 1988.

[5] "Shall I Compare Thee..." in Robert Solow, Donald McCloskey and Arjo Klamer, editors, **The Consequences of Economic Rhetoric**, New York: Cambridge University Press, 1988, pp. 117-145.

[6] "Three Vignettes on the State of Economic Rhetoric" in Neil de Marchi, editor, **Post-Popperian Methodology of Economics**, Boston: Kluwer Academic Publishers, 1992.

[7] "The Philosophical Bases of Institutionalist Economics: Peirce and Commons" in Don Lavoie, editor, **Hermeneutics and Economics**, London: Routledge, 1991.

[8] Entries for "William Stanley Jevons" and "Henry Ludwell Moore" in David Glaisner, ed., **Business Cycles and Depressions: An Encyclopedia**, New York: Garland, 1997.

[9] "Walras' Economics and Mechanics: Translation, Commentary, Context" (with Pamela Cook), in Warren Samuels, editor, Economics as Discourse, Norwell: Kluwer-Nijhoff, 1990, pp. 189-215. Reprinted in: Roberto Marchionatti, ed. Early Mathematical Economics, London: Routledge, 2003.

[10] "The Probabilistic Counter-Revolution" in Neil de Marchi and Christopher Gilbert, editors, **The History and Methodology of Econometrics**, Oxford: Oxford University Press, 1989, pp. 217-235.

[11] "Smooth Operator: How Marshall's Demand and Supply Curves Made Neoclassicism Safe for Public Consumption But Unfit for Science" in R. Tullberg, editor, Alfred Marshall in **Retrospect**, Aldershot: Edward Elgar, 1990, pp. 61-90.

[12] "Maquiladoras: Mexico's Tiger by the Tail?" (with Sue Helper), **Challenge**, May/June 1989, pp. 24-30.

[13] "Nicholas Georgescu-Roegen" in Warren Samuels, editor, New Horizons in Economic Thought: An Appraisal of Ten Leading Economists, Cheltenham: Edward Elgar, 1992, pp. 86-105.

[14] "Comment on Weintraub" in Mark Blaug and Neil de Marchi, editors, Appraising Economic Theories, Cheltenham: Edward Elgar, 1991, pp. 291-293.

[15] "Comment on Margaret Schabas' Breaking Away'," **History of Political Economy**, Spring 1992, 24:221-223.

[16] "The Goalkeeper's Anxiety at the Penalty Kick," in Neil de Marchi, editor, Nonnatural Social Science: Reflections on the Project of More Heat than Light," Durham, NC: Duke University Press, 1993, pp. 305-349.

[17] "Some Suggestions for Linking Arbitrage, Symmetries and the Social Theory of Value," in Amitava Dutt, editor, **New Directions in Analytical Political Economy**, Aldershot: Edward Elgar, 1994, pp. 185-210.

[18] "Charles Sanders Peirce," entry in **Handbook of Evolutionary and Institutionalist Economics**, G. Hodgson, M. Tool and W. Samuels, editors. Aldershot: Edward Elgar, 1994, pp. 149-152.

[19] "The Realms of the Natural," Carl Koch Professorship Inaugural Lecture, in Mirowski, editor, **Natural Images in Economics: Markets Read in Tooth and Claw**, New York: Cambridge University Press, 1994, pp. 451-483.

[20] "Doing What Comes Naturally: Four Metanarratives on What Metaphors are For," in Mirowski, editor, **Natural Images in Economics**, New York: Cambridge University Press, 1994, pp. 3-19.

[21] "Marshalling the Unruly Atoms: Understanding Edgeworth's Career," in Mirowski, editor. **Edgeworth on Chance**,..., Savage, MD: Rowman & Littlefield, 1994.

[22] "What Are the Questions?" in Roger Backhouse, editor, **New Directions in Economic Methodology**. London: Routledge, 1994, pp. 50-74. Japanese translation, Economic Science Press, 2000.

[23] "Comment on Feigenbaum and Levy," **Social Epistemology**, July-September 1993, 7:278-283.

[24] Entries on "Probability," pp.393-4; "Nicholas Georgescu-Roegen," pp.212-13; and "Operationalism" pp.346-9 in J. Davis, D.W. Hands and U. Maki, editors, **Handbook of** 

#### Economic Methodology. Aldershot: Edward Elgar, 1998.

[25] "Confessions of an Aging *Enfant Terrible*" in Michael Szenberg, editor, **Passion and Craft**, University of Michigan Press, 1998. Also in **The American Economist**, Summer 1994, 38:28-35.

[26] "Do You Know the Way to Santa Fe? or, Political Economy Gets More Complex" in **Explorations in Political Economy: Malvern After Ten Years**, Steve Pressman, editor, London: Routledge, 1996, pp.13-40.

[27] "The Attribution of Quantitative Error and the Erasure of Plural Interpretations in Various Sciences," and "Comment on Hodgson" in Andrea Salanti and Ernesto Screpanti, editors, **Pluralism in Economics**, Aldershot: Edward Elgar, 1996.

[28] "A Confederacy of Bunches: Comment on Niehans on Multiple Discoveries," European Journal for the History of Economic Thought, Autumn 1995, (2): 279-289.

[29] "Refusing the Gift" in Steven Cullenberg, Jack Amariglio and David Ruccio, editors, **Postmodernism, Economics and Knowledge**. Pp.431-458. London: Routledge, 2001. Japanese translation: Tokyo:Ochanomizu Shobo, 2008

[30] "Economics, Science and Knowledge: Polanyi vs. Hayek," in **Tradition and Discovery: The Polanyi Society Periodical.** 1998-9, (25:1):29-42.

[31] "Harold Hotelling and the Neoclassical Dream," (with Wade Hands), pp.322-397 in **Economics and Methodology: Crossing Boundaries**, edited by Roger Backhouse, D.Hausman, U.Maki & A. Salanti, London: Macmillan, 1998.

[32] "Comment on Arthur Diamond's version of an economics of science" Knowledge and Policy, Summer/Fall 1996, (2/3):72-75.

[33] "A Brief History of Classical and Frequentist Approaches to Probability in Economics" in James Henderson, ed., **The State of the History of Economics**, London: Routledge, 1997, pp.19-38.

[34] "What Econometrics Can and Can't tell us about the Historical Actors," pp. 182-200, 360-367 in Jeff Biddle, John Davis and Steve Medema, eds. **Economics Broadly Considered: Essays in honor of Warren Samuels.** London: Routledge, 2001.

[35] "*Ratio Ex Machina*" in Center 11: Value 2, Austin: Center for American Architecture and Design, 1999, pp.16-31.

[36] "Inhuman, All too Inhuman," Nineteenth Century Contexts, forthcoming.

[37] (With Koye Somefun) "Fecund, Cheap and Out of Control: Heterogeneous Agents as Flawed Computers vs. Markets as Evolving Computational Entities" pp.267-298 in Domenico Della Gatti, Mauro Gallegati & Alan Kirman, eds., Interactions and Market Structure: essays on heterogeneity in economics. Berlin: Springer Verlag, 2000.

[38] "Economism from Affront to Facade" pp.225-246 in Amitava Dutt and Kenneth Jamison, eds., **Crossing the Mainstream: Essays in Honor of Charles Wilber.** Notre Dame: University of Notre Dame Press, 2001.

[39] "Operations Research," entry in **Oxford Companion to the History of Science**, edited by John Heilbron, Oxford: Oxford University Press, 2003.

[40] "What's Kuhn Got to do with it?" **History of the Human Sciences**, May 2001 (14): 97-111. Reprinted in **Social Epistemology**, 2003, (17): 219-229.

[41] "Science Bought and Sold," (with Esther-Mirjam Sent) in Science Bought and Sold, University of Chicago Press, 2002.

[42] "A Pall Along the Watchtower: reflections on leaving the conference," pp.378-90 in Roy Weintraub, ed. **The Future of the History of Economics**, Supplement to HOPE volume 24, Durham: Duke University Press, 2002.

[43] "Economists encounter Cyborgs," pp. 101-118 in Caroline Gerschlager, ed., **Expanding the Economic Concept of Exchange: deception, self-deception and illusions.** Dordrecht: Kluwer, 2001.

[44] "Cracks, False Bottoms, and Hidden Stairwells" in Philip Mirowski, **The Effortless Economy of Science?** Durham: Duke University Press, 2004.

[45] "Introduction" to new edition of Stanley Wong, **The Foundations of Paul Samuelson's Revealed Preference Theory.** London: Routledge, 2005.

[46] "How Positivism Made Pact with the Postwar Social Sciences in America," in George Steinmetz, ed., **Positivism and the Social Sciences**, Durham: Duke University Press, 2004.

[47] "Markets Made Flesh: Callon, Performativity and the FCC Spectrum Auctions" (with Eddie Nik-Khah) in **Do Economists Make Markets? On the Performativity of Economics.** Ed. Donald MacKenzie, Fabien Muniesa & Lucia Siu., Princeton: Princeton University Press, 2007.

[48] (with Esther-Mirjam Sent) "The Commercialization of Science and the Response of STS," pp. 635-689 in Ed Hackett, Olga Amsterdamska, & Michael Lynch, eds., **Handbook of Science**, **Technology and Society Studies**, MIT Press, 2007.

[49] "Hoedown at the OK Corral: Further thoughts on the scientific dimensions of social

thought," Studies in the History and Philosophy of Science, 2005, (36):790-800..

[50] Entry for "Neoliberalism" (with Rob van Horn) in Ross Emmett, ed., Elgar Companion to the Chicago School of Economics, forthcoming.

[51] "The Role and Effectiveness of Mathematics in Modern Economics" in Uskali Maki, ed., **Handbook of the Philosophy of Economics**, Amsterdam: Elsevier, forthcoming.

[52] "Why there is (as yet) no such thing as an Economics of Knowledge," in Harold Kincaid, ed., **The Philosophical Foundations of Economic Science**, Oxford: Oxford University Press, forthcoming.

[53] "Command Performance: Exploring what STS thinks it takes to build a market," (with Edward Nik-Khah) in Trevor Pinch & Richard Swedberg, eds., Living in a Material World: On the Mutual Constitution of Technology, Economy and Society. Cambridge: MIT Press, forthcoming.

[54] "On Kicking the Habit," in Symposium on 'Markets Come to Bits', Journal of Economic Behavior and Organization, 2007 (63): 359-371.

[55] "Viridiana Jones and the Temple of Mammon" in Gerald McKenny, ed., Commerce, Politics and Science: The Changing Context, University of Notre Dame Press, forthcoming.

[56] "Realism and Neoliberalism: two studies in reactionary modernism in the 1950s" in Nicholas Guilhot, ed., **The Birth of International Relations in the 1950s**, New York: Columbia University Press, forthcoming.

[57] "Postface: Defining Neoliberalism" in Mirowski and Plehwe, eds., **The Road to Mont Pèlerin: Making of the Neoliberal Thought Collective**. Cambridge: Harvard University Press, forthcoming.

[58] "The Road to a World Made Safe for Corporations: The Rise of the Chicago School of Economics" (with Rob van Horn) in Mirowski & Plehwe, eds., **The Road to Mont Pèlerin: Making of the Neoliberal Thought Collective**, Cambridge: Harvard University Press, forthcoming.

[59] "The Stanford School of the Economics of Science and Technology" in William Sundstrom, ed. **Festschrift in Honor of Gavin Wright**, forthcoming.

# **REFEREED JOURNAL ARTICLES:**

[1] "The Birth of the Business Cycle" (thesis summary with published session commentary on pp. 182-183). **Journal of Economic History**, March 1980, pp. 171-174.

[2] "The Rise (and Retreat) of a Market: English Joint Stock Shares in the Eighteenth Century." **Journal of Economic History**, September 1981, pp. 559-577.

[3] "Is There a Mathematical Neo-Institutional Economics?" Journal of Economic Issues, September 1981, pp. 593-613. Reprinted in Warren Samuels, editor, Institutional Economics, Cheltenham: Edward Elgar, 1989.

[4] "Adam Smith, Empiricism and the Rate of Profit in Eighteenth Century England." History of Political Economy, Summer 1982, pp. 178-198. Reprinted in Mark Blaug, editor, Adam Smith, Vol. II. Cheltenham: Edward Elgar, 1989.

[5] "What's Wrong With the Laffer Curve?" **Journal of Economic Issues**, September 1982, pp. 815-828.

[6] "The Falling Share of Corporate Taxation" with co-author Arthur Schwartz, **Journal of Post Keynesian Economics**, Fall-Winter 1982-83, pp. 245-256.

[7] "The Role of Conservation Principles in Twentieth Century Economic Theory." **Philosophy** of the Social Sciences, December 1984, pp. 461-473.

[8] "Macroeconomic Instability and 'Natural' Processes in Early Neoclassical Economics." **Journal of Economic History**, June 1984, pp. 345-354.

[9] "Physics and the Marginalist Revolution." **Cambridge Journal of Economics**, December 1984, pp. 361-379. Reprinted in Mark Blaug, editor, **The History of Economic Thought**. Cheltenham: Elgar, 1990.

[10] "Interest Rates and Crowding Out During Britain's Industrial Revolution," with co-author Carol Heim, **Journal of Economic History**, March 1987, pp. 117-139.

[11] "Shall I Compare Thee to a Minkowski-Ricardo-Leontief-Metzler Matrix of the Mosak-Hicks Type? Rhetoric, Mathematics, and the Nature of Neoclassical Theory." **Economics and Philosophy**, April 1987, 3:67-96.

[12] "What Do Markets Do?" Explorations in Economic History, April 1987, pp. 107-129.

[13] "The Philosophical Bases of Institutionalist Economics." Journal of Economic Issues, September 1987, pp. 1001-1038. Reprinted in Rick Tilman, ed., The Legacy of Thorstein Veblen. Cheltenham: Elgar, forthcoming.

[14] "The Probabilistic Counter-revolution: The Advent of Probabilistic Concepts in Neoclassical Economics." **Oxford Economic Papers**, March 1989, pp. 217-235.

[15] "Rates of Interest in Eighteenth Century England," with Kenneth Weiller, **Explorations in Economic History**, January 1990, pp. 1-28.

[16] "'Tis a Pity Econometrics Isn't an Empirical Endeavor: Mandelbrot, Chaos, and the Noah and Joseph Effects," **Ricerche Economiche**, June-July 1989, pp. 76-99.

[17] "How Not to Do Things with Metaphors: Paul Samuelson and the Science of Neoclassical Economics," **Studies in the History and Philosophy of Science**, June 1989, pp. 175-191.

[18] "On Hollander's 'Substantive Identity' of Classical and Neoclassical Economics: Mirowski on Hollander on Mirowski," **Cambridge Journal of Economics**, September 1989, pp. 471-477.

[19] "The How, the When and the Why of Mathematical Expression in the History of Economics," **Journal of Economic Perspectives**, 1991, 5:145-158.

[20] "The Measurement Without Theory Controversy: Defeating Rival Research Programs by Accusing Them of Naive Empiricism," **Economies et Sociétés, Serie Oeconomia** (France), 1989, pp. 65-87.

[21] "The Rhetoric of Economics," History of the Human Sciences, June 1990, pp. 243-257.

[22] "The Rise and Fall of the Equilibrium Concept in Economics From Walras to Mandelbrot," **Recherches Économiques de Louvain**, 1989, 55(4):447-468.

[23] "Problems in the Paternity of Econometrics: Henry Ludwell Moore," **History of Political Economy**, Winter 1990, 22:587-609.

[24] "Learning the Value of a Dollar: Conservation Principles and the Social Theory of Value," **Social Research**, fall 1990, pp. 689-718. German translation: **Prokla 88**, September 1992, pp. 388-412.

[25] "Postmodernism and the Social Theory of Economic Value." Journal of Post Keynesian Economics, Summer 1991, 13:565-582. Reprinted in Geoffrey Hodgson, editor, The Economics of Institutions. Cheltenham: Edward Elgar, 1993.

[26] "What Were Von Neumann and Morgenstern Trying to Accomplish?" In E. Roy Weintraub, editor, **Towards a History of Game Theory**. Supplement to **History of Political Economy**, 1992, 24:113-147.

[27] "From Mandelbrot to Chaos in Economic Theory," **Southern Economic Journal**, October 1990, 57:289-307. Reprinted in: Omar Hamouda & J. Rowley, eds., *Foundations of Probability, Econometrics and Economic Games*. Cheltenham: Edward Elgar, 1998.

[28] (with co-author Steven Sklivas) "Why Econometricians Don't Replicate (Although They

Do Reproduce)," Review of Political Economy, 1991, 3:146-163.

[29] "When Games Grow Deadly Serious: The Influence of the Military on the Evolution of Game Theory," in **Economics and National Security**, Craufurd Goodwin, editor, Annual Supplement to Vol. 23, **History of Political Economy**, 1991, pp. 227-255. Reprinted in Todd Sandler & Keith Hartley, eds, **The Economics of Conflict**, Cheltenham: Elgar, 2001.

[30] "Looking for those Natural Numbers: Dimensionless Constants and the Idea of Natural Measurement," **Science in Context**, Spring 1992, 5:165-188.

[31] (with co-author Carol Heim), "Reply to Black and Gilmore," Journal of Economic History, September 1991, 51:701-706.

[32] "Do Economists Suffer from Physics Envy?" **Finnish Economic Papers**, Spring 1992, 5:61-68. Spanish translation: *Economia Informa*, Dec. 1997, (263): 21-28.

[33] "More Bleat than Bite: Reply to Barnes, Cohen, Hands and Wise," **Philosophy of the Social Sciences**, March 1992, 22:131-141.

[34] "Three Ways to Think about Testing in Econometrics." Journal of Econometrics, 1995, (76):25-46. Reprinted in John Davis, ed., Recent Developments in Economic Methodology. Elgar, 2004.

[35] "Tit for Tat: Concepts of Exchange, Higgling, and Barter in the History of Economic Anthropology," **History of Political Economy**, Supplement to Vol.26, **Higgling**, editors, Neil de Marchi and Mary Morgan, 1994, pp. 313-342.

[36] "What Could Mathematical Rigor Mean? Three Reactions to Gödel in mid-twentieth Century Economics," **History of Economics Review**, summer 1993, 20:41-60.

[37] "A Visible Hand in the Marketplace of Ideas: Precision Measurement as Arbitrage," Science in Context, Autumn 1994, 7(3):563-589. Reprinted in Michael Power, ed. Accounting and Science: Natural Inquiry and Commercial Reason, Cambridge: Cambridge University Press, 1996.

[38] (with Roy Weintraub) "The Pure and the Applied: Bourbakism Comes to Mathematical Economics" Science in Context, Summer 1994, 7:245-272. Reprinted as Chapter 4 of Roy Weintraub, How Economics became a Mathematical Science, Duke University Press.

[39] "Civilization and its Discounts," Dialogue, Summer 1995, (34):541-560.

[40] "The Economic Consequences of Philip Kitcher," **Social Epistemology**, 1996, (10):153-169.

12

[41] "Mandelbrot's Economics after a quarter-century," Fractals, 1995, (3:3): 581-600. Reprinted in H.Peitgen & R.Voss, eds., Fractal Geometry and Analysis. Singapore: World Scientific, 1996.

[42] "On Playing the Economics Trump Card in the Philosophy of Science: Why It Didn't Work for Michael Polanyi" **Philosophy of Science**, *PSA 97* Supplement to vol.64: S127-S138.

[43] "Machine Dreams: Economic Agent as Cyborg" in John Davis, ed., *The New Economics and its History*, Supplement to vol. 29 of **History of Political Economy**, 1998: pp.13-40. Spanish translation in **Politica y Sociadad**, no.21, 1996, pp.113-131.

[44] (with Wade Hands) "A Paradox of Budgets," **From Interwar Pluralism to Postwar Neoclassicism.** 1998 Supplement to vol.30 *History of Political Economy*. Eds. M. Rutherford & M. Morgan. Durham: Duke Univ. Press, 1998, pp.260-292.

[45] (with Koye Somefun) "Markets as Evolving Computational Entities", Journal of Evolutionary Economics, 1998, (8):329-356. Reprinted in Peter Earl, ed., *The Legacy of Herbert Simon*. Vol. II. Aldershot: Elgar, 2001.

[46] "Cyborg Agonistes: Economics Meets Operations Research in Mid-Century," Social Studies of Science, October 1999, (29):685-718.

[47] "Exploring the Fault Lines: Introduction to Some Problems in the History of Economic Anthropology" **History of Political Economy**, Winter 2000, (32): 919-932.

[48] "Cowles Changes Allegiance: From Econometric Empiricism to Cognition as Intuitive Statistics," **Journal of the History of Economic Thought**, June 2002, (24):165-194.

[49] "Re-engineering Scientific Credit in an Era of the Globalized Information Economy," **First Monday**, December 2001. <u>www.firstmonday.dk/issues/issue6\_12/mirowski</u>. Italian translation: URL <u>http://www.psychiatryonline.it/ital/mirowski.htm</u>

[50] "The Scientific Dimensions of Society and their Distant Echoes in American Philosophy of Science," **Studies in the History and Philosophy of Science A**, June 2004, (35):283-326.

[51] <La sociologie des sciences et la nouvelle economie de l'information>, "Science Studies and the 'New Information Economy'," (French translation) **Reseaux**, 2003, vol. 21, numero 122, pp.167-188.

[52] "Naturalizing the Market on the Road to Revisionism: Caldwell on Hayek's Challenge", **Journal of Institutional Economics**, 2007 (3): 351-372.

[53] "Philosophizing with a Hammer: reply to Binmore, Davis & Klaes," Journal of Economic Methodology, 2004, (11):499-513.

[54] (with Rob Van Horn) "The Contract Research Organization and the Commercialization of Science," **Social Studies of Science**, August 2005, (35:4): 503-548..

[55] "Markets Come to Bits: Markomata and the future of computational evolutionary economics," **Journal of Economic Behavior and Organization**, April 2007, (63):209-242.

[56] "Positivism and the Conception of Society in Dewey and in Reichenbach," Galileo (Uruguay), May 2005, (31):xxx-xxx.

[57] "Twelve Theses on the History of Demand Theory in America," in Wade Hands and Philip Mirowski, eds., Agreement of Demand, Supplement to History of Political Economy, 2006, (38): 343-379.

[58] "Invention as the Mother of Necessity: reflections on Paul Forman's <u>The primacy of science</u> in modernity" **History and Technology**, 2007 (23:1/2):176-184.

[59] (with Kyu Sang Lee) 'The Energy behind Vernon Smith's experimental economics, illustrated by the Mirowski-Hands thesis'. **Cambridge Journal of Economics**, 2008, 32: 257-271.

[60] "Livin' with the MTA," Minerva, 2008, forthcoming.

[61] "How the Commercialization of Knowledge has Harmed Science," **European Journal of Sociology**, forthcoming.

[62]

# **BOOK REVIEWS AND REVIEW ARTICLES**

[1] Review of E.R. Weintraub, Microfoundations, and Irving Kristol, editor, The Crisis in Economic Theory, in Contemporary Crisis, December 1981.

[2] Review of David Jeremy, Transatlantic Industrial Revolution, in Technology and Culture, October 1982.

[3] Review of Russell MacCormmach, Night Thoughts of a Classical Physicist, in History of Political Economy, Spring 1983.

[4] Review article on Richard Nelson and Sidney Winter, An Evolutionary Theory of Economic Change, in Journal of Economic Issues, September 1983.

[5] Review of Ben Fine, Theories of the Capitalist Economy, in History of Political

Economy, Winter 1983.

[6] Review of Karl Pribram, A History of Economic Reasoning, in Journal of Economic Literature, September 1984.

[7] Review of P. Wiles & G. Routh, editors, Economics in Disarray, in Journal of Economic Issues, December 1985.

[8] Review of Lawrence Boland, Methodology for a New Microeconomics, in Journal of Economic Literature, March 1987.

[9] Review of Robert Fisher, The Logic of Economic Discovery, in Journal of Economic History, March 1987.

[10] Review of Roger Backhouse, History of Modern Economic Analysis, in Journal of Economic Literature, December 1987.

[11] Review Essay "Energy and Energetics in Economic Theory" on W. van Gool & J. Bruggink, editors, Energy and Time in The Economic and Physical Sciences, and J. Dragan & M. Demetrescu, Entropy and Bioeconomics: The New Paradigm of Nicholas Georgescu-Roegen, in Journal of Economic Issues, September 1988, pp. 811-830.

[12] Review of Lorenz Kruger, Lorraine Daston, et al., editors, **The Probabilistic Revolution**, and Theodore Porter, **The Rise of Statistical Thinking**, in **History of Political Economy**, Spring 1990.

[13] Review of Julian Hoppit, **Risk and Return in British Business**, 1700-1800, Journal of Interdisciplinary History, March 1989.

[14] Review of J. Boyd & J. Blatt, **Investment Confidence and Business Cycles**, in **Journal of Economic Literature**, June 1989.

[15] Review of J. King, Economic Exiles, in Journal of Economic History, December 1989.

[16] Review of Margaret Schabas, A World Ruled by Number, in Isis, September 1992, pp. 501-502.

[17] Review of Henry Woo, What's Wrong With Formalization in Economics? in Research in the History of Economic Thought and Methodology, Vol. 7, 1990, pp. 281-283.

[18] Review of Arjo Klamer & David Colander, **The Making of an Economist**, in **Journal of Economic Literature**, March 1991.

[19] Review of Giorgio Israel & Bruna Ingrao, The Invisible Hand, in Eastern Economic

Journal, October 1991.

[20] Review of R. Sato and R. Ramnachandran, editors, Conservation Laws and Symmetry: Applications to Economics and Finance, in Journal of Economic Literature, March 1992.

[21] Review of Larry Neal, The Rise of Financial Capitalism, in Business History Review, Spring 1993.

[22] Review of Herbert Simon, Economics, Bounded Rationality and the Cognitive Revolution, in Southern Economic Journal, January 1994.

[23] Review Essay on Philip Kitcher, **The Advancement of Science**, in **Review of Political Economy**, Summer 1995, (7:2): 227-241.

[24] Review of Howard Margolis, **Paradigms and Barriers**, in **Journal of Economic** Literature, December 1994.

[25] Review of Geoff Hodgson, Economics and Evolution, in Economics and Philosophy, October 1995, (11): 366-370.

[26] Review of I.B. Cohen, Interactions, in American Journal of Sociology, November 1995.

[27] Review of Theodore Porter, **Trust in Numbers**, in **History of Political Economy**, Fall 1996.

[28] Review of Trevor Barnes, Logics of Dislocation, in Canadian Geographer, Fall 1997, (41):335.

[29] Review of Antoine d'Autumne & Jean Cartelier, eds., Is Economics Becoming a Hard Science? In Journal of Economic Literature, June 1998.

[30] Review of Yuval Yonay, The Struggle over the Soul of Economics, in Research in the History of Economic Thought and Method, 2000, vol. 18A, pp. 158-163.

[31] Review of Sylvia Nasar, A Beautiful Mind, in Economics and Philosophy, October 1999, (15):302-7.

[32] "The Good, the Bad, and the Bungly": Review essay on Deborah Redman, The Rise of Economics as a Science, and Mary Poovey, The Making of the Modern Fact, in Journal of the History of Economic Thought, 2000, (22): 85-91.

[33] Review of Melvin Reder, Economics: the Culture of a Science in Business History Review, Winter 1999.

[34] Review of N. Katherine Hayles, How We Became Posthuman, in Isis, September 2000.

[35] Review of T. Beard & G. Lozada, Economics, Entropy and the Environment in Economic Journal, June 2001.

[36] Review of Ariel Rubinstein, Economics and Language in Economica, Feb. 2004, (71):171-2.

[37] Review of Benoit Mandelbrot, Fractals and Scaling in Finance in Journal of Economic Literature, June 2001.

[38] Review of Olivier Dyens, Metal and Flesh, in The Information Society, 2004, (20:1).

[39] Review of M. Hacohen, Karl Popper in Isis, June 2002, pp.324-5.

[40] Review of Wade Hands, Reflection without Rules, in Philosophy of Science, June 2002.

[41] Review of Michael Bernstein, A Perilous Progress, in History of Economic Ideas, 2002, X2, pp.176-8.

[42] Review of K. Velupillai, Computational Economics, in Journal of Economic Behavior and Organization, 2003.

[43] Review of E. Roy Weintraub, **How Economics Became a Mathematical Science**, in **Isis**, September 2003.

[44] Review of Luigino Bruni, Vilfredo Pareto and the Birth of modern microeconomics. in History of Economic Ideas, 2004 (XI:3) 102-103.

[45] Review Essay: "McCorduck's *Machines who Think* after 25 Years: Revisiting the Origins of AI", **AI Magazine**, Winter 2004, (24:4):135-138.

[46] Review of Slava Gerovich, From Newspeak to Cyberspeak, in Journal of Economic Literature, March 2004.

[47] "Sleights of the Invisible Hand," Review Essay on Sonia Amadae, **Rationalizing Capitalist Democracy,** in **Journal of the History of Economic Thought**, March 2005, (27): 87-99.

[48] Review of Andrew Cunningham, Masters of Theory: Cambridge and the Rise of Mathematical Physics, in History of Political Economy, 2005.

[49] Review of Nicola Giocoli, **Modeling Rational Agents**, in **Economic Journal**, November 2004.

[50] "Johnny's in the Basement, Mixin' Up the Medicine," Review essay on Arthur Daemmrich, **Pharmacopolitics**, Jerry Avorn, **Powerful Medicines**, and Marcia Angell, **The Truth about the Drug Companies**, in **Social Studies of Science**, 2007, (37):311-327.

[51] Review of Harro Maas, William Stanley Jevons and the Making of Modern Economics, British Journal for the History of Science, (2007), 40: 297-298

[52] "Coming to Terms with Neoliberalism," Review of David Harvey, A Brief History of Neoliberalism and Dieter Plehwe, Bernard Walpen, et al, Neoliberal Hegemony, in European Journal of Sociology, (2006), 47: 461-463

[53] "Did the (Returns to) Scales Fall from their Eyes?" Review Essay on David Warsh, **Knowledge and the Wealth of Nations**, in **Journal of the History of Economic Thought**, December 2007, (29):481-494.

[54] Review of Johan van Overtveldt, **The Chicago School**, in **History of Economic Ideas**, forthcoming.

[55] Review Essay of David Harvey, A Brief History of Neoliberalism, in Economics and Philosophy, April 2008.

### **INTERVIEWS, TV appearances, ETC.**

[1] Visa Heinonen, "Talous, instituutiot ja kulttuuri" **Finnish Economic Journal**, 1992, 88:50-63.

[2] Conversation with Visa Heinonen, "Economics as the Physics of Society," **Review of Political Economy**, October 1993, 5:508-531.

[3] "The lesson to be taken from this...Anything doesn't go in value" **Kurswechel**, 1997, Heft 4: 30-35.

[4] "Nicholas Georgescu-Roegen," RAI Italian television, May 1997.

[5] "Cyborg Values" in Caroline Gerschlager and Ina Paul-Horn, eds., **Die Gestaltung des Geldes**, Marburg: Metropolis, 2000.

[6] "Philip Mirowski descifrando la economia de los suenos," Interview with Carlos Mallorquin in *Este Pais*, August 2002. More extended versions may be found in: **Revista Mexicana de Ciencias Politicas**, 2002, no. 184; and in Carlos Mallorquin, ed., **La Economia entre Vista**, 2004, pp.189-262.

[7] "La Economia de los Zombies," Clarin (Buenos Aires, Argentina), Nov. 9, 2003 <u>http://old.clarin.com/suplementos/economico/2003/11/09/n-00501.htm</u>

[8] "Tensions of Science and Democracy", Odyssey (National Public Radio), 16 Sept. 2004.

[9] Interview, "A Revisionist History of Modern Economics", *Challenge Magazine*, September/October, 2005, (48):79-94.

[10] Interview excerpts in Adam Curtis' 3-part TV series "The Trap", BBC, March 2007.

SSRC Blog "Knowledge Rules" : http://www.ssrc.org/blogs/knowledgerules/

# **Upcoming Events**

[1]. Invited visiting professorship, Ecole Nationale Superieure Cachan, Paris, 2009.

[2] Invited session on neoliberalism as politics and philosophy at INEM, Madrid, Sept. 2008.

[3]. Invited paper for PROKNOW conference on Academic spin-offs, Brussels Belgium Feb. 2009.

[4] Invited conference in honor of Gavin Wright, Stanford Univ., Sept. 2008.

[5] Invited paper to First International Symposium on Economic Thought, Rio de Janiero, Brazil, Aug. 2009.

#### **UNPUBLISHED WORKING PAPERS**

- 1. Draft chapters of Koopmans biography.
- 2. "An Unholy History of Error."

3. "Scissors, Lies and Scotchtape: The Hidden History of Supply and Demand."

4. "The Evolution of Market Automata and Some Applications to Finance"

**5.** "How Intelligence Straddled the Natural and the Artificial" (with Mie Augier)

6 . "On the Origins (at Chicago) of Some Species of Neoliberal Evolutionary Economics"

7. "Caveat Emptor: Rethinking the Historical Relationship between Commercial Activity and Science"

8. "Alain Lewis on the Formal Character of Neoclassical Economic Theory," (with Fernando Tohme)

9. "Standing at the crossroads of evolution and computation,"

10. "The Making of the Neoliberal Thought Collective"

11. (with Thomas Scheiding) "Are the Natural Sciences Examples of Self-Organizing Complex Systems?"

#### **RECENT CONFERENCE AND SEMINAR PRESENTATIONS**

"On the Origins (at Chicago) of Some Species of Neoliberal Evolutionary Economics" HISRECO Conference, Lisbon Portugal, June 2008.

"New Approaches to Complexity" Mannheim University, Mannheim Germany May 2008.

Invited participation in conference on "Transdisciplinary Models of Economic Complexity," James Madison University, May 2008.

"How has Commercialization harmed Science," invited Social Science Research Council seminar, New York, May 2008.

"Markets Come to Bits," Said Business School, Oxford University, Feb. 2008.

"Defining Neoliberalism", University of Manchester, Feb. 2008; Green Economics Conference, Mansfield College, Oxford, Feb. 2008; Open university, Feb. 2008.

Keynote Speaker, SCEME Workshop on Neoliberalism, Keele Univ., Feb 2008.

"Trust in Science?" All Souls College, Oxford University, Jan. 2008.

"The Concept of the Political in Postwar International Relations and Neoliberalism" LSE seminar in the history of the human sciences, Jan. 2008.

Three Regimes of American Scientific Organization" Nuffield economic history seminar, Oxford University, Jan. 2008.

"What we Mean when we say we have lost trust in science" Trust in Science Conference keynote, Toronto Canada, Oct. 2007.

"Living with the MTA," meetings of 4S, Montreal Canada Oct. 2007.

"Realism and Neoliberalism: two studies in reactionary modernism," workshop on the Birth of IR, Rockefeller Archives, Sleepy Hollow, NY, Sept. 2007.

"On the Origins (at Chicago) of Some Species of Neoliberal Evolutionary Economics," Presentation to the conference "Revisiting the Chicago School" Notre Dame, Sept. 2007.

Why there is (as yet) no such thing as an Economics of Knowledge," Workshop on the History of Modern Economics, CRNS Cachan, Paris, June 2007.

Invited Keynote Speaker at Philosophy of Social Science Roundtable, University of South Florida, March 2007: "Why There is (as yet) No Such Thing as an Economics of Information."

Invited to deliver the 2007 Brown & Haley endowed lectures, University of Puget Sound, March. 2007.

"The Dialectic of Neoliberalism and Catholic Social Thought," Notre Dame, Feb. 2007.

Invited Heilbroner Lecture, "Protecting Science From Politics," New School University, New York, February 2007.

Discussant in ASSA session on Chicago School, Chicago, Jan 2007.

"Markets come to bits", Presentation University of Trento Economics conference, Dec. 2006.

Special author meets critics session, Annual meting Society for the Social Studies of Science, Vancouver, Nov. 2006. Also: "Neoliberalism Comes to Science Studies".

"Viridiana Jones and the Temple of Mammon," Conference on the Commercialization of Science, Notre Dame, Sept. 2006; invited plenary, Conference on the relationship of science to democracy, Ghent Belgium, Sept. 2006. Invited participation, Workshop on "History of Economics as History of Science," ENS Cachan, Paris France, June 2006.

Invited scholar in residence, ENS-Cachan, Paris, June 2006.

"The Making of the Neoliberal Thought Collective," Workshop on History of Economics as History of Science, Paris, June 2006.

"On the Origins of Some Species of Evolutionary Economics," Ecole des Hautes Etudes en Sciences Sociales, Paris, June 2006.

"Why there is (as yet) No Such Thing as an 'Economics of Knowledge'" Conference on the History of the Human Sciences, University of Pennsylvania, Philadelphia, May 2006; and Conference on the Philosophy of Economics, University of Alabama, May 2006.

"Neoliberalism as Reactionary Modernism," Conference on Modernism and the Sciences, Goethe University, Frankfurt Germany, March 2006.

"The CRO and the Commercialization of Science" WZB Berlin, Germany, March 2006.

"The Origins of the Chicago School," American Economics Association meetings, Boston, Jan. 2006

Invited participation, Patent Law and Innovation Workshop, Harvard University, Dec. 2005.

"Do Economists Help Make Markets? The FCC Spectrum Auctions" Conference at the Intersection of STS and Economic Sociology, Cornell University, Sept. 2005.

Invited presentation on markets as evolving automata, Conference on evolutionary economics, University of Queensland, Brisbane Australia, July 2005.

"Thirteen Thesis on the History of Demand Theory," Conference presentation at "Agreement on Demand", Duke, April 2005.

"Neoliberalism and the Rise of the Chicago School," ICAS NYU conference on the Transnational Origins of Neoliberalism, New York, April 2005.

"Rethinking the Commercialization of Science," invited talk, New School University, Feb. 2005; Conference on "Science for Sale," Cornell University, April, 2005; invited lecture, Univ. of Pennsylvania, Nov. 2005; invited lecture, Wayne State University, Dec. 2005.

"Computation and the Future of Evolutionary Economics," Copenhagen Business School, and University of Southern Denmark, Odense, January 2005.

"Caveat Emptor: Rethinking the Historical Relationship between Commercial Activity and Science," invited plenary, History of Science Society, Austin, November 2004.

"Markets Made Flesh: Auctioning the Spectrum," presentation to Conference on Performativity in Economics, Paris, August 2004; ICAS Seminar, NYU, New York, October 2004.

"Critique and the Responsibility of Intellectuals," panel, NYU, September 2004.

"Vernon Smith and the Rise of Experimental Economics", "Social Dimensions of Scientific Knowledge," and "Callon on Performativity", all papers presented to the joint meetings of 4S and EASSST, Paris, August 2004.

"Markets come to Bits," INEM meetings, Amsterdam, August 2004.

"Social Dimensions of Scientific Knowledge" and "The Purest Form of Rationality is that which is imposed," George Mason Summer Workshop on the History of Economics, Fairfax, July 2004.

"Military Foundations of the Postwar Economic Orthodoxy," invited lecture, Nuffield College, Oxford University, March 2004. Also: "Does Technology Drive Theory?" Respondent at Conference devoted to *Machine Dreams*, SCHEME, University of Stirling, Scotland, March 2004. "Contract Research Organization and the Commercialization of Science," invited lecture, Univ. of Hertfordshire, UK, March 2004.

"Scientific Dimensions of Social Thought," Erasmus University, Rotterdam, Feb. 2004.

"Philosophizing with a Hammer," invited lecture, EIPE, Erasmus University, Rotterdam, Holland, Feb. 2004. "Regimes of Science Organization and the Science/Society Divide" invited lecture, Universidad Autonoma de

Madrid, Feb. 2004. Also: "Philosophizing with a Hammer". "Philosophy of Science and the Organization of Science," University of Chicago Workshop on Science, Technology, Society and the State, January 2004.

"Machine Dreams", Fullbright lectures, Universidad de la Republica, Montevideo, Uruguay, Oct. 2003.

Invited Plenary lecture on *Machine Dreams*, InterAmerican Society for the Epistemology of Economics, Buenos Aires Argentina, October 2003.

"The Purest Form of Rationality is That Which Is Imposed," HES meetings, Duke Univ., July 2003.

"The Scientific Dimensions of Social Knowledge and their Distant Echoes in 20<sup>th</sup> century Philosophy of Science," Conference on Values in Science, Bielefeld, Germany, July 2003; Invited Lecture, Center for Economic Policy Analysis, New School, New York, September 2003.

"The Automata Theory of Markets," invited lecture, Carnegie-Mellon University, April 2003.

"The Commercialization of the University and the New Economics of Science," invited lecture, Rice University, Houston, Texas, March 2003.

"On the Ultimate Incoherence of the 'Economics of Information" Copenhagen Business School, Nov. 2002; Univ. of Amsterdam, Nov. 2002.

"How Intelligence Straddled the Natural and the Artificial" INEM, Stirling Scotland, Sept. 2002; invited lecture, University of Michigan, Dec. 2002.

Invited respondent to sessions devoted to *Machine Dreams*: Southern Economics Assn., New Orleans, Nov. 2002; INEM, Univ. of Stirling, Scotland, Sept. 2002.

"Machine Dreams: the summary" and "Possible Futures for Computational Economics", Santa Fe Institute, Dec. 2001; University of California- Irvine Institute of Mathematical Behavioral Science, March 2002. Also University of Pisa, University of Siena, and University of Milan-Biacoccha, May 2002.

"The Parallel Histories of AI and Neoclassical Economics," invited dinner talk, Brookings Workshop on Multi-Agent Computation in Natural and Artificial Economies, Washington DC, Oct. 2001.

"Morte d'Author: Problems of credit in globalized science" and "From Wargames to Roboshopping," 4S meetings, Cambridge Mass., November 2001.

"The Future of Methodological Individualism and the Cyborg Sciences," History and Philosophy of Science Seminar, University of Indiana- Bloomington, Sept. 2001.

"Information Technologies and the New New Institutionalism" invited plenary lecture, Third International Workshop on Institutional Economics, University of Hertford, England, Sept. 2001.

"Cowles Changes Allegiance," History of Economics Society meetings, Wake Forest University, July 2001.

"On the American Hegemony in Modern Economics," University of Paris-I, March 2001.

"Alice through the Liquid Crystal: A different perspective on IT and the economy," invited lecture, Kennedy School, Harvard University, January 2001. Also CEPREMAP, Paris, March 2001; Univ. of Aix-Marseilles, May 2001; invited lecture, University of Odense, Denmark, June 2001.

"The Evolution of Market Automata and their importance in recent finance markets" invited paper at workshop on "The Culture(s) of Finance," University of Bielefeld, Germany, November 2000.

"Some Games in search of their Players," SCANCOR conference on economics and sociology, Stanford University, Sept. 2000.

"What's Kuhn Got to Do With It?" Symposium on Steve Fuller's *Thomas Kuhn*, History of Science Society meetings, St. Louis, August 2000.

"The Hayek Hypothesis and the Future of Computational Economics" University of Trento, May 2000; University of Venice, Italy, May 2000.

"Machines Who think vs. Machines That Sell", Invited Jenkins Lecture, Duke University, March 2000;

"On the Origins of Some Species of Evolutionary Economics", Duke University Economics Department, March 2000; History of Economics Society meetings, Vancouver, June 2000.

"The New Economics of Science" presented to invited conference on *Science and Spontaneous Order*, Skagen, Denmark, January 2000.

"RAND/OR: Operations Research and the Postwar Stabilization of the Neoclassical Orthodoxy" HES meetings, Greensboro, NC, June 1999; Invited lecture, Science Studies Program, University of California-San Diego, November 1999

John von Neumann, Quantum Mechanics and Economics", History of Science Society, November 1999, Pittsburgh, PA.

Three invited lectures to the Russian Academy of Science, Moscow, Russia, October 1999.

"Recent Issues in Computational Economics", Elejalde Summer School of Economic Methodology, San Sebastien, Spain, July 1999.

"How Science Policy and Neoclassical Economics were precipitated out of OR" SPRU, Univ. of Sussex, Brighton UK, April 1999..

"How the Computer prompted Experimental Economics at RAND," ECHE, Paris, April 1999.

"The Colonel's Dilemma: RAND and game theory," Postwar Economics Warkshop, Erasmus University, April 1999; invited lecture, York University, Toronto, Canada, March 1999.

"Economics in Cyberspace" invited lecture, University of Illinois Science Studies Unit, Urbana, Feb. 1999.

"Economics Becomes a Cyborg Science" Invited Plenary Lecture, HETSA, Univ. Of Western Sydney, Australia, July 1998.

"What should be Bounded When it comes to Bounded Rationality?" Monash University, Melbourne, Australia, July 1998; Paidea International Conference of Philosophy, Boston, Mass., August 1998.

"Markets as Evolving Computational Entities", Conference on Social Interactions and Computing, Ancona, Italy, May 1998; University of Modena, Italy, May 1998, Melbourne University, July 1998.

"Inhuman, All too Inhuman" Plenary session, Interdisciplinary 19th Century Studies Assn, New Orleans, April 1998.

"The Military, the Scientists, and the Changed Rules of the Game," Duke Univ., Nov. 1997; University of Witten, Germany, June 1998.

"The Exchanging of the Avant Garde," Symposium on Marshall Sahlins' Stone Age Economics, American Anthropological Association, Washington, DC, Nov. 1997.

Lectures on Evolutionary Economics, EEAPE Summer School, Hania, Crete, July 1997.

"Simulacra vs. Automata" Symposium on Complexity in Economics, Technical University of Lisbon, Portugal, April 1997.

"Economics as a Cyborg Science", Fischbein Center, University of Chicago, Jan. 1997.

"Ratio ex Machina" Invited lecture to the Symposium on the Question of Economic Value, University of Texas--Austin, October 1996.

"Problems of Value in Economics and Anthropology," at the Internationales Forschungszentrum Kulturwissenschaften Workshop on "Die Welt des Tauches", Vienna Austria, October 1996.

"Ecology in the Mirror of Economics" at workshop on "Making Sense of the Ecology" Pori, Finland, August 1996.

"Maxwell's Demon and Entropy Reversal Come to Economics," Seminaire de l'Adse, 1996; Ecoles des Mines, Paris, Feb. 1996.

"Three Types of Limitations in Computational Economics," ATOM, Univ. of Paris-I, Sorbonne; Feb. 1996.

"Machine Dreams," Duke Conference on New Writing in the History of Economics, Durham NC, March 1996.

"On Playing the Economics Trump Card in the Philosophy of Science: Why It Didn't Work for Michael Polanyi," Symposium on the Use of Economic Concepts in Contemporary Philosophy of Science at the 1996 meetings of the PSA, Cleveland, Ohio, November 1996; HES meetings, Vancouver BC, July 1996.

"Harold Hotelling and the Neoclassical Dream" ASSA meetings, San Francisco, Jan. 1996; Meetings of the European Assn. for the History of Economics, Lisbon, Portugal, Feb. 1996; IEA Conference on Economic Methodology, Bergamo, Italy, June 1996.

"Economics, Science and Knowledge: Polanyi vs. Hayek" EEAPE Conference Plenary session, Kracow, Poland, October 1995.

"Do You Know the Way to Santa Fe?" History of Economics Association meetings, South Bend, June 1995; University of Warsaw, Warsaw, Poland, Oct. 1995; University of Lisbon, Portugal, Feb. 1996; Univ. de Paris --IX, Dauphine; Paris, Feb. 1996..

"Refusing the Gift" Conference on Postmodernism and Economics, University of California-Riverside, March 1995.

"Mandelbrot's Economics 25 Years Later," Conference in Honor of Benoit Mandelbrot's 70th birthday, Curacao, February 1995.

"Bourbakism Comes to Economics" AEA meetings, Washington, DC, January 1995.

"The Economic Consequences of Philip Kitcher" 4S/PSA meetings, New Orleans, October 1994.

"A Graduate Course in Institutionalist Economic Theory" Dinner address at Conference in honor of the restoration of Veblen's birthplace, Carleton College, Northfield, Minnesota, September 1994.

"The Attribution of Quantitative Error and the Erasure of Plural Interpretations in Various Sciences" Conference on Pluralism in Economics, Bergamo, Italy, May 1994.

"Passing Around the Gift" Duke Center for Interdisciplinary Studies in Science, March 1994.

"Scissors, Lies and Scotchtape" mini-course, Duke University, March 1994.

"Civilization and Its Discounts" ASSA/HES, Boston, January 1994; Michigan State University, April 1994; Duke University, March 1994.

"Precision Measurement as Arbitrage" Society for the Social Studies of Science, Purdue University, November 1993; Stanford University, May 1994, Universite de Paris- I, Feb. 1996.

"Error in Its Cultural Contexts" invited lecture, Virginia Polytechnic, Blacksburg, VA, November 1993.

"What Econometrics Can and Can't Tell Us About the Economic Actors: Brewing and Rationality in early 19th Century Britain" Economic History Association, Tucson, October 1993.

"Tit for Tat: Gift, Exchange and Money in the History of Economic Anthropology" Duke Conference on the History of Higgling, March 1993; COPEC XIII, Northeastern University, Boston, January 1994.

"How to Stop Worrying and Calculate the Improbable" George Washington University and George Mason University, Washington, DC, November 1992.

"The Realms of the Natural" Université de Montreal, November 1992.

"Value as a Mobile Army of Metaphors" National Conference on Systems Science and Law, Denver, July 1992.

Roundtable on Dan Hausman, The Inexact and Separate Science of Economics, History of Economics Society meetings, Fairfax, VA, May 1992.

"Econometrics and the Problem of Replication" Conference on Econometric Method, University of Tilburg, Holland, December 1991; York University, Toronto, Canada, March 1992; History of Economics Society meetings, Fairfax, VA, May 1992; Western Economics Association meetings, San Francisco, July 1992; Economic Science Association, Tucson, Arizona, October 1992; Simon Fraser University, February 1993; University of Victoria, February 1993; Malvern Conference, United Kingdom, August 1993.

"Problems in the History of Neoclassical Economics" University of Witten, Germany, May 1991.

"Learning the Meaning of a Guilder" Dutch Society for the History of Economic Thought, University of Utrecht, Holland, March 1991; University of Amsterdam, April 1991.

"A Postmodern Approach to Mathematical Discourse in Economics" Vanderbilt University and the University of the South (Georgescu- Roegen Lecture), November 1990; AEA meetings, Washington, DC, December 1990; Finnish Economics Association, Turkuu, February 1991; Conference on New Directions in Analytical Economics, University of Notre Dame, March 1991; SCASS, Uppsala, Sweden, March 1991.

"What Were von Neumann and Morgenstern Trying to Accomplish?" Duke Conference on the History of Game Theory, October 1990; AEA meetings, Washington, DC, December 1990; Loyola University invited lecture, December 1991.

"The Shape of Beer to Come: Price Expectations of Brewers in the Early 19th Century" Indiana University Economic History Workshop, October 1990.

"Value and Measurement in Theory and History" University of Michigan Economic History Workshop, September 1990; University of Chicago Economic History Workshop, November 1990.

"When Games Grow Deadly Serious" Pew Conference on the History of Defense Economics, Duke University, August 1990.

"Smooth Operator: Marshall"s Impact on the Evolution of Neoclassical Theory" Marshall Centenary Conference, Cambridge University, August 1990.

"Conservation Principles and the Theory of Economic Value" Université de Montreal, March 1990.

"What Was Game Theory Trying to Accomplish in the 1940s/50s?" Duke Seminar on the History of Game Theory, January 1990.

"The Rise and Fall of the Equilibrium Concept" Kress Society, September 1989.

"From Mandelbrot to Chaos" Journées d'étude sur la notion d'equilibre, Louvain-la-neuve, Belgium, May 1989; and

24

Department of Statistics, University of Rome, October 1989; University of Helsinki, February 1991; University of Copenhagen, June 1991; University of Lund, June 1991.

"Discontinuity in the History of Economic Theory" Invited lecture to Colloquium on Continuity and Discontinuity in Economics, Tinbergen Institute, Erasmus University, Netherlands, April 1989.

"From Mandelbrot to Chaos" International Symposium on Evolutionary Dynamics and Nonlinear Economics, IC<sup>2</sup> Institute, Austin, Texas, April 1989.

"The Structure of a Social Theory of Value," workshop in Institutionalist Economics, University of Tennessee, February 1989.

"Moore and the Columbia School of Stochastic Economics" invited Political Economy lecture, Barnard College, March 1989.

"Tis a Pity Econometrics Isn't an Empirical Endeavor" American Economics Association, New York, December 1988; Kress Society, Harvard University, October 1988; American University, February 1989.

"Historical Determinants of Issues in Mathematical Economics" Cowles Lunch Series, Yale University, May 1988.

"Future Trends in Institutional Economics" International Conference of Institutionalist Scholars, London, June 1988.

"Deterministic and Stochastic Order in Twentieth Century Economics" Austrian Economics Seminar, New York University, April 1988; and Yale University Economic History Workshop, March 1988.

"The Six Neoclassical Theories of Production" Harvard Economics Seminar, October 1987.

"What is So Convincing About Econometrics?" Conference on Interpretative Economics, Wellesley College, June 1987.

"The Spurious Symmetry of Neoclassical Theories of Production and Consumption" Kress Society Lectures, Harvard Business School, September 1986; History of Economics Society, Boston, June 1987.

"The Metaphorical Persistence of the Neoclassical Field" Duke University Economics Department, October 1986.

"Metaphor and Neoclassical Theory" Université de Paris I--Sorbonne, June 1986.

"The Rhetoric of Mathematics in Economics" Conference on the Consequences of Economic Rhetoric, Wellesley College, April 1986.

"Mathematical Formalism and Economic Explanation" Syracuse University, Economics Department Lecture Series, March 1986.

"The Mutual Interpenetration of Economics and Physics" Princeton University Program in the History of Science Colloquia, February 1986; University of New Hampshire Economics Department, March 1986.

"Value as Substance and Value as Field" Yale University Economics Department, April 1985.

"Mathematical Formalism in the History of Economic Thought" Harvard Political Economy Lecture Series, April 1985.

## **PROFESSIONAL ACTIVITIES**

**Editorial Boards:** 

History of Political Economy, 1987-Social Concept, 1987-1994 Review of Political Economy, 1994-98 Journal of the History of Economic Thought, 1999-Journal of Institutional Economics, 2004-Cosmos & History, 2004-Journal of Economic Methodology, 2007-

#### **Official Duties:**

Elected to Executive Committee, HES, 1996-8 Committee to Select Editor of JHET, 1998

#### Elected Vice-President HES, 1999

#### Member:

American Economics Association American Association for the Advancement of Science History of Economics Society History of Science Society European Association for Evolutionary Political Economy Society for the Social Studies of Science International Network of Economic Methodology

**Referee:** National Science Foundation, National Endowment for the Humanities, University of Chicago Press, University of Michigan Press, Cambridge University Press, Oxford University Press, Princeton University Press, MIT Press, American Economic Review, Economic Journal, Economics and Philosophy, Cambridge Journal of Economics, Social Science History, Journal of Economic Behavior and Organization, Journal of Econometrics, European Journal of Political Economy, Journal of Institutional Economics, History of the Human Sciences, Journal of Economic Education, Philosophy of the Social Sciences, Perspectives in Science, Journal for the History of Ideas, Studies in the History and Philosophy of Science, Philosophy of Science, Science in Context, Social Studies of Science, Social Science and Medicine, IEEE Transactions on Evolutionary Computation.

#### Ph.D. Theses Chaired:

Economics:	Ellen O'Brien, 1998: Contested Accounts: The Evolution of the Meaning and Measurement of National Income
	Martin Stack, 1999: Liquid Bread: An Examination of the American Brewing Industry, 1865- 1940.
	Andres Rius, 1999: On the Rationality of Democratic Macroeconomic Policies
	Koye Somefun, 2000: Towards a Computational Complexity Approach to Markets.
	Vesna Straser, 2002: Three Essays on the Informational Consequences of Electronic Financial Markets.
	Edward Nik-Khah, 2004. Designs on the Mechanism: What happened with the FCC Spectrum Auctions.
	Kyu-Sang Lee. 2004. Rationality, Mind and Machine in the Laboratory: A Thematic History of Vernon Smith's Experimental Economics. [winner Joseph Dorfman award for best thesis, History of Economics Society, 2005]
	Thomas Scheiding, 2006, Paying to Publish: Using the Page Charge to Fund the Scholarly Journal
	Aida Ramos, 2007, The Enlightenment of Sir James Steuart
	Robert Van Horn, 2007, The Rise of the Chicago School of Law and Economics
History and Ph	nilosophy of Science:
2	Christopher McClellan, 1999: Science, Intellect and Social Evolution: A Study of Auguste Comte's Philosophy of Science.

### External Ph.D. Examiner:

Michael White, 2003: A Mechanization of Victorian Values: The Making of Jevons' Theory of Political Economy, Monash University.