

CURRICULUM VITAE

Richard N. Langlois

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304 Oak Hall
365 Fairfield Way
The University of Connecticut
Storrs, CT 06269-1063 USA
+1 (860) 821-0152
Richard.Langlois@UConn.edu
<http://langlois.uconn.edu>

Education.

Ph.D.	Stanford University	1981	Engineering-Economic Systems.
M.S.	Stanford University	1976	Engineering-Economic Systems.
M.S.	Yale University	1975	Astronomy.
B.A.	Williams College	1974	Physics (honors) and English literature (highest honors).

Academic Experience.

- 9/91-date **Professor of Economics**, University of Connecticut (and, by courtesy, Professor of Management and Professor of Agricultural and Resource Economics).
- 7/16-12/18 **Distinguished Professor**, School of Economic and Business Sciences, University of the Witwatersrand, Johannesburg, South Africa.
- 1/05-12/15 **Adjunct (honorary) Professor**, Department of Strategic Management and Globalization, Copenhagen Business School, Denmark.
- 9/02-6/03 **Senior Fellow**, Department of Management, The Wharton School, University of Pennsylvania.
- 10/87-9/91 **Associate Professor of Economics**, University of Connecticut.
- 9/83-9/87 **Assistant Professor of Economics**, University of Connecticut.
- 9/81-9/83 **Adjunct Assistant Professor**, Department of Economics, New York University.
Associate Research Scientist, C.V. Starr Center for Applied Economics, New York University.
Research Assistant Professor, Center for Science and Technology Policy, Graduate School of Business Administration, New York University.
- 9/80-9/81 **Instructor**, Department of Economics, New York University.
Assistant Research Scientist, Center for Science and Technology Policy, New York University.

Honors and Awards

- Named Distinguished Professor, School of Economic and Business Sciences, University of the Witwatersrand, Johannesburg, South Africa (2016-2018).
- Research Excellence Award (Social Sciences), College of Liberal Arts and Sciences, University of Connecticut, April 2015.
- Named a founding Honorary President of the World Interdisciplinary Network for Institutional Research (WINIR), June 2013.
- Inducted into the Connecticut Academy of Arts and Sciences, March 29, 2011.
- University of Connecticut Alumni Association 2007 Faculty Excellence Award in Research (Humanities/Social Sciences).
- Co-recipient of the 2006 Schumpeter Prize of the International Joseph A. Schumpeter Society.
- Provost's Research Excellence Award, University of Connecticut, 2006.
- Named Adjunct (Honorary) Professor in Strategy and Business History, Department of Management, Politics, and Philosophy, Copenhagen Business School, January 7, 2005, Copenhagen, Denmark. (Professorship transferred to the Department of Strategic Management and Globalization, 2011.)
- Grillo Family Faculty Award, Department of Economics, University of Connecticut: for research 2004 and for teaching 2011.
- Chancellor's Research Fellowship, 2002-2003.
- Voted "Most Appreciated Faculty Member" by the Association of Graduate Economics Students, Department of Economics, University of Connecticut, 1997-98 and 2000-01.
- Newcomer Award for the best paper in *Business History Review*, 1992.

Advisory and editorial positions.

- North American co-editor, *Journal of Institutional Economics*.
- Member, advisory board, Danish Research Unit in Industrial Dynamics (DRUID), Copenhagen Business School and Aalborg University (1996-2008).
- Member, Board of Management, International Joseph A. Schumpeter Society (2006-2010).
- Member, editorial board, *Journal of Evolutionary Economics*.
- Contributing Editor, *The Independent Review*.

Highlights of recent professional activities.

- Panelist, seminar on "Is Big Business Bad? The Law and Economics of Innovation, Entrepreneurship and Antitrust," International Center for Law & Economics, November 22, 2019, Ft. Lauderdale, Florida.
- Invited Participant, Conference on the "New Enlightenment," July 1-2, 2019, Edinburgh, Scotland.
- Keynote address, Scientific Workshop on the 4th Industrial Revolution: Business Model Innovation, Local Ecosystems and Global Competition, March 23, 2018, University of Trento, Italy.
- Keynote address, WINIR Symposium on "the Legacy of Ludwig Lachmann: Interdisciplinary Perspectives on Institutions, Agency and Uncertainty," April 11-13, 2017, Johannesburg, South Africa.
- Invited written evidence, UK House of Lords inquiry into online platforms and the EU Digital Single Market, January 2016.
- Invited speaker, International Workshop on Institutions and Economic Change, September, 20-21, 2013, Hitchin, Hertfordshire, UK.

- Director, Intensive Course on Modularity and Design for Innovation, Fourteenth Trento Summer School, Programme in Adaptive Economic Dynamics, University of Trento, July 1-12, 2013, Trento, Italy.
- Breakfast Keynote, “The Digital Inventor: How Entrepreneurs Compete on Platforms,” February 24, 2012, George Mason University School of Law, Arlington, VA.
- Sponsored talk on “Insights from Joseph Schumpeter for These Trying Economic Times,” November 8, 2011, BB&T Center for the Study of Capitalism, Wake Forest University, Winston-Salem, North Carolina.
- Keynote address, Conference on “Open Source, Innovation, and New Organizational Forms,” August 1, 2011, Institutions and Political Economy Group, University of the Witwatersrand, Johannesburg, South Africa.
- Invited speaker, conference on “Institutions and National Competitiveness,” August 9-11, 2010, Chung-Ang University, Seoul, South Korea.
- Invited speaker, conference on “The Future of Industry and Innovation in Asia: Firms, Networks and Alliances,” July 8-9, 2010, Stanford University.
- Named Visiting International Fellow, Advanced Institute of Management Research (UK), June 2010. Visited and lectured in Lancaster, London, and Edinburgh.
- Sponsored Lecture on Joseph Schumpeter, Engineering Program and Department of Economics, Union College, October 1, 2009, Schenectady, New York.
- Invited speaker, Symposium on Joseph Schumpeter: His Work and Legacy, Minda de Gunzburg Center for European Studies, April 18, 2008, Harvard University.
- Invited participant, International Workshop on Marshall and the Marshallians on Industrial Economics, Hitotsubashi University, March 15-16, 2008, Tokyo, Japan.
- Invited participant, Kyoto International Conference on Evolutionary Dynamics of Business Groups in Emerging Economies, Kyoto University and Doshisha University, November 26-28, 2007, Kyoto, Japan.
- Invited speaker, 7th International Symposium on Evolutionary Economics, “Evolutionary Theory, Self-Reproduction and Economic Development,” Institute of Economics, Russian Academy of Science, September 14-15, 2007, Pushchino, Russia.
- Keynote lecturer, international workshop on “Internal Organisation, Cooperative Relationships among Firms and Competitiveness,” January 19-20, 2007, Lucca, Italy.
- Invited lecturer, European Summer School in the New Institutional Economics, May 15-20, 2006, Cargèse, Corsica.
- Delivered two days of lectures on the economics of organization at Beijing Jiaotong University, March 22 and 24, 2005, Beijing, China.
- Director, Intensive course in institutional economics, Fifth Trento Summer School, Programme in Adaptive Economic Dynamics, University of Trento, June 28-July 9, 2004, Trento, Italy.
- Delivered the Graz Schumpeter Lectures, June 3-8, 2004, Graz, Austria.
- Invited participant, National Science Foundation workshop on “Science of Design: Software-Intensive Systems,” November 2-4, 2003, Airlie, Virginia.
- Presenter and panelist, Leverhulme conference on “Digital Transformations: ICT’s Impact on Productivity: Economics, Industries and Firms,” London Business School, October 1, 2003.
- Keynote speaker, international conference on “The Evolution of Institutions and the Knowledge Economy,” October 4-5, 2002, Debrecen, Hungary.
- Keynote speaker, Second Brazilian Seminar on the New Institutional Economics, March 21-23, 2001, Campinas, Brazil.
- Faculty speaker, first annual Social Science Research Council-MacArthur Foundation graduate student workshop, August, 7-8, 1998, Airlie, Virginia.

- Invited speaker, Economic Outlook Conference, Asia Pacific Economic Cooperation Forum (APEC), May 16, 1998, Xiamen, China.
- Keynote address, annual meeting of the European Association for Research in Industrial Economics (EARIE), September 5, 1995, Juan-les-Pins, France.
- Book launch of Langlois and Robertson, *Firms, Markets, and Economic Change*, Institute of Economic Affairs, June 29, 1995, London.

Publications.

Books and Monographs.

Richard N. Langlois, *The Dynamics of Industrial Capitalism: Schumpeter, Chandler, and the New Economy*. The Graz Schumpeter Lectures 2004. London: Routledge, 2007. Paperback edition, 2014. Japanese translation from Keio University Press. **Recipient of the 2006 Schumpeter Prize of the International Joseph A. Schumpeter Society.**

Richard N. Langlois, Tony Fu-Lai Yu, and Paul L. Robertson, eds., *Alternative Theories of the Firm*. Cheltenham: Edward Elgar, three volumes, 2003.

Raghu Garud, Arun Kumaraswamy, and Richard N. Langlois, eds., *Managing in the Modular Age: Architectures, Networks and Organizations*. Oxford: Blackwell Publishing, 2003. (Simultaneously in hardcover and paperback.)

Richard N. Langlois and Paul L. Robertson, *Firms, Markets, and Economic Change: A Dynamic Theory of Business Institutions*. London: Routledge, 1995. (Simultaneously in hardcover and paperback. Electronic edition 2002.) Spanish translation as *Empresas, Mercados y Cambio Económico*. Barcelona: Proyecto A Ediciones, 2000. Japanese translation, NTT Publishing, 2004.

Don Lavoie, Howard Baetjer, William Tulloh, and Richard Langlois, *Component Software: A Market Perspective on the Coming Revolution in Software Development*. Special Research Report, Patricia Seybold Group, Boston, April 1993.

Richard N. Langlois, Thomas A. Pugel, Carmela S. Haklisch, Richard R. Nelson, and William G. Egelhoff, *Microelectronics: An Industry in Transition*. London: Unwin Hyman, 1988.

Richard N. Langlois, ed., *Economics as a Process: Essays in the New Institutional Economics*. New York: Cambridge University Press, 1986. (Paperback edition, 1989.)

Herbert I. Fusfeld and Richard N. Langlois, eds., *Understanding R&D Productivity*. Elmsford, New York: Pergamon Press, 1982. Russian translation as *Éffektivnost' nauchnykh issledovaniï i razrabotok*. Moscow: Ékonomika, 1986.

Herbert I. Fusfeld, Richard N. Langlois, and Richard R. Nelson, *The Changing Tide: Federal Support of Civilian Sector R&D*. Center for Science and Technology Policy, Graduate School of Business Administration, New York University, November 1981.

Articles Published or in Press.

“The Corporation Is Not a Nexus of Contracts. It’s an iPhone,” to appear in Francesca Gagliardi and David Gindis, eds., *Institutions and Evolution of Capitalism: Essays in Honour of Geoffrey M. Hodgson*. Cheltenham: Edward Elgar, 2019.

“Hunting the Big Five: Twenty-first Century Antitrust in Historical Perspective,” *The Independent Review* **23**(3): 411-433 (Winter 2019).

“Fission, Forking, and Fine Tuning,” *Journal of Institutional Economics* **14**(6): 1049-1070 (December 2018).

“Stop Crying over Spilt Knowledge: A Critical Look at the Theory of Spillovers and Technical Change” (with Paul L. Robertson), *Journal of Public Finance and Public Choice* **33**(1): 63-80 (April 2018).

“The Institutional Approach to Economic History: Connecting the Two Strands,” *Journal of Comparative Economics* **45**(1): 201-212 (February 2016).

“The Institutional Revolution: a Review Essay,” *Review of Austrian Economics* **26**(4): 383-395 (2013).

“Insights from Joseph Schumpeter,” in G. Page West III and Robert M. Whaples, eds., *The Economic Crisis in Retrospect: Explanations by Great Economists*. Cheltenham: Edward Elgar, June 2013.

“The Austrian Theory of the Firm: Retrospect and Prospect,” *Review of Austrian Economics* **26**(3): 247–258 (2013).

“Business Groups and the Natural State,” *Journal of Economic Behavior & Organization* **88**: 14-26 (April 2013).

“Organizing the Electronic Century,” in Giovanni Dosi and Louis Galambos, eds., *The Third Industrial Revolution in Global Business*. New York: Cambridge University Press, March 2013.

“Design, Institutions, and the Evolution of Platforms,” *Journal of Law, Economics & Policy* **9**(1): 1-13 (Fall 2012).

“Marshall’s (Real) Influence on Present-day Industrial Economics,” in Tiziano Raffaelli, Tamotsu Nishizawa, and Simon Cook, eds., *Marshall, Marshallians and Industrial Economics*. London: Routledge, pp. 308-319 (2011).

“Economic Institutions and the Boundaries of Business Groups,” in Asli M. Colpan, Takashi Hikino, and James R. Lincoln, eds., *Oxford Handbook of Business Groups*. Oxford: Oxford University Press, 2010.

“Innovation Processes and Industrial Districts” (with Paul L. Robertson and David Jacobson), in Giacomo Becattini, Marco Bellandi, and Lisa De Propriis, eds., *The Elgar Handbook of Industrial Districts*. Cheltenham: Edward Elgar, 2008.

“Of Hackers and Hairdressers: Modularity and the Organizational Economics of Open-source Collaboration” (with Giampaolo Garzarelli), *Industry & Innovation* **15**(2): 125-143 (April 2008).

- “The Entrepreneurial Theory of the Firm and the Theory of the Entrepreneurial Firm,” *Journal of Management Studies* **44**(7) 1107-1124 (November 2007).
- “The Secret Life of Mundane Transaction Costs,” *Organization Studies* **27**(9): 1389–1410 (2006). (Invited “Peripheral Vision” feature.)
- “Competition through Institutional Form: the Case of Cluster Tool Standards,” in Shane Greenstein and Victor Stango, eds., *Standards and Public Policy*. New York: Cambridge University Press, 2006, pp. 60-86.
- “Chandler in a Larger Frame: Markets, Transaction Costs, and Organizational Form in History,” *Enterprise and Society* **5**(3): 355-375 (September 2004), reprinted in Walter A. Friedman and Geoffrey G. Jones, eds., *Business History*. Cheltenham: Edward Elgar, 2013.
- “Schumpeter and the Obsolescence of the Entrepreneur,” *Advances in Austrian Economics* **6**: 287-302 (2003).
- “Strategy as Economics versus Economics as Strategy,” *Managerial and Decision Economics* **24**(4): 283-290. (June-July 2003).
- “The Vanishing Hand: the Changing Dynamics of Industrial Capitalism,” *Industrial and Corporate Change* **12**(2): 351-385 (2003), reprinted in Mie Augier and David J. Teece, eds., *Fundamentals of Business Strategy*. London: Sage Publications, 2007. Italian translation in *Annali di storia dell'impresa* **14**: 59-110 (2003). Spanish translation in *Libertas* [Buenos Aires: ESEADE] **42**: 235-301 (May 2005). Chinese translation in the *Nanjing Business Review* **12**: 120-153 (2008).
- “Cognitive Comparative Advantage and the Organization of Work: Lessons from Herbert Simon’s Vision of the Future,” *Journal of Economic Psychology* **24**: 187-207 (2003).
- “Introduction to Alternative Theories of the Firm” (with Tony Fu-Lai Yu and Paul L. Robertson), in Richard N. Langlois, Tony Fu-Lai Yu, and Paul L. Robertson, eds., *Alternative Theories of the Firm*. Cheltenham: Edward Elgar, three volumes, 2003.
- “Introduction: Managing in the Modular Age: Architectures, Networks, and Organizations” (with Raghu Garud and Arun Kumaraswamy), in Raghu Garud, Arun Kumaraswamy, and Richard N. Langlois, eds., *Managing in the Modular Age: Architectures, Networks and Organizations*. Oxford: Blackwell, 2002, pp. 1-11.
- “Commentary on ‘Networks and Innovation in a Modular System’” (with Paul L. Robertson) in Raghu Garud, Arun Kumaraswamy, and Richard N. Langlois, eds., *Managing in the Modular Age: Architectures, Networks and Organizations*. Oxford: Blackwell Publishers, 2002, pp. 101-113.
- “Modularity in Technology and Organization,” *Journal of Economic Behavior and Organization* **49**(1): 19-37 (September 2002), reprinted in Nicolai Foss and Peter Klein, eds., *Entrepreneurship and the Theory of the Firm*. Cheltenham: Edward Elgar, 2002, and in Kurt Dopfer and Jason Potts, eds., *The New Evolutionary Economics*. Cheltenham: Edward Elgar, 2014.
- “Digital Technology and Economic Growth: the History of Semiconductors and Computers,” in Benn Steil, David Victor, and Richard R. Nelson, eds., *Technological Innovation and Economic Performance*. Princeton: Princeton University Press for the Council on Foreign Relations, 2002, pp. 265-284.

- “Kirznerian Entrepreneurship and the Nature of the Firm,” *Journal des Economistes et des Etudes Humaines* 12(1), March 2002.
- “Knowledge and Meliorism in the Evolutionary Theory of F. A. Hayek” (with Müfit Sabooglu), in Kurt Dopfer, ed., *Evolutionary Economics: Program and Scope*. Dordrecht: Kluwer Academic Publishers, 2001, pp. 231-251.
- “Organizations and Language Games” (with Roger Koppl), *Journal of Management and Governance* 5(3-4): 287-305 (2001).
- “Technological Standards, Innovation, and Essential Facilities: Toward a Schumpeterian Post-Chicago Approach,” in Jerry Ellig, ed., *Dynamic Competition and Public Policy: Technology, Innovation, and Antitrust Issues*. New York: Cambridge University Press, 2001, pp. 193-228.
- “Standards, Modularity, and Innovation: the Case of Medical Practice” (with Deborah A. Savage), in Raghu Garud and Peter Karnøe, eds., *Path Dependence and Path Creation*. Hillsdale: Lawrence Erlbaum, 2001, pp. 149-168.
- “Knowledge, Consumption, and Endogenous Growth,” *Journal of Evolutionary Economics* 11(1): 77-93 (January 2001), reprinted in Ulrich Witt, ed., *Escaping Satiation: the Demand Side and Economic Growth*. Berlin: Springer-Verlag, 2001, pp. 97-113. Translated into Russian and reprinted in Vladimir Maevsky, ed., *Selected Articles from Journal of Evolutionary Economics*. Moscow: Editions “Delo” for the Institute of Economics, Russian Academy of Science.
- “Strategy and Circumstance: the Response of American Firms to Japanese Competition in Semiconductors, 1980-1995” (with W. Edward Steinmueller), *Strategic Management Journal* 21: 1163-1173 (2000), reprinted in Constance E. Helfat, ed., *The Strategic Management Society Blackwell Handbook of Organizational Capabilities*. Oxford: Blackwell Publishing, 2003, pp. 326-340.
- “Capabilities and Vertical Disintegration in Process Technology: The Case of Semiconductor Fabrication Equipment,” in Nicolai J. Foss and Paul L. Robertson, eds., *Resources, Technology, and Strategy*. London: Routledge, 2000, pp. 199-206.
- “The Evolution of Competitive Advantage in the Worldwide Semiconductor Industry, 1947-1996” (with W. Edward Steinmueller), in David C. Mowery and Richard R. Nelson, eds., *The Sources of Industrial Leadership*. New York: Cambridge University Press, 1999, pp. 19-78.
- “Scale, Scope, and the Reuse of Knowledge,” in Sheila C. Dow and Peter E. Earl, eds., *Economic Organization and Economic Knowledge: Essays in Honour of Brian J. Loasby*. Cheltenham: Edward Elgar, 1999, pp. 239-254.
- “The Coevolution of Technology and Organization in the Transition to the Factory System,” in Paul L. Robertson, ed., *Authority and Control in Modern Industry*. London: Routledge, 1999, pp. 45-72.
- “Capabilities and Governance: the Rebirth of Production in the Theory of Economic Organization” (with Nicolai J. Foss), *Kyklos* 52(2): 201-218 (1999), reprinted in Richard N. Langlois, Tony Fu-Lai Yu, and Paul L. Robertson, eds., *Alternative Theories of the Firm*. Cheltenham: Edward Elgar, 2002, Volume I, and in John C. Wood and Michael C. Wood, eds., *Alfred Chandler: Critical Evaluations*. London: Routledge, 2007.

- “The Organization of Consumption” (with Metin M. Coşgel), in Marina Bianchi, ed., *The Active Consumer: Novelty and Surprise in Consumer Choice*. London: Routledge, 1998, pp. 107-121.
- “Personal Capitalism as Charismatic Authority: the Organizational Economics of a Weberian Concept,” *Industrial and Corporate Change* **7**: 195-214 (1998).
- “Schumpeter and Personal Capitalism,” in Gunnar Eliasson and Christopher Green with Charles McCann, eds., *Microfoundations of Economic Growth: A Schumpeterian Perspective*. Ann Arbor: University of Michigan Press, 1998, pp. 57-82.
- “Capabilities and the Theory of the Firm,” in Nicolai J. Foss and Brian J. Loasby, eds., *Economic Organization, Capabilities and Co-ordination: Essays in Honour of G.B. Richardson*. London: Routledge, 1998, pp. 183-203.
- “Rule-following, Expertise, and Rationality: a New Behavioral Economics?” in Kenneth Dennis, ed., *Rationality in Economics: Alternative Perspectives*. Dordrecht: Kluwer Academic Publishers, 1998, pp. 55-78, reprinted in Massimo Egidi and Salvatore Rizzello, eds., *Cognitive Economics*. Cheltenham: Edward Elgar, 2004.
- “Transaction Costs, Production Costs, and the Passage of Time,” in Steven G. Medema, ed., *Coasean Economics: Law and Economics and the New Institutional Economics*. Dordrecht: Kluwer Academic Publishers, 1997, pp. 1-21.
- “Cognition and Capabilities: Opportunities Seized and Missed in the History of the Computer Industry,” in Raghu Garud, Praveen Nayar, and Zur Shapira, eds., *Technological Innovation: Oversights and Foresights*. New York: Cambridge University Press, 1997, pp. 71-94.
- “Cognition, Redundancy, and Learning in Organizations” (with Pierre Garrouste), *Economics of Innovation and New Technology* **4**: 287-299 (1997).
- “Spinning Off and Spinning On(?): The Federal Government Role in the Development of the U.S. Computer Software Industry” (with David C. Mowery), *Research Policy* **25**: 947-966 (1996).
- “The Federal Government Role in the Development of the American Software Industry: An Assessment” (with David C. Mowery), chapter 3 in David C. Mowery, ed., *The International Computer Software Industry: A Comparative Study of Industrial Evolution and Structure*. New York: Oxford University Press, 1996.
- “Do Firms Plan?” *Constitutional Political Economy* **6**(3): 247-261 (1995). Author’s translation into French as “La Firme planifie-t-elle?” reprinted in Pierre Garrouste, ed., *Les frontières de la firme*, Paris: Economica, 1997, pp. 61-80. Also translated into Spanish and reprinted as “¿Planifican las empresas?” *Libertas* [Buenos Aires: ESEADE] **26**: 47-70 (May 1997).
- “Capabilities and Coherence in Firms and Markets,” in Cynthia A. Montgomery, ed., *Resource-based and Evolutionary Theories of the Firm: Towards a Synthesis*. Dordrecht: Kluwer Academic Publishers, 1995, pp. 71-100.
- “Innovation, Networks, and Vertical Integration” (with Paul L. Robertson), *Research Policy* **24**: 543-562 (July 1995), reprinted in John Storey, ed., *The Management of Innovation*. Cheltenham: Edward Elgar, 2004.

- “Institutions, Inertia, and Changing Industrial Leadership” (with Paul L. Robertson), *Industrial and Corporate Change* **3**(2): 359-378 (1994).
- “When Do Ideas Matter? A Study in the Natural Selection of Social Games” (with Roger Koppl), *Advances in Austrian Economics*, Volume 1, 1994, pp. 81-104.
- “What Is Evolutionary Economics?” (with Michael J. Everett), chapter 2 in Lars Magnusson, ed., *Evolutionary and Neo-Schumpeterian Approaches to Economics*. Dordrecht: Kluwer Academic Publishing, 1994, pp. 11-47.
- “Business Organization as a Coordination Problem: Toward A Dynamic Theory of the Boundaries of the Firm” (with Paul L. Robertson), *Business and Economic History* **22**(1): 31-41 (Fall 1993), reprinted in Richard N. Langlois, Tony Fu-Lai Yu, and Paul L. Robertson, eds., *Alternative Theories of the Firm*. Cheltenham: Edward Elgar, 2002, Volume III.
- “Frank Knight on Risk, Uncertainty, and the Firm: A New Interpretation” (with Metin Coşgel), *Economic Inquiry* **31**: 456-465 (July 1993).
- “Optimization, Rule Following, and the Methodology of Situational Analysis” (with László Csontos), in Uskali Mäki, Bo Gustafsson, and Christian Knudsen, eds., *Rationality, Institutions, and Economic Methodology*. London: Routledge, 1993, pp. 113-132.
- “External Economies and Economic Progress: The Case of the Microcomputer Industry,” *Business History Review* **66**(1): 1-50 (Spring 1992), reprinted in William Lazonick and William Mass, eds., *Organizational Capability and Competitive Advantage*. Cheltenham: Edward Elgar (1995). **(Winner of the Newcomen Award for the best article in *Business History Review* in 1992.)**
- “Modularity, Innovation, and the Firm: the Case of Audio Components” (with Paul L. Robertson), in Frederick M. Scherer and Mark Perlman, eds., *Entrepreneurship, Technological Innovation, and Economic Growth: Studies in the Schumpeterian Tradition*. Ann Arbor: University of Michigan Press, 1992, pp. 321-342.
- “Complexity, Genuine Uncertainty, and the Theory of Organization” (with Michael J. Everett), *Human Systems Management* **11**(2): 67-75 (1992).
- “Networks and Innovation in a Modular System: Lessons from the Microcomputer and Stereo Component Industries” (with Paul L. Robertson), *Research Policy* **21**(4): 297-313 (1992), reprinted in Raghu Garud, Arun Kumaraswamy, and Richard Langlois, eds., *Managing the Modular Age: Architectures, Networks and Organizations*. Oxford: Blackwell Publishers, 2002, pp. 78-100, and in Shane Greenstein, ed., *Computing*. Cheltenham: Edward Elgar, 2006.
- “Transaction-Cost Economics in Real Time,” *Industrial and Corporate Change* **1**(1): 99-127 (1992), reprinted in Nicolai J. Foss, ed., *Resources, Firms, and Strategies: A Reader in the Resource-Based Perspective*. Oxford: Oxford University Press, 1997, pp. 286-305, and in Mie Augier and David Teece, eds., *Fundamentals of Business Strategy*. London: Sage Publications, 2007.
- “Orders and Organizations: Toward an Austrian Theory of Social Institutions,” in Bruce Caldwell and Stephan Böhm, eds., *Austrian Economics: Tensions and New Directions*. Dordrecht: Kluwer Academic Publishers, 1992, pp. 165-83.

“The Capabilities of Industrial Capitalism,” *Critical Review* 5(4): 513-530 (Fall 1991).

“Fritz Machlup and Marginalism: A Reevaluation” (with Roger Koppl), *Methodus* 3(2): 86-102 (December 1991).

“Creating External Capabilities: Innovation and Vertical Disintegration in the Microcomputer Industry,” *Business and Economic History* 19: 93-102 (1990).

“Contract, Competition, and Efficiency,” *Brooklyn Law Review* 55(3): 831-845 (Fall 1989).

“Explaining Vertical Integration: Lessons from the American Automobile Industry” (with Paul L. Robertson), *Journal of Economic History* 49(2): 361-375 (June 1989), reprinted in Mark Casson, ed., *The Theory of the Firm*. Cheltenham: Edward Elgar, 1996, and in Nicolai J. Foss, ed., *The Theory of the Firm: Critical Perspectives*. London: Routledge, 1999.

“What Was Wrong with the ‘Old’ Institutional Economics? (And What Is Still Wrong with the ‘New?’)” *Review of Political Economy* 1(3): 272-300 (November 1989). Translated into Danish and reprinted in Christian Knudsen, ed., *Institutionalism i Samfundsvidenskaberne*. Copenhagen: Samfundslitteratur, 1989, pp. 9-43. Also reprinted in Wojciech W. Gasparski, J. Lee Auspitz, Marek K. Mlicki, and Klemens Szaniawski, eds., *Praxiologies and the Philosophy of Economics*. New Brunswick: Transaction Books, 1992, pp. 389-420, and in Sandye Gloria-Palermo, Peter Boettke, and Stephan Böhm, eds., *Modern Austrian Economics*, Volume 3, London: Pickering and Chatto, 2002.

“Economic Change and the Boundaries of the Firm,” *Journal of Institutional and Theoretical Economics* 144(4): 635-657 (1988), reprinted in Bo Carlsson, ed., *Industrial Dynamics: Technological, Organizational, and Structural Changes in Industries and Firms*. Dordrecht: Kluwer Academic Publishers, 1989; in Geoffrey Hodgson, ed., *The Economics of Institutions*. Cheltenham: Edward Elgar, 1993; and in Richard N. Langlois, Tony Fu-Lai Yu, and Paul L. Robertson, eds., *Alternative Theories of the Firm*. Cheltenham: Edward Elgar, 2002, Volume III.

“Are Economic Models Applicable to Politics?” *Economia delle Scelte Pubbliche/Journal of Public Finance and Public Choice* 1988(2): 83-93 (Summer 1988).

“The New Institutional Economics: An Introductory Essay,” in R. N. Langlois, ed., *Economics as a Process: Essays in the New Institutional Economics*. New York: Cambridge University Press, pp. 1-25 (1986). (Translated into Japanese for a volume edited by Ken-ichi Imai and published by NTT Shuppan.)

“Rationality, Institutions, and Explanation,” in R. N. Langlois, ed., *Economics as a Process: Essays in the New Institutional Economics*. New York: Cambridge University Press, pp. 225-55 (1986), reprinted in Sandye Gloria-Palermo, Peter Boettke, and Stephan Böhm, eds., *Modern Austrian Economics*, Volume 3, London: Pickering and Chatto (2002), and in Massimo Egidi and Salvatore Rizzello, eds., *Cognitive Economics*. Cheltenham: Edward Elgar, 2004.

“Coherence and Flexibility: Social Institutions in a World of Radical Uncertainty,” in Israel Kirzner, ed., *Subjectivism, Intelligibility, and Economic Understanding: Essays in Honor of the Eightieth Birthday of Ludwig Lachmann*. New York: New York University Press, pp. 171-191 (1986), reprinted in Sandye Gloria-Palermo, Peter Boettke, and Stephan Böhm, eds., *Modern Austrian Economics*, Volume 3, London: Pickering and Chatto (2002).

“Knowledge and Rationality in the Austrian School: An Analytical Survey,” *Eastern Economic Journal* **9**(4): 309-330 (1985), reprinted in John Cunningham Wood and Ronald N. Woods, eds., *Friedrich A. Hayek: Critical Assessments*. Volume 4. Critical Assessments of Contemporary Economists. London: Routledge, pages 118-40 (1991), and in Massimo Egidi and Salvatore Rizzello, eds., *Cognitive Economics*. Cheltenham: Edward Elgar, 2004.

“From the Knowledge of Economics to the Economics of Knowledge: Fritz Machlup on Methodology and on the ‘Knowledge Society,’” *Research in the History of Economic Thought and Methodology* **3**: 225-235 (1985).

“Internal Organization in a Dynamic Context: Some Theoretical Considerations,” in M. Jussawalla and H. Ebenfield, eds., *Communication and Information Economics: New Perspectives*. Amsterdam: North-Holland, pp. 23-49 (1984).

“Industrial Innovation Policy: Lessons from American History” (with Richard R. Nelson), *Science* **219**: 814-818 (18 February 1983), reprinted in Thomas E. Petri *et al.*, eds., *National Industrial Policy: Solution or Illusion?* Boulder: Westview Press, pp. 85-96 (1984), and in Michael L. Tushman and William L. Moore, eds., *Readings in the Management of Innovation*, 2nd ed., Cambridge: Ballinger, pp. 661-669 (1988).

“Systems Theory, Knowledge, and the Social Sciences,” in Fritz Machlup and Úna Mansfield, eds., *The Study of Information: Interdisciplinary Messages*, New York: John Wiley, pp. 581-600 (1983).

“The Market Process: An Evolutionary View,” *Market Process* **1**(2), Summer 1983, reprinted in Peter J. Boettke and David L. Prychitko, eds., *The Market Process: Essays in Contemporary Austrian Economics*. Cheltenham: Edward Elgar, 1994.

“Systems Theory and the Meaning of Information,” *Journal of the American Society for Information Science* **33**(6): 395-399 (November 1982).

“Austrian Economics as Affirmative Science,” in Israel M. Kirzner, ed., *Method, Process, and Austrian Economics: Essays in Honor of Ludwig von Mises*, Lexington, MA: D.C. Heath, pp. 75-84 (1982).

“Cost-Benefit Analysis, Environmentalism, and Rights,” *The Cato Journal* **2**(1): 279-300 (Spring 1982).

Book reviews and shorter pieces:

“Expertise, the Administrative State, and Corporate Governance: a Comment on Koppl,” *Cosmos + Taxis* **7**(1+2): 30-38 (2019).

“Institutions for Getting Out of the Way: a Comment on McCloskey,” *Journal of Institutional Economics* **12**(1): 53-61 (2016).

“Comment on ‘Technological Revolutions and the Evolution of Industrial Structures’ (by Giovanni Dosi, Alfonso Gambardella, Marco Grazzi, and Luigi Orsenigo),” *Capitalism and Society* **3**(2): Article 7 (2008).

Book review of Thomas K. McCraw, *Prophet of Innovation: Joseph Schumpeter and Creative Destruction*, EH.Net Economic History Services, November 14, 2007.

“Industrial Economics,” entry for *The Elgar Companion to Alfred Marshall*, edited by Tiziano Raffaelli, Marco Dardi, and Giacomo Becattini. Cheltenham: Edward Elgar, 2006, pp. 658-663.

Entry on Fritz Machlup, in Ross Emmett, ed., *Biographical Dictionary of American Economists*. London: Continuum International Publishing, 2006.

Entry on “Information,” in Jens Beckert and Milan Zafirovsky, eds., *International Encyclopedia of Economic Sociology*. London: Routledge, 2005.

“Comment on ‘Group Selection and Methodological Individualism: Compatible and Complementary’ by Douglas Glen Whitman,” *Advances in Austrian Economics* 7:261-265 (2004)

Entry on the Computer Industry for the *Oxford Encyclopedia of Economic History* (Joel Mokyr, editor), 2003.

“Strategy and the Market Process: Introduction to the Special Issue,” *Managerial and Decision Economics* 22: 163-168 (2001), special issue on “Strategy and the Market Process” (R. N. Langlois, guest editor).

Foreword to Tony Fu-Lai Yu, *Firms, Governments, and Economic Change: An Entrepreneurial Perspective*. Cheltenham: Edward Elgar, 2001.

Entry on Rationality in Economics, *International Encyclopedia of Business & Management*, 2nd edition. London: Thompson Learning, 2001.

Biographical entry in Mark Blaug, ed., *Who's Who in Economics*. Cheltenham: Edward Elgar, third edition, 1999.

Entry on the computer industry in Robert Ferrell and Joan Hoff, eds., Supplement to Scribner's *Dictionary of American History*. Lakeville, CT: American Reference Publishing Co., 1996.

Entries on “The New Institutional Economics,” “The Boundaries of the Firm,” and “Risk and Uncertainty” for Peter J. Boettke, ed., *The Elgar Companion to Austrian Economics*. Cheltenham: Edward Elgar, 1994.

“Bounded Rationality and Behavioralism: A Clarification and Critique,” invited note for a symposium in *The Journal of Institutional and Theoretical Economics* 146(4): 691-695 (December 1990), reprinted in Claude Ménard, ed., *The International Library of the New Institutional Economics*. Cheltenham: Edward Elgar, in preparation.

“On the Reception of Noise: A Rejoinder,” in Fritz Machlup and Úna Mansfield, eds., *The Study of Information: Interdisciplinary Messages*. New York: John Wiley, pp. 631-637 (1983).

“Can Mathematical Systems Be Concrete?” in Fritz Machlup and Úna Mansfield, eds., *The Study of Information: Interdisciplinary Messages*. New York: John Wiley, pp. 551-554 (1983).

Eighteen book reviews in eleven journals, including *Journal of Economic Literature* (5), *Journal of Economic Behavior and Organization* (3), *The Public Interest* (2), *Southern Economic Journal*, *Journal of Economic History*, *Business History Review*, *Journal of Institutional and Theoretical Economics*, *Economics and Philosophy*, *Constitutional Political Economy*, *Managerial and Decision Economics*, and *Public Choice*.

Unpublished.

“R&D and the American Corporation before World War II,” Working Paper 2019-19, Department of Economics, University of Connecticut, November 2019.

“The Fisher Body Case and Organizational Economics,” Working Paper 2018-13, Department of Economics, University of Connecticut, July 2018.

“Antitrust: Where Did It Come from and What Did It Mean?” Working Paper 2016-07, Department of Economics, University of Connecticut, September 2016.

“Bursting Boilers and the Federal Power Redux: How Effective Was Federal Regulation on the Western Rivers?” (with David J. Denault and Samson M. Kimenyi). Paper presented at the Economic History Seminar, Northwestern University, May 26, 1994.

“Uncertainty and the Origin of Predictable Behavior: Heiner Reexamined” (with Thomas J. Miceli), Working Paper 91-1500, Department of Economics, University of Connecticut, 1991.

“Science, Technology, and Public Policy: Lessons from the Classics,” paper presented at the American Economic Association annual meeting, December 28, 1986, New Orleans.

“Entrepreneurship and Knowledge,” Research Report 82-12, C. V. Starr Center for Applied Economics, New York University, June 1982.

“Subjective Probability and Subjective Economics,” Research Report 82-09, C. V. Starr Center for Applied Economics, New York University, March 1982.

“Why Are There Firms?” Research Report 81-30, C. V. Starr Center for Applied Economics, New York University, March 1981.