

Seminar (MA)

Evolutionary Economics

Professor Dr. Guido Bünstorf

Winter Term 2015-16

Time and Location: Monday, 16.00-18.00 (first session: October 19, 2015); Room 1108 (NP 5)

6 Credits: **MSc Economic Behavior and Governance** (PO 2013: Modules 5, 2a & 2b; PO 2012: Module 2 & 5); **MA Wirtschaftswissenschaften** (Profile 4); **MA Wirtschaft, Psychologie und Management** (Modules 7 & 8); **MA Business Studies** (PO 2013: Modules: VWL-IIM-B1, VWL-DiMark-B1; PO 2012: Module: IIM3/ DiMark 3)

Scope and Format:

Evolutionary economics is a general heterodox approach to economics. It encompasses a number of contributions that emphasize development processes and often draw on evolutionary theories from biology. Starting from classic works by Veblen, Schumpeter and others, evolutionary economists have produced a substantial body of theoretical and empirical work addressing a wide variety of economic topics including, but not limited to, innovation and growth. In this course, we will discuss both the conceptual foundations of evolutionary economics and selected applications to specific economic issues. **WARNING:** This will be a reading-intensive course. We expect all participants to have read the **reading assignments** for each session and to actively participate in the classroom discussion. In addition, each participant will give an introductory presentation about one of the course topics. This presentation should also take the **complementary reading** for the respective session into account (where provided). **To keep the workload manageable, written assignments will be kept to a minimum.**

Credit requirements:

- Reading of the assigned readings **prior** to each session
- Active participation in the classroom discussion
- 1 oral presentation of 15-20 minutes
- 1 term paper related to the presentation topic (about 8 text pages; due date: March 31, 2016)

Background reading:

- Nelson, R. R. (1995) "Recent evolutionary theorizing about economic change," *Journal of Economic Literature*, 33: 48–90.
- Section 1 of Bünstorf, G. (2012): "Introduction", in: G. Bünstorf (ed.): *Economics, Organization and Economic Behavior*, Cheltenham: Edward Elgar, pp. 1-6.

Registration and Selection of Seminar Topics

Open immediately / by e-mail to buenstorf@uni-kassel.de.

Course Schedule

For each topic an article or book chapter is provided as mandatory reading. We expect all participants to have read this article / chapter ahead of the presentation date. Presentations and essays are expected to use the introductory readings (and, where provided, also the complementary readings) as a starting point for discussing the topic. Independent searches of the literature and the use of other literature will be required

Part A: Intellectual Roots

Week 1 (October 19, 2015): Introduction and Organizational Issues

No reading assignment

Week 2 (October 26, 2015): Thorstein Veblen

Reading assignment for all students: Veblen, T. (1898): "Why Is Economics not an Evolutionary Science?" *Quarterly Journal of Economics*, 12: 373-397.

Topic 1: Founding Fathers (1): Thorstein Veblen

Introductory reading: Veblen, T. (1898): "Why Is Economics not an Evolutionary Science?" *Quarterly Journal of Economics*, 12: 373-397.

Topic 2: Thorstein Veblen: A Present-Day Perspective

Introductory reading: Cordes, C. (2007): "The Role of 'Instincts' in the Development of Corporate Cultures", *Journal of Economic Issues*, 41: 747-764.

Week 3 (November 2, 2015): Joseph Schumpeter

Reading assignment for all students: Chapter 2 of Schumpeter, J. A. (1911/1934): *The Theory of Economic Development*, Cambridge MA: Harvard Univ. Press.

Topic 3: Founding Fathers (2a): Joseph Schumpeter's Early Work

Introductory reading: Chapter 2 ("The Fundamental Phenomenon of Economic Development") of: Schumpeter, J. A. (1911/1934): *The Theory of Economic Development*, Cambridge MA: Harvard Univ. Press.

Topic 4: Founding Fathers (2b): Joseph Schumpeter's Late Work

Introductory reading: Chapters 7 ("The Process of Creative Destruction") and 8 ("Monopolistic Practices") of: Schumpeter, J. A. (1911/1934): *The Theory of Economic Development*, Cambridge MA: Harvard Univ. Press.

Week 4 (November 9, 2015): Hayek and Simon

Reading assignment for all students: Hayek, F.A. (1988): "Between Instinct and Reason", in F. A. Hayek: *The Fatal Conceit: The Errors of Socialism*, London: Routledge, pp. 11-28.

Topic 5: Founding Fathers (3): Friedrich von Hayek

Introductory reading: Hayek, F.A. (1988): "Between Instinct and Reason", in F. A. Hayek: *The Fatal Conceit: The Errors of Socialism*, London: Routledge, pp. 11-28.

Complementary reading: Viktor J. Vanberg (2014): "Darwinian paradigm, cultural evolution and human purposes: on F.A. Hayek's evolutionary view of the market", *Journal of Evolutionary Economics* 24(1): 35-58

Topic 6: Founding Fathers (4): Herbert Simon

Introductory reading: Chapter 2 of Simon, H. A. (1996): *The Sciences of the Artificial*, 3rd edition, Cambridge MA and London: MIT Press.

Complementary reading: Sections I-III of Winter, S.G. (1971): "Satisficing, Selection, and The Innovating Remnant", *Quarterly Journal of Economics*, 85: 237-261.

Week 5 (November 16, 2015):

No class – no reading assignment

Part B: The Neo-Schumpeterian Approach to Evolutionary Economics

Week 6 (November 23, 2015): Path Dependence and Lock-In

Reading assignment for all students: Arthur, W. B. (1989): "Competing Technologies, Increasing Returns, and Lock-In by Historical Events", *Economic Journal*, 99: 116-131.

Topic 7: Path Dependence and Lock-In

Introductory reading: Arthur, W. B. (1989): "Competing Technologies, Increasing Returns, and Lock-In by Historical Events", *Economic Journal*, 99: 116-131.

Topic 8: Path Dependence: Examples and Processes

Introductory reading: Dobusch, L. & Schüßler, E. (2013): "Theorizing path dependence: a review of positive feedback mechanisms in technology markets, regional clusters, and organizations", *Industrial and Corporate Change*, 22(3): 617-647.

Week 7 (November 30, 2015): Organizational Routines

Reading assignment for all students: Chapter 5 of Nelson, R. R. and S. G. Winter (1982): *An Evolutionary Theory of Economic Change*, Cambridge MA and London: Belknap Press of Harvard University Press.

Topic 9: Routines as Genes of the Organization?

Introductory reading: Chapter 5 of Nelson, R. R. and S. G. Winter (1982): *An Evolutionary Theory of Economic Change*, Cambridge MA and London: Belknap Press of Harvard University Press.

Complementary reading: Becker, M. C. (2004): "Organizational routines: a review of the literature", *Industrial and Corporate Change*, 13: 643-677.

Topic 10: Replication of Routines

Introductory reading: Winter, S.G. and G. Szulanski (2001): "Replication as Strategy", *Organization Science*, 12: 730-743.

Week 8 (December 7, 2015): Replicator Dynamics and Agent-Based Modeling

Reading assignment for all students: Cantner, U. and J. J. Krueger (2008): "Micro-heterogeneity and aggregate productivity development in the German manufacturing sector", *Journal of Evolutionary Economics*, 18(2): 119-133.

Topic 11: Replicator Dynamics and Market Competition

Introductory reading: Cantner, U. and J. J. Krueger (2008): "Micro-heterogeneity and aggregate productivity development in the German manufacturing sector", *Journal of Evolutionary Economics*, 18(2): 119-133.

Topic 12: Agent-Based Modeling of Innovation

Introductory reading: Dawid, H. (2006): "Agent-based Models of Innovation and Technological Change", in: L. Tesfatsion and K. L. Judd (eds.): *Handbook of Computational Economics*, vol. 2, pp. 1235-1275.

Week 9 (December 14, 2015): Inheritance and Co-Evolution

Reading assignment for all students: Klepper, S. (2001): "Employee startups in high-tech industries," *Industrial and Corporate Change*, 10(3): 639-674. **(IN PARTICULAR; NOTE THE DISCUSSION IN SECTION 4.2)**

Topic 13: Inheritance of Routines through Entrepreneurship?

Introductory reading: Klepper, S. (2001): "Employee startups in high-tech industries," *Industrial and Corporate Change*, 10(3): 639-674.

Topic 14: Co-Evolution of Industries and their Environment

Introductory reading: Murmann, J. P. (2013): "The coevolution of industries and important features of their environments", *Organization Science*, 24: 58-78.

Complementary reading: Nelson. R. R. (1994): "The Co-evolution of Technology, Industrial Structure, and Supporting Institutions", *Industrial and Corporate Change*, 3(1): 47-63.

Part C: Biological Heritage and Economic Behavior

Week 10 (January 11, 2016): How to Make Use of Biology in Evolutionary Economics?

Reading assignment for all students: Hodgson, G.M. (2002): "Darwinism in economics: from analogy to ontology", *Journal of Evolutionary Economics*, 12: 259-281, and: Witt, U. (2004): "On the proper interpretation of 'evolution' in economics and its implications for production theory", *Journal of Economic Methodology*, 11(2): 125-146.

Topic 15: Darwinism as a General Model of Evolution?

Introductory reading: Hodgson, G.M. (2002): "Darwinism in economics: from analogy to ontology", *Journal of Evolutionary Economics*, 12: 259-281.

Topic 16: The Naturalistic Approach to Evolutionary Economics

Introductory reading: Witt, U. (2004): "On the proper interpretation of 'evolution' in economics and its implications for production theory", *Journal of Economic Methodology*, 11(2): 125-146.

Week 11 (January 18, 2016): Consumer Learning and Sustainability

Reading assignment for all students Witt, U. (2001): "Learning to consume –a theory of wants and the growth of demand", *Journal of Evolutionary Economics*, 11: 23–36.

Topic 17: Innate Wants, Learning and the Evolution of Consumer Behavior

Introductory reading: Witt, U. (2001): "Learning to consume –a theory of wants and the growth of demand", *Journal of Evolutionary Economics*, 11: 23–36.

Topic 18: Consumer Learning and the Transition to Sustainable Consumption

Introductory reading: Witt, U. (2011): "The dynamics of consumer behavior and the transition to sustainable consumption patterns, *Environmental Innovation and Societal Transitions*, 1(1): 109-114.

Complementary reading: Buenstorf, G. and C. Cordes (2008): "Can sustainable consumption be learned? A model of cultural evolution", *Ecological Economics*, 67(4): 646-657.

Week 12 (January 25, 2016): Strategic Interaction and Economic Policy

Reading assignment for all students: Witt, U. (2003): “Economic policy making in evolutionary perspective”, *Journal of Evolutionary Economics*, 13: 77–94.

Topic 19: Strategic Interaction: The Indirect Evolutionary Approach

Introductory reading: Huck, S. and J. Oechssler (1999): “The indirect evolutionary approach to explaining fair allocations”, *Games and Economic Behavior*, 28(1): 13-24 (EXCEPT Section 4)

Topic 20: Economic Policy

Introductory reading: Witt, U. (2003): “Economic policy making in evolutionary perspective”, *Journal of Evolutionary Economics*, 13: 77–94.

Week 13 (February 1, 2016): Welfare Economics

Reading assignment for all students: Schubert, C. (2012): “Is novelty always a good thing? Towards an evolutionary welfare economics”, *Journal of Evolutionary Economics*, 22: 585–619.

Topic 21: Innovation and Welfare

Introductory reading: Schubert, C. (2012): “Is novelty always a good thing? Towards an evolutionary welfare economics”, *Journal of Evolutionary Economics*, 22: 585–619.

Topic 22: An Evolutionary Analysis of Policy Nudges

Introductory reading: Binder, M. (2014): “Should evolutionary economists embrace libertarian paternalism?” *Journal of Evolutionary Economics*, 24(3), 515-539.

Week 14 (February 8, 2015): Backup Date – Concluding Discussion

No reading assignment