Ec717A
Spring 2024
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Social Learning in Economics

The course is in two parts. The first focuses on social learning; the second is taught by Krishna Desaratha will focus on networks. The reading list for the first part may be amended during the course. Grades are independent for the two halves and their average will be the grade for the entire course. For the first half, the evaluation is based on problem sets (1/3) and an assignment which is the construction of a problem set from a published article. Such a problem set could be used as a template for a discussion of the paper in a conference.

Ec 717A will use chapters in the first part of *Rational Herds: Economic Models of Social Learning* (CUP 2004), hereafter RH.

Introduction

RH, Sections 2.1-2.4, 3.1-3.3 (posted on the website).

* Vives, Xavier. 1993. "How fast do rational agents learn?" *Review of Economic Studies*, 60: 329-347.

Learning from the actions others, cascades and herds

RH 4.1-4.4.

* Gale, Douglas. 1996. "What have we learned from social learning," *European Economic Review*, 40: 617-628.

* Smith, Lones, and Peter Norman Sørensen. 2000. "Pathological Outcomes of Observational Learning," *Econometrica*, 68(2): 371-398.

Rosenberg, Dinah, and Nicolas Vieille. 2019. "On the efficiency of social learning," *Econometrica*, 87(6): 2141-2168.

Applications

* Ottaviani, Marco, and Peter Norman Sørensen. 2001. "Information aggregation in debate: Who should speak first?" *Journal of Public Economy*, 81(3):393-421..

Daughety, Andrew F., and Jennifer F. Reinganum. 1999. "Stampede to Judgment: Persuasive Influence and Herding Behavior by Courts," *American Law and Economics Review*, 1(1 & 2).

Misspecification

* Bohren, J. Aislinn. 2016. "Informational herding with model misspecification," *Journal of Economic Theory*, 163: 222-247.

Frick, Mira, Ryota Iijima, and Yuhta Ishii. 2020. "Misinterpreting Others and the Fragility of Social Learning," *Econometrica*, 88(6): 2281-2328.

Esponda, I. and D. Pouzo (2016). "Berk-Nash equilibrium: A Framework for Modeling Agents with Misspecified Models," *Econometrica*, 84, 1093-1130.

Bohren, J. A. and D. Hauser (2021). "Learning with heterogeneous misspecified models: ," *Econometrica*, 89, 3025-3077.

Frick M. , Iijima R. and Y. Ishii (2023). "Belief convergence under misspecified learning: A martingale approach," *The Review of Economic Studies*, Volume 90, Issue 2, Pages 781814.

Esponda, I. D Pouzoand Y Yamamoto (2021). "Asymptotic behavior of Bayesian learners with misspecified models," *Journal of Economic Theory*.

Endogenous sequencing and delays

RH, Chapter 5.

* Chamley, Christophe, and Douglas Gale (1994). "Information Revelation and Strategic Delay in Irreversible Decisions," *Econometrica*, 62(5): 1065-1085.

* Chamley, Christophe. 2004. "Delays and equilibria with large and small information in social learning," *European Economic Review*, 48(3): 477-501.

Aghamolla, Cyrus, and Tadashi Hashimoto. 2020. "Information arrival, delay, and clustering in financial markets with dynamic free-riding," *Journal of Financial Economics*, 138(1): 27-52.

Aghamolla, Cyrus. 2018. "Observational Learning, Endogenous Timing, and Information Acquisition," Working Paper, University of Minnesota.

Learning from the outcomes of others' actions

RH, chapter 8

Wolitzky, Alexander.2018. "Learning from Others' Outcomes," *American Economic Review*, 108(10): 2763-2801.

Other issues in sequential social learning

Monzan, Ignacio and Michael Rapp. 2014 "Observational learning with position uncertainty," *Journal of Economic Theory*, 154: 375-402.

Smith, Lones, and Peter N. Sørensen. 2020. "Rational Social Learning with Random Sampling," Working paper, University of Wisconsin.

Smith, Lones, Peter Norman Sørensen and Jianrong Tian. 2021. "Informational herding, optimal experimentation, and contrarianism," *The Review of Economic Studies*, 88(5): 2527-2554.

Song, Yangbo. 2016. "Social learning with endogenous observation," *Journal of Economic Theory*, 166: 324-333.

Wang, Tao. 2017. "Information revelation through bunching," *Games and Economic Behavior*, 102: 568-582.

Finance

Class notes (chapter 14 in RH)

Avery, Christopher and Peter Zemsky (1998). "Multidimensional Uncertainty and Herd Behavior in Financial Markets," *American Economic Review*, 88(4), 724-748.

Park, Andreas and Hamid Sabourian (2011). "Herding and Contrarian Behavior in Financial Markets," *Econometrica*, 79(4), 973-1026.

Alevy, Jonathan E., Michael S. Haigh, and John A. List. 2007. "Information Cascades: Evidence from a Field Experiment with Financial Market Professionals," *Journal of Finance*, 62(1): 151-180.

Ottaviani, Marco, and Peter Norman Sørensen. 2020. "Herd behavior and investment: Comment," *American Economic Review*, 90(3): 695-704.

Product adoption

Hendricks, Kenneth, Alan Sorensen, and Thomas Wiseman. 2012. "Observational Learning and Demand for Search Goods," *American Economic Journal: Microeconomics*, 4(1): 1-31.

Che, Yeon-Koo, and Johannes Hörner. 2018. "Recommender systems as mechanisms for social learning," *Quarterly Journal of Economics*, 133(2): 871-925.

Bailey, Michael, Drew M. Johnston, Theresa Kuchler, Johannes Stroebel, and Arlene Wong. 2022. "Peer Effects in Product Adoption," *American Economic Journal: Applied*

Economics, forthcoming.

Duan, Wenjing, Bin Gu, and Andrew B. Whinston. 2009. "Informational Cascades and Software Adoption on the Internet: An Empirical Investigation," *MIS Quarterly*, 33(1): 23?48.

Ifrach, Bar, Costis Maglaras, Marco Scarsini, and Anna Zseleva. 2019. "Bayesian social learning from consumer reviews," *Operations Research* 67(5): 1209-1221.

Conley, Timothy G., and Christopher R. Udry. 2010. "Learning about a New Technology: Pineapple in Ghana." American Economic Review 100 (1): 35-69.

Experiments

Newberry, Peter W. 2016. "An empirical study of observational learning," *RAND Journal of Economics*, 47(2): 394-432.

Ziegelmeyer, Anthony, Christoph March, and Sebastian Krügel. 2013. "Do We Follow Others When We Should? A Simple Test of Rational Expectations: Comment," *American Economic Review*, 103(6): 2633-2642.

Non-employment and rational herding

Oberholzer-Gee, Felix. 2008. "Nonemployment stigma as rational herding: A field experiment," *Journal of Economic Behavior & Organization*, 65(1): 30-40.

Kroft, Kory, Fabian Lange, and Matthew J. Notowidigdo. 2013. "Duration Dependence and Labor Market Conditions: Evidence from a Field Experiment," *Quarterly Journal of Economics*, 128(3): 1123-1167.

Zhang, Juanjuan. 2010. "The Sound of Silence: Observational Learning in the U.S. Kidney Market," *Marketing Science*, 29(2): 315-335.

Politics

Knight, Brian, and Nathan Schiff. 2010. "Momentum and Social Learning in Presidential Primaries," *Journal of Political Economy*, 118(6): 1110-1150.

Fisher, James C.D., and John Wooders. 2017. "Interacting Information Cascades: On the Movement of Conventions Between Groups," *Economic Theory*, 63(1): 211-231.