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JEFFREY K. NAECKER

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EMPLOYMENT

2019-present **Behavioral Economist** Google Inc

2015-2019 **Assistant Professor** Department of Economics, Wesleyan University

2016-2019 **Director** Digital Experiments Lab, Wesleyan University

2018-2019 **Visiting Scholar** Department of Economics, University of California at San Diego

EDUCATION

2015 **Ph.D. in Economics,** Stanford University

2008 **B.A in Economics and Physics** with highest honors, University of California, Berkeley

RESEARCH

PUBLISHED AND FORTHCOMING PAPERS

2020 **James Andreoni, Deniz Aydin, Blake Barton, B. Douglas Bernheim, and Jeffrey Naecker. When fair isn't fair: Understanding choice reversals involving social preferences.** ***Journal of Political Economy*****, 128(5):1673–1711, 2020**

In settings with uncertainty, tension exists between ex ante and ex post notions of fairness. Subjects in an experiment most commonly select the ex ante fair alternative ex ante and switch to the ex post fair alternative ex post. One potential explanation embraces consequentialism and construes reversals as time inconsistent. Another abandons consequentialism in favor of deontological (rule-based) ethics and thereby avoids the implication that revisions imply inconsistency. We test these explanations by examining contingent planning and the demand for commitment. Our findings suggest that the most common attitude toward fairness involves a time-consistent preference for applying a naive deontological heuristic.

2017 **Alexander Peysakhovich and Jeffrey Naecker. Using methods from machine learning to evaluate behavioral models of choice under risk and ambiguity.** ***Journal of Economic Behavior & Organization*****, 133:373 – 384, 2017** [SSRN version]

How can behavioral scientists incorporate tools from machine learning (ML)? We propose that ML models can be used as upper bounds for the explainable variance in a given data set and thus serve as upper bounds for the potential power of a theory. We demonstrate this method in the domain of uncertainty. We ask 600 individuals to make 6000 choices with randomized parameters and compare standard economic models to ML models. In the domain of risk, a version of expected utility that allows for non-linear probability weighting (as in cumulative prospect theory) and individual-level parameters performs as well out-of-sample as ML techniques. By contrast, in the domain of ambiguity, two of the most widely studied models (a linear version of maximin preferences and second order expected utility) fail to compete with the ML methods. We open the black boxes of the ML methods and show that

under risk our ML methods essentially rediscover expected utility with probability weighting. However, in the case of ambiguity we show that the form of ambiguity aversion implied by our ML models suggests that there is gain from theoretical work on a portable model of ambiguity aversion. Our results highlight ways in which behavioral scientists can incorporate ML techniques in their daily practice to gain genuinely new insights.

2017 **Christine L. Exley and Jeffrey K. Naecker. Observability increases the demand for commitment devices. *Management Science*, 63(10):3262–3267, 2017** [SSRN version]

Previous research often interprets the choice to restrict one's future opportunity set as evidence for sophisticated time-inconsistency. We propose an additional mechanism that may contribute to the demand for commitment technology: the desire to signal to others. We present a field experiment where participants can choose to give up money if they do not follow through with an action. When commitment choices are made public rather than kept private, we find significantly higher uptake rates.

WORKING PAPERS

Causal Inference from Hypothetical Evaluations with B. Douglas Bernheim, Daniel Bjorkegren, and Michael Pollmann

This paper explores methods for inferring the causal effects of treatments on choices by combining data on real choices with hypothetical evaluations. We propose a class of estimators, identify conditions under which they yield consistent estimates, and derive their asymptotic distributions. The approach is applicable in settings where standard methods cannot be used (e.g., due to the absence of helpful instruments, or because the treatment has not been implemented). It can recover heterogeneous treatment effects more comprehensively, and can improve precision. We provide proof of concept using data generated in a laboratory experiment and through a field application.

The Lives of Others: Predicting Donations with Non-Choice Responses

There is significant variation in the percentage of adults registered as organ donors across the United States. Some of this variation may be due to characteristics of the sign-up pro- cess, in particular the form that is used when state residents renew or apply for their driver?s licenses. However, it is difficult to model and predict the success of the different forms with typical methods, due to the exceptionally large feature space and the limited data. To surmount this problem, I apply a methodology that uses data on subjective non-choice reactions to predict choices. I find that active (ie yes-no) framing of the designation question decreases designation rates by 2-3 percentage points relative to an opt-in framing. Additionally, I show that this methodology can predict behavior in an experimental setting involving social motives where we have good structural benchmarks. More generally, this methodology can be used to perform policy pseudo-experiments where field experiments would prove prohibitively expensive or difficult.

Do Hypothetical Choices and Non-Choice Ratings Reveal Preferences? with B. Douglas Bernheim, Daniel Bjorkegren, and Antonio Rangel

A central task in microeconomics is to predict choices in as-yet-unobserved situations (e.g., after some policy intervention). Standard approaches can prove problematic when sufficiently similar changes have not been observed or do not have observable exogenous causes. We explore an alternative approach that generates predictions based on relationships across decision problems between actual choice frequencies and non-choice subjective evaluations of the available options. In a laboratory experiment, we find that this method yields accurate estimates of price sensitivities for a collection of products under conditions that render standard methods either inapplicable or highly inaccurate.

TEACHING EXPERIENCE

2015-2018 **Intermediate Microeconomics,** Wesleyan University

2016-2018 **Experiments and Strategic Behavior,** Wesleyan University

2015-2017 **Behavioral and Experimental Economics,** Wesleyan University

2012, 2014 **Teaching Assistant, Graduate Game Theory,** Stanford University
Departmental Outstanding Teaching Assistant Award, both years

2008-2009 **Head Tutor and Study Group Leader (Mathematics and Statistics),** Student Learning Center, University of California, Berkeley

FELLOWSHIPS AND AWARDS

2015 **Centennial Teaching Award,** Stanford University

2014-2015 **B.F. Haley and E.S. Shaw Fellowship,** Stanford Institute for Economic Policy Research

2014-2015 **Research Fellowship,** Stanford University Center on Philanthropy and Civil Society

2012, 2014 **Outstanding Teaching Assistant Award,** Stanford University Economics Department

2013-2014 **Bradley Graduate and Post Graduate Fellowship,** Stanford Institute for Economic Policy Research

2012-2013 **Shultz Graduate Fellowship in Economic Policy,** Stanford Institute for Economic Policy Research

2012 **Participant,** Russell Sage Foundation Summer School in Behavioral Economics

2009-2011 **Department Fellowship,** Stanford University Economics Department

2008 **Phi Beta Kappa**

2007-2008 **Isidore Pomerantz Scholarship in Physics,** University of California, Berkeley

2004-2005 **National Merit Scholar**

GRANTS

2017 **Catalyst Program Research Transparency and Reproducibility Scale-Up Grant,** Berkeley Institute for Transparency in Social Science

2014 **Graduate Research Opportunity Award,** School of Humanities and Social Sciences, Stanford University

2014 **Research Grant,** Department of Economics, Stanford University

CONFERENCE AND SEMINAR PRESENTATIONS

2019 RAND Corporation

2018 American Economic Association Annual Meetings (discussant)
Chapman University, ESI Lecture Series
CalTech, Bray Social Sciences Seminar
UCSD, Rady School Econ/Strategy Seminar

2017 Russell Sage Conference for Early-Career Behavioral Economists
Claremont Graduate University Division of Politics & Economics

2016 Russell Sage Conference for Early-Career Behavioral Economists (discussant)
New England Experimental Economics Workshop
Emory University Economics Department
University of Southern California Economics Department
Claremont Graduate University Division of Politics & Economics
Cornell University Economics Department
Google StartupOnomics Conference

2015 Texas A&M University Economics Department
Russell Sage Conference for Early-Career Behavioral Economists (discussant)
Western Economic Association (Honolulu)
Social Dilemmas Workshop (Brown)
Bay Area Behavioral and Experimental Economics Workshop (Santa Cruz)
Wesleyan University Economics Department
New York Federal Reserve

2014 Cal State East Bay Economics Department
Economic Science Association (Florida)
Stanford Institute for Theoretical Economics (Experimental Economics Session)
Bay Area Behavioral and Experimental Economics Workshop
ACM Conference on Economics and Computation (poster session)

2013 Social Dilemmas Conference (Caltech)
Bay Area Behavioral and Experimental Economics Workshop
Cal State East Bay Economics Department
Economic Science Association (Santa Cruz)

2012 Economic Science Association (Tucson)

PROFESSIONAL SERVICE

2017-2018 **Economics Representative,** Wesleyan Public Affairs Renovation Committee

2017-2018 **Tenure Track Representative** Wesleyan Economics Department Self-Study Report

2015-2017 **Co-organizer,** Wesleyan Economics Department Seminar

2015-2016 **Faculty Advisor,** Female Economists at Wesleyan

2011-2014 **Organizer,** Stanford Economics Behavioral and Experimental Seminar

2011, 2012 **Student Member,** Stanford Economics Ph.D. Recruiting Committee

2010-2012 **Lab Manager,** Stanford Economics Research Laboratory (SERL)

Referee: American Economic Review, Review of Economics and Statistics, Management Science, Journal of Public Economics, Journal of the European Economic Association, Games and Economic Behavior, Journal of Development Economics, Journal of Economic Behavior and Organization, Economic Inquiry, Review of Economic Design, B.E. Journal of Theoretical Economics, Southern Economic Journal, Journal of Personality and Social Psychology: Personality Processes and Individual Differences

Thesis Students: Sarah Xu (2018); Jesse Cohen (2017)

PERSONAL INFORMATION

Citizenship: United States · Married · Born November 7, 1985