Workshop on Theory, Prediction, and Confirmation

Sponsored by

CENTER FOR THE STUDY OF Economy & Society

Cornell University

Convened at the
ILR Conference Center, NYC
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Participants:

Delia Baldassarri, New York University; **Yang Cao**, University of North Carolina, Charlotte; **Karen Cook**, Stanford University; **Daniel DellaPosta**, Penn State University; **Paul DiMaggio**, New York University; **Diego Gambetta**, Collegio Carlo Alberto; **Hakan J. Holm**, Lund University School of Economics and Business; **Siegwart Lindenberg**, Universitiy of Tilburg; **Michael Macy**, Cornell University; **Barnaby Marsh**, Institute for Advanced Study; **Victor Nee**, Cornell University; **Barum Park**, Cornell University; **Arnout van de Rijt**, European University Institute; **Sirui Wang**, McKinsey Consulting and Fellow of CSES.

WORKSHOP PROGRAM

A Zoom link for audience mode

Breakfast
8:00 am to 8:50 am

Opening remarks, *Victor Nee*
8:50 am – 9:00 am

Theory and the Quest for Generalizability
9:00 am to 10:00 am

Diego Gambetta, "A theory of overconfidence"

Why has vaccination hesitancy grown so much in the developed world? Why even some doctors and nurses resisted vaccination? And why does France register the highest frequency of objectors? The answer to these questions, we conjecture, lies in an increase in **over-confidence,** the unwarranted trust that some people have in their own judgement even when considering complex matters. As many have shown, trust in experts has declined, but it is the increase of trust in self that begs an explanation. We surmise that a key lies in the combined effect of the diffusion of higher education degrees, often of poor quality, and the massive diffusion of low-cost online medical information. These jointly contributed to spread a sense of **epistemic equality** that in turn encouraged an increase in overconfidence. We follow in the footsteps of Alexis de Tocqueville who argued, *in Democracy in America* (1837), that the progressive spreading of **"***the equality of conditions* brought each to seek the truth by himself*"*.

Victor Nee, "A theory of emergence and the quest for generalizability"

Knowledge spillover and network rewiring constitute interconnected social mechanisms driving endogenous emergence of knowledge economies and cumulative regional advantage. In the twenty-first century, the pace of technological change has accelerated in competitive markets connecting and integrating national economies in the world system. The rapid flow of knowledge and knowhow through global networks of science and technology and the scalability of disruptive technological innovation have contributed to a swift diffusion of ideas, technological knowhow, and institutional innovation. Notwithstanding this, national political and economic orders remain resilient, rooted in path-dependent institutional arrangements and cultural beliefs. In a global economy linked by competitive markets and diffusion of novel institutional forms, ongoing interaction of mechanisms of institutional resilience and change shape behavioral patterns bounded by the nation state. The problem we explore is whether predictions derived from a middle range theory are applicable in cross-national comparative analysis. Do differences in national political and economic institutions limit the generalizability of a positive theory?

Coffee break
10:00 to 10:25

The Challenge of Measurement, Discovery and Confirmation
10:25 am to 11:55 am

Sirui Wang, "Challenges of measuring social mechanisms with large scale longitudinal data to test a theory"

I address the challenge of measurement—knowledge spillover and rewiring in overlapping networks—social mechanisms that are 'invisible' to test a theory of emergence, using big data scrapped from Meetup.com, an economic institution of the 21st century knowledge economy. From 2002 to 2022 we examine longitudinal big data in regional knowledge economies of the United States and Sweden. At the meso-level, we examine the behavioral patterns of knowledge flow and network rewiring in knowledge economies of in Los Angeles, New York City and Silicon Valley and Stockholm and Lund/Malmo. The analyses show how the more expansive the knowledge spillover and network rewiring, the greater the breadth of innovation and diversity of technology firms. Our findings are consistent with middle range theory of emergence and comparative institutional advantage theory on the similarities and differences between liberal and coordinated market economies.

Siegwart Lindenberg, "Discovering a 'type' of reciprocity fundamental in human interaction"

Developing positive theory and deriving predictions will be extended with "*discovery of* positive theory, deriving predictions and how to test them experimentally. I explore a new series of experiments on the discovery of a particular kind of reciprocity: "next to the usual concept of reciprocity as reciprocating acts (kind act with kind act, unkind act with unkind act), there might be another, less vulnerable (cognitively taxing) kind of reciprocity (reciprocating character [or type]: respond to what you think the other *is* rather than what he/she *does*". The experiments are finished and written up. This involves a tour of discovery of fundamental of human behavior, heavily leaning on theory, and on heuristics for experimental design.

Hakan J. Holm, "Theory, prediction and confirmation using lab-in-the-field behavioral studies using methods from experimental economics."

The presentation will discuss experiences from using methods and concepts from experimental economics in a laboratory-in-the field 2009, 2012 and 2016 to study entrepreneurs and CEOs in China's Yangzi River Delta regional market economy. The emphasis will be on discussing theoretical consistency and the preciseness of measures.

Buffet Lunch
12:00 pm to 1:30 pm

Challenges in Confirmation of Theory and Prediction
1:30 pm to 4:00 pm

Delia Baldassarri, "Strange bedfellows: Middle-range theorizing and experimental design"

There are valuable advantages deriving from the adoption of an experimental mind frame in sociology. For instance, experimental methods prevent scholars from engaging in *post factum* explanations, channeling the research toward a virtuous circle of inquiry, in which theories are explicitly specified, evaluated, and refined incrementally. However, there is no natural synergy between most sociological theories and the experimental logic. There is, in fact, generative attrition: experimental designs lay bare, more than other methods, problems of generalizability, definition of the scope conditions and treatment heterogeneity that afflict social science research. In my presentation I will draw from a few

examples of research in which I explore how the process of 'operationalizing' concepts and translating hypotheses into an actual research design both stretches what experiments can do and contributes to the development of better sociological theories.

Arnout van de Rijt, "No Matthew Effects in the life course"

Some sociological principles are treated as laws no matter their empirical support. We show that chance events in the life course do not generally produce Matthew effects. We also predict that this refutation will not impact the (self-reinforcing?) popularity of the concept in the sociologist's theoretical toolbox.

Daniel DellaPosta, "Cunning of the bulls? Social influence and collective intelligence in stock market predictions"

I will present a new study that develops and tests a set of theoretical predictions from classic theories of the "wisdom of crowds" and information flows in networks. The challenge of this study is to take these predictions out of the controlled conditions of laboratory experiments, and to test them in a complex real-world network setting (an online platform for stock market followers) where "crowds" of participants shift, overlap, and interact with one another. The study provides large-scale empirical evidence for the "wisdom of crowds," but also highlights the critical ways this wisdom depends on the shifting network topologies that produce it.

Yang Cao, "The cultural consequences of markets"

Social scientists have long been interested in how markets reshape culture. In this presentation, I will discuss some of the key conceptual and methodological issues in the social science literature and highlight China's potential as a strategic research site for advancing it. Specific topics include the micro- and macro-level conceptions of markets, specification of the causal mechanisms, experimental versus non-experimental designs, and cross-sectional versus longitudinal comparisons.

Coffee and refreshment

Discussion and looking to the future: *4:00 pm to 4:45 pm*

Reception at 66 East 83 Street, #4C, *5:30 to 6:50 pm*

Dinner at Antonucci Café, *7:00 pm at 170 East 81st Street*