

1. Probabilistic reasoning: The future and the past

The history of modern probability theory (there is no other) began in 1494 with the publication of a tome on mathematics by Fra Luca dal Borgo (*Paccioli*). Luca articulated the “Problem of Points,” which puzzled generations until Pascal and Fermat found a solution. The problem is an opportunity to study probabilistic intuitions and how they related to questions of rationality and morality.

2. Judgment aggregation: The wisdom of the crowd

Sir Francis Galton (1907) observed that you can improve the accuracy of judgment by aggregated (average) individual judgments (see also Nate Silver’s, 2012), contemporary efforts). Accuracy gains increase with the independence among the individual judgments. The aggregation principle can be applied to judgments of social consensus (but it has not). Recent research suggests that accuracy gains can be obtained even when the same individuals make multiple judgments (despite limited independence).

3. Social categorization: Projection and self-enhancement

Most people believe others are similar to them (projection) while also believing they are better than the average person (the BTA effect). The two phenomena obviously constrain each other. To study their relationship, we turn to social categorization. As social categories become larger, people project less while self-enhancing more. There are theoretical reasons to think that this is so, but nothing convinces like an empirical test.

Class Organization

Time in class will be divided between reviewing and discussing chapters from the book, other research or review articles, the original articles pertaining to the three projects, and setting up the experiments. Each student is expected to contribute to the course by presenting some of the read materials and leading a discussion. The student briefly summarizes a chapter or article, poses questions to the class and leads the discussion. In addition, the student prepares a review of a related research article, presents it to the class and entertains questions. All students are expected to contribute constructively to the discussion. One way to prepare is to write down questions or comments and bring them to class. These questions and comments are only for your private use, to help you participate. They will neither be posted on the course website, nor will they be reviewed by the instructor or the TAs.

On Wednesday mornings, the computer lab in Metcalf 107 is open to the class from 9:00 to 12:00. We will use the lab mainly for data analysis. The instructor or the TAs will instruct, assist, and answer questions. The data gathered for the three projects will be entered into MS Excel spreadsheets. Each student collects data from several outside participants per experiment. These data are collated into master files and prepared for analysis. Students prepare a lab report for each study, in which they review relevant theory, the design of the study, the findings and conclusions.

Format and requirements

The course is designed for advanced undergraduates concentrating in psychology who have the required background, including courses in Introductory Psychology, Social Psychology, and Quantitative Methods in Psychology, or recognized equivalents of these courses. Non-concentrators may enroll if space permits.

Grading

The course grade is a weighted average of the in-class presentation and participation (30%), and the three lab reports (20% each).

Book Reading

Bless, H., Fiedler, K., & Strack, F. (2004). *Social cognition: A modular course*. New York, NY: Psychology Press.

Project-related Readings

Probabilistic reasoning: The future and the past

Krueger, J. I. (2012). Rationality: Variations on a theme. *In-Mind: Italy*, 1, 9-13.

Krueger, J. (2000). Distributive judgments under uncertainty: Paccioli's game revisited. *Journal of Experimental Psychology: General*, 129, 546-558.

Tversky, A., & Kahneman, D. (1981). The framing of decisions and the psychology of choice. *Science*, 211, 453-458.

Dawes, R. M. (1999). A message from psychologists to economists: mere predictability doesn't matter like it should (without a good story appended to it). *Journal of Economic Behavior & Organization*, 39, 29-40.

Dawes, R.M., 1993. The prediction of the future versus an understanding of the past: A basic asymmetry. *American Journal of Psychology*, 106, 1-24.

Judgment aggregation: The wisdom of the crowd

Larrick, R. P., Mannes, A. E., & Soll, J. B. (2012). The social psychology of the wisdom of crowds. In J. I. Krueger (ed.), *Social judgment and decision making* (pp. 227-242). New York: Psychology Press.

Herzog, S. M., & Hertwig, R. (2009). The wisdom of many in one mind. Improving individual judgments with dialectical bootstrapping. *Psychological Science*, *20*, 231-237.

Krueger, J. (2000). The projective perception of the social world: A building block of social comparison processes. In J. Suls & L. Wheeler (Eds.), *Handbook of social comparison: Theory and research* (pp. 323-351). New York: Plenum/Kluwer.

Epley, N., Keysar, B., Van Boven, L., & Gilovich, T. (2004). Perspective taking as egocentric anchoring and adjustment. *Journal of Personality and Social Psychology*, *87*, 327-339.

Yaniv, I., & Milyavsky, M. (2007). Using advice from multiple sources to revise and improve judgments. *Organizational Behavior and Human Decision Processes*, *103*, 104-120.

Social categorization: Projection and self-enhancement

Guenther, C. L., & Alicke, M. D. (2008). Self-enhancement and belief perseverance. *Journal of Experimental Social Psychology*, *44*, 706-712.

Sedikides, C., & Gregg, A. P. (2008). Self-enhancement: Food for thought. *Perspectives on Psychological Science*, *3*, 102-116.

Brown, J. D. (2011). Understanding the better than average effect: Motives (still) matter. *Personality and Social Psychology Bulletin*, *38*, 209-219.

Krueger, J., & Clement, R. W. (1996). Inferring category characteristics from sample characteristics: Inductive reasoning and social projection. *Journal of Experimental Psychology: General*, *125*, 52-68.