1 Course Objective

The course covers game-theoretic works on communication. We will maintain a healthy balance between classic / core papers and more recent papers, and between theory papers and experimental papers. Some of topics covered will be sender-receiver games, mediated communication, psychological aspects of communication, and game theory at the intersection of economics and linguistics. The goal is to stimulate original (theoretical and/or experimental) research in one of these areas.

2 Grading

If you are enrolled for credit, you will be asked to present a number of papers from the reading list, prepare and present a research proposal and write a short paper. If you audit the class, you will be involved in presenting papers like everyone else but will not have to prepare a research proposal or have to write a paper.

We divide the ★ (key theory), ♥ (key experimental), and ♠ (recent theory) papers in equal proportion among all participants. Everyone presents at least one ★ paper, one ♥ paper, and one ♠ paper. The ★ paper and the ♥ paper should be chosen from different topics. When you are responsible for a ★ paper, you will be responsible for all ★ papers that belong to the same topic. When you are responsible for a ♥ paper, you will be responsible for all ♥ papers that belong to the same topic.

The research proposal should have a minimum length of three pages and is due at the beginning of our 7th meeting. A first draft of your paper (in case of theory ideas) or extended proposal (for experimental ideas) is due at the beginning of the last class (November 29) and you should be prepared to give a short presentation (20-30 mins) of what you have found. The final version of your paper (for theory ideas) or proposal (for experimental ideas) is due at the last day of Fall term (December 19).

Guidelines for theory paper: I expect the paper to have a minimum length of eight pages (not including title page and references), to contain a result stated in the form of a proposition and a proof of that proposition. The paper should be written in \LaTeX; have a title page; a 150 word abstract that clearly explains the question asked and the key result; an introduction that elaborates on the abstract; a section that sets up, motivates and explains the model; a result section that states and proves the key results; and a concluding section that states
Guidelines for experimental paper: I expect the paper to have a minimum length of nine pages (not including title page and references), to contain a main question stated in the form of a testable hypothesis. The paper should be written in \LaTeX; have a title page; a 150 word abstract that clearly explains the question asked and the key expected result; an introduction that elaborates on the abstract; a section that sets up, motivates research questions and explains theoretical background; experimental hypothesis and procedure section that states the testable hypotheses and experimental design clearly; a small section that present some expected results and some methods to analyze the data; and a concluding section that states concisely what the punchline of the paper is.

Research Funding Support: After grading the original research proposals submitted, I am going to select one or two projects to provide a small grant (HKD 30,000) for each selected project. The funding will be used (restrictively) to support the experimental subject payment.

3 Reading List

3.1 Methodology - Experiments


3.2 Cheap-talk: Fundamentals


### 3.3 Equilibrium Selection


### 3.4 Mediation and Other Communication Channels


3.5 Multi-sender, Multi-receiver, Multi-dimensional Cheap-talk


3.6 Persuasion Mechanism


4. ♠ Alonso, Ricardo and Odilon Camara [2016], “Bayesian Persuasion with Heterogeneous Priors” *Journal of Economic Theory*

5. ♠ Alonso, Ricardo and Odilon Camara [2014], “On the Value of Persuasion by Experts”.

6. Wang, Yun [2013], “Bayesian Persuasion with Multiple Receivers”.

### 3.7 Emergence of Meaning and Grammar / Compositionality


8. Fuhai Hong, Wooyoung Lim, and Xiaojian Zhao [2016], “The Emergence of Compositional Grammars in Artificial Codes.”

### 3.8 Contracting, Delegation and Commitment


3.9 Psychology of Communication and Bounded Rationality


3.10 Higher-Order Uncertainty about Language, Vagueness and Ambiguity


3.11 Over-communication


3.12 Cheap-talk: Surveys

