



The 3rd Tokyo Network Workshop

Advances in multi-disciplinary research of networks

October 31 (Sat), 2015

Waseda University

The aim of this workshop is to share knowledge on analysis of networks in various disciplines and to promote inter-disciplinary research of networks. Because of our inter-disciplinary approach, backgrounds of the presenters vary substantially from statistics, physics, and engineering to economics and marketing.

The workshop this year focuses more on networks of firms, although the previous two emphasized methodologies and environmental issues more. However, our interests are not confined to firm networks but expanding to dynamics and consequences of networks in general.

Organized by: Yasuyuki Todo (Waseda University)
Petr Matous (the University of Sydney)

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Super Global University Program at Waseda University
Center for Positive Political Economy, Waseda University

Program

10:00-10:10 Opening remarks by Petr Matous

10:10-12:10 Firm networks

- Ian Wilkinson (the University of Sydney)
"Business mating and the evolution of business networks"
- Yoshiaki Ogura (Waseda University)
"Network-motivated lending decisions"
- Yohei Kobashi (Waseda University)
"Spillover effect of heterogeneous inter-firm networks on innovation"

12:10-13:10 Lunch

13:10-15:10 Frontiers of analysis of networks

- Johan Koskinen (the University of Manchester)
"Insights from applying social network models to spatially embedded flows"
- Mahendra Piraveenan (the University of Sydney)
"Measures of robustness to sustained targeted attacks for networked systems"
- Shiro Horiuchi (Yamagata University)

"The possibility of knowledge accumulation and diffusion; Interactive effects of communication media on individuals' choice"

15:30-17:30 Networks in South-East Asia

- Tomohiro Machikita (Institute of Developing Economies)
"Who disseminates technology to whom, how, and why: Evidence from buyer-supplier business networks in Southeast Asia"
- Petr Matous (the University of Sydney)
"On complementarity and substitution between transportation and communication infrastructure in rural areas of developing countries"
- Yasuyuki Todo (Waseda University)
"Political networks of firms and firm openness in Indonesia"

17:30-17:40 Closing remarks by Yasuyuki Todo

18:00- Reception

Each speaker has 25 minutes for the presentation and 15 minutes for discussion (40 minutes in total).

Registration

Prior registration is encouraged (though not necessary). If you are interested in joining the workshop, please contact Ms. Rie Matsuda at r.matsuda2@kurenai.waseda.jp.

Venue

Room 704, Building No. 3, Waseda Campus

Please note that the venue has been changed to:

Meeting Room No. 1, 10th floor, Building No. 3, Waseda Campus
Faculty of Political Science and Economics, Waseda University

Please see the following web site for details.

<http://www.waseda.jp/top/en/access/waseda-campus>

Biography of presenters

Shiro Horiuchi

- Associate Professor, COC Promotion Office, Yamagata University
- Research fields: mathematical sociology, loose community, social capital
- His main interest in research is how heterogeneous individuals cooperate or coexist. For the research question, he analyzes mathematical models, particularly building and running Agent-Based-Model simulations. He also engages in field work study in Japan, particularly interested in communication between residents of depopulation areas and outsiders who visit there as tourists, volunteers or immigrants.

Yohei Kobashi

- Assistant Professor, Faculty of Political Science and Economics, Waseda University
- Research fields: natural language processing, discourse analysis, comparative politics
- Yohei Kobashi is an assistant professor of Waseda Institute of Political Economy, and a Ph.D. graduate of Tokyo Institute of Technology. While his major is social science, the approach is interdisciplinary. He is the author of refereed journal articles about Japanese linguistics, natural language processing and policy network analysis, and wrote chapters of two books about comparing civil societies in state level. He has recently studied an application of machine learning methods to statistical analysis in social science.

Johan Koskinen

- School of Social Sciences, the University of Manchester
- Research fields: statistics, social network analysis, exponential random graph models
- Johan Koskinen was awarded his PhD in statistics from the University of Stockholm and has since worked at the Universities of Melbourne and Oxford on SNA methodology. In 2011 he took up a position as Lecturer in Social Statistics at the University of Manchester where he joined the Mitchell Centre for Social Network Analysis. He is an active member of the Mitchell Centre and the MelNet social network lab in Melbourne and also upholds a position at the Institute of Analytical Sociology in Norrköping.

Tomohiro Machikita

- Research Economist, Inter-disciplinary Studies Center, Institute of Developing Economies (IDE-JETRO)
- Research fields: labor economics, urban economics, and industrial development
- Tomohiro Machikita is a researcher of the Institute of Developing Economies (IDE-JETRO). His research fields are labor and urban economics with a special emphasis on production chains. His research is aiming at improving our understanding how economic globalization-agglomeration nexus affects firms, workers, and cities through production networks. More specifically, his research interest is in the firm-to-firm matching with technology transfers, the empirics of technology spillovers along the chains, and the evaluation of suppliers and manufacturers' performance using unique firm-level data in Southeast Asia (Indonesia, Lao PDR, Myanmar, the Philippines, Thailand, and Vietnam).

Petr Matous

- Faculty of Engineering & Information Technologies, the University of Sydney
- Research fields: Social Networks, Infrastructure Systems, International Development
- Dr. Petr Matous has been organising experimental interventions and social surveys in diverse communities across Asia and Africa to empirically elucidate the role of social networks in contexts constrained by limited resources or environmental disasters. Dr. Matous applies novel quantitative methods to these unique data sets to model the mechanisms of dynamic interactions between interpersonal or inter-organisational networks and their technological and natural environment.

Yoshiaki Ogura

- Professor, Faculty of Political Science and Economics, Waseda University
- Research fields: banking theory, industrial organization, corporate finance, financial economics
- Dr. Ogura's main research interests include the industrial organization of the banking sector, relationship banking, and their impact on the metabolism of an economy. His

recent researches include the effect of an inter-firm network on the loan decision and pricing by the banking sector, the empirical analysis of the economic value of the long-term bank-firm relationship, and the role of government-controlled banks under a financial crisis.

Mahendra Piraveenan

- Lecturer, Faculty of Engineering & Information Technologies, the University of Sydney
- Research fields: complex networks, graph theory, information theory, evolutionary game theory, bioinformatics
- Dr. Mahendra Piraveenan models and analyses the emergence of selfishness in socio-ecological systems using a complex network approach. He uses game theory to model the cognitive behaviour, including decision making under uncertainty, of people and other sentient entities which make up such systems. Dr Piraveenan's particular interest is in how the topological structure of such systems or societies could affect the emergent cognitive behaviour of their members. In addition to using existing topological metrics, Dr. Piraveenan has developed a range of his own topological metrics which could be used in all areas of network analysis. His other research interests include infectious disease dynamics, robustness of complex networks, and applications of network and game theory in decision making scenarios.

Yasuyuki Todo

- Professor, Faculty of Political Science and Economics, Waseda University
- Research fields: development economics, international economics, Japanese economy
- Yasuyuki Todo is a Professor at the Faculty of Political Science and Economics, Waseda University, as well as a Faculty Fellow at Research Institute of Economy, Trade and Industry. His research fields are international economics, development economics, and economic growth. More specifically, his research includes analysis of roles of economic networks (e.g., trade, FDI, and supply chains) and social networks (e.g., ties with relatives and friends) in economic growth, using firm- and household-level data for Japan, Indonesia, Vietnam, China, Burkina Faso, and Ethiopia.

Ian Wilkinson

- Honorary Professor, Business School, the University of Sydney, and Institute for Entrepreneurship and Relationship Management, University of Southern Denmark (Syddansk)
- Research fields: business relations and networks, dynamics of marketing systems, complexity, agent based models
- Professor Wilkinson's research focus is on business to business marketing, with an emphasis on the nature and role of business relations and networks. Currently he is examining the structure and dynamics of actual business relations and networks using case studies and, with others as part of an ARC Discovery project, developing agent based models of the development and evolution of business relations and networks in order to develop "flight simulators" for managers and policy makers. Other interests include innovation and opportunity discovery processes in business, the reliability and validity of managers as key informants in surveys, complex systems theory and management and process theories of change.