Organized Sessions - EUSN 2019

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Communication Networks
Thomas Friemel, Tobias Frey (Universit of Zurich)

Since the subject of communication is relational by definition, SNA is gaining increasing importance to study the structure of communication infrastructure, content, actors, and processes. The session on communication networks focuses on networks of individuals using different media technologies or content, organizations that are producing, distributing or regulating media, infrastructure through which communication is transmitted, and the structure between distinct entities of communication (websites, articles, tweets etc.). The session welcomes both theoretical and empirical contributions describing the structure or analysing dynamic processes such as selection and diffusion of information.

Health Behaviour Networks
Thomas Friemel, Sarah Geber (University of Zurich)

Health and health-related behaviours are embedded in social contexts in various ways, which comprise both risks and opportunities for individual's health. Communicable (i.e., infectious) diseases, such as HIV or influenza, are spread through social contacts between persons, and unfavourable health behaviours (e.g., alcohol and drug abuse) might be reinforced by social influence. On the other hand, social support can ease the coping with diseases in everyday life (e.g., diabetes, depression), and social norms may promote favourable health behaviours (e.g., doing sports or eating healthily). The session welcomes both theoretical and empirical contributions addressing network structures or network dynamics related to health behaviour.

Organizational Networks

Spyros Angelopoulos (Tilburg University)
Emmanuel Lazega (Sciences Po)
Francesca Pallotti (Greenwich University)
Paola Zappa (Maynooth University)

The networked nature of organizations creates a complex ecosystem where individuals, groups, units, and other organizations are entangled. Such entanglement shapes organizations in a dynamic way and affects their outcomes at multiple levels. This session aims to bring together studies on organizational networks addressing antecedents, dynamics, and implications of the cross-level processes leading to the emergence of relations and outcomes at various levels.

Submissions to this session can refer, but are not limited, to the following areas of research:

- Micro-foundations of organizational networks: How individual characteristics (i.e., motivation, personality) and cognitions affect the emergence of network structures and how, in turn, these network structures affect individuals;
- Evolution of network structures at various levels: How networks at various levels coevolve and affect one another;
- Issues of time-dependence in organizational network research: How organizational networks at various levels change at different rates;
- Overlap and multilevel interplay between social and other kinds of networks within and between organizations: How are social networks affected by the affiliation of individuals, or organizations to events or contexts.

We welcome both theoretical as well as empirical contributions that address the various aspects and implications of organizational networks research

Networks for Learning

Dominik Froehlich (University of Vienna)
Katerina Bohle Carbonell (National University of Ireland, Galway)

This session focuses on papers that use social network analysis to understand how individuals involved in activities related to education and learning (pupils, students, teachers, school management, policy makers etc.) are affected by or use their social networks for educational purposes or in educational settings. The session's papers will build on the assumption that actors are embedded within social networks which provide opportunities and constraints, in turn affecting individuals' behaviors and attitudes (Monge & Contractor, 2003, Emirbayer & Goodwin, 1994 Borgatti & Halgin, 2011). Within this framework, the session welcomes papers that seek to make empirical, methodological and/or theoretical contributions to understandings of social networks in learning and education. These could include papers on:

- The importance of social networks for the social and learning environments of students and educational professionals (e.g. teachers)
- Theoretical processes underlying social networks, as well as the antecedents and consequences of networks
- Discussions of the particularities of educational settings from a social network perspective
- Methodological innovations for studying social networks in learning and education (e.g. algorithms to describe and explain social and learning environments, combinations of different methodological approaches
- Social networks of educational policy-makers
- Other topics within the above remit

Contributions from all fields (Education, Sociology, Computational Social Science, Psychology, Organisation Science, Anthropology, Statistics, etc.) are welcome, including interdisciplinary endeavors combining insights from educational or learning sciences with social network perspectives. The session welcomes research using qualitative, quantitative, and mixed methods.

Intergroup Relations in Social Networks

Lars Leszczensky, David Kretschmer, Sebastian Pink (University of Mannheim)
Hanno Kruse (University of Cologne)
Tobias Stark (Utrecht University)

More and more researchers use social network analysis to examine intergroup relations. Studies using cross-sectional (e.g., ERGM) and longitudinal (e.g., SAOM) network analyses have established that social networks are segregated along ethnic, cultural, and religious lines.

At the same time, however, research has only begun to exploit the potential of social network analysis for understanding the processes behind the emergence of intra- and intergroup relations and the consequences of such relationships, such as group-specific attitudes, norms, or behavior.

This session invites theoretical, methodological, and empirical contributions that aim to deepen our understanding on the emergence and consequences of intergroup relations in social networks.

Sports Networks

Raphael Heiberger, Tom Töpfer (University of Bremen)
David Schoch (The University of Manchester)
Christina Plath (University of Vechta)
Jennifer Schmitz (Institute of Sport and Sportscience, TU Dortmund University)

Network analysis has become an integral part in many disciplines of the social and natural sciences, yet has only recently come into the focus of sport research. Given the abundance of connected actors in sport, adopting a relational perspective offers a great potential for integrating network analysis as a methodological approach for sports research. This session aims to bring together network analytic research which focuses on different aspects of sports. Examples include, but are not limited to:

- Competition networks based on e.g. results of games to assess relative performance of teams and players.
- Interaction networks derived from rule-based elements of a game (e.g. passes) to analyse strategies and effectiveness of teams.
- Inter-organizational networks to study collaboration between e.g. franchises, clubs and event organizers.
- Intra-organizational networks to study communication among team members or within sport associations.
- Affiliation networks based on membership in organizations and teams (e.g. two-mode networks of clubs and coaches), or participation in events.
- Social environment as a network in which individual sports actors are embedded to study, e.g., social support.

The session is not limited to any specific methodological approach and welcomes submissions that include the analysis of ego networks, whole networks, two-mode networks or any other type of network that arises from a sport related background.

Gender and Social Networks

Elisa Bellotti (The University of Manchester)

Social network research studies the mechanisms that drive formations of network structures as well as the outcomes of such structures on social behaviour. A well investigated area of research focuses on gender differences in network formations and outcomes in personal and professional networks. Researchers have looked, for example, at the different styles of socializations of boys and girls in early age, varieties of gendered network structures in different cultures, gender differences in peer networks and educational outcomes, gendered structural and cultural constrains of network strategies in organizational studies, different network positions and relational strategies between men and women at work, gender unbalance in academic networks and interlocking directorates.

This session wants to bring together interdisciplinary perspectives on gender similarities and differences in social networks which might be investigated with a variety of methods and modelling techniques. We welcome both highly quantitative modelling studies as well as qualitative research that looks at how discourses and narratives may impact the relational strategies embedded in network structures.

Topics of the session might include, but are not limited to:

- Gender differences in structure and composition of personal networks
- Gender differences in tie formation in early life
- Gender dynamics in educational settings
- Gender and social support over the lifetime
- Gender, social capital and brokerage
- Gender differences in interlocking directorates, academic networks and organizational studies
- Gendered narratives in relational strategies
- Gendered perceptions of social networks

Criminal Networks

Nynke Niezink (Carnegie Mellon University)
Paolo Campana (University of Cambridge)

The importance of social networks for analyzing criminal behavior has been widely recognized. Violence and assaults, for instance, can be thought of as directional relational events. More generally, a wide range of illegal activities, such as drug trafficking or human smuggling, requires coordination among offenders to be successfully performed. It is not surprising, therefore, that the network perspective on crime has recently gained popularity, both among academics and law enforcement practitioners, as it captures the essence of such activities.

However, the study of criminal networks is challenging. Data collection is difficult in situations where subjects aim not to be detected. Scholars have relied on police data, such as arrests, or investigative evidence, such as electronic surveillance or phone records, to build an empirical base for their analysis. Gathering first-hand evidence on such phenomena is extremely difficult, and in some cases dangerous. A second challenge is methodological, i.e. matching/developing the right statistical models based on the specificities of criminal networks to adequately test criminological theories, thus moving beyond descriptive network.

This session is dedicated to innovative research at the intersection of network analysis and criminology. We welcome a wide range of submissions focused on criminal networks, including methodological, theoretical, and empirical studies. Topics may include: collection of criminal network data, testing theories of co-offending, victimizations and violence using network data, and statistical modeling tailored to the complexities of criminal network data.

Keywords: covert networks, criminology, methodological innovation, co-offending, violence, organized crime, illegal markets.

Qualitative Perspectives in Social Network Analysis

Luisa Peters, Andreas Herz, Inga Truschkat (Universität Hildesheim)
Stefan Bernhard (IAB Nürnberg)

Qualitative approaches in Social Network Analysis (SNA) are a rapidly growing field of expertise. A variety of methodological traditions and theories inspire this research, including conversation analysis, ethnography, small story research, field theory, social world theory and interactionism. In empirical studies diverse qualitative methods are applied and different kinds of data are taken as qualitative data material including interviews, observations and visualizations. Fundamental to the qualitative approaches is a close entanglement of theory and method in the sense of a methodical holism. Their internal coherence is essential since theoretical assumptions orient methods and vice versa.
In this session we want to engage in a discussion on how different traditions and schools of thought orient qualitative research on social networks. We invite participants to present their empirical approaches and to discuss how they integrate theory, methodology and method in their research.

Contributions may tackle questions such as the following:

- How do qualitative methodical procedures relate to methodological and theoretical positions and how can they be integrated for analyzing social networks?
- What do the various strands of qualitative research offer for the analysis of social networks?
- What are the comparative (dis-)advantages of different qualitative perspectives (such as narrative inquiry or ethnography) for analyzing social networks?
- How do we integrate qualitative research strategies with perspectives taken from (quantitative) structural analysis and how can this be done in a theoretically and methodologically consistent manner?
- What are historic examples of qualitative network analysis?

Polarization in Social and Political Networks

Philip Leifeld (University of Glasgow)
Laurence Brandenberger (ETH Zurich)

Social networks, especially in political contexts, are sometimes characterized by polarization. Polarization can be caused by homophily, or attribute-based assortativity, and can be measured using a number of methods including techniques related to modularity or network centralization.

In networks that are structured by homophily, nodes interact more frequently or strongly with similar nodes than dissimilar ones. If this homophily effect becomes dominant, it can lead to polarization in the network where two or more groups of nodes separate themselves from each other and interaction between the groups becomes unlikely. Extreme forms of polarization lead to so-called echo chambers or filter bubbles, which can have negative effects on the information flow between nodes. Polarization can also be measured in two-mode networks, such as political discourse networks, in which political actors are connected to ideological beliefs and gradually seek out more homophilous profiles.

Possible sources of polarization, among others, include the widespread adoption of recommendation systems as well as endogenous mechanisms in information or partner selection in networks. Polarization has been observed mostly in the political sphere, such as voters, legislators, political coalitions, and other political actors, but may extend to other domains.

This session explores polarization and depolarization dynamics in social and political networks. It will provide a forum for presentations of empirical evidence of polarized networks as well as new insights into methodological advances made in measuring polarization. We welcome contributions from a broad range of topics such as for instance:

- opinion polarization
- evidence of polarization in discourse networks
- polarization and partisanship in legislative networks
- polarization dynamics in online social networks

We particularly welcome contributions with a longitudinal research design that analyze how polarization develops in social or political networks and the temporal mechanisms that help maintain or dispense it.

Network Ecology: Tie Formation in Context(s)

Malte Doehne (University of Zurich)
Daniel McFarland (Stanford University)
James Moody (Duke University)

Social networks are embedded in cultural, institutional, and material contexts that affect tie formation processes and the resulting network topologies. For example, romantic entanglements are subject to social and cultural norms, interfirm alliances vary by industry- and country-specific legislation, and adolescent friendships are conditioned by neighborhood effects and ethnic composition. In short, contexts clearly matter for the formation and stabilization of social relations. Which contexts matter, how exactly, and when, however, remain to be established. This organized session brings together research that addresses these and related questions through an ecological lens.

Network ecology starts from the premise that networks stabilize from variations in patterns of association that are selected for at various levels. Top-down, tie formation is conditioned by local actor configurations and the broader institutional, cultural, and material setting in which relationships form. For example, certain triads demonstrably condition the activation of some relations over others. Bottom-up, social actors shape and design various levels of contexts with the aim of creating, sustaining, and exploiting coveted positions and desired outcomes. For example, a dictator may attempt to suppress opposition by rotating functionaries in and out of office, teams can be designed to maximize performance, effective managers balance phases of outward-oriented brokerage with periods of deep engagement, and health experts tailor interventions to particular groups. In short, the contexts in which social relations are formed, maintained, and dissolved are subject to social design and efforts from within. To further develop 'Network Ecology' as a conceptual framework, we solicit methodological, conceptual, and empirical contributions that model, explain, and predict how social networks coevolve with ecological pressures that arise top- down and/or bottom-up.

Topics of interest include but are not limited to the following broad lines of enquiry:

- Substantive and methodological implications of treating social networks as outcomes of stochastic processes of tie variation, selection, and retention.
- Measuring, modelling, and predicting the coevolutionary trajectories of tie formation processes, the networks they give rise to, and the contexts in which they unfold.
- Patterns of tie formation (and tie dissolution) for different types of relations (e.g., positive, negative, instrumental, agonistic) and for different populations.
- How contexts are designed to facilitate niche formation and community structures. - Strategies actors develop to leverage social contexts and shape the networks they are part of.
- Evaluations of tie fitness and network resilience to external shocks.

Studying Intertwined Social-ecological Systems as Networks: Methodological and Conceptual Advances, and New Substantive Insights

Örjan Bodin (Stockholm University)
Manuel Fischer (EAWAG)
Karin Ingold (University of Bern)

Global environmental developments such as climate change, decreasing stocks of natural resources, or loss of biodiversity are among the most crucial challenges that humanity was ever confronted with. A central assumption in environmental research is that the effectiveness of addressing these crucial environmental challenges is contingent on the degree to which governance systems fit the characteristics of the biophysical and ecological systems where the challenges are arising.

A network approach is a promising attempt to advance this broad notion of social-ecological fit, i.e. to make it more tangible and empirically observable. Essentially per definition, a network conceptualization is well suited to grasp the interdependencies within and between different social- and ecological elements, and provides a shared cross-disciplinary language through which theories and insights from various different fields can be effectively combined and possibly even integrated. Following this notion of an integrated network spanning the domains of the social and the ecological, social-ecological fit is thus achieved if, broadly speaking, the network structure of the governance system corresponds to the structure of the ecological system being governed.

The ability of the network approach to advance the study of intertwined social and ecological systems is further fueled by a rapid development of methodological and conceptual development related to the analysis of networks, such as advanced statistical modeling techniques of multilevel or longitudinal networks, and/or the study of social-ecological networks as bi-partite networks.

The goal of this session is to further elaborate conceptual, theoretical and methodological innovations in network studies in order to advance the understanding of the politics and governance of the environment, preferably by explicating structural aspects of both the governance systems and the ecological system being governed. Studies proving substantial insights in relation to environmental governance in intertwined social-ecological systems are also welcome. Further, a network perspective can accommodate also less standardized, mathematically non-formalized, approaches such as discourse analysis or ethnography that provide thick descriptions of network perceptions and interpretations through which actors position themselves in relation to their environment. Thus, a network approach offers a more-than-ample methodological toolbox well suited for coping with the utterly complex challenges humanity is confronted with early in the 21th century.

Collaboration Networks. Methods and Applications

Maria Prosperina Vitale, Giuseppe Giordano (University of Salerno)
Giancarlo Ragozini (University of Naples Federico II)

Collaboration networks attract a lot of attention in many scientific domains as they have a positive impact on the performance of complex systems. The session focuses on presenting methodological developments and novel applications related to the session topics. Special interest is on the analysis of collaboration networks in presence of multiplex, multimode and multilevel data structure, and on collaboration data extraction and empirical data collection.

The organizers solicit the submission of papers dealing with the following topics:

- Academic and scientific collaboration networks
- Analysis of collaboration networks in economics, cultural and social environments
- Community detection in collaboration networks
- Dynamics and evolution patterns of collaboration networks
- Empirical data collection
- Mixed methods for the analysis collaboration networks

Movie Networks

Pete Jones, Termeh Shafie (The University of Manchester)

This session aims to collect social network research analysing movies. Network-based research into the film and television industries (both on-screen and off) has been growing in recent years, with more and more researchers recognising the potential of relational perspectives and methods for building understanding of cultural texts and the creative processes by which they are produced. Until now, however, such research has been disparate and has lacked the internal dialogue and cohesion that could help this research area to develop and become more sophisticated.

Based on the existing early research in this area, we offer a few suggestions for topics in which network perspectives have shown promise for deepening our understanding of film:

- Networks and film production: e.g. networks of those involved in the making of films, including organisational research into creative teams and collaboration networks among film making professionals.
- Character networks: e.g. network models of film texts, wherein narrative dynamics and the relationships and patterns of interaction between characters in narratives are explored.
- Semantic networks: e.g. text analysis of screenplays, applications of machine learning and natural language processing techniques for analysing film texts.
- Networks and intertextuality: e.g. network methods for exploring the ways in which cultural texts increasingly refer to other cultural texts, often through transmedia storytelling, and how this might impact the ways in which we engage with popular culture.
- Internet Movie Database: e.g. analysing IMDB as a two-mode network or the respective one mode projections.

These suggestions are not exhaustive, however, and we are open to considering any research which takes a relational approach to the study of film.

Evolving Stakeholder Networks

Christina Prell (University of Maryland)
Örjan Bodin (University of Stockholm)
Christian Steglich (University of Groningen)
Lorien Jasny (University of Exeter)
Manuel Fischer (EAWAG)

Stakeholder networks can be fragile or temporary in nature and/or they are dynamic and change over time. For example, a government or academic agent may assemble a group of diverse stakeholders for the purpose of discussing, and hence improving the understanding of, a given environmental problem or set of problems. Similarly, a small group of locals may invite like-minded locals along with key 'experts' or decision makers to come together for in-depth discussions around environmental (or other) topics of mutual concern. Sometimes these groups and their agendas can be broad in nature, e.g. 'water management' or 'climate change impacts' and other times, very focused around a particular problem, issue, or event. Assembling and maintaining these kinds of networks is often challenging, but studying them is also problematic on a number of fronts. For example, some networks cease to exist once external support/funding for bringing stakeholders together ends; some change in size and composition as topics arising from group discussions leads to including new actors, while other actors lose interest in the group discussion and cease participating; personal dynamics and power conflicts also can impact the composition and longevity of these groups, or affect their internal structure, again posing problems for network analysts seeking a stable, clearly defined network for study.

This panel seeks to consider a range of challenges and issues that can arise when studying these kinds of stakeholder networks. What are the inherent problems in defining, measuring, gathering data on and analyzing these kinds of networks? Further, studying such networks also raises theoretical concerns. Often, networks are created with the purpose of solving specific problems. In such cases, if they dissolve before their mission is accomplished, it could (perhaps even should?) be seen as a failure. However, in other cases these networks are meant to be short lived, like "task forces", that nonetheless draw from or are embedded within more stable ties. Still in other cases, "new" networks that are established to deal with a given issue are implicitly based on different types of existing networks among involved stakeholders. Thus, there exists a potential for theoretically exploring what drives changes in these networks overtime – are there external circumstances or endogenous ones that help networks form, remain stable, change their internal structure, or fall apart? What, in short, is the interplay between long- and short lasting networks? Understanding and theorizing how these differences shape the life course of such networks is likewise important, and thus we invite papers that consider why, how, or should such networks evolve in certain ways, and under what conditions?

Although this panel is primarily geared towards stakeholder networks focused around environmental issues, we are also open to considering papers that address other topics (e.g. health, crime, infrastructure, policy, etc.), provided that the emphasis is on the problems/challenges in studying the creation, evolution and possibly the "evaporation" of stakeholder networks. As the organizers have professional networks containing individuals interested in this topic, we will be circulating this call among these contacts to populate the panel(s).

Social Networks and Retirement

Laura Naegele, Christina Plath (University of Vechta)

The aging of societies across Europe is not only fundamentally changing the demographic composition of populations as a whole, but also the structure of the workforces within. As working populations are ageing and simultaneous shrinking, the quest of extending working lives and - as rather new phenomena - enabling post-retirement employment has moved into the focus of policy-makers, employers and researchers alike. Although an increasing number of workers opt for continuing their working lives, sometimes even beyond their statuary retirement age, little is known in regard to what is shaping their decision to do so. Some scholars in the past provided evidence that people adjust their retirement behaviour to policy reforms (e.g. closing of early-retirement options, increase of statuary retirement age), whereas others argue toward work place related factors such as the prevalence of an age-appropriate work environments or age-inclusive company-cultures. Other studies look at the individual level and show that one's individual qualification, health status, financial situation and motivation influence employment and retirement behaviour in later life.

Albeit this rather broad research body, few scholars have looked at the influence social networks may have on one's decision to prolong working life or even work beyond retirement. Moreover, if they done so, research in this context often focuses on family related networks, neglecting the important social sphere of work. There is evidence on how strong family networks might act as a "pull factor" from the labour market e.g. when people harmonize their point of retirement with their spouses or take over care responsibilities for a family member. Little research exist on the impact one's relationship with work-related networks such as co-workers, team-members and supervisors have on shaping the decision to work longer and/or retire. Having contacts with others and experience a sense of belonging is central to an individual's identity and its perceived role in society and both family and professional networks alike might fulfill this need for reference. Rooted in Granovetter's distinction between "strong" and "weak" ties it could be argued that if "strong ties" not only exist with members of one's personal network (family-members, spouse), but also with pro- 2 fessional contacts, these ties could act as "glue" ultimately preventing older workers from leaving the labour market early.

The aim of the proposed session is to take a broader look on how social networks – both professional and family related – shape the decision making of older workers to prolong their working lives. In addition, as numbers of working pensioners are rising across Europe, it is also of interest to understand how social networks influence one's reasoning behind work beyond retirement. The session invites both theoretical-conceptual and/or empirical (qualitative/quantitative) contributions and aims for contributors from a broad set of disciplines.

Mobility Flows in Education System

Giancarlo Ragozini (Federico II University of Naples)
Maria Prosperina Vitale (University of Salerno)

In the recent years student and teacher mobility has witnessed an increasing trend due to the presence of a lot of programs encouraging exchanges. At same time, the increasing inequalities inside countries, and among countries, the spreads in universities prestige and in socio-economic contexts yield student mobility and intellectual migrations. In this scenario, network approaches can be fruitful employed to analyze such mobility flows. The session focuses on presenting methodological developments and novel applications related to the network analysis applied to mobility in higher education.

The organizers solicit the submission of papers dealing with the following topics:

- Dynamics and evolution patterns of student mobility flow
- Empirical data collection and administrative databases
- Erasmus+ program
- Intellectual migrations
- International student mobility
- Intra-national student mobility
- Personal network of students in mobility

Networks and the Study of the Human Past

Martin Stark (ILS-Institute for Regional and Urban Developement)
Tom Brughmans (University of Oxford)
Ivo Veiga (Universidade NOVA de Lisboa)
Bernd Wurpts (University of Lucerne)
David Zbíral (Masaryk University)

Most network research focuses on contemporary data and is presentist in orientation, overlooking the vast store of interesting data from the past. Over the last decades, a substantial number of empirical studies have shown that both network theories and formal network methods can be productively applied to (selected) bodies of historical and archaeological data. The aim of this interdisciplinary session is to further extend the community of scholars in this field in Europe and beyond by promoting contacts between the various disciplines that aim at making sense of past phenomena through methods and theories derived from network analysis and network science.

We are looking for papers exploring the challenges and potential posed by such network studies of past phenomena. Not exhaustive examples of such challenges and avenues include: incomplete and missing data, usually without the possibility to collect more data; big data analytics and textual/semantic network analysis based on (fragmented) sources; material sources as proxy evidence for social phenomena; ability to explore long-term changes in past systems vs. the analysis of mid-term or short-term processes and the historicity of ties; etc.

The session invites contributions from researchers from various disciplines applying methods of formal network analysis and network science on the human past. We welcome submissions concerning any period, geographical area or topic. The authors may be archaeologists, historians, social scientists as well as scholars from other disciplines working with historical or archaeological data. Topics might include but are not limited to: past revolutions; migration; industrial revolution; diffusion processes; transitions from authoritarianism to democracy and back; trade; kinship; war; religion and science.

To be eligible, the proposals should:

- Address and clearly formulate research questions concerning past phenomena.
- Critically address issues related to the sources/materials/construction of data used.
- Explain why it is substantively interesting to consider their topic in formal network terms.
- Elaborate what the added value of such a relational view is, and what methodological and theoretical choices it implies.

Political Networks

Florence Metz (ETH Zurich)
James Hollway (Gradate Institute Geneva)
Mario Diani (University of Trento)
Dimitris Christopoulos (MU Vienna)

The Political Networks Section aims to provide a multidisciplinary space for scholars sharing a common interest in political networks. A network approach to studying political phenomena has become increasingly popular and broad, with topics including social movements, domestic and international legislative and policy-making processes, governance, and power. Political networks can consist of political actors, institutions, documents, topics, or events, connected by resources, information, symbols, affiliations, collaborations, negotiations or on- or offline communications. Irrespective of the topic or type of political network, researchers share an understanding of relational political phenomena, whereby the interdependencies among observations must be integrated in theory, empirical data and analysis.

Central research questions in political networks research include: Which political network topologies are more common or effective and why? Which are a political network's central actors, institutions, cleavages, or classes? What mechanisms drive the evolution of political networks? And how should we study all of the above? Scholars have analyzed patterns of collaboration, coordination or information exchange in political networks and found drivers that include perceived influence or popularity, attribute or value homophily, and closure or social cohesion as responsible for different political network topologies and how they have evolved. However, we are only beginning to understand how political network topologies and the mechanisms that drive their evolution differ across political contexts.

One way to address this gap is to compare political networks across political contexts, systems or policy sectors. Comparing political networks over space and time is a powerful strategy to support causal explanations on the antecedents or consequences of network structures. Comparisons over space can include cross-country comparisons or within-country comparisons across regions or policy sectors. Comparisons over time can include network observations at several discrete time points, or can be based on the dynamic assessment of network evolution.

Another emergent area of research involves the ways in which political networks are composed of multiple, interlocking sets of nodes and ties. Political networks are often multimodal, multiplex, or multilevel, and understanding how each node set or network depends on the other can be key to understanding individuals, groups, or whole topologies in these political networks. Handling such complex networks, especially their evolution, pushes the boundaries of social network methodology, but potentially offers rich insight.

Within the Political Networks section we aim to offer panels on political network theory, political network applications, and political network methodology, and welcome any papers that serve to extend the study of political networks in these areas.

Modeling Network Dynamics

Christian Steglich (University of Groningen)
Tom Snijders (University of Groningen and Oxford University)
Christoph Stadtfeld (ETH Zurich)
James Hollway (Graduate Institute Geneva)
Nynke Niezink (Carnegie Mellon University)

Important insights into social networks can be obtained with the help of longitudinal observation designs. Such designs can be of a varied nature. Panel data is the structure used traditionally for self-reported networks; regular time series and time-stamped data can be obtained from official or automatic records; but this does not exhaust the types of longitudinal network designs. Corresponding to these differences in data collection, a variety of longitudinal methods of analysis have been developed, such as continuous-time actor-oriented and tie-oriented models for panel and time series data, network autoregressive models for time series at regular intervals, and network event models for data with a fine-grained time resolution. Some of these methods are based on actor-oriented models, others on tie-oriented models.

This session will be open to methodological as well as applied presentations about models for network dynamics. Papers can have a mathematical, statistical, theoretical, or empirical subject-matter focus, as long as they are relevant for empirical social science.

Social Influence

Christian Steglich (University of Groningen)
Tom Snijders (University of Groningen and Oxford University)
Andras Vörös (ETH Zurich)
James Hollway (Graduate Institute Geneva)
Nynke Niezink (Carnegie Mellon University)

The empirical study of social influence using longitudinal network-and-behavior designs has been growing steadily with the availability of appropriate methods, software, and data. We now have the possibility to study quite nuanced mechanisms by which influence operates, in a diversity of research domains. For example, it is now possible to study influence based on structural equivalence (having the same network contacts) as an alternative mechanism to influence based on cohesion (direct ties). Also the question about who influences whom can be addressed. Social influence is conceptually not even limited to network-and-behavior studies. We can also investigate mechanisms of network-network influence, where one (one-mode) network defines what the reference group of social actors is that exerts influence, while another (one- or two-mode) network indicates what is being influenced. In this session we welcome methodological, theoretical, and applied contributions, as long as they are relevant for empirical research on social influence mechanisms.

Personal Networks and the Life Course

Marlene Sapin, Laura Bernardi (University of Lausanne)
and Eric D. Widmer (University of Geneva)

Personal network and life course scholarships have come increasingly closer in recent years. A strong interest for personal networks has developed in life course research around the theme of the linked lives, stressing the relational dimension of any personal trajectory. Likewise scholars originally focused on family and peer networks have become more and more aware of the importance of the unfolding of relationships through time, along with life events and transitions shaping the structures and dynamics of such networks in a variety of historical and cultural contexts. In order to promote the further integration of those two lines of research, we propose a session on personal networks in a life course perspective.

Papers on the following issues are welcome:

- The interrelations between life events or transitions and personal networks. On the one hand, such events, either normative or non-normative, often have consequences on personal networks, which may add up in trajectories of cumulated advantages/disadvantages. On the other, individuals play an active role in shaping their networks in order to cope with challenging transitions.
- Relational structures of personal networks as factors of key decisions or orientation in the life course, be it related with decisions or orientations related with work or the family. Agentic behaviors of individuals may indeed depend on resources and constrains stemming from their personal networks.
- The influence of social norms, expectations, obligations and values on the composition and the relational dynamics of personal and family networks. Norms of solidarity or reciprocity might interact in reinforcing crucial resources in some trajectories or, at the opposite, exert additional stresses or demands that hinder individual life chances.
- Methodological developments for the study of personal networks in life course research. Collecting and analyzing personal network data is challenging given the multiple dimensions of composition and structural features that might intervene with regard to the processes of development of vulnerability and strength in the life course have to be considered.

Papers with a longitudinal design are particularly encouraged, although research around specific life stages are also welcome. Quantitative and qualitative approach are equally welcome.

Complex Social Networks

Haiko Lietz, Marcos Oliveira (GESIS - Leibniz Institute for the Social Sciences)
Martin Stark (ILS - Institute for Regional and Urban Developement)
Kai Fischbach (University of Bamberg)

This session is dedicated to complexity in social networks and dynamics, that is, to higher-order structures and functionalities that spring from lower-order processes. Topologically, complexity is typically found in networks of 1,000 or more nodes, manifesting in the form of hierarchy, modularity, the small-world property, scale-freeness, and in many other ways. But complexity can also be present in the dynamics of small systems studied as networks.

We invite contributions from all the sciences on these topics:

- emergence and non-linearity
- mechanisms and generative models
- tipping points and transitions
- multi-layer or multiplex networks
- autocatalysis and evolutionary modeling
- graph partitioning
- computational social science

Ideally, contributions will be both theoretical and empirical, but those that are one or the other are fine.

Organizing this session around a theoretical approach as opposed to a context or topic will make it possible to host presentations that may have a difficult time fitting into other sessions. This session will be an opportunity for scholars from multiple disciplines to convene under the umbrella of complexity theory and benefit from interdisciplinary exchange. The organizers hope that the session will contribute to disciplinary convergence regarding methodology and terminology.

Eligible proposals will (a) clearly state the aspect of complexity addressed; (b) express how the topic is considered in formal network terms; and (c) explain why it is relevant for the social sciences.

Inference & Generalisability in Modelling Samples of Networks & Multi-Level Network Data

Marijtje van Duijn (University of Groningen)
Pavel Krivitsky (University of Wollongong)

Sociometric data that we collect are increasingly rich, and we increasingly analyse not single networks but ensembles of networks. Data using the same name generator on disjoint sets of actors in disjoint but similar settings have been collected about classrooms, schools, households, firms, legislative bodies, and other such replicable scenarios. Given such data, we often wish to pool the information from these multiple networks, and to draw conclusions generalisable to a broader population of networks in those settings. Methods to do so range from post-hoc meta-analyses to full hierarchical multi-level models.

These joint analyses raise a number of methodological questions, however. Some of them are questions that are asked in any situation that involves sampling from a population:

- What does it mean to draw a representative sample of networks?
- Can networks selected using different procedures be analysed together, and how?
- What "population" quantities are actually being estimated when metanalyses are performed or multilevel models fit?

Others are specific to social networks:

- Can the same model be fit to all of the networks in the ensemble?
- How can parameter estimates from networks that vary in size and/or composition be compared?

The goal of this session is to bring attention to these questions and to propose methods and diagnostics for joint estimation of models for multiple networks or for networks with multi-level structure. We welcome contributions on any of the above questions, related questions, or applications in which generalisability or inference to populations of networks play a role.

Agent-based Models: Linking Complex Social Phenomena to Social Network Dynamics

Andreas Flache (University of Groningen)
Federico Bianchi (University of Brescia)
Károly Takács (Hungarian Academy of Sciences)

Computational agent-based modelling (ABM) has established itself as an approach to elaborate and analyze the complex interplay between micro-behavior and macro-structure that occurs in the emergence of social networks from individual relational decisions. ABM construes agents as autonomous, yet interdependent decision makers, driven by rules that span from simple heuristics to more or less sophisticated boundedly rational decision making or cognitive processes. Increasingly, the ABM literature addresses the dynamics of social networks as crucial element in processes that bring about complex macro-level phenomena like opinion polarization, social and residential segregation, cooperation and conflict in organizations, gossip and reputation structures, social inequality, or status dynamics. Papers are invited that propose explanations of complex macro-level phenomena in terms of ABMs linking macro-outcomes with social network dynamics. Particularly – but not exclusively - welcome are contributions bridging theoretical ABM, empirical data and statistical models of network generating processes (e.g., ERGM, SAOM).

Migration, Transnationalism and Social Networks

Miranda Jessica Lubbers, Jose Luis Molina (Autonomous University of Barcelona)
Marian-Gabriel Hancean (University of Bucharest)

Scholars have long recognized the networked nature of migration (e.g., Boyd, 1989), but only in recent decades has social network analysis been gradually incorporated in research into migration and transnationalism. This interdisciplinary session invites contributions from researchers who apply social network methods (qualitative, quantitative or mixed) in the study of international migration and transnationalism. Examples of questions that could be addressed are:

- What role do social networks play for migrants in the premigration, transit and post-migration phase
- What specific roles do local and transnational ties have in migration and mobility decisions, social support provision, identity formation, or transnational behaviors?
- How can social networks help to visualize the concept of transnational social fields, or related concepts?
- How are transnational care relations configured?
- How do social networks change over the migration trajectory?
- What is the role of migration regimes in the formation and evolution of social networks?
- What are the specific challenges of social network analysis in migration research in terms of methods or ethics?