

**UNIVERSITY OF EDINBURGH  
GRADUATE SCHOOL OF SOCIAL AND POLITICAL  
SCIENCE**

**COURSE HANDOUT  
2013-2014  
Semester 2**

**Social Network Analysis:  
Mapping and exploring the network society**

**PGSP11372**

**Convenor: Gil Viry**

**Time: Lectures on Tuesdays 2:10pm to 4:00pm  
Lab Sessions on Fridays 9:00am to 10:50am**

**Location: Lectures in Seminar Room G5, Appleton Tower  
Lab Sessions in Room B.03, Chrystal Macmillan Building**

**Workshop: Wednesday 22 January 2:10pm to 6:00pm (Week 2)  
Hugh Robson Building Computer Lab**

**THIS BOOK CAN BE MADE AVAILABLE IN LARGE PRINT IF  
REQUIRED**

## Contact Details

**Course Convenor:**

**Gil Viry**

**Room 2.03, 58 George Square**

**Tel: 651 5768**

**Email: [gil.viry@ed.ac.uk](mailto:gil.viry@ed.ac.uk)**

**Office hours: Tuesdays 10.30am to 12.30pm**

A powerful way of making sense of the complexity of the social world is to analyse connections between people as social networks. Friendship, love, ideas, money, power or even disease pass through and are shaped by networks. This course will introduce you to the theories, concepts and measures of social network analysis (SNA) through a mixture of classroom teaching and hands-on computer work. Articulating social network theory and methods, it will get you thinking about the transformations of social life in contemporary societies characterised by the importance of connectedness and geographic mobility.

The course aims to discuss in particular:

- 1) to what extent social life is more networked in late modern societies;
- 2) how SNA is a powerful way of capturing empirically social life;
- 3) to what extent social networks are more individualised;
- 4) how physical and virtual mobility play an increasing role in meetings and social relationships.

Key notions will be addressed and illustrated through both the discussions of major thinkers and the use of the UCInet software and its visualisation program NetDraw on real-world data sets.

Emphasis will be placed on sociological/social science research, even though students will be free to choose their own topic/discipline for their final essay. No prior knowledge of social network analysis, maths or statistics is assumed for this course.

## Course Aims

- Investigate, develop knowledge and think critically about contemporary changes in social life and social relationships;
- Use the network approach as a way to understand and analyse constitutive tensions and interactions between individual agency and social structure;
- Be able to apply SNA and to use the UCInet software to the study of social groups;
- Be able to conduct a small-scale research project in a chosen discipline based on SNA;
- Have an advanced critical understanding of the capacity to embark on SNA for future research.

**For full course details please see the information and course content on Learn.**

## Learning outcomes

By the end of the course, students should be able to demonstrate:

- 1) A critical understanding of the principal theories, concepts and principles of social network analysis;
- 2) Knowledge that covers and integrates major areas of social network analysis;
- 3) Extensive, detailed and critical knowledge and understanding in one area of social network analysis linked to a discipline of their choosing;
- 4) A critical awareness of current issues in the field of social network analysis.

## Course Ethics

As part of the course you will conduct several short exercises during class and lab sessions. These may require both reading and some work on the task prior to class. Please keep checking ahead and come to class prepared.

The tasks provide opportunities to think scientifically about social relationships. They sometimes involve the possibility of drawing on information about your own personal life or of researching people known to you. Some students might find these topics sensitive or, in some cases, distressing. You should read this handout carefully and if there are any topics that you may feel distressed by you should seek advice from the course convenor and/or your Personal Tutor.

For more general issues you may consider seeking the advice of the Student Counselling Service,

<http://www.ed.ac.uk/schools-departments/student-counselling>

Research done for or in class should always follow general ethical guidelines and do no harm – familiarise yourself with the checklist of ethical procedures, including the principles of informed consent, confidentiality and anonymity.

<http://www.sps.ed.ac.uk/research/ethics>

Nobody is obliged to share any information about themselves or those they know if they do not wish to.

## Course Timetable

Week 1 14 January	2:10pm to 4:00pm	Lecture 1: The rise of the network society	Seminar Room G5
Week 2 22 January	2:10pm to 6:00pm <b>NOTE CHANGE OF DATE AND TIME</b>	Workshop UCINet lab session 1: Introduction to UCINet and NetDraw Importing and analysing SNA data (with the SNAS group)	Hugh Robson Building Computer Lab
Week 3 28 January	2:10pm to 4:00pm	Lecture 2: Social capital and social inequalities	Seminar Room G5
Week 3 31 January	9:00am to 10:50am	UCINet lab session 2 Power, prestige and centrality	Basement lab CMB Room B.03
Week 4 4 February	2:10pm to 4:00pm	Lecture 3: Networks over time, communities and small world	Seminar Room G5
Week 4 7 February	9:00am to 10:50am	UCINet lab session 3 Cohesive subgroups analysis	Basement lab CMB Room B.03
Week 5 11 February	2:10pm to 4:00pm	Lecture 4: Networks across space: mobility, technologies and distant social ties	Seminar Room G5
Week 5 14 February	9:00am to 10:50am	UCINet lab session 4 Affiliation networks	Basement lab CMB Room B.03
Week 6 25 February	2:10pm to 4:00pm	Lecture 5: Social relationships in contemporary society: between individualism and connectedness	Seminar Room G5
Week 6 28 February	9:00am to 10:50am Specific time slots will be allocated	Special session: one-to-one or small-group discussions with students about their final essay topics	Basement lab CMB Room B.03

## Course overview

### Lecture 1

Tuesday 14 January

#### The rise of the network society

In this introductory lecture, some major thinkers about the network society will be introduced. We will examine contemporary changes in social relationships and the tension between individuality and social structure. In particular, we will discuss the idea that social groups in a diverse society are less defined by predetermined criteria or as an institution, but rather by a set of interdependencies and relationships. We will show to what extent the form, spatial extent and nature of social groups are less taken for granted and should be more built and negotiated by actors. The network theories will be linked to the more general debates about individualisation, de-traditionalisation and globalisation. We will examine how the network approach constitutes a critique of the individualisation thesis and can be a fruitful way to capture social relationships beyond single institutions and local communities. Wellman's concept of *networked individualism* will be examined and some origins of social network analysis will be briefly presented. Finally, the strengths but also the limitations of the network approach will be discussed.

#### Homework for week 2 (Wednesday 22 January)

Read chapter 1 of Kadushin's book and chapter 2 of Rainie & Wellman's book. Think about your personal relationships with relatives and friends. Do you think of yourself as belonging to a small set of groups or rather as operating in a shifting and diverse network of individuals? Write some reflective notes about this.

#### Lecture Reading

Kadushin, C. (2011). *Understanding social networks: Theories, concepts, and findings*. Chapter 1. Oxford University Press, USA.

Rainie, L. Wellman, B. (2012). *Networked: The new social operating system*. Chapter 2. MIT Press.

#### Further Reading

Bott, E. (1957). *Family and Social Networks*. London, Tavistock.

Castells, M. (2000). *The rise of the network society*. Blackwell, Oxford.

Christakis, N. A. Fowler, J. H. (2007). The spread of obesity in a large social network over 32 years. *New England journal of medicine*, 357, 370-379.

Small animation here: <http://www.nejm.org/doi/full/10.1056/NEJMsa066082>

Emirbayer, M. (1997). Manifesto for a relational sociology. *American Journal of Sociology*, 103, 281-317.

Finch, J. Mason, J. (1993). *Negotiating family responsibilities*. New York: Routledge.

- Fischer, C. S. (1982). *To Dwell Among Friends: Personal Networks in Town and City*. Chicago: University of Chicago Press.
- Freeman, L. C. (1996). Some antecedents of social network analysis. *Connections*, 19, 39-42.
- Freeman L. C. (2004). *The Development of Social Network Analysis: A Study in the Sociology of Science*. Vancouver, BC: Empirical Press.
- Granovetter, M. (1985). Economic action and social structure: The problem of embeddedness. *American Journal of Sociology*, 91, 481-510.
- Moreno, J. L. (1934). *Who Shall Survive?* Washington: Nervous & Mental Disease Publishing Co.
- Scott, J. (2012). *What is social network analysis?* Bloomsbury Academic. Chapter 2.
- Simmel, G. (1955 [1908]). The web of group affiliations. In: *Conflict and the web of affiliations*. Trans. R. Bendix. New York: Free Press, pp. 125-195.
- Van Dijk, J. (1999). *The network society: Social aspects of new media*. Sage.
- Wellman, B. Berkowitz, S.D. (Eds.) (1988). *Social Structures: A Network Approach*. Cambridge: Cambridge University Press.
- Wellman, B. (2001). Physical place and cyberspace: The rise of personalized networking. *International Journal of Urban and Regional Research*, 25, 227-252.

## **UCINET lab session 1 (Workshop)**

**Wednesday 22 January**

### **Introduction to UCINET and NetDraw: Importing and analysing SNA data**

During a 4-hour workshop co-run by the Social Network Analysis in Scotland Group (SNAS), you will be taught the basics of network data management and will gain hands-on experience working with UCINET 6 and NetDraw visualization software. You will learn how to collect, import, transform and start analysing real-world network data.

After being introduced to the network data structure, you will be asked to participate in a small survey about the connections existing within the class. You will then learn how to import real-world network data into UCINET and do basic transformations of social networks. Finally, you will start analysing the patterns of social ties through density and reciprocity measures. The workshop will cover basic notions of SNA, such as nodes, edges, arcs, degree, neighbourhood, adjacency matrix, attributes, complete networks and ego networks.

### **Homework for week 3 (Friday 31 January)**

Complete and submit online using our submission system – ELMA the first series of exercises about network data management, network density and network reciprocity.

The series must be submitted by **12 Noon on Thursday 30 January 2014.**

### **Reference books**

De Nooy, W. Mrvar, A. Batagelj, V. (2005). *Exploratory social network analysis with Pajek*. Chapters 1-2. Cambridge: Cambridge University Press.

Hanneman, R. A. Riddle, M. *Introduction to social network methods*. Chapters 1-5 and 7-8. <http://faculty.ucr.edu/~hanneman/nettext/>

Kadushin, C. (2011). *Understanding social networks: Theories, concepts, and findings*. Chapters 2-3. Oxford University Press, USA.

Knoke, D. Yang, S. (2007). *Social network analysis. Quantitative applications in the social sciences*. Chapters 1-4. Thousand Oaks, California: Sage.

Scott, J. (2012). *Social network analysis*. 3rd Edition. Chapters 1-4. London: Sage Publications.

Wasserman, S. Faust, K. (1994). *Social network analysis: methods and applications*. Chapters 1-2 and 4. Cambridge: Cambridge University Press.

## **Lecture 2**

### **Tuesday 28 January**

### **Social capital and social inequalities**

Based on readings, you will be familiarised with the concept of social capital. In particular, the differences between *bonding* and *bridging social capitals* will be discussed and illustrated through empirical research. We will pay particular attention to inequalities in social capital. Various studies on friendship, power at work, communication, trust and control within small groups will be used as illustration. The lecture will then show that social dynamics are not only characterised by support or trust relationships, but also by conflict relationships. The structural balance and cognitive balance theories will be briefly discussed to better understand the triadic nature of social interaction. We will address the notions of network closure, homophily, Simmel's theory of social circles, strength of weak ties, multiplexity, structural holes, brokerage, tertius gaudens strategies and their social consequences such as segregation or social influence.

### **Homework for week 4 (Tuesday 4 February)**

Read the pieces of Coleman and Granovetter. Think about several forms of support you regularly or occasionally get from friends, neighbours and acquaintances. Do you think of yourself as having a large bonding social capital, a large bridging social capital, both? How has this changed over the past 5 years? Write some reflective notes about this.

### **Lecture reading**

Coleman, J. S. (1988). Social Capital in the Creation of Human Capital. *American Journal of Sociology*, 94(S1), 95-120.

Granovetter, M. S. (1973). The Strength of Weak Ties. *American Journal of Sociology*, 78(6), 1360-1380.

### **Further Reading**

Bearman, P. (1997). Generalized Exchange. *American Journal of Sociology*, 102, 1383-1415.

Burt, R. S. (1992). *Structural holes: The social structure of competition*. Harvard University Press, Cambridge, MA.

Burt, R. S. (2005). *Brokerage and closure: An introduction to social capital*. Oxford: Oxford University Press.

Cartwright, D. Harary, F. (1956). Structural balance: A generalization of Heider's theory. *Psychological Review*, 63, 277-293.

Crossley, N. (2008). (Net)working out: social capital in a private health club. *The British journal of sociology*, 59, 475-500.

- Edwards, R. Franklin, J. Holland, J. (2003). *Families and social capital: exploring the issues*. London: South Bank University.
- Heider, F. (1946). Attitudes and cognitive organization. *Journal of Psychology*, 21, 107-112.
- Heider, F. (1958). *The psychology of interpersonal relations*. New York: Wiley.
- Kadushin, C. (2011). *Understanding social networks: Theories, concepts, and findings*. Chapter 10. Oxford University Press, USA.
- Knoke, D. (2001). *Changing Organizations: Business Networks in the New Political Economy*. Boulder: Westview.
- Lin, N. (1999). Building a network theory of social capital. *Connections*, 22, 28-51.
- Lin, N. (2001). *Social capital. A theory of social structure and action*. Cambridge University Press, New York.
- Lin, N. Cook, K. S. Burt, R. S. (2001). *Social capital: theory and research*. Aldine de Gruyter.
- Putnam, R. D. (2000). *Bowling alone*. New York: Simon & Schuster.
- Simmel, G. (1955 [1908]). The web of group affiliations. In: *Conflict and the web of affiliations*. Trans. R. Bendix. New York: Free Press, pp. 125-195.
- Urry, J. (2012). Social networks, mobile lives and social inequalities. *Journal of Transport Geography*, 21, 24-30.

**UCINet lab session 2**  
**Friday 31 January**  
**Power, prestige and centrality**

You will be first introduced to the relational approach of power and the different SNA measures of centrality. You will then practice measures of node centrality and network centralisation through hands-on computer work on real-world data. Degree, eigenvector, closeness and betweenness centrality/centralisation will be calculated and interpreted. Findings will be discussed in the light of the concept of social capital exposed during the previous lecture.

**Homework for week 4 (Friday 7 February)**

Complete and submit online using our submission system – ELMA the second series of exercises about node centrality and network centralisation.

The series must be submitted by **12 Noon on Thursday 6 February 2014.**

**Reference books**

Bonacich, P. (1987). Power and Centrality: A Family of Measures. *American Journal of Sociology*, 92, 1170-1182.

De Nooy, W. Mrvar, A. Batagelj, V. (2005). *Exploratory social network analysis with Pajek*. Chapters 6-7 and 9. Cambridge: Cambridge University Press.

Hanneman, R. A. Riddle, M. *Introduction to social network methods*. Chapters 9-10. <http://faculty.ucr.edu/~hanneman/nettext/>

Ibarra, H. (1993). Network centrality, power and innovation involvement: Determinants of technical and administrative roles. *Academy of Management Journal*, 36, 471-501.

Kadushin, C. (2011). *Understanding social networks: Theories, concepts, and findings*. Chapter 3. Oxford University Press, USA.

Knoke, D. Yang, S. (2007). *Social network analysis. Quantitative applications in the social sciences*. Chapter 4. Thousand Oaks, California: Sage.

Krackhardt, D. (1999). Ties that torture: Simmelian tie analysis in organizations. *Research in the Sociology of Organizations*, 16, 183-210.

Krackhardt, D. Porter, L. W. (1985). When friends leave: A structural analysis of the relationship between turnover and stayers' attitudes." *Administrative Science Quarterly*, 30, 242-261.

Scott, J. (2012). *Social network analysis*. 3rd Edition. Chapter 5. London: Sage Publications.

Wasserman, S. Faust, K. (1994). *Social network analysis: methods and applications*. Chapters 5-6. Cambridge: Cambridge University Press.

## Lecture 3

Tuesday 4 February

### Networks over time, communities and small world

How many and what people do we know? How are our social relationships changing over the life cycle? In this lecture, we will provide some answers to these fundamental questions about social life. The classical notions of social groups and communities will be related to and transposed into a network approach. We will discuss the controversial Dunbar's numbers and the small world problem, often referred to as *six degrees of separation*. Based on empirical findings, we will also examine the changing nature of social networks over time and over the life course. How are major life transitions (e.g. first job, marriage, divorce, retirement, parenthood) impacting our social networks?

### Homework for week 5 (Tuesday 11 February)

Using the namegenweb app, upload your Facebook social network into UCINet and visualize it on NetDraw. If you have too many friends to import it into UCINet, use the visualisation tool of namegenweb. If you do not have a Facebook account, discuss the Facebook network of a classmate or use another social media like LinkedIn, Qzone, Renren or Google+ to build (a simplified version of) your personal network of 'friends' or 'followers'. Add basic attributes to characterise your contacts (e.g. social circles, age, geographical places) and describe the key features of your personal network. How fragmented is your network? Can you identify some subgroups and interpret them based on the attributes used? Do they overlap or split the network? Are there key actors who play strategic roles like connecting different subgroups? Write some reflective notes about this.

### Further Reading

Barabási, A.-L. (2003) *Linked*. New York: Plume.

Bell, C. Newby, H. (1971). *Community Studies*. London: Allen and Unwin.

Bidart, C. Lavenu, D. (2005). Evolutions of personal networks and life events. *Social Networks*, 27, 359-376.

Crossley, N. (2008). Small-world networks, complex systems and sociology. *Sociology*, 42, 261-277.

Crossley, N. (2009). The man whose web expanded: Network dynamics in Manchester's post/punk music scene 1976–1980. *Poetics*, 37, 24-49.

Crow, G. Maclean, C. (2006) Community. In Payne, G. (Ed.). *Social divisions*. (pp. 305–324), Basingstoke: Palgrave Macmillan.

Dunbar, R. I. M. (1992). Neocortex size as a constraint on group size in primates. *Journal of Human Evolution*, 20, 469-493.

Feld, S. (1981). The focused organisation of social ties. *American Journal of Sociology*, 86: 1015-1035.

- Feld, S. (1982). Social structural determinants of similarity among associates, *American Sociological Review*, 47, 797-801.
- Fischer, C. S. (1982). *To Dwell Among Friends: Personal Networks in Town and City*. Chicago: University of Chicago Press.
- Frank, K. A. Muller, C. Mueller, A. S. (2013). The Embeddedness of Adolescent Friendship Nominations: The Formation of Social Capital in Emergent Network Structures. *American Journal of Sociology*, 119, 216-253.
- Guare, J. (1990). *Six Degrees of Separation: A Play*. New York: Vintage.
- Kadushin, C. (2011). *Understanding social networks: Theories, concepts, and findings*. Chapter 8. Oxford University Press, USA.
- Milgram, S. (1967). The Small World Problem. *Psychology Today*, 2, 60-67.
- Scott, J. (2012). *Social network analysis*. 3rd Edition. Chapter 8. London: Sage Publications.
- Watts, D. J. (2003). *Small worlds: the dynamics of networks between order and randomness*. Princeton: Princeton University Press.
- Watts, D. J. (2004). *Six Degrees*. London: Vintage.
- Watts, D. J. Strogatz, S. H. (1998). Collective Dynamics of Small-World Networks. *Nature*, 393, 440-442.
- Wellman, B. Carrington, P.J. Hall, A. (1988). Networks as personal communities. In Wellman, B., Berkowitz, S.D. (Eds.). *Social Structures: A Network Analysis*. Cambridge: Cambridge University Press.
- Lee M.Y. Ellis, P. D. (2000). Insider-outsider perspectives of guanxi. *Business Horizons*, (Jan-Feb), 25-30.

**UCINet lab session 3**  
**Friday 7 February**  
**Cohesive subgroups analysis**

Based on hands-on computer work, you will learn how to detect and interpret cohesive subgroups of a variety of networks. The clustering and block modelling procedures on UCINet will be used. You will be familiarized with the notions of cliques, plexes, components, cut-points, factions and core/periphery structure. Findings will be particularly discussed in the light of the notions discussed during lecture 3.

**Homework for week 5 (Friday 14 February)**

Complete and submit online using our submission system – ELMA the third series of exercises about cohesive subgroups analysis.

The series must be submitted by **12 Noon on Thursday 13 February 2014.**

**Reference books**

De Nooy, W. Mrvar, A. Batagelj, V. (2005). *Exploratory social network analysis with Pajek*. Chapter 3. Cambridge: Cambridge University Press.

Hanneman, R. A. Riddle, M. *Introduction to social network methods*. Chapter 11. <http://faculty.ucr.edu/~hanneman/nettext/>

Kadushin, C. (2011). *Understanding social networks: Theories, concepts, and findings*. Chapter 4. Oxford University Press, USA.

Knoke, D. Yang, S. (2007). *Social network analysis. Quantitative applications in the social sciences*. Chapter 4. Thousand Oaks, California: Sage.

Scott, J. (2012). *Social network analysis*. 3rd Edition. Chapter 6. London: Sage Publications.

Wasserman, S. Faust, K. (1994). *Social network analysis: Methods and applications*. Chapter 7. Cambridge: Cambridge University Press.

## Lecture 4

Tuesday 11 February

### Networks across space: mobility, technologies and distant social relationships

The issue of social life in the context of increasing spatial mobility requirements and behaviours will be examined. We will first show how social ties in contemporary societies are built and maintained based not only on proximity, but also distance, with facilitated access to transportation and communication systems. Based on empirical research, the lecture will expose to what extent social relationships survive great distances, as well as the capacity of mobile individuals to adapt their ways of building and maintaining their social ties. We will stress that moving (and its corollary geographical distance) may be seen for individuals both as an obstacle for keeping social ties and an opportunity to free themselves from their network of origin, ascribed relationships and roles. In the light of recent (but still sparse) research, the lecture will expose the role of new telecommunication technologies, allowing people to be connected at any time and place. We will discuss how these technologies may lead to continuous monitoring, but also offer new spaces of autonomy and intimacy.

### Homework for week 6 (Tuesday 25 February)

Read the pieces of Urry and Wellman. Then set aside half an hour to reflect on your significant experiences of spatial mobility (e.g. moving to another region or town) and those of your close friends and relatives. How have these mobility experiences impacted your relationships with friends and relatives? To answer this question, you can also draw upon the geography of your Facebook network built last week. Write descriptive notes about this.

### Lecture reading

Urry, J. (2003). Social networks, travel and talk. *British Journal of Sociology*, 54, 155-175.

Wellman, B. Haase, A. Q. Witte, J. Hampton, K. (2001). Does the Internet increase, decrease, or supplement social capital? Social networks, participation, and community commitment. *American behavioral scientist*, 45, 436-455.

### Further Reading

De Miguel Luken, V. Tranmer, M. (2010). Personal support networks of immigrants to Spain: A multilevel analysis. *Social Networks*, 32, 253-262.

Elliott, A., Urry, J. (2010). *Mobile Lives*. New York: Routledge.

Fischer, C. S. (1982). *To Dwell Among Friends: Personal Networks in Town and City*. Chicago: University of Chicago Press.

Garton, L. Haythornthwaite, C. Wellman, B. (2006). Studying online social networks. *Journal of Computer-Mediated Communication*, 3.

- Larsen, J., Urry, J., Axhausen, K. (2006). *Mobilities, Networks, Geographies*. Ashgate, Aldershot, UK.
- Lubbers, M. J. Molina, J. L. Lerner, J. Brandes, U. Ávila, J. McCarty, C. (2010). Longitudinal analysis of personal networks. The case of Argentinean migrants in Spain. *Social Networks*, 32, 91-104.
- Mason, J. (1999). Living away from relatives: kinship and geographical reasoning. In: S. McRae (Ed.). *Changing Britain: Families and Households in the 1990s*. Oxford: Oxford University Press.
- Mason, J. (2004). Managing Kinship over Long Distances: The Significance of 'The Visit'. *Social Policy & Society*, 3, 421-429.
- Rettie, R. (2008). Mobile phones as network capital: facilitating connections. *Mobilities*, 3, 291-311.
- Takhteyev, Y. Gruzd, A. Wellman, B. (2012). Geography of Twitter networks. *Social Networks*, 34, 73-81.
- Urry, J. (2012). Social networks, mobile lives and social inequalities. *Journal of Transport Geography*, 21, 24-30.
- Viry, G. (2012). Residential mobility and the spatial dispersion of personal networks: effects on social support. *Social Networks*, 34, 59-72.
- Wang, H., & Wellman, B. (2010). Social connectivity in America: changes in adult friendship network size from 2002 to 2007. *American Behavioral Scientist*, 53(8), 1148-1169.
- Wellman, B. (2001). Physical place and cyberspace: The rise of personalized networking. *International Journal of Urban and Regional Research*, 25, 227-252.

**UCINet lab session 4**  
**Friday 14 February**  
**Affiliation networks**

Affiliation networks (or two-mode networks) capture connections at two different levels of analysis: groups and people (macro-micro levels). In doing so, affiliation networks capture the dual nature of social life: Individuals, by their agency, create social structures while, in turn, social structures shape individual perceptions, attitudes and behaviours. In this lab session, classical examples of real-world 2-mode networks like director interlocks, national power structures and other collectivities sharing members will be analysed and interpreted. You will learn how to use Galois Lattices (Concept Explorer software) for the visualisation of 2-mode networks, as well as correspondence analysis and 2-mode block modelling to analyse them.

**Homework for week 6 (Friday 28 February)**

Complete and submit online using our submission system – ELMA the fourth series of exercises about affiliation networks.

The series must be submitted by **12 Noon on Thursday 27 February 2014.**

**Reference books**

Borgatti, S. P. Everett, M. G. (1997). Network Analysis of 2-Mode Data. *Social Networks*, 19, 243-269.

Breiger, R. (1974). The duality of persons and groups. *Social Forces*. 53, 191-190.

De Nooy, W. Mrvar, A. Batagelj, V. (2005). *Exploratory social network analysis with Pajek*. Chapter 5. Cambridge: Cambridge University Press.

Freeman, L. C. White, D. R. (1993). Using Galois Lattices to represent network data. *Sociological methodology*, 23, U146.

Hanneman, R. A. Riddle, M. *Introduction to social network methods*. Chapter 17. <http://faculty.ucr.edu/~hanneman/nettext/>

Knoke, D. Yang, S. (2007). *Social network analysis. Quantitative applications in the social sciences*. Chapter 5. Thousand Oaks, California: Sage.

Scott, J. (2012). *Social network analysis*. 3rd Edition. Chapter 7. London: Sage Publications, 136-138.

Wasserman, S. Faust, K. (1994). *Social network analysis: Methods and applications*. Chapter 8. Cambridge: Cambridge University Press.

## Lecture 5

Tuesday 25 February

### Social relationships in contemporary society: between individualism and connectedness

In this final lecture, we will return to one major issue raised at the beginning of the course about the interplay (and tensions) between increasing individualism on the one hand and vitality and dependence on social relationships on the other. We will show that, in late modern society, while people may have more room for manoeuvre, both socially and spatially, in building their personal relationships, they are still constrained by pre-existing local social structures and social norms. Contrary to the alarmist thesis that people are isolated, mainly driven by selfish interests or lacking in strong and enduring relationships, we will present empirical findings demonstrating the diversity and significance of personal communities in late modern societies. Solidarity, reliable information and social support appear rather to be of paramount importance to face adversities and challenges that people experience over their life course and across place.

### Homework for week 6 (Friday 28 February)

Read the pieces of Allan and Duncan & Smith. Drawing on the arguments raised in these papers and in the final lecture, write some reflective notes about the tensions between individualism and connectedness in the area of your final essay.

### Lecture reading

Allan, G. (2001). Personal relationships in late modernity. *Personal Relationships*, 8, 325-339.

Duncan, S. Smith, D. (2006). Individualisation versus the geography of 'new' families. *Twenty-First Century Society*, 1, 167-189.

### Further Reading

Allan, G. (2008). Flexibility, friendship, and family. *Personal Relationships*, 15, 1-16.

Byrne, D. (2005 [1999]). *Social exclusion*. Open University Press.

Finch, J. Mason, J. (1993). *Negotiating family responsibilities*. London: Routledge.

Giddens, A. (1991). *Modernity and self-identity: Self and society in the late modern age*. Stanford University Press.

Li, Y. Savage, M. Pickles, A. (2003). Social capital and social exclusion in England and Wales (1972–1999). *The British journal of sociology*, 54, 497-526.

May, V. (Ed.) (2011). *Sociology of Personal Life*. Basingstoke: Palgrave Macmillan.

McPherson, M. Smith-Lovin, L. Brashears, M. (2006). Social isolation in America: Changes in core discussion networks over two decades. *American Sociological Review*, 71, 353-375.

- Pahl, R. E. Spencer, L. (2004). Personal Communities: not simply families of 'fate' or 'choice'. *Current Sociology*, 52, 199-221.
- Putnam, R. D. (2000). *Bowling alone*. New York: Simon & Schuster.
- Rainie, L. Wellman, B. (2012). *Networked: The new social operating system*. MIT Press.
- Roseneil, S. (2005). Living and loving beyond the boundaries of the heteronorm: Personal relationships in the 21st century. In L. McKie, L. Cunningham-Burley, S. (Eds.). *Families in society: Boundaries and relationships*, Bristol, UK: Policy Press, pp. 241–258.
- Room, G. J. (2002). Social exclusion, solidarity and the challenge of globalization. *International journal of social welfare*, 8, 166-174.
- Smart, C. (2007). *Personal life*. Polity.
- Wellman, B., Wortley, S. (1990). Different strokes from different folks. *American Journal of Sociology*, 96, 558-588.
- Wellman, B. Frank, K. (2001). Network capital in a multilevel world: Getting support from personal communities. In Lin, N. Cook, K. S. Burt, R. S. *Social capital: theory and research*. Aldine de Gruyter, pp. 233–273.

**Week 6 special session****Friday 28 February****One-to-one or small-group discussions with students about their final essay topics**

You should have taken the initiative to meet with the course convenor before this week 6 session to discuss the topic of your final essay and the network data used. During this session, you will meet, either individually or within small groups, with the course convenor to report progress and discuss any difficulties encountered in your project for the final essay.

## Online resources

On-line textbook of Robert Hanneman and Mark Riddle introducing many of the basics of SNA on UCINET

<http://faculty.ucr.edu/~hanneman/nettext/>

Borgatti, Everett and Freeman. (2002). UCINET 6 for Windows. Harvard: Analytic Technologies. A 30-day free trial version is available on the web

[www.analytictech.com](http://www.analytictech.com)

Wiki about the Pajek Software, including data sets

<http://pajek.imfm.si/doku.php>

<http://pajek.imfm.si/doku.php?id=data:pajek:index>

Data on the net

<http://3stages.org/idata/>

Online course of David Knoke on SNA Theories & Methods

<http://www.soc.umn.edu/~knoke/pages/SOC8412.htm>

Online course of John Scott

<http://www.analytictech.com/mb119/tableof.htm>

What is social network analysis? by John Scott

<http://www.ncrm.ac.uk/TandE/video/RMF2012/whatis.php?id=f37f16c>

Online course of Giorgos Cheliotis

<http://fr.slideshare.net/gcheliotis/social-network-analysis-3273045>

Official site of the International Network for SNA (INSNA)

<http://www.insna.org/>

Wikipedia on Social Network Analysis

[http://en.wikipedia.org/wiki/Social\\_network](http://en.wikipedia.org/wiki/Social_network)

## Funny things linked to Social Network Analysis

Find your Erdős number

<http://www.oakland.edu/enp/>

Six degrees of Kevin Bacon

<http://www-distance.syr.edu/bacon.html>

<http://www.wired.com/culture/lifestyle/news/2002/01/49343>

App to capture and visualise your Facebook network

<https://apps.facebook.com/namegenweb/>

About the Dunbar's number

[http://en.wikipedia.org/wiki/Dunbar%27s\\_number](http://en.wikipedia.org/wiki/Dunbar%27s_number)

## Course assessment

Three series (out of four) of practical exercises on UCINet that students will work through during the lab sessions, **worth 20% of the total mark**, completed and submitted online using our submission system – ELMA. See above for submission deadlines;

One 3,200 word essay (appendices and bibliography excluded), **worth 80% of the total mark**. For their essay, students will be required to complete an SNA analysis of a specific set of empirical data (collected themselves or not) using UCINet to critically address a research question in a discipline of their choosing. The essay must be submitted online using our submission system – ELMA by **12 Noon on Monday 7 April 2014**.

You set your own essay topic BUT this must be approved in writing by the course convenor. Never submit the same piece of writing for more than one assessment.

When writing your essay, you are encouraged to draw on lecture readings but go beyond the reading listed and resources provided. Do your own searches and draw on your own academic discipline. You must have a core of work in a discipline of your choosing and are expected to demonstrate a grasp of relevant literature in this area.

The exercises during lab sessions and lectures all build towards the final assessment and you should ensure that you participate fully in class.

For full details of the assessment please see the course information on Learn.

## Submission and Return of Coursework

### *Electronic Submission, Feedback and Return*

From 2013-4, coursework will be submitted online using our submission system – ELMA. You will not be required to submit a paper copy.

Marked course work, grades and feedback will be returned online – you will not receive a paper of your marked course work or feedback.

For information, help and advice on submitting coursework and accessing feedback, please see the ELMA wiki <https://www.wiki.ed.ac.uk/display/SPSITWiki/ELMA>. Further detailed guidance on how it works will be provided by the Graduate School Office prior to your first course work submission.

When you submit your work electronically, you will be asked to tick a box confirming that your work complies with the School's Declaration of Own Work statement. This confirms that the work you have submitted is your own (for a copy of the statement, and for information on plagiarism and how to avoid it, see [http://www.sps.ed.ac.uk/gradschool/on\\_course/student\\_intranet/for\\_taught\\_masters/courses/avoiding\\_plagiarism](http://www.sps.ed.ac.uk/gradschool/on_course/student_intranet/for_taught_masters/courses/avoiding_plagiarism) on the student intranet.

**Remember that your name should not appear anywhere on your coursework or cover sheet.**

#### *Deadlines, Extensions and Penalties*

If you cannot meet the submission deadline you should seek an extension in advance. Please check your programme handbook for details.

If you submit your work late without arranging an extension in advance, a lateness penalty will be applied. If you submit your work later than an agreed extended deadline, the lateness penalty will also apply.

#### *Penalties for Late Submission*

If you miss the submission deadline for any piece of assessed work, 5 marks will be deducted for each working day (Monday to Friday) that work is late, up to a maximum of five working days (25 marks). After that, a mark of 0% (zero) will be given. Please note that a mark of zero may have very serious consequences for your degree, so it is always worth submitting work, even if late.

#### *Penalties for Exceeding the Word Length*

The word length of your assessments is specified above. All coursework submitted by students must state the word count on the front.

If you go over the word length, 5% of the total marks given for that assignment will be deducted, regardless of how much you do so (whether it is by 5 words or by 500!). A course organiser may decide that any additional text (that is, text over the word length) will be excluded from the assignment when marked.

Word length for the final essay includes footnotes and endnotes, but not appendices, tables, diagrams and bibliographies. Given that footnotes and endnotes are included, you may wish to use a short referencing system such as Harvard.

#### *Confirmation of Marks*

All coursework assessment is reviewed at a formal Examination Board held at the end of semester 2, in late May/early June. All marks returned to you are provisional until confirmed by the Board. Provisional course marks are posted on ELMA; once confirmed, final marks are transmitted to Academic Registry and uploaded to EUCLID. Students taking SSPS degrees also receive an email telling them to check EUCLID.

## **External Examiner**

The External Examiner for this course is Dr Robert Gibb, School of Social and Political Sciences, University of Glasgow.

## **Formative feedback**

While the coursework is assessed 100% by the final essay and series of exercises you will receive ongoing formative feedback prior to this summative assessment.