Using Social Network Analysis to Explore Patterns of Europeanisation and Multi-Level Governance in South East Europe

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Discipline

Political Science and International Relations [D8]

Sub-discipline

European Politics [SD-POLIR-4]

Academic Level

Postgraduate

Contributor Biography

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holds or has held visiting fellowships at the University of California San Diego, the Australian National University, the University of Sydney, Cardiff University, the University of Birmingham, and the University of Sussex.

Published Articles

Taylor, A., Geddes, A., & Lees, C. (2013). *The European Union and South East Europe: The dynamics of Europeanization and multi-level governance*. Abingdon, UK: Routledge.

Abstract

Charles Lees describes the planning and execution of the Economic and Social Research Council research project (with Andrew Taylor, Andrew Geddes, and Ian Bache) "Multi-Level Governance in South East Europe: Institutional Innovation and Adaptation in Croatia, Greece, Macedonia, and Slovenia" (ESRC response mode RES-062-23-0183). Lees describes the rationale for the research; the research design, choice of cases, research questions, and hypotheses; the management of fieldwork; and how the team set up and operationalized their method of Social Network Analysis. Lees assesses the team's use of Social Network Analysis and finishes with four key conclusions he has drawn from the experience that are relevant to all research projects, including PhD theses.

Learning Outcomes

By the end of this case, students should be able to

- Better understand how research projects are built and run
- Better understand the logic of research design and case selection
- Better understand the use of Social Network Analysis as research method

- Critically reflect on the potential constraints and limitations on data collection and analysis
- Critically reflect on their own methodological skillset

Case Study

Project Overview and Context

In 2006, I was a member of a four-person research team (with Andrew Taylor, Andrew Geddes, and Ian Bache) in the Department of Politics at the University of Sheffield. We were awarded £280,000 by the Economic and Social Research Council (ESRC) for the research project "Multi-Level Governance in South East Europe: Institutional Innovation and Adaptation in Croatia, Greece, Macedonia, and Slovenia" (ESRC response mode RES-062-23-0183). The end of project report by three external assessors ranked the project as "outstanding."

Our project bid for the grant took around 8 months to prepare, based on weekly 1-hr meetings of the team and many iterations of the bid document. We were lucky to be working in one of Europe's top Politics departments and we made good use of this by circulating drafts among our colleagues. The advice and feedback from this process were invaluable in preparing the bid.

The actual idea for the project came from a visit to Croatia a year earlier. Andrew Taylor and I both presented papers to a workshop on multi-level governance (MLG) in Europe, organized by the South East Europe Research Centre (SEERC) and held at the Institute of Economics, Zagreb. Our papers attracted lively critical analysis from a number of researchers based in the region, who felt that we were trying to use what they regarded as an overly deterministic and top-down analytical framework (based on established notions of Europeanisation and MLG) to examine very nuanced processes of integration and institutional

compliance underway in South East European countries as a result of engagement with the European Union. These colleagues accused us of a one-size-fits-all approach to our analysis. We countered this by arguing that they were indulging in the kind of cultural exceptionalism that comparative political analysis tries to avoid. The argument was lively but good-natured and continued over dinner later that evening.

Andrew and I came away from Zagreb convinced that we had engaged with a fruitful area of research with potential for methodological development and innovation. We were still convinced that we could capture the complex political processes that were taking place in the region by using the concepts of Europeanisation and MLG but we were now also alive to the need to develop a suite of research methods that were not just compatible with our theoretical framework but also allowed a careful reading of local political contexts and the social relations and resource dependencies that underpinned them. Social Network Analysis (SNA), which focuses on how actors access and use social resources embedded in social networks through connections at individual and group levels, was part of that suite of methods and was certainly a new addition to my own research toolkit.

Research Design

Through a series of inter-related case studies, our research project assessed the extent to which the concepts of Europeanisation and MLG adequately captured and explained the political context touched upon in the previous section. We used SNA to analyze "MLG effects" in our case countries.

In our bid document, we noted that the case study design occupied a "vexed position" within the discipline of political science (Gerring, 2004, p. 341) with no settled view about their exact nature (Eckstein, 1975; Lijphart, 1971; Van Evera, 1997) or their usefulness (Mackie &

Marsh, 1995). However, we were confident our design was explicitly comparative and informed by a well-defined theoretical framework, capable of replication and application across other cases (Lijphart, 1971, pp. 691–693; Rose, 1991, p. 449; Sartori, 1994, p. 23).

The project examined three policy areas—cohesion, environment, and migration/border management—in four case countries (Greece, Slovenia, Croatia, and the Republic of Macedonia) over the period 1997–2005. The study used a reasonably loose "Most Different Systems" research design (MDSD). The independent variable was each countries' experience of engagement with the European Union (EU); the dependent variable was the presumed common phenomena of change in modes of governance in our case countries. In building our MDSD, we identified a number of key intervening variables. These were, first, the relationship between the case country and the EU (was it a member state or not? if yes, how long had it been a member state? if no, was it a pre-accession state, and for how long?); second, whether the case country had been part of Yugoslavia and the degree to which it had been affected by the Yugoslav Wars of Secession; and, third, the degree of economic and administrative modernization at T1 (1995). As is discussed below, we hypothesized that these intervening variables would account for some variance in the scope and scale of the impact of EU engagement on modes of governance across the four case countries.

In our bid document, we identified four reasons for our choice of policy areas. First, they were all highly salient policy areas and we considered them important to the development of the region. Second, they were all trans-boundary policy areas (their scope and impact were not easily confined within national borders and other neat jurisdictional boundaries) and in our judgment were therefore pre-disposed to MLG effects. Third, they were all policy areas in which there was a significant EU dimension. Finally, they fitted well with our own interests and expertise. Our

timeline started in 1995 because it marked the signing of the Dayton accords, which in retrospect marked a turning point in the Wars of Secession, the long-term resolution of which involved the EU. We chose a cut-off point of 2007 because we anticipated that, by that time, Croatia would be approaching full EU membership and Macedonia would be fully engaged in accession negotiations.

Our key empirical and theoretical research questions were as follows:

1. How had political engagement with the EU changed modes of governance in South East European countries?
2. Had this process of political engagement with the EU led to the development of MLG, as defined in the established literature?
3. What did the developing modes of governance tell us about the explanatory power of the MLG model?
4. What did our findings tell us about the process of Europeanization?

The research was driven by four empirical and theoretical hypotheses:

1. The process of engagement with the EU leads to convergence in modes of governance across sectors and countries.
2. The process of engagement with the EU leads to divergence in modes of governance across sectors and countries.
3. The process of engagement with the EU leads to inertia rather than reform of modes of governance across sectors and countries.[1]
4. Patterns of convergence and divergence in South East European countries can be explained by the impact of intervening variables on the process of engagement with the EU.

Specific methods of data collection and analysis were as follows:

1. Large *n*—descriptive statistics, at both national and EU-level, relating to state and non-state actors
2. Small *n* and/or qualitative—judgmental opinion of official sources (organigrams, policy documents, etc.) and interviews; content analysis (using NVivo 7, an earlier version of what is now a widely used software package that is designed to organize, analyze, and visualize unstructured data); and single case SNA (using UCINET, a software package that is designed for the analysis of social network data)

We used SNA to operationalize our notion of MLG, which drew on Hooghe and Marks' (2003, 2004) twofold typology of MLG in which

1. Type 1 MLG has echoes of federalism, suggesting a system-wide arrangement in which the dispersion of authority is restricted to a limited number of clearly defined, non-overlapping jurisdictions at a limited number of territorial levels, each of which has responsibility for a "bundle" of functions
2. Type 2 MLG is one in which the jurisdiction of authority is task-specific, where jurisdictions operate at numerous territorial scales and may be overlapping

As far as we were aware, SNA had not been used in this context before and opened up the possibility of achieving greater validity and replicability in our findings. As already noted, SNA focuses on how actors access and use social resources embedded in social networks through connections at individual and group levels. We wanted to use SNA to explore the politics of institution building over time in our case countries, particularly the complex patterns of adaptation and interaction involved in this process. We saw SNA as a means to counter the "small-N problem" associated with studies with a limited number of cases and give us a means

of systematic analysis across networks and countries. In our project document, we worked from the a priori assumption that networks sustain individuals and organizations and provide resources to the structures themselves (Coleman, 1990). We defined networks as sets of co-operative ties linking sets of social actors. The specialist software UCINET allowed us to focus on the density and intensity of network interaction, through a computation expressing the ratio of the total possible links to the total actual links in the network (Cinalli, 2004). We also intended to use the software packages QCA and TOSMANA as additional tools for fuzzy set analysis (Ragin, 2000) of key variables determining network density. However, for a number of practical reasons around the process of data collection, this line of enquiry was less fruitful than our SNA research.

Research Practicalities

Field research was organized through SEERC, an international, not-for-profit research center operated by the University of Sheffield and CITY University, Thessaloniki. We used individual field researchers to collect data in each case country across all three of our policy areas. The fieldwork coordinators were Ian Bache (focusing on cohesion policy), Andrew Geddes (migration), and me (environment), and we were responsible for coordinating the research into our policy area across all four countries. We designed this arrangement so that each field researcher would interact with all three coordinators and each coordinator would interact with all four field researchers. It was intended that this would reduce individual measurement bias and maximize the degree of triangulation of our data; as well as to alleviate some of the principal–agent dynamics associated with sub-contracting field research. Nevertheless, one of the fieldworkers we originally recruited proved to be very unsatisfactory but we were able to recruit an excellent replacement and there was no significant overall impact on the study.

Our intention was that that field researchers would identify candidates for elite interviews but that the research coordinators would carry out most interviews. We originally planned for at least 40 interviews per policy area (a minimum of 10 per policy area per country), drawn from the following:

1. EU sections of each country's foreign ministry
2. Sector-specific departments
3. Other state actors at the national/sub-national level
4. Social partners
5. Wider non-governmental organizations (NGOs)
6. EU Directorates General
7. EU field offices
8. Member state field offices

It was assumed that interview data generated were to be in English and would then be transcribed for transparency, replication, and for use with specialist software. We recognized that any additional non-English language interview data would require transcription before and after translation. In addition, non-English language official documents would also need translation for use with our software.

Method in Action

A social network is a structure composed of *nodes* that are *tied* by the relationships established by actors to satisfy the requirements set out by the EU in that specific policy sector. The term "node" originated in computer science and is used to convey information about the individual and collective actors within the policy networks that we wished to unpack in our analysis. The term "tie" describes the relationships between the individual actors and the nature of these ties is

as important as the identity of the nodes in any network (Dowding, 1995). In our analysis of the ties that bound actors in our case countries, we hoped to capture the exchange of resources and the development of inter-organizational dependencies directed at the achievement of outputs or outcomes and the manner in which actors solved policy problems and managed political relationships. This allowed us to "bring agency back in" to our analysis, as it were, and in doing so move on from the sometimes static and top-down conception of MLG found in the literature. Using software, nodes and ties were to be presented as complex "webs" that are graphically rich and complex but potentially analytically intractable. In other words, we recognized that SNA was not a magic bullet and sound research design was crucial when using it.

In the data collection stage of our project, we conducted around 120 semi-structured interviews with policy makers, officials, and other actors concerned with each of our three policy areas in four case countries, as well as officials in the Directorates General in Brussels. We also asked interviewees to complete a short, structured questionnaire in which they identified those institutions and organizations with which they interacted and estimated the frequency of that interaction. We then collated these data so that our UCINET software could create network maps. The two questions we used to generate our data are set out in Figure 1.

Figure 1.

Caption: Questions designed for generating SNA data for UCINET.

1. With which organizations does your organization interact most often?

List of institutions/organizations (add information supplied by fieldworkers)	**How would you characterize the frequency of your contacts?**	**How would you characterize the nature of your relationship?**

	X—no significant contact **1—occasional** **2—regular** **3—permanent**	**X—no significant contact** **1—occasional business relations/work contacts** **2—contacts, confined to individual projects** **3—strategic cooperation**
	X 1 2 3	X 1 2 3
	X 1 2 3	X 1 2 3
	X 1 2 3	X 1 2 3
	X 1 2 3	X 1 2 3
	X 1 2 3	X 1 2 3
	X 1 2 3	X 1 2 3
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	X 1 2 3	X 1 2 3
	X 1 2 3	X 1 2 3
	X 1 2 3	X 1 2 3

2. STATEMENT: The following organizations are influential over cohesion/environment/migration policy in XXXX/others.

Add from list supplied by fieldworks + any others identified by interviewee (examples below)	**Strongly agree**	**Agree**	**Somewhat agree**	**Neither agree nor disagree**	**Somewhat disagree**	**Disagree**	**Strongly disagree**
Central government	1	2	3	4	5	6	7

Local government	1	2	3	4	5	6	7
European Union	1	2	3	4	5	6	7
Business interests	1	2	3	4	5	6	7

Civil society organizations	1	2	3	4	5	6	7
Other organizations, namely: 1 2 3 4 etc.	1	2	3	4	5	6	7

If we look at Figure 1, we can see that our two questions both use rating scales (Q.2 uses a Likert-type scale) that we designed to generate quantitative data that reflect actors' perceptions of the structure of social networks and the density and intensity of interactions within them. Our data were small *n* in nature but, with a larger sample size, it would also be possible to generate large *n* datasets with this method. To generate our sample, we made use of the "reputational method" (Polsby, 1980, pp. 144–145). This meant we relied heavily on snowball sampling in which we asked interviewees who *they* considered the most influential actors in their network and with whom *their* organization interacted most frequently. Where no other interviewee

subsequently mentioned an actor, we excluded that individual or collective actor as we assumed that a lack of corroboration from other actors pointed to limited influence in the wider network. We also specifically avoided asking questions about European integration to avoid "leading" respondents to over-emphasize the EU's role. The visual outputs of our data analysis in the environmental policy sector are presented in Figure 2.

Figure 2.

Caption: Environmental policy webs in our four case countries.

[TS: Insert Figure 2 here]

In looking at these webs, it is important to bear in mind the following. First, one should not infer too much from the physical shape of the webs: an SNA chart with a dense network may reflect the ease with which interviews could be secured rather than the reality on the ground. In addition, it is tempting to assume that a large, complex map with many participants indicates a diffuse power structure and pluralistic politics. By the same measure, smaller, tighter networks do not necessarily indicate an elite, or oligarchical, power structure. Finally, there is a difference between "networked-ness" and "multi-levelled-ness." The environmental policy network web for Greece is clearly visually richer and denser than that reported in Macedonia. However, because it lacked capacity, Macedonia's elites had welcomed outside expertise into their governance network in a way that Greek elites had not. This meant that, in relative terms, although Macedonia's governance network was quite under-developed, it was in fact very "multi-level" in nature with a great deal of penetration by international non-governmental organizations and other actors.

Practical Lessons Learned

As we noted in our End of Project Report, our research was relatively problem free but the following problems were worth noting. First, we underestimated the amount of time that was required to set up an interview schedule in the region and in Brussels, even though we believed that the original fieldwork schedule set out in the bid document had been generous in the amount of time allocated. What turned out to be our failure to budget enough time was compounded by the richness of material gathered from our interviews, which had the effect of slowing down the overall process of data analysis. This meant we had to put back the date originally intended for a major dissemination event in the region, because it would have been pointless to hold it until we had had time to process the results of our research.

There were also self-imposed limitations to our data. When collating our data, we only explored whole or complete networks, identifying the ties expressing specified relations in defined and discrete policy areas by our interviewees. No attempt was made at achieving "comprehensive" coverage of policy networks and, as already noted, there was a degree of subjectivity in data that constrained the strength of our knowledge claims. In addition, we applied the "union rule" for symmetric data: if more than one organization identified contacts with a third party but the third party did not mention the other parties (or was not interviewed), we assumed that the contact is reciprocal. In addition, where we found divergence in data, we did the following:

1. Divergence between interviewees within organizations: the mean was coded
2. Divergence between interviewees in separate organizations: the highest answer mentioned was coded

The important point to mention here is that we were aware of potential data gaps in our field research. For instance, we knew that for practical reasons, some key actors were not

interviewed but, if more than one of our interviewees regarded a non-interviewed actor as influential, we captured this in our data. Nevertheless, we recognized that in our operationalisation of SNA, we could only explore relationships involving actors we had interviewed. Inevitably, this meant that we could say little about the relationships of actors not interviewed. However, we were confident that our sample was robust and that the descriptive small *n* data generated by it was reliable.

For all of the reasons noted above, we sought and were granted two no cost extensions to the project. These did not affect the eventual outcome of the project and, indeed, the delays were essential in completing our analysis and dissemination activities. So, in terms of lessons learned, the experience has taught me to be more cautious about what can be achieved in a limited amount of time and, therefore, to be more generous in allocating a schedule for fieldwork and also for data collation and analysis. It will nearly always take longer than you think it will.

Conclusion

As already noted, our End of Project Report saw our work classified as "outstanding." Our research team was praised for solid organization, careful use of resources, a good dissemination strategy, and important empirical and theoretical conclusions. The project would eventually yield a number of academic outputs, including our book *The European Union and South East Europe: The Dynamics of Europeanization and Multi-Level Governance*, published in 2013.

I drew four conclusions from our experiences on the project. First, when writing for an academic or well-informed practitioner audience, do all you can to get it read by peers or colleagues that you trust and take their feedback seriously. You have little or nothing to gain by being the "lone wolf" scholar. Second, make sure that your research design is clear and that your methods of data collection and analysis are appropriate to it and practicable. Third, give yourself

significantly more time than you think you need—you do not want to rush your fieldwork and analysis. Fourth, do not go looking for a "magic bullet" research method but *do* keep working on expanding your methodological toolkit. I am a firm believer in a mixed methods approach but that does not mean sticking to a tried-and-tested set of (often exclusively qualitative) methods. In this case, SNA was a new addition to my methodological toolkit and one that allowed us to abstract out of often complex real-world settings. In the end, we found that the strength of knowledge claims we could make was limited and had to be triangulated against more detailed "thick" description and careful scholarship.

Note

1. This is effectively a null hypothesis and is included because inertia is central to the Europeanization literature (see Ladi, 2005, for instance).

Exercises and Discussion Questions

1. What is your assessment of the research team's Most Different Systems Design? Can you think of any other research design that might have worked in this context?
2. What is your assessment of the research team's two questions for generating SNA data? Can you think of other ways in which these data could be generated?
3. What is your assessment of SNA as a research method? What are its strengths and limitations?
4. Do you have the appropriate suite of methods for your research? How could you build on your existing skillset?

Further Reading

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Web Resources

http://www.seerc.org/new/relateddocuments/seerc-annual-report-2008.pdf

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