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in the trinational region
of Basel**

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Abstract

This paper provides evidence of how national and linguistic borders affect the structure of policy networks. Our analysis of the Basel metropolitan region located across Switzerland, France and Germany considers the case of cross-border public transportation. Using a social network approach based on 44 actors, we show that national borders play a diminishing role in the formation of policy networks for both information exchange and decision making but still limit interactions between German and French-speaking actors. Local actors develop different brokerage roles according to their country of origin, with Swiss actors acting as coordinator and representative brokers vis-à-vis players located in France and Germany.

Keywords: policy networks, cross-border metropolitan region, transport policies, social network analysis, Basel, Switzerland, France, Germany

JEL Classification Codes: F15, F16, J61, R42, R50, R58

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1. Introduction

In the last decades, a large variety of political initiatives have been developed in cross-border metropolitan regions, with the general aim of increasing spatial integration, positioning the metropolis vis-à-vis other national or international metropolitan regions and developing shared values that transcend administrative divisions. Over the time, it is often assumed that a joint vision of the cross-border territory will emerge and overcome the stereotypes based on distinctive visions of national space. In most of the European urban regions, the objective of a united cultural and cognitive cross-border region has so far not been realised (Soeters *et al.*, 1995; Löfgren, 2008; Paasi and Prokola, 2008; Schneider-Sliwa *et al.*, 2009). National preferences strongly affect the behaviour of urban dwellers, despite the institutional and political efforts to develop a sense of belonging to a common living space.

Until now, most of the literature devoted to the persistence of national preferences has targeted local populations, their consumer behaviour, and their mental identification with a cross-border region. Very few studies have specifically aimed at examining whether national preferences could also play a role among the stakeholders that design, finance and develop cross-border policies. Yet, these stakeholders are nonetheless regularly confronted with the problems and opportunities that characterise the development of border regions. In their daily work with foreign partners, they must engage with different bureaucratic hierarchies, contend with linguistic difficulties, learn to deal with different professional cultures, and manage conflicting political agendas. At the same time, they also form a ‘small world’ that regularly meets and exchanges information in an informal way and have developed a common understanding of the major regional issues. Cross-border governance thus results from the subtle and delicate balance between the heterogeneity of the border situation and the common concerns arising from cross-border urban development.

In this paper we are interested in how policy networks differ across countries and linguistic areas. In line with previous studies that considered governance through networks (John, 1998; Knokke *et al.*, 1996), we focus on how such borders affect the density of information exchange and the process of decision making. Our analysis focuses on transport policies in the Basel region located across Switzerland, France and Germany, which combines two contrasting characteristics that are likely to influence the persistence of nationally-based behaviours within policy networks. On the one hand, the region is strongly polarized by Basel City, where urban elites exert leadership over the trinational region, and is marked by strong

wealth differentials between Switzerland and the neighbouring regions (ESPON, 2010). On the other hand, Basel has since the 1960s developed pioneering institutional and private bodies that aim to enhance spatial integration. The region is widely regarded as an example of cross-border cooperation in Europe, particularly as far as transport is concerned. Public transport has long been recognised as a top priority and is the starting point for the agglomeration programme subsidized by the Swiss Confederation Agglomeration Policy.

Using social network analysis (SNA), the paper successively tests two hypotheses. First, we wish to know the extent to which the existence of national borders and language barriers still limit interactions between the partners involved in cross-border transportation policies. Because of the prolonged history of cooperation in the Basel region, we suppose that local partners know each other well and are used to collaborate. Thus, we expect to find few homophily effects, meaning that information exchange and decision-making should take place irrespective of the nationalities of the players. Secondly, we wish to know whether being in a border context allows the players to develop specific brokerage opportunities, i.e. possibilities for an actor to bridge loosely connected parts of the networks, called structural holes (Burt, 2005). The fact that the Basel urban region brings together three countries offers interesting opportunities for testing brokerage roles that arise from the interactions between a broker and two other social actors. Because of the various political and economic differentials in the trinational region, we expect local actors to have different brokerage roles according to their nationality.

The article starts with a brief literature review on policy networks before elaborating the methodology used to analyse those policy networks. It then discusses the specificities of the Basel trinational region. In the fourth part, the article tests whether national preferences still influence the exchange of information between actors and shape the decision-making process of transport policy networks. The paper concludes with a summary of key findings and discusses policy implications related to cross-border governance.

2. Policy networks in border regions

The policy network approach has become one of the most influential paradigms in political science in recent years (Dowding, 1995). The approach enables an understanding of how the relations between social actors are structured by their social context. In the framework of urban policies, the policy network approach has contributed to the identification of key actors

involved in the political process of decision making as well as those who are excluded, how these actors cooperate to achieve their objectives, which actors or group of actors exert pressure, which have formal power and which may influence decisions in other ways, and how these actors would cooperate when faced with different or conflicting institutional and historical frameworks. One of the advantages of adopting a policy network perspective is that it does not assume that information and decisions flow from top policy makers down, but recognizes a more versatile field of policy making (Cooke, 1996).

Until now, a great majority of the research on urban governance analyzing policy networks has focussed on national policies (Knoke *et al.*, 1996; Marsch and Rhodes, 1992) or on European and North American metropolitan areas (John, 1998; Cole and John, 2001; Gissendanner, 2003) while cross-border regions have rarely been considered as a relevant unit of analysis. However, the concentration of economic resources in city-regions does not stop at the national borders and thus is also of direct concern to major cross-border metropolitan regions (Brunet-Jailly, 2006; Sohn *et al.*, 2009; Nelles and Durand, 2012). Cross-border metropolitan regions are of great interest in the study of policy networks for at least three reasons. First, these urban regions force us to rethink the relationship between cities and borders. As noted by Reitel *et al.* (2002), the utility of such a coupling appears counterintuitive: as institutions of nation-state borders classically evoke the idea of periphery, fringes and closeness whereas the city is linked with notions of centrality, accumulation and social interaction. Second, following the relativisation of the role of the state in regulating social and economic order, cross-border metropolitan regions have emerged as privileged sites of globalization and can no longer be considered national peripheries (Leresche and Saez, 2002; Blatter, 2003). Third, these regions have substantially benefitted from the debordering of Europe, i.e. the diminishing effect of national borders in the central part of the continent, which has led to an increase of cross-border functional interdependencies (Decoville *et al.*, 2010).

The opening of the borders in Europe constitutes an opportunity for cities to exploit border differentials and to flourish from the opportunities that they represent for businesses and labour markets. Border differentials represent a source of new opportunities contributing to accelerating awareness of the benefit (or the necessity) of cooperating with the territories located on the other side (Reitel, 2006; Sohn, 2010). In addition, if the border remains a political and institutional factor, the wide variety of cooperative projects resulting from EU

programmes initiated since the 1990s at the cross-border scale has shown that borders are not necessarily a limiting factor (Perkmann, 2003). The promotion of legal tools by the EU and the provision of financial resources aimed at formalising cross-border projects constitute a strong incentive for cities and regions to cooperate (Scott, 2002). Generally, an increase of functional interdependencies leads to the spatial integration of peripheral territories located increasingly far from the urban centre. In the case of cross-border metropolitan regions, those integrated territories can frequently be very close in distance to the core urban centre, but be located in another country. This leads to the emergence of new cross-border management systems for two reasons. First, new challenges often emerge due to the institutional differences between national territories: public bodies must find solutions to make the system work. Second, the embeddedness of metropolitan centres in the global network of world cities often requires an acceleration of spatial integration at the regional level, in order to build common project on cross-border scale, or make the city region become more globally visible.

3. Methodology and case study

3.1. Methods

Building on Knoke *et al.*'s (1996) comparative analysis of policy networks and John's (1998) study of urban policies, we conducted a structural analysis of transport policy networks. Following a methodological approach primarily based on network analysis, we define networks as a specific set of inter-relationships among a defined set of persons within a social system. These collections of individuals and the linkages between them can be analysed through relational theories of social interaction and analytical tools developed by SNA over recent decades (Carrington *et al.*, 2005).

One of the key issues in network analysis is that social actors are not statistically independent and, therefore, using random sampling is not possible (Contractor *et al.*, 2006). In addition, exceptional actors are by definition unique and cannot be sampled. In order to address these challenges, we started by listing all organizations and firms working in the field of cross-border public transport in the region and performed a two-mode analysis based on their co-membership in the following cross-border institutions. Out of the 74 organizations or firms that belonged to one or several of these cross-border institutions, we selected the most prominent and used two experts as informants to identify who were the most relevant actors within each of these organizations or firms. We used snowballing techniques (Christopoulos,

2009) as an alternative to standard sample surveys to conduct three waves of interviews. As shown in Table 1, our first wave was composed of 43 individuals. Five of them proved to be not relevant for the field of cross-border public transport because they had no cross-border activities or did not exist anymore and two of them refused to answer our questions. Our respondents mentioned 51 actors that they considered as the most prominent of the region, 16 of which were mentioned more than three times. We conducted a second wave of interviews with these actors, which led to 7 more interviews. A third wave was conducted with one actor, resulting in a final population of 44 actors, 26 in Switzerland, 16 in France and 7 in Germany. The overall response rate of 83% resulted in the estimate of the real complete network, without our results being negatively affected by missing data (Kossinets, 2006).

Table 1. Waves and response rates

	Planned	Not relevant / not existing	Refused	Interviewed	Response rate
Wave 1	43	5	2	36	94.7%
Wave 2	16	2	7	7	50.0%
Wave 3	1	0	0	1	100.0%
Total	60	7	9	44	83.0%

Source: authors

Between December 2010 and August 2011, we first asked with whom our respondents had been exchanging information in the last two years (2010-2012). Information exchange included all exchanges through personal interaction, phone, email, social media or circulation of documents that was targeted at a specific person within an organization. This did not include emails to lists or generally distributed memos but was the information targeted to specific other organisations. We called this network the ‘information’ network. Because we wanted to compare the information exchange network to the decision making network, we also asked our respondents to nominate who they regarded as the most prominent actors in the field of cross-border public transport. We called this network the ‘decision’ network. In contrast to the ‘information’ network, which was based on real interactions, the ‘decision’ network relies on the representations of cognitive social structures the actors have of how it is important in the region. Finally, we asked actors where the most important decisions concerning cross-border public transport were taken in order to have a precise idea of which cities were seen as regionally important. We complemented this social network analysis with a

series of open-ended questions asked to the 44 actors. This qualitative assessment gave us insights on the major achievements and challenges in the field of public transport.

3.2. The Basel region

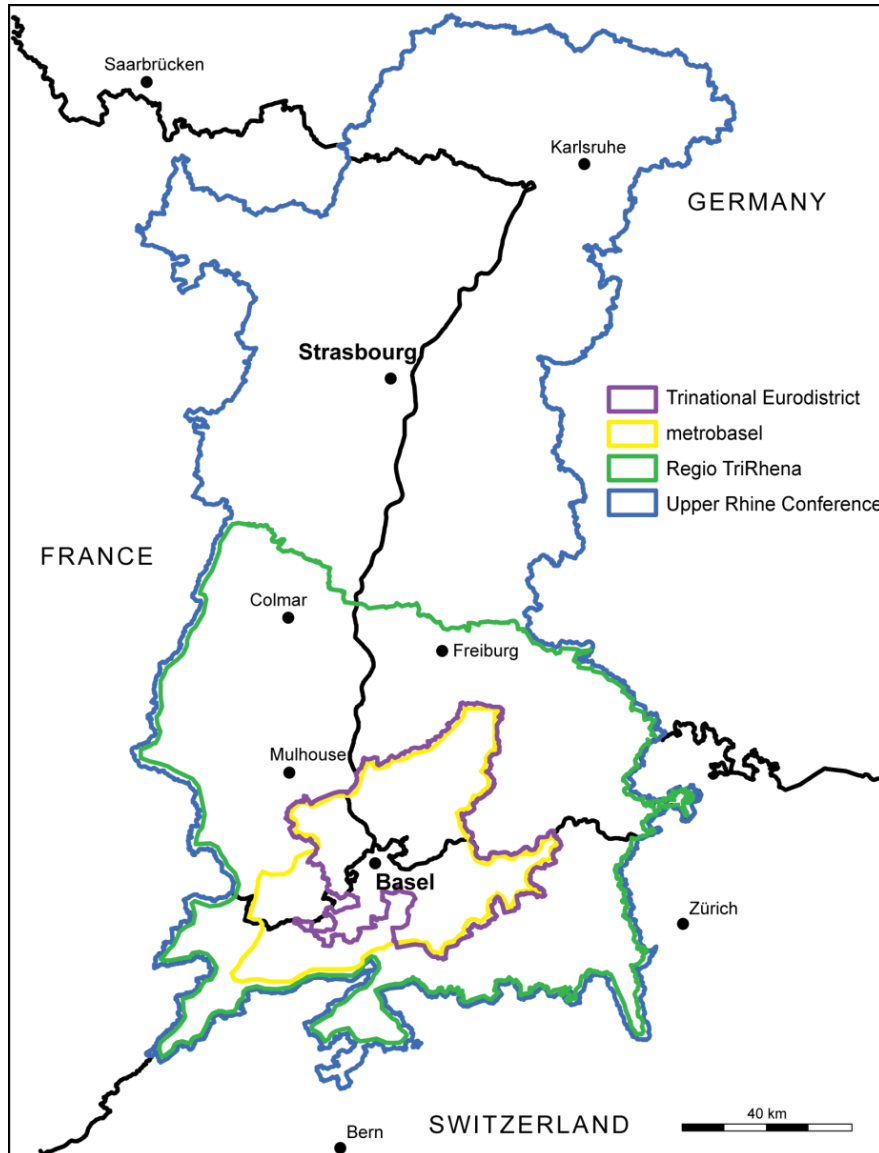
Among the 11 cross-border metropolitan regions identified in Europe (ESPON, 2010), Basel is particularly interesting in the sense that two conflicting stereotypes seem to be attached to the actors involved in the cross-border cooperation process.

On the one hand, the region is often seen as if cross-border cooperation still functions according to national divisions and interests when it comes to decision-making. This perspective draws on the long history of dominance of Basel in the region (Habicht, 2008). Before the 19th century, Basel was the centre of a region bounded by the Vosges (West), the Black Forest (East) and the Jura (south). The surrounding rural areas were supplying the influential elite of merchants located in Basel with agriculture products. In the 20th century, Basel managed to transform its border location into an economic opportunity by concentrating employment in a limited number of sectors and radically transforming its economy from chemical production to life sciences in the mid-1990s. The city is now home to two of the five largest pharmaceutical companies in the world, has the highest R&D investment as a share of Gross Regional Product in the world and the largest number of employees in life sciences in Europe (BAK, 2010). The city is also recognized as a major cultural centre: Art Basel is the world's premier international art show for modern and contemporary works, and Baselworld one of the largest watch and jewellery shows. Basel is still one of the richest Swiss cantons and certainly one with a deliberate international orientation. Basel urban elites have developed a common vision of what their city should be which contrasts strongly with the neighbouring French and German municipalities that have developed more slowly and were mostly rural until the beginning of the 20th century.

On the other side, the Basel region has long been praised for being a pioneer in cross-border cooperation (TEB, 2008; ETH-Studio, 2009), sharing a common culture and be well advanced in terms of building a shared vision of the future (BAK, 2006; TEB, 2007). The region has developed several cross-border structures since the 1960s, including the Trinational Agglomeration and Eurodistrict of Basel and metrobasel (local), the Regio Basiliensis, the Regio TriRhena (regional) and the Upper Rhine Conference and Council (macro-regional) as shown in Map 1. In the 1960s, the vision of Basel was elaborated at the regional level but,

since the mid-1990s, this vision has increasingly focused on the cross-border urban area, an illustration of the rise of city-regions in policy development (Harrison and Growe, 2012).

Map 1. Cross-border institutions in the Basel and Upper Rhine region



Source: authors

More recently, Basel has benefited from the Swiss Confederation Agglomeration Policy, which has financed large-scale transport infrastructure in the trinational region (metrobasel, 2006; Swiss Federal Council, 2007; Kanton Basel-Stadt, 2008; Schneider-Sliwa, 2008). An interesting feature of this policy was that it allows Switzerland to finance transport infrastructure in neighbouring countries if the projects are in the interest of the Basel urban area as a whole. As a result, tramlines have been built from Basel to Germany with an

important participation of Swiss funds (Swiss Federal Council, 2010) and an extension into France is in the planning stages. In addition, decades of institutional and private efforts have been devoted to promoting a common sense of belonging in the trinational region through a variety of cultural and social activities. The most recent example of such efforts is IBA-Basel 2020, an international architecture fair that will bring together Basel actors and its French and German partners over a period of 10 years.

4. Network analysis

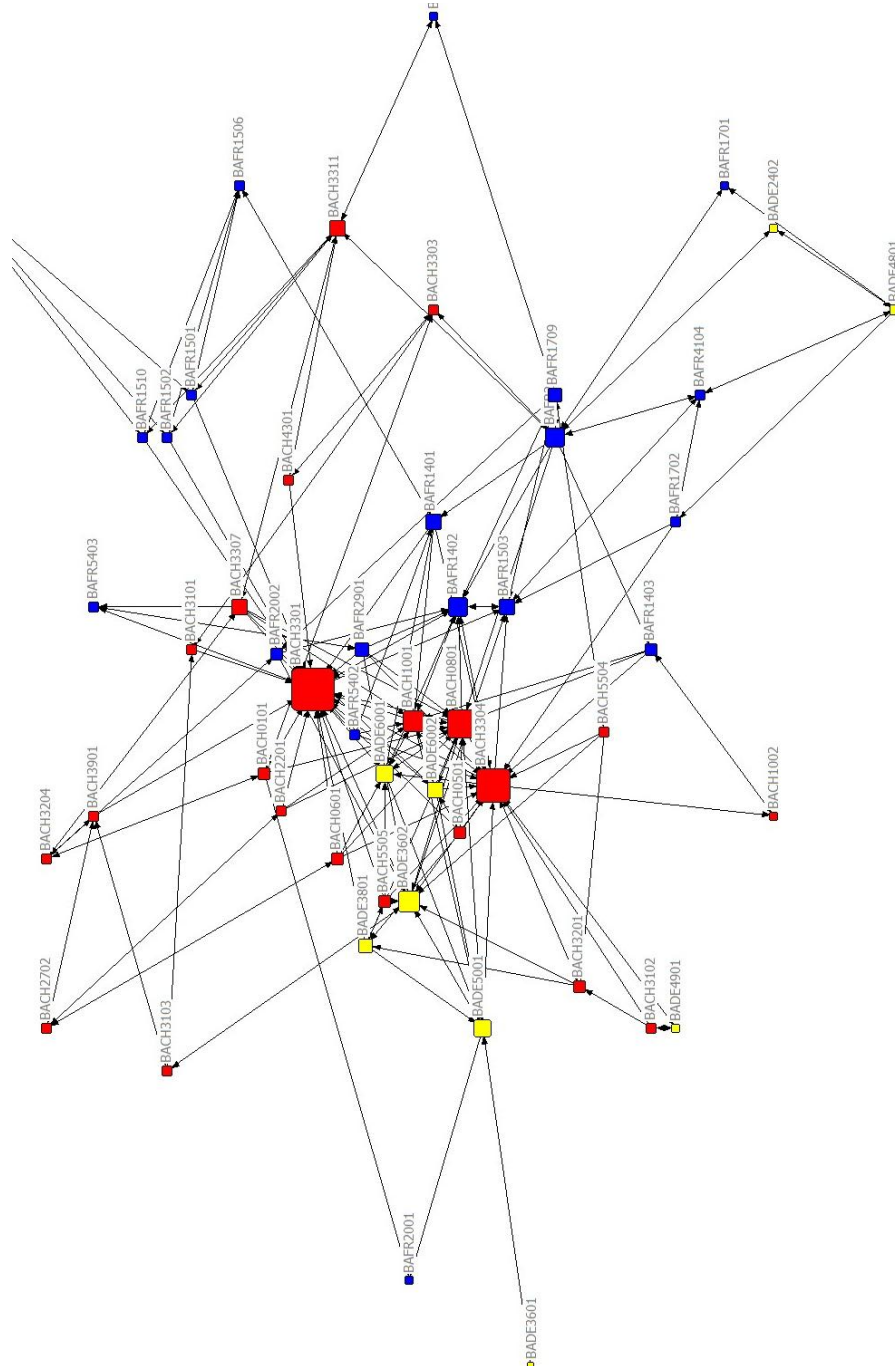
That Basel is simultaneously a profoundly divided region in terms of economic and political resources and a pioneer in cross-border co-operation has long constituted a challenge for the actors developing policies in the field of public transport. Our network analysis reveals how the structure of such policies are affected by the existence of national and linguistic borders by focussing on the exchange of information between local partners and on decision making processes in turn.

4.1. The centrality of actors

The structure of our two policy networks reflecting the exchange of information or the decision making process is quite dissimilar. The ‘information network’ (based on who exchanges information with whom) is composed of a large number of densely connected actors: 25.5% of all possible ties are actually present in the network but relatively few actors stand out as particularly central. Figure 1 shows how our actors are tied together. The size of the nodes on both figures reflects the degree centrality of these actors with countries in colour. Four out of the five most central actors are from Switzerland. The Cantons of Basel City (CH3301, CH3304) and Basel Land (CH3201), the transport companies BVB Basler Verkehrs-Betriebe, BLT Baselland Transport and Swiss Federal Railways (CH1001, CH0801, CH5505) and the cross-border institution Regio Basiliensis (CH4701) are particularly central. The most central French actors work for the Eurodistrict (FR2001) while the representatives of the German border municipalities of Lörrach and Weil am Rhein (DE3801, DE6002) also appear quite central.

the transport companies BVB and BLT (CH1001, CH0801). On the other side of the border, actors from the German municipality of Lörrach (DE3602) and the EuroAirport Basel-Mulhouse-Freiburg (FR2101) are central.

Figure 2. Decision-making: Degree centrality with countries in colour



Note: Swiss (red), German (yellow) and French (blue) actors. Source: authors. Software: UCINET 6.258 (Borgatti, Everett and Freeman 2002).

The centrality of Basel actors is predominantly explained by economic resource differentials. It is certainly true that border municipalities – especially on the French side – cannot dedicate as much financial means as Basel in cross-border transport policies. Due to the fact that most of the highly qualified and well paid jobs are located in Switzerland, French and German local authorities very often lack the budgets and staff that would be necessary to develop ambitious planning. To give just a few examples of the differential of means: while Basel has the competence and financial means of a whole department of urban affairs, the French city of Saint-Louis, located where the tram line is slated to end in the near future, does not have the financial resources to pay a full time staff in the field of cross-border cooperation. With an annual budget of 335,500 Euros in 2012 including the salaries of the three permanent employees (Grosserat Basel, 2010), the Eurodistrict is also far from having the means to be able to address all the issues raised by the cross-border development of the region. Cross-national disparities are particularly evident when large-scale project have to be co-funded. As an adjunct director of the Direction of Transport of a French regional authority reported, *“One gets the impression that no-one knows how to deal with the question of the shortage of funding, which also applies on the German side, but not the Swiss side”* (FR1701, interview 03-03-2011). Swiss actors are widely aware of such wealth differentials. According to this high-ranking representative of the City of Basel, *“there are imbalances that sometimes make the process very complex. It takes a lot of time to coordinate matters, and to grasp the different framework conditions and planning cultures”* (CH3301, interview 02-05-2011).

In addition to wealth differentials, there are obvious differences between the political systems, as shown in Table 2. The fact that regional actors from France and Germany involved in the daily cooperation agenda are often not the principal decision-makers greatly hinders the efficiency of cooperation and, consequently, gives a certain advantage to Swiss actors. French authorities, for instance, very often don't have the decision-making powers that Swiss and German partners have at the regional level. Not only does the centralization of power remain strong in France, but in addition, subsidiarity is rarely applied. A similar problem has been observed in the cross-border metropolitan region of Luxembourg where the state of Luxembourg is in a favourable position to negotiate with local authorities from neighbouring France, Germany and Belgium (Sohn and Walther, 2012; Dörry and Decoville, 2012).

Table 3. Political systems in the three countries

State	Political system	Relationships with communities	Principles of government	Mechanisms of public participation
Switzerland	Federal	Subsidiarity Autonomy	Collegiality Consensus Liberalism	Popular votes on all levels
Germany	Federal Shared sovereignty	Subsidiarity Autonomy Co-operation	Social market economy	Popular votes on local and regional levels
France	Unitary and decentralized Centralism	Hierarchy Differentiation	Centralism Authoritarianism	Popular votes on national level (referendum)

Source: authors.

The Basel-Mulhouse-Freiburg EuroAirport certainly illuminates some of these issues. The airport is located in France due to the lack of territory on the Swiss side, but is operated jointly by both France and Switzerland. A great number of highly specialized firms have established their activities on the Swiss side, where they have benefited from favourable tax and employment facilities so far. Their development has resulted in an extension of an area situated within the airport perimeter, but whose legal status has never been clearly defined. A union representing former employees laid off by a Swiss company filed a lawsuit in France. The Court of Cassation was seized as a last resort and declared that the French labour law should apply in this zone, which has created concern in companies that are subject to Swiss law. Recently, French politicians fear that the companies based in the Swiss part of the airport may leave if the French state decides to renegotiate their fiscal and regulatory conditions. With 6,500 direct jobs in aviation and 28,000 indirect jobs, the airport is one of the largest employers in the region, especially for advanced service sector. Politicians also fear that if the law could not be settled, the Swiss authorities would threaten their investments in the Belfort-Mulhouse agreement and in the planned railroad connection between the EuroAirport and Basel City. As the head of a regional French authority recalls, “[The Swiss] *won’t carry on putting money into infrastructure, sometimes outside of their own country, into a country like France which is not making any progress. It’s the highest level of state of emergency: if we don’t manage to find a solution to the problem of the EuroAirport companies, there will be a risk of these companies declining, at least on the French side*” (FR1503, interview 25-05-

2011). Fortunately, an agreement was signed in March 2012 between the French and Swiss authorities and EuroAirport that validates existing practices, in order to retain the companies in the area.

4.2. The effect of borders on information exchange and decision making

What is the influence of borders on the ‘information’ and ‘decision’ networks? In an environment characterised by a long history of cross-border cooperation information exchange and decision-making processes are typically still affected by borders. As Table 2 reveals, the border effect is, in this case, not a limiting factor. The percentages of homophilous ties – exchanged between actors from the same country – are low for German and French actors and moderate for Swiss actors, both with regard to information exchange or decision making. With a percentage of homophilous ties lower than 50%, Swiss actors in particular do not seem to adopt a purely unilateral approach in terms of decision making. This important finding contrasts with the common belief according to which they keep their own council when important decisions are to be taken in the region, a behaviour known locally as *Alleingang* (literally ‘solo effort’ in German). None of the most central Swiss actors previously identified have a strong homophilous behaviour, with the exception of representatives from metrobasel, a think tank composed of public authorities and private companies, which acts to promote the social and economic development of the Basel region, and is strongly driven by Swiss actors.

These results are corroborated by the E-I Index that is calculated as the difference between external (E) and internal (I) ties for each country, divided by the total number of ties. The E-I index ranges from 1.0 to -1.0. A negative value on the E-I index implies a homophily effect, i.e. actors tend to associate with other from their group more than those from outside their group, whereas positive values imply more external ties (Krackhardt and Stern, 1988). As shown in Table 3, Swiss actors have a moderate negative E-I Index value for both networks (-0.271 and -0.062), which is congruent with the fact that they tend to have comparatively more ties with actors located in their country. Both German and French actors have positive E-I Index values. Note that the E-I Index is only significant ($p < 0.05$) for the information exchange network.

Table 3. Homophily by country

	Network 1:		Network 2:	
	Exchange of information		Decision making	
	Pct Homophily	E/I Index	Pct Homophily	E/I Index
Switzerland	54.4	-0.271	48.1	-0.062
Germany	13.6	0.673	29.0	0.535
France	45.8	0.033	21.1	0.360
Whole network	44.8	-0.032**	35.2	0.165

** E-I Index is significant ($p < 0.05$). Source: authors. Software: UCINET 6.258 (Borgatti, Everett and Freeman 2002).

National borders may not play a huge role in policy networks when we look at subgroups defined according to their country membership, but they still matter when one considers them as linguistic barriers. As Table 4 reveals, linguistic borders between German-speaking and French-speaking actors have a considerable influence on information exchange and decision-making processes (only the mother tongue of the respondents is considered in our analysis). This is particularly true of German-speaking actors, comprising both Swiss and German respondents, who reported more than 70% of their ties within their linguistic community. This group is marked with a strong E-I index negative in both networks (-0.571 and -0.564). As a minority in the region, French-speaking actors predominantly maintain ties with actors who do not belong to their linguistic community, especially when decision making is concerned. E-I Index is significant ($p < 0.05$) for both networks.

Table 4. Homophily by language

	Network 1:		Network 2:	
	Exchange of information		Decision making	
	Pct Homophily	E/I Index	Pct Homophily	E/I Index
German	77.6	-0.571	72.5	-0.564
French	45.9	0.033	21.1	0.360
Whole network	66.5	-0.394**	53.8	-0.340**

** E-I Index is significant ($p < 0.05$). Source: authors. Software: UCINET 6.258 (Borgatti, Everett and Freeman 2002).

4.3. Various brokerage roles depending on the countries

Local actors might not be too constrained by the existence of national borders but they might use their border situation as an opportunity for brokering, i.e. to bridge holes between disconnected parts of networks. Thus, in the second part of our network analysis we asked whether they tend to have different brokerage roles depending on their location in one of the three countries of the region. The answer is clearly yes. Based on the information exchange network, Table 5 shows the raw number of times that an actor plays one of the five structurally distinct types of brokers identified by Gould and Fernandez (1989) as well as the average brokerage values per country. Switzerland is the country where the largest brokers are located, in particular those from Basel City (CH3301, CH3304) and Basel Land (CH3201), and the transport company BVB (CH1001). Outside Switzerland, important brokers are also employed by the Upper Rhine Department (FR1503), the Trinational Eurodistrict of Basel (FR2002), and the EuroAirport (FR2101). One should note however that the Eurodistrict and the EuroAirport have close links to Switzerland, the former because it is a cross-border institution, and the latter because it is jointly operated by the two countries. German actors have overall low rates of brokerage.

Table 5. Exchange of information network: Un-normalized brokerage scores

codes	Coordinator	Gatekeeper	Representative	Consultant	Liaison	Total
BACH3301	0.0	0.0	32.3	12.5	0.0	57.6
BACH3304	10.9	23.8	10.3	4.5	0.0	55.8
BACH1001	3.3	6.8	14.4	3.5	0.0	32.7
BACH4701	14.4	0.0	17.7	0.0	1.0	32.1
BAFR2002	7.5	6.0	8.3	2.5	3.0	27.3
BACH3201	14.7	4.5	2.1	0.0	0.0	22.3
BADE5001	0.0	0.0	7.5	4.2	7.7	19.3
BADE6002	0.0	1.4	0.0	4.2	11.3	16.9
BAFR2001	0.0	0.0	8.0	3.3	5.2	16.5
BACH5505	5.0	4.3	5.0	2.0	0.5	16.3
BADE3801	0.0	5.9	0.0	4.6	2.3	12.8
BACH0801	0.0	0.0	6.3	1.0	4.7	8.8
BAFR1403	0.0	1.3	3.5	3.5	0.2	8.5
BACH5504	2.3	2.5	2.0	0.0	0.0	7.8
BADE3602	0.0	0.7	1.8	0.8	3.0	6.3

BAFR1402	0.0	0.0	5.0	0.8	0.5	6.3
Means by country	Coordinator	Gatekeeper	Representative	Consultant	Liaison	Total
Swiss	4.8	3.8	7.8	2.0	1.2	20.6
Germans	0.0	1.6	1.9	2.9	4.9	11.2
French	1.1	1.0	2.5	1.2	0.9	6.6

Note: Only the individuals with a total score higher than 5.0 are shown. Source: authors.

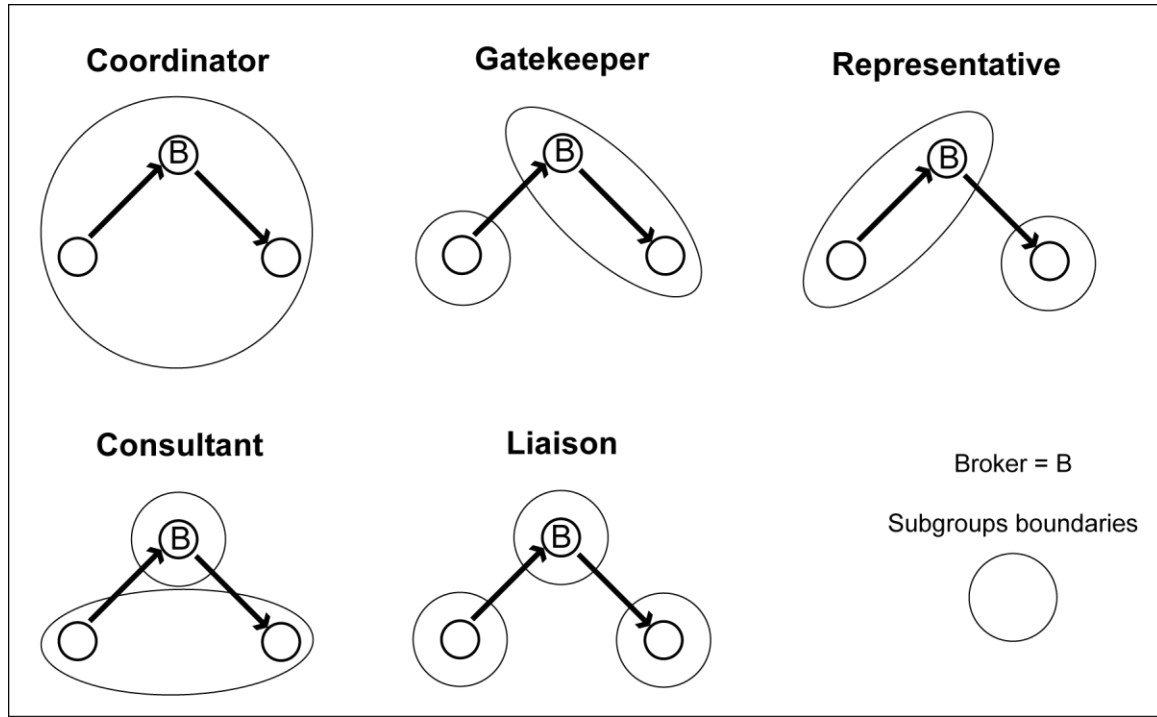
Software: UCINET 6.258 G&F brokerage roles weighted routine (Borgatti, Everett and Freeman 2002).

The brokerage importance of Basel actors is primarily explained by the fact that they have for decades been forced to interact frequently with their French and German counterparts due to their peripheral position relative to Switzerland, lack of available space for urban development, and need of transport infrastructure. Since the 1960s, this strategy has been quite successful: while remaining the main transport hub of the trinational region, Basel has succeeded in implementing several major infrastructure projects (like the EuroAirport) and environmental facilities outside of its territory by negotiating with border partners (Beyer, 2007). This strategy has led to development new partnerships, particularly in the field of cross-border transport.

Relatively clear brokerage roles are assigned according to countries. Table 5 reveals that when they exchange information, Swiss actors tend to act predominantly as representative and coordinator brokers and to a lesser extent as gatekeepers. As shown in Figure 3, coordinators connect different actors from the same group – in our case from the Swiss part of the Basel trinational region – whereas representative brokers act between Swiss fellow citizens and foreign partners located in France and Germany. Being able to coordinate policies among Swiss actors is a key issue in the region because, as we have shown previously, the information network is composed of a large number of actors with relative little centrality. The representative role is also particularly important when political decisions taken on a national basis (such as cantonal or federal votes), or funding opportunities regarding the Swiss Agglomeration Policy, have to be communicated to foreign partners and later on implemented in the trinational strategy. Across the border, the Germans are mostly liaison brokers that tend

to bind the Swiss and the French and consultant brokers that connect two actors from either Switzerland or France. The French do not present specific brokerage roles.

Figure 3. Main brokerage roles observed in the Basel region



Source: Adapted from Gould and Fernandez 1989. Note: coordinator brokers bridge two actors from their own subgroup; gatekeepers mediate between a subgroup and their own group; representative brokers bridge one actor from their subgroup with someone from another group; consultant brokers intercede between two actors from the same subgroup; liaison brokers bridge two actors from two different subgroups.

Being a powerful broker certainly helped Basel Swiss elites from the public sector to implement cross-border policies. Thus, Basel actors still are in a favourable position as far as financial means and political power are concerned compared with its neighbours, but it does not necessarily mean that they can openly express their dominant role in the region. Since cross-border cooperation is much more about persuasion and collaboration than power and constraint, Basel actors have to make sure that all partners are treated equally, and not overchallenged in terms of momentum or financial resources. As is well summarized by this Councillor of a Swiss canton: *“On the one hand, we want to speed things up and assume a leadership role, but on the other, we have to step on the brakes and make sure that we are moving the project forward with everyone involved”* (CH3301, interview 02-05-2011). Local

Swiss elites are very much aware of the fact that, considering the wealth and political differentials separating Switzerland from France and Germany, leadership needs to come from their country while at the same time acknowledging the necessity of building alliances with public and private bodies in order to ensure political consensus.

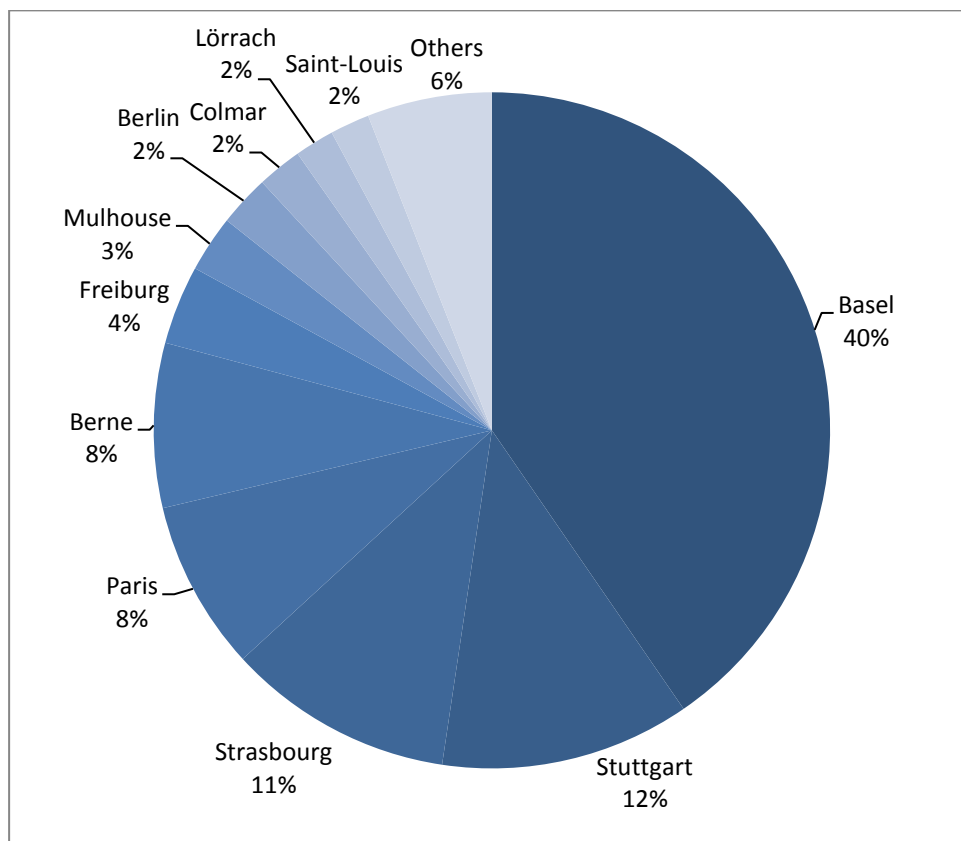
Basel City has often played an active role in initiating and organizing cross-border transport networks in the trilateral region. The Canton has resources in terms of legal expertise, urban and regional planning, and economic development that enable it to develop its own vision of the cross-border territory, which is less the case for neighbouring public authorities. Urban plans are not imposed on other partners but are usually negotiated with them within the framework of cross-border bodies and they are subject to a gradual acceptance by the partners through negotiations within the Eurodistrict. In this sense, Basel is a metropolis that is able to integrate the different actors around a common project. The border situation gives a special dimension to its urban development: the Canton of Basel-City needs to think about integration with other cantons of North-Western Switzerland and with German and French territories. The institutional complexity of this region also forces Basel City to communicate intensely and negotiate on a long-term basis, as illustrated by the following example.

In a cantonal vote that took place in November 2010, the population of the Basel canton agreed to cut the share of private motorized traffic within the city by at least 10% until 2020. This political decision, taken solely within Swiss territory, had huge consequences for infrastructure, customer services and planning for neighbouring municipalities since Basel is the primary destination of cross-border commuters in the region. As the director of a cross-border institution puts it, this vote “*shapes all the cross-border cooperation because Basel won't get there if they don't put in place cross-border infrastructure. That's why they are paying for the cross-border tramlines*” (FR2001, interview 13-12-2010). In addition to the construction of tram lines across the border, one of the consequences of this strategy has been to establish a more developed parking policy at the level of Basel City. Considering that space is scarce on the Swiss side, this policy includes the creation of a fund that will enable Basel to finance park and rides outside of the canton, notably in France and Germany. This has been a controversial issue in the region considering that their French and German neighbours would generally prefer to build biotechnology research centres instead of parking facilities on their territory.

4.4. The geography of decision-making

Not only is the transport system focussed on Basel, but Basel is the most frequently cited location of strategic decision-making in the realm of regional public transportation (Figure 4). This result remains valid even when we take into consideration the fact that more Swiss actors were interviewed than French and German actors. Twenty out of the 39 people who answered this question (51.3%) even identified the city of Basel as the only decision centre in the region regarding the cross-border issues of public transportation. Basel is often referred by Swiss actors as a “magnet” and “*clearly the largest and most important city in the region*”, or as the “*absolutely indisputable*” centre of the trinational region. The leadership of Basel seems widely accepted by French and German actors located close to Basel who for instance mention that “*there is a single place: Basel*”, or that there is a need for a “*clear leader...that has to come from Basel*”.

Figure 4. What are the place(s) where the most important decisions concerning cross-border public transport are taken?



Source: authors. N = 44 interviewed actors.

Considering the complexity of cross-border public transport, a number of other important cities were also identified as importance decision centres, including the two regional capitals of Baden Württemberg (Stuttgart) and Alsace (Strasbourg). Stuttgart is a regional capital of a German federal state and constitutes a real place of power, which is not the case of Strasbourg in France. Paris and Berne, the capital cities of France and Switzerland countries were mentioned by 8% of the respondents, which reflects the importance of national or federal funding in the field of transportation; with 2%, Berlin does not play a significant role. From the point of view of local actors, Berne is located really close to Basel, whereas Paris and Berlin are seen as more distant and potentially more indifferent to the development of the cross-border region of Basel.

Spatially, the neighbouring urban centres of France or Germany are located in a peripheral position from their respective regional capitals which could have the financial resources to enhance public transport infrastructure and services. For the representatives of the state of Baden Württemberg in Stuttgart (260 km) and the Alsace region in Strasbourg (135 km), the Basel agglomeration is at the far end of the region. Despite the fact that these southern regions benefit greatly from interaction with Switzerland in general and Basel in particular, local actors have the feeling that political and administrative leaders rarely consider the cross-border region of Basel as a priority where cooperation should be promoted. In the field of public transport, notably, *“The decision makers are in Paris, in Stuttgart, in Berlin [...] and for them of course the whole issue is not as pressing as it is for us here in the region”*, reported the Director from a Swiss chamber of commerce (CH2701, interviewed 21-12-2010). Of course, it doesn't necessarily help the local border municipalities that their respective regional capitals have competing urban projects. It is well known that the regional capital of Strasbourg plans to improve its cross-border tram lines with Germany and thus competes seriously with the Basel extension in terms of funding from the Region and State (Beyer and Reitel, 2012). In Germany too, the city of Freiburg sees itself as a direct competitor with Basel in terms of knowledge-intensive activities and research activities. The distance is even larger with capital cities. For the French municipalities of the Basel border region, Paris is seen as a distant albeit authoritarian power.

The peripheral location is not the only handicap factor. One should also take into account how much importance is given by each country to the urban centres of the Basel trilateral area (Table 6). Thus, regional and national authorities in France generally see Lörrach or Saint-

Louis as small-sized urban centres and identify Basel primarily as a Swiss city, without taking into consideration the cross-border interactions that exist in the trilateral area. For the Swiss authorities, however, Basel is considered as a gateway for the national territory and as cross-border metropolis despite its peripheral location. Due to the presence of the border, the integration of French and German cities to the Basel area can only be partial, making them peripheral both from Basel City and from their own regional and national centres.

Table 6. One cross-border urban agglomeration but three specific peripheral situations

Urban area	State	Size of the region	Size of the urban core (national level)	Size of the urban core (regional level)
Basel	Switzerland	Small (Basel)	Metropolitan	Metropolitan
Lörrach, Weil am Rhein	Germany	Large (Baden Württemberg)	Small	Medium
Saint-Louis	France	Large (Alsace)	Small	Small

Source: authors.

As the following example shows, spatial integration is also complicated by conflicting conceptions of rail public transit.

4.5. “Just let them roll, and go across the border”: The FLIRT dispute

In the 1980s the cantonal authorities of Basel aspired to build a Regional Express Network (REN) modeled on the system established several years earlier in Zurich (Jemelin and Kaufmann 2008). The vision of a cross-border REN line was vigorously promoted by the Regio Basiliensis and was rooted in the desire to formalize a functional trilateral space where national borders no longer functioned as barriers. The hub and spoke system centered on Basel would consist of several lines linking communities between 30 and 40 kilometers from the center. The first line linked Mulhouse (France) to Frick and Laufenburg, two Swiss towns located 30 kilometers to the east of Basel (see Map 2). Bi-current locomotives were acquired to accommodate two different national rail systems. The system adopted a schedule based on the basic model of the Swiss Federal Railways (SBB), which allowed trains to leave daily at the same times and that differs significantly from the French system of variable schedules. The rail network was extended within Switzerland and later in Germany. In contrast with the French-Swiss links the rail lines to Germany were governed using SBB scheduling and operational standards. The evolution of cross-border service with Germany

was based partly on the similarity of the national rail systems and in the context of the liberalization of EU policies governing rail transport. These regulations permitted the creation of a Swiss transit subsidiary by German transportation authority in the Kreis of Lörrach to manage joint service of the line.

Map 2. Regio S-Bahn Basel



Source: Regio-S-Bahn Basel, SBB CFF, 2012, modified by the authors.

As a result the SBB was able to apply its management model to its links with Germany where it had to compromise with respect to French authorities. However, in the 2000s the maintenance of direct links with France became more difficult as tensions developed over the use of Swiss rolling stock (FLIRT trains). FLIRT trains are rail passengers cars produced by the Swiss manufacturer Stadler Rail AG. Since the first delivery to the SBB in 2004, these trains have operated with great success and have been exported to various European and North African countries. FLIRT trains were originally intended to equip the S1 cross-border train line (Frick/Laufenburg–Basel–Mulhouse) that has been in operation since 1997, but the

French Railways authority never approved the rolling stock. As a consequence, the line is divided into two distinct sections operated by different rolling stocks and the passengers have now to stop in Basel and change trains on their cross-border journey. The failure of this cross-border train connection illustrates some of the difficulties of transport policies and gives a good example of how cross-border integration can actually decrease over time.

The reasons of the failure of this cross-border connection differ among interviewed actors who respond similarly along national line. Generally speaking, the Swiss tend to blame the French for having put their national interests over regional needs and consider the FLIRT as a political issue, whereas the French see the FLIRT debate primarily as a technical and secondary as a market issue. An important aspect in this dispute is that, between 1997 and 2001, the governance of the French railway system has changed a lot due to the regionalization of rail transport in which rail public transit became a regional rather than a national responsibility. The FLIRT failure is recognised as a highly significant example of the limitations of cross-border cooperation. It was mentioned by 34% of our interviewees – 43% of the Swiss and of the German and 19% of the French – when they identified the shortcomings of the Swiss-French-German actions in the field of public transport.

The French decision to prevent Swiss trains from crossing the border is interpreted as a setback in the process of cross-border integration. As an adjunct director of the transport of a Swiss canton says, *“We had a through line, we made the first steps within the tariff association (...) and now we’ve actually taken a step back, with this introduction of rolling stock, this Flirt, on line 1, which now can no longer go to France. We were actually close. Then they stopped the approval of these vehicles in France”* (CH3102 interview 14-02-2011). A clear majority of the Swiss actors interviewed argue that the choice of not approving FLIRT trains was motivated by political reasons and protectionism, whether they are from the public or private sector. As this head of the Head Economic & Public Affairs from a Swiss multinational company recalls *“So it is down to politicians, yes. There was a speech, (...) and, the CEO of Stadler Rail came. He had a lot to say about protectionism. On the French side, unfortunately”* (CH4301, interview 31-01-2011). From the Swiss perspective, the fact that very few train lines actually cross the Swiss-French border and that a large majority of French commuters come by car reinforces the idea that the French decision went against the overall interest of the trinational region.

On the French side, the political argument according to which France would have favoured its national interests by buying French manufactured trains is not recognised as valid. On the contrary, actors interviewed from the French side primarily attribute the failure of the FLIRT line to inadequate timetables. The French stress that the two regional centres of Basel and Strasbourg have conflicting schedules, which makes a direct cross-border connection impossible. As a representative from the Alsace Region argues, *“the main reason why it doesn’t work is linked to the fact that the Swiss and French schedules don’t follow the same logic. They are based on the main hubs on either side, on Basel and Strasbourg, and the schedules are incompatible. Leaving Strasbourg, you can’t arrive in Basel according to the Swiss schedule and vice versa”* (FR1701, interview 03-03-2011). It is also true that the two countries have completely different organizational structures in their regional transport systems: in France, most of the lines are organized according to a regional or interurban perspective, whereas in Switzerland, transportation networks are predominantly organized according to a centre-periphery approach which fits well with a REN or S-Bahn system. These two conflicting conceptions of transport have had to coexist on the same railway line between Mulhouse and Basel.

In addition, French actors tend to minimize the scope of this event by stressing that the existing direct connection from Mulhouse through Basel wasn’t really justified from an economic point of view. *“I am not convinced of the utility of strong links going beyond Basel”*, says the French adjunct director of the Alsace Region. *“There is frankly a low number of potential passengers, about 200 people. Moreover, on the day when the cross-border links ended, we didn’t receive a single letter of protest, which is a sign that the service provided was not fundamental”* (FR1701, interview 03-03-2011). This is contradicted by recent figures collected at the borders in 2012, which indicate that 38% of cross-border flows aim at Swiss regions located further away than the two Swiss Basel cantons, representing almost 58’000 people (TEB, 2012).

The story of the FLIRT trains reveals the tensions between two different conceptions of rail public transit. In France rail service is scheduled in response to demand, which is determined through studies of traffic flows. In Switzerland the priority is to ensure continuity of service on existing lines using a consistent and cadenced schedule. Furthermore, the institutional structure of regional rail differs significantly across the three countries. In France rail policy is in the hands of regional authorities whereas roads are governed at the departmental level. In

Germany the Länder are the responsible authorities for public transit but frequently delegate the specifics of governance to the Kreise level. Each transit authority in this context coordinates the entirety of public transit services within their territory, which gives them the authority to negotiate and implement integrated cross-border tariff systems. This is not the case in France. In Switzerland the cantonal authority is responsible for transit within its territory. However, five Swiss cantons in the northwestern part of the country have created an integrated transit structure (Regio). The strong integration between cantons in northwestern Switzerland is unique in the country and has facilitated the creation of cross-border structures. This experience of the City of Basel with interjurisdictional partnership within Regio has contributed to its political will and institutional capacity to engage in cross-border transit governance in the trilateral region.

The failure of the Frick-Mulhouse direct connection also illustrates the influence of certain actors located extremely far from the region studies. In the case of the FLIRT trains, the decision not to homologate the Swiss rolling stock was taken in Paris at the central government level. *“The French government agencies continue to come up with new permit requirements. That is not very polite and is being viewed as industry promotion politics. But we are not discouraged”* says this director a large Swiss-based public transport company (CH0801, interview 03-05-2011).

5. Conclusion

Our main objective in this paper was to explore how the development of transport policy networks was affected by the existence of national and linguistic borders and how local actors could use the border situation to act as brokers vis-à-vis their neighbours. By looking at information exchange and decision making with the help of social network analysis we showed that, rather than restricting their ties to other members of their national community, local actors tend to have a heterophilous profile with regards to their foreign partners. For both information exchange and decision-making, the hypothesis that national borders play a diminishing role in the formation of policy networks in the region of Basel has been confirmed. The common belief according to which the Swiss would follow a unilateral strategy in the cross-border region proved incorrect. Despite the existence of important population, wealth and political differentials in the region between Basel and the French and German authorities, decisions affecting the development strategy for public transport are not made solely on the basis of national interests.

What is true, however, is that the Basel region remains divided by linguistic borders that tend to exert a strong influence on transport policy networks. German-speaking actors tend to exchange information and take decisions primarily with other actors from their group. The fact that similarity increases the probability of social ties when linguistic borders are considered does not only reflect linguistic proximity. It can also be explained by institutional proximity, which is particularly strong between the Germans and the Swiss. In addition to sharing the same language – notwithstanding the important fact that Swiss-German is considered as a specific language, distinct from German – Swiss and German actors share a number of institutional features, most notably their commitment to a federalist political system that allows a large autonomy to local and regional authorities, and which appears radically different from the unitary and centralised French political system (Reitel, 2010). This finding suggests that the intensification of functional interactions in some of the most dynamic European border regions does not necessarily mean that cultural disparities will diminish. A similar conclusion had been reached at the level of European cross-border metropolitan regions recently (Decoville *et al.*, 2012).

Our results are in line with previous studies that used social network analysis to understand policy networks in border regions. In their study of transport networks in the Lille region – where cross-border co-operation has also a long history – Durand and Nelles (2012) found that most of the French and Belgium organization did not express a high level of homophily. As in Basel, exchange of information in the Lille region tends to take place irrespective of the national boundaries. Another interesting finding of the Lille study, which can be compared with the Basel case, is that regional borders between Flanders and Wallonia, which also correspond to a strong linguistic barrier between Dutch and French-speaking actors, tend to limit information exchange more frequently than national borders.

Our analysis also shows that actors located in the urban core in Switzerland are the most prominent brokers and act as coordinator and representative brokers vis-à-vis other more peripheral players located in France and Germany. This strategy of intense brokerage has been rendered necessary by the fact that, in the absence of a cross-border body that possesses its own budget and can negotiate legally binding agreements, local actors must reach compromises rather than rely on dominance. Strategic decisions affecting the development of transport in the region are predominantly taken in Basel under the leadership of

representatives from the canton of Basel and in consultation with other central players such as those working for the Swiss transport companies, the Trinational Eurodistrict of Basel, and local border municipalities. Basel City both has the resources to propose new ideas, establish a network of partners who support their view, and implement concrete infrastructure, but one should note that there is no real instance of regulation, the Eurodistrict function more as a platform for negotiation than as a cross-border institution.

More broadly, our research offers new horizons for other cross-border metropolitan regions in Europe. The Basel case shows that cross-border co-operation works well when it builds on a powerful actor that does not use its resources to dominate more peripheral actors and has developed different brokerage roles. Combining centrality and brokerage appears to be a metropolitan characteristic and is certainly an objective that any institutional stakeholder working in the field of cross-border cooperation should pursue. The Basel case also demonstrates the need for city regions to develop a long-standing vision of what they would like to be known for in the future. Such vision should not be based solely on standard recipes that have guaranteed success in other metropolitan regions in the world, but should rather build on what the existence of national borders can bring to the city and its region in terms of resources and international recognition.

References

- BAK (2006) *L'Espace du Rhin Supérieur en tant que Région Métropolitaine Européenne*. Basel, Basel Economics.
- BAK (2010) Monitoring Life-Science Locations. Life Sciences Report 2009/2010. Basel, Basel Economics.
- Beyer, A. (2007) Nœuds de transport et frontières. L'invention de la métropole bâloise, *Annales de Géographie*, 657, pp. 451–469.
- Beyer A. and Reitel, B. (2012) La gouvernance des transports publics comme mesure de l'intégration transfrontalière en Europe de l'Ouest. L'exemple des trois Eurodistricts de Sarrebruck, Strasbourg et Bâle, *Géo-Regards*, 4.
- Blatter, J. (2003) Beyond hierarchies and networks: Institutional logics and change in transboundary spaces, *Governance*, 16(4), pp. 503–526.
- Borgatti, S.P., Everett, M.G. and Freeman, L.C. (2002) Ucinet for Windows: Software for Social Network Analysis. Version 6.258. Harvard, MA, Analytic Technologies.
- Brunet-Jailly, E. (2006) NAFTA and cross-border relations in Niagara, Detroit and Vancouver, *Journal of Borderland Studies*, 21(2), pp. 1–19.
- Burt, R.S. (2005) *Brokerage and Closure. An Introduction to Social Capital*. Oxford, Oxford University Press.
- Carrington, P.J., Scott, J. and Wasserman, S. (2005) *Models and Methods in Social Network Analysis*. Cambridge, Cambridge University Press.
- Christopoulos, D. (2009) Peer esteem snowballing: A methodology for expert surveys. Brussels, *Eurostat Conference for New Techniques and Technologies for Statistics*, February, pp. 171–179.
- Cole, A. and John, P. (2001) *Local Governance in England and France*. London, Routledge.
- Contractor, N., Wasserman, S. and Faust, K. (2006) Testing multitheoretical, multilevel hypotheses about organizational networks: An analytic framework and empirical example, *Academy of Management Review*, 31(3), pp. 681–703.
- Cooke, P. (1996) Policy networks, innovation networks and regional policy: A review of the literature and an example from South Wales, in: H. Heinelt and R. Smith (Eds) *Networks and European Structural Funds: A Comparison Between European Union Member States*, pp. 26–45. Aldershot: Avebury.

- Decoville, A., Durand, F., Sohn, C. and Walther, O. (2010) Spatial integration in European cross-border metropolitan regions: A comparative approach. Luxembourg, CEPS/INSTEAD *Working Papers* 40.
- Dörny, S. and Decoville, A. (2012) Transportation policy networks in cross-border regions. First results from a social network analysis in Luxembourg and the Greater Region. Luxembourg, CEPS/INSTEAD *Working Papers* 22.
- Dowding, K. (1995) Model or metaphor? A critical review of the policy network approach, *Political Studies*, 43, pp. 136–158.
- Durand, F. and Nelles, J. (2012) Cross-border governance within the Eurometropolis Lille-Kortrijk-Tournai (ELKT) through the example of cross-border public transportation. Luxembourg, CEPS/INSTEAD *Working Papers* 16.
- ESPON (2010) *METROBORDER. Cross-border Polycentric Metropolitan Regions*. Final Report. Luxembourg, European Spatial Planning Observation Network (ESPON).
- ETH Studio Basel (2009) *Metrobasel. Un Modèle de Région Métropolitaine Européenne*. Basel, ETH Studio Basel.
- Gissendanner, S. (2003) Methodology problems in urban governance studies, *Environment and Planning C: Government and Policy*, 21, pp. 663–685.
- Gould, J. and Fernandez, R.M. (1989) Structures of mediation: A formal approach to brokerage in transaction networks, *Sociological Methodology*, 3, pp. 89–126.
- Grosserath Basel (2010) Ausgaben ETB-TEB 2008-2010, <http://www.grosserrat.bs.ch/dokumente/100271/0000000271177.pdf>
- Habicht, P. (2008) *Basel – A Center at the Fringe. A Concise History*. Basel, Christoph Merian Verlag.
- Harrison, J. and Grove, A. (2012) From places to flows? Planning for the new ‘regional world’ in Germany, *European Urban and Regional Studies* (forthcoming).
- John, P. (1998) Urban economic policy networks in Britain and France: a sociometric approach, *Environment and Planning C: Government and Policy*, 16, pp. 307–322.
- Kanton Basel-Stadt (2008) *Das Agglomerationsprogramm Basel*. Basel, Baudepartement.
- Knoke, D., Pappi, F.U., Broadbent, J. and Tsujinaka, Y. (1996) *Comparing Policy Networks. Labor Politics in the U.S., Germany, and Japan*. Cambridge, Cambridge University Press.
- Kossinets, G. (2006) Effects of missing data in social networks, *Social Networks*, 28, pp. 247–226.

- Krackhardt, D. and Stern, R.N. (1988) Informal networks and organizational crises: An experimental simulation, *Social Psychology Quarterly*, 51(2), pp. 123–140.
- Leresche, J.-P. and Saez, G. (2002) Political frontier regimes: Towards cross-border governance? in: M. Perkmann and N.-L. Sum (Eds) *Globalization, Regionalization and Cross-Border Regions*, pp. 77–99. London: Palgrave MacMillan:
- Löfgren, O (2008) Regionauts: the transformation of cross-border regions in Scandinavia, *European Urban and Regional Studies*, 15(3), pp. 195–209.
- Marsch, D. and Rhodes, R.A.W. (Eds) (1992) *Policy Networks in British Government*. Oxford, Clarendon Press.
- metrobasel (2006) Vision metrobasel 2020. Basel, metrobasel.
- Nelles, J. and Durand, F. (2012) Political rescaling and metropolitan governance in cross-border regions: comparing the cross-border metropolitan areas of Lille and Luxembourg, *European Urban and Regional Studies*, published online 13 March 2012, DOI: 10.1177/0969776411431103.
- Paasi, A. and Prokola, E.-K. (2008) Territorial dynamics, cross-border work and everyday life in the Finnish–Swedish border area, *Space & Polity*, 12(1), pp. 13–29.
- Perkmann, M. (2003) Cross-border regions in Europe. Significance and drivers of regional cross-border co-operation. *European Urban and Regional Studies*, 10(2), pp. 153–171.
- Reitel, B. (2006) Governance in cross-border agglomerations in Europe – the examples of Basle and Strasbourg, *Europa Regional*, 14(1), pp. 9–21.
- Reitel, B. (2010) Le Rhin supérieur, une région transfrontalière en construction? Une approche géographique d'une situation frontalière, in: B. Wassenberg (Ed.) *Vivre et Penser la Coopération Transfrontalière: les Régions Frontalières Françaises*, pp. 289–306. Stuttgart: Franz Steiner:
- Reitel, B., Zander, P., Piermay, J.-L. and Renard, J.-P. (2002) *Villes et Frontières*. Paris, Anthropos.
- Schneider-Sliwa, R. (2008) Enjeux et transformations des régions métropolitaines du sud du Rhin supérieur, *Revue Géographique de l'Est* 48(3-4), <http://rge.revues.org/1718>.
- Schneider-Sliwa, R., Erismann, C., Saalfrank, C. and Griebel, C. (2009) Regionale Identität in der Regio TriRhena. University of Basel, Institute of Geography Series 32.
- Scott, J.W. (2002). A networked space of meaning? Spatial politics as geostrategies of European integration, *Space & Polity*, 6(2), pp. 147–167.

- Soeters, J., Hofstede, G. and van Twuyver, M. (1995) Culture's consequences and the police: Cross-border cooperation between police forces in Germany, Belgium and the Netherlands, *Policing and Society*, 5(1), pp. 1–14.
- Sohn, C. (2010) El papel ambivalente de las fronteras en la construcción de la metrópolis transfronterizas en Europa. El caso de Basilea, Ginebra y Luxemburgo, *Documents d'Anàlisi Geogràfica*, 56(1), pp. 167–184.
- Sohn, C., Reitel, B. and Walther, O. (2009) Cross-border metropolitan integration in Europe: the case of Luxembourg, Basel and Geneva, *Environment and Planning C: Government and Policy*, 27, pp. 922–939.
- Sohn, C. and Walther, O. (2012) Building a cross-border metropolitan region: the political stakes of scalar restructuring, in: C. Sohn (Ed.) *Luxembourg: An Emerging Cross-Border Metropolitan Region*, pp. 265–278. Brussels: Peter Lang.
- Swiss Federal Council (2007) *Basel: Trinationale Agglomeration Basel (TAB)*. Berne, Swiss Federal Council, ARE.
- Swiss Federal Council (2010) Politique des agglomérations de la Confédération: projets-modèles pour l'amélioration de la collaboration dans les agglomérations. Bilan 2002-2007. Berne, Swiss Federal Council, ARE.
- TEB (2007) *Un Avenir à Trois: Concept de Développement 2006 – 2020*. Basel, Trinational Eurodistrict of Basel.
- TEB (2008) *Historique. Un modèle de coopération transfrontalière*. Basel, Trinational Eurodistrict of Basel, <http://www.eurodistrictbasel.eu>.
- TEB (2012) *Mobilité transfrontalière par moyen de transport*. Basel, Trinational Eurodistrict of Basel, <http://www.eurodistrictbasel.eu>.



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