

Policy Integration for Sustainable Transport Development

Case Studies of Two Swedish Regions

Linnea Eriksson



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This thesis is based on work conducted within the interdisciplinary graduate school Energy Systems. The national Energy Systems Programme aims at creating competence in solving complex energy problems by combining technical and social sciences. The research programme analyses processes for the conversion, transmission and utilisation of energy, combined together in order to fulfil specific needs.



The research groups that constitute the Energy Systems Programme are the Department of Engineering Sciences at Uppsala University, the Division of Energy Systems at Linköping Institute of Technology, the Research Theme Technology and Social Change at Linköping University, the Division of Heat and Power Technology at Chalmers University of Technology in Göteborg as well as the Division of Energy Processes at the Royal Institute of Technology in Stockholm. Associated research groups are the Division of Environmental Systems Analysis at Chalmers University of Technology in Göteborg as well as the Division of Electric Power Systems at the Royal Institute of Technology in Stockholm.

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ABSTRACT

It has been argued that for the management of complex issues such as sustainability, which transcend traditional policy sectors and require coordination between several different interests and actors, policymaking depends upon collaboration and integration processes between different sectors and tiers of government. The overall aim of this thesis is therefore to study how and why (or why not) policy integration processes are being developed in regional policymaking and what this means for the achievement of sustainable transport. The thesis consists of two separate qualitative case studies of policymaking in two Swedish regions, one representing a least likely case and the other a most likely case of policy integration. The focus has been on the organizational actors involved in policymaking processes for the regional transport system. For the general discussion the theoretical framework of policy integration, complemented by the analytical concepts of policy logics, organizational identities and boundary object are used. The findings are presented in four articles. An overall conclusion is that policy integration processes do not necessarily result in policy for sustainable transport. If policy integration becomes a goal in itself and the same as joint policy, it risks neglecting sustainable values and becoming the smallest common denominator that a number of actors can agree on. For developing sustainable transport solutions, collaboration for the coordination of policy may be beneficial, but the aim of such processes should not be joint policy.

Keywords: policy integration, sustainable transport, region, policy, planning, public administration, institutional logics, organizational identity, boundary object, Sweden

SAMMANFATTNING

Svensk titel: Integration av policyprocesser mellan sektorer och nivåer för hållbar transportutveckling – två fallstudier av svenska regioner

För att beslut och riktlinjer ska kunna utformas så att de leder till lösningar av komplexa frågor, såsom hållbar utveckling, anses de behöva hanteras i samverkan mellan flertalet berörda sektorer och beslutsfattande nivåer. Det är dessa samverkansprocesser, beskrivna som integration under policy processer, som den här avhandlingen analyserar. Syftet är att studera om och hur integrerade regionala policyprocesser förekommer, hur de utvecklas samt deras betydelse för att åstadkomma ett hållbarare transportsystem. Detta undersöks genom kvalitativa fallstudier av två olika svenska regioner som representerar ett minst och ett mest troligt fall av integration av policy. Fallstudierna görs i regionerna Stockholms län och Västra Götalands län. Dessa två fall representerar dessutom två helt olika typer av regionala organisationer, vilket gör att de utgör underlag till, inte bara en diskussion om hållbara transporter, utan också om utvecklingen av den svenska regionala förvaltningsnivån. Fokus för avhandlingen är således organiseringen av regionala beslutsprocesser på transportområdet. För analys används teori kring integration av policy och tre huvudsakliga analytiska begreppsansatser: policylogiker, organisationsidentiteter och gränsobjekt. Resultaten presenteras i fyra separata artiklar och dessa diskuteras tillsammans i den inledande delen, den så kallade kappan. I studien konstateras att integration av policysektorer och förvaltningsnivåer inte nödvändigtvis leder till transportlösningar som är mer hållbara. Integration av policyprocesser förutsätts leda fram till gemensamma beslut och riktlinjer mellan olika aktörer, men om detta blir huvudsakliga målet för processen glöms lätt hållbara mål och lösningar bort. Beslut om en gemensam policy över sektorer och nivåer riskerar därför bli urvattnad eftersom det är många aktörer som ska komma överens. Samverkan för att samordna olika mål och intressen visar sig i huvudsak vara viktigt för att styra mot ett hållbart transportsystem, men det innebär inte att gemensam policy bör vara målet. Därutöver belyser studien hur olika organisationsformer på regional nivå påverkar regionala beslutsprocesser och hanteringen av hållbar transportutveckling.

Nyckelord: Policy integration, samverkan, hållbara transporter, regional nivå, policy, planering, offentlig förvaltning, institutionella logiker, organisationsidentiteter, gränsobjekt

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Gammalkil, juli 2016

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LIST OF ARTICLES INCLUDED IN THIS THESIS AND COAUTHOR STATEMENT

This thesis constitutes of four appended articles and one introduction where all articles are taken together and are jointly discussed.

Article I.

Bridging the implementation gap: Combining backcasting and policy analysis to study renewable energy in urban road transport.

Linda Olsson, Linnea Hjalmarsson, Martina Wikström, Mårten Larsson
Transport Policy 37:72–82, 2015.

Article II.

Biogas as a boundary object for policy integration – The case of Stockholm.

Linnea Hjalmarsson
Journal of Cleaner Production, 98:185–193, 2015.

Article III.

Integration of transport policy – Desirable goal or threat to sustainable transport development?

Linnea Eriksson
Submitted to Journal of Environmental Policy and Planning

Article IV.

The role of organizational identities for policy integration processes – Managing sustainable transport development

Linnea Eriksson
Public Organization Review, accepted for publication and published online.

Article I is based on two studies in terms of methodology; the backcasting study was performed by Martina Wikström and Mårten Larsson, and I conducted the document study and the interviews for the policy analysis. I performed the analysis of policy integration and collaborated with Linda Olsson and Martina Wikström in writing the article.

ABBREVIATIONS AND TRANSLATIONS

CAB	County Administrative Board	Länsstyrelse
SCC	Stockholm County Council	Stockholms läns landsting
SCALA	Stockholm County Association of local Authorities	Kommunförbundet
Stockholms län		
RVG	Region Västra Götaland	Västra Götalandsregionen
SDDC	Sustainable Development Drafting Committee	Beredningen för hållbar
utveckling		

1. INTRODUCTION

Research shows that we must change and transform our society to have sustainable development and to meet the climate change challenge (e.g. IPCC, 2014). That this has made an impact on most national governments is manifested in the climate decision in Paris in December 2015, which established a new goal of restraining global warming by a maximum of 1.5 degrees Celsius in the year 2100 compared to the temperature before the start of industrialism (UN, 2015). Research also shows that one of the major challenges to achieve the Paris climate goal is to change the transport system and make it more sustainable. Transportation accounts for 20% of global energy usage, and fossil energy carriers dominate the system (IEA, 2014). In addition, the transport sector stands out as the one of the few sectors that have not been able to turn around the increasing use of energy and fossil fuels. The housing and the industrial sectors, both heavy energy users, have managed to turn the increase around, but not the transport sector. The transport system therefore accounts for an increasing share of the total fossil energy used (IEA, 2014; SEA, 2015). Research shows that this is a result of growing transport volumes, growing use of private vehicles, continuing use of fossil fuels and conventional engine technologies (Nilsson, 2012). For a change towards sustainability it is argued that the necessary technological innovations are in place, but there is an inability to diffuse low-carbon technologies and fuels on a grand scale (Marsden, Mullen, Bache, Bartle, & Flinders, 2014). For a successful diffusion of these technologies public policy change and support is necessary (McCormick, Bomb, & Deurwaarder, 2012).

However, even if available technologies were used it would not be enough (Höjer, Gullberg, & Pettersson, 2011; Åkerman & Höjer, 2006). Consequently, there is a need for change in behaviour among individuals, foremost decision-makers who may change public policy content and the organization of policymaking to include all different actors and interests in joint processes (see, e.g. Banister, 2005; Banister, 2008; Banister, Steen, Åkerman, & Dreborg, 2000; Goldman & Gorham, 2006; Hickman, Hall, & Banister, 2013; McCormick, Anderberg, Coenen, & Neij, 2013). The last point above describes policy integration processes, which are about organizing policymaking as processes of cooperation and collaboration between actors in different sectors and on different levels of government. Within the area of transport it is about integration of different modes of transport into one system and integration of transport policy with other relevant policy sectors, such as energy (Banister, 2008; Banister et al., 2000; Hull, 2005; Hull, 2011). This thesis will analyse and discuss processes of policy integration as one bit in the puzzle of how the transport system could better develop towards eliminating fossil energy use and achieving sustainability.

Public administration in contemporary democracies is organized into sectors, which define certain policy fields. This organizational model goes back to the Weberian idea of the efficient modern bureaucracy, where the carefully defined division of tasks is one of the key aspects of efficiency (Hague & Harrop, 2004). This has partly been contested by the argument of existing cross-cutting issues that transcend the traditional government and administrative boundaries of policy sectors, organizations and levels and therefore call for changes in organizational structure and approaches to policymaking (Christensen, Laegreid, & Rykkja, 2013; Stead, Geerlings, & Meijers, 2004; Underdal, 1980). In the Brundtland Commission report, *Our Common Future*, policy integration was

suggested as a measure to achieve sustainable development, because of its cross-cutting character. The Commission argued that sustainability needs to be managed by creation of joint or coordinated policy to cover as many sectoral goals as possible and to minimize the risk of conflicts and contradictions between different policies (Meijers & Geerlings, 2004; WCED, 1987).

Policy integration with focus foremost on environmental issues has, then, been established as a principle for policymaking in the work of the OECD, and in the Amsterdam Treaty of the European Union (EU, 1997; Lenschow, 2002; Nilsson & Eckerberg, 2007; OECD, 1996). It is thus a current principle for policymaking within the EU institutions. In addition, policy integration has been established as central to transport policymaking in the recent European Transport White Papers (CEC, 2001; EC, 2011). The focus has been on integration of different modes of transport and on an emphasis of the need for coordination between the transport sector and other sectors in policymaking in order to solve transport problems relating to sustainability (EC, 2011; Geerlings & Stead, 2003). Generally, the idea of policy integration has also been current in several European countries during the last 15 years. In the United Kingdom a governance strategy of joined-up government was launched in the late 1990s, which aimed for more integration between all policy sectors at all levels (Ling T, 2002). Also, in other European countries such as Denmark and Germany, policy integration has been shown to be a major goal for policymaking (Hull, 2011; Stead & Geerlings, 2005).

Sweden is one country that is known internationally for its ambitious goals and major work regarding sustainability and decrease in the use of fossil energy (Jordan & Lenschow, 2010; Krueger & Gibbs, 2007; Lafferty, 2001). Environmental issues are said to be a priority, and there is national legislation of environmental quality objectives to be taken into consideration in all policymaking throughout the public sector, along with environmental management systems for all national public agencies (Nilsson & Eckerberg, 2007). In addition, in Sweden the idea of policy integration as a tool to manage more complex issues, such as sustainable development, has influenced the recommendations for policy development (e.g. Nilsson & Eckerberg, 2007; Premfors, 2003; SGOR, 2016). The sectorization of the national government is seen as necessary to enable specialization concerning complex issues (SGOR, 2007). However, this sectorization is not regarded as positive for all issues, especially not for those that need interventions from several sectors at the same time; in addition, it is regarded as a less positive model for decision-making on local and regional levels than on the national level (SGOR, 2007; Storbjörk & Isaksson, 2014).

In Sweden, as well as in other countries, day-to-day transports are increasingly occurring within regional areas (Storbjörk, Lähteenmäki-Smith, & Hilding-Rydevik, 2009). This implies that the transport system is a regional system, when considering how it is used. From an international perspective, regional subnational policymaking bodies are active and engaged in deciding upon more ambitious goals than national governments concerning climate problems and dealing with issues of sustainability (Haughton & Morgan, 2008; McCormick et al., 2013). In Sweden transport has become more regionalized with respect to policymaking and management (Storbjörk et al., 2009), since regional self-governing authorities are increasingly becoming more common throughout the country (Andersson, Ek, & Molina, 2008). Research on regional policymaking and sustainable development has in Sweden been primarily focused on how sustainability is framed and implemented in regional development policy (see, e.g. Dovlén, Hilding-Rydevik, & Khakee, 2008; Mobjörk, 2010; Storbjörk & Isaksson, 2014; Storbjörk et al., 2009). Conclusions have been

that there is lack of integration between policy sectors, which obstructs sustainable development implementation (Storbjörk & Isaksson, 2014). I will continue this discussion by focusing on policy integration processes to manage the transport system towards sustainability in two Swedish regions. The two regions represent two different cases of policy integration and regional policymaking, as well differing in tradition, geography and organizational structure. The case studies are the county of the Swedish capital, Stockholm, and the west Swedish region of Västra Götaland.

Research on public administration has long argued for the need of processes of policy integration as more cooperation and collaboration to coordinate public policymaking to facilitate managing of complex issues (Bouckaert, Peters, & Verhoest, 2010; Peters, 1998; Verhoest & Lagreid, 2010). Today such processes are ongoing and common within and between the public organizations that manage the transport system and take part in policymaking. Therefore, this thesis focuses on how to understand these processes and what effects these processes have on sustainable transport development. To be able to answer these sorts of questions, I will look into the processes of transport policymaking in the two different regions and analyse and discuss whether there are policy integration processes and how and why they are conducted. Stockholm is a least likely case of policy integration, due to its scattered regional-level policymaking. To be able to follow possible integration processes in such a structure, I have used the theoretical framework of the boundary object, which puts the focus on the object's relevance for policymaking. Västra Götaland, on the other hand, is a most likely case of policy integration; to capture the relevance of several actors and their relevance in integration processes, I have adopted the theoretical framework of organizational identities and developed the concept of policy logics. For the joint discussion in this thesis I will use these three concepts to highlight the joint results concerning policy integration and sustainable transport development. The questions underlying this discussion will be outlined below.

AIM AND RESEARCH QUESTIONS

The overall aim of this thesis is to study how and why (or why not) policy integration processes are being developed in regional policymaking and what this means for the achievement of sustainable transport. The aim is further specified in three research questions:

- 1. Are there policy integration processes, and how are they conducted in the regions studied?**
- 2. How can policy integration processes be understood from the perspectives of policy logics, organizational identities and boundary objects?**
- 3. How can (or cannot) policy integration processes contribute to forming sustainable transport development?**

The policy integration approach is a normative idea of how policymaking for sustainable development should be performed to produce more sustainable results. In this thesis I am therefore taking a critical stance towards this idea to be able to discuss the possibilities and obstacles of policy integration processes in forming a sustainable transport system. I am contributing to the field of policy integration by focusing on organizational aspects of policy integration processes and by using analytical concepts derived from other theoretical frameworks for the analysis. In this way I will both improve the understanding of policy integration and increase

the knowledge of its effects for sustainable transport development. The joint analysis and discussion in this thesis is based on two case studies in the Swedish regions of Stockholm and Västra Götaland. The results of the case studies are reported in detail in the four included articles.

Policy integration and sustainable development are closely connected concepts and therefore a review of the development of the two concepts is necessary to understand the context of this thesis. In addition, a discussion of what sustainable transport development is and should be, according to both research and policy, is also needed for the further discussion in this thesis. I will therefore continue this introductory chapter with a description of sustainable development and policy integration. The chapter then ends with a background of the Swedish regional government organization and detailed descriptions of the Stockholm and Västra Götaland regions.

SUSTAINABLE DEVELOPMENT AND POLICY INTEGRATION

Sustainable development was first established in the report *Our Common Future* in 1987 by the World Commission on Environment and Development, also known as the Brundtland Report (WCED, 1987). Sustainable development was there defined as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. A few years later, at the UN Conference on Environment and Development in Rio de Janeiro in 1992, the world’s leaders identified the principles for action for sustainable development in the future, resulting in the Agenda 21 document. Ever since its establishment, the concept of sustainable development has been under much debate, and several different definitions of it are current in policies and discussions throughout the world. At the World Summit on Sustainable Development in Johannesburg in 2002, the understanding of sustainability was directed towards the complex interdependencies of environmental, economic and social development (Elliott, 2006). Sustainable development was thus established to include three interdependent “pillars”, which were all to be taken into consideration while acting towards sustainability. At the Rio+20 Summit in 2012, the participating world leaders officially defined sustainable development “as composed of three dimensions that must be pursued simultaneously: economic, social and environmental” (Cléménçon, 2012, p. 312).

There are numerous different definitions and understandings of sustainable development, both in policymaking and in the research debate. Different definitions have been sorted into scales, which range from weak to strong versions of sustainability (Baker, 1997). The weak forms of sustainability are anthropocentric approaches whose focus is expansion of the global economy and an underlying assumption that innovations will solve environmental problems. Stronger forms of sustainability focus on economic growth based on environmental regulations, for example, ecological modernization (Baker, 1997). In recent years the resilience approach of planetary boundaries – physical limits for the Earth – have been brought into the debate on sustainability (Rockström & Sachs, 2013). Planetary boundaries do not put a restriction on human development, and the argument is that technological innovations and market solutions can solve the sustainability challenge (Saunders, 2015). It is thus also a definition of sustainability that bases economic growth on environmental regulations. The strongest forms of sustainability are approaches that have nature as their point of departure for development. An alternative view on growth is that it should be measured through quality of life rather than standard of living (Baker, 1997). Sustainability is in this thesis, however, interconnected with the discussion of transport system development and

sustainable transport, as well as with the discussion on policy integration; therefore, the definition used in this thesis will be further elaborated in the coming parts and in the chapter on previous research.

As mentioned in the introduction, the Brundtland Commission report suggested policy integration as a measure to achieve sustainable development. The concept of policy integration had already been developed in the beginning of the 1980s, mostly in the context of environmental ocean management (Underdal, 1980), but it was with the launch of the concept of sustainability that it gained interest in a wider community of researchers and policymakers. Policy integration is thus a concept that is closely connected to and associated with the concept of sustainable development.

Since the 1990s onwards the focus of policy integration research and actual policymaking has been on the integration of environmental concerns into all other policy sectors (Goria, Sgobbi, & von Homeyer, 2010; Jordan & Lenschow, 2010; Nilsson & Eckerberg, 2007; Persson, 2004). The Brundtland Commission argued in its report for the centrality of this environmental policy integration (EPI) principle to the definition of sustainable development, that is, that environmental sustainability considerations are the priority and should be integrated into economic and social policies (Nilsson & Eckerberg, 2007). Environmental policy integration today constitutes one field of research and is incorporated as a central principle in policymaking within the EU institutions and in particular in Sweden (Jordan & Lenschow, 2010; Lenschow, 2002; Nilsson & Eckerberg, 2007). However, the major focus on integration of environmental considerations into all policy sectors by researchers and policymakers has been criticized, *inter alia*, from the perspective of a more general approach to policy integration (Briassoulis, 2004). Briassoulis has defined this general policy integration as “a process either of coordinating and blending policies into a unified whole, or of incorporating concerns of one policy into another” (Briassoulis, 2004, p. 9). The argument is that the focus on environmental integration by EPI has overshadowed other, at least as important, concerns, such as spatial, social and cultural issues (Briassoulis, 2004).

Within the research area of spatial issues and specifically sustainable transport development, this more general approach to policy integration was becoming common in the research literature in the beginning of the 2000s. The focus was foremost on the integration of transport and spatial issues for environmental sustainability aims in organizations such as the EU and local and regional authorities responsible for city development (Geerlings & Stead, 2003; Hull, 2005; Stead et al., 2004). In transport policymaking the more general principle of policy integration was also used, for example, in the European Transport White Papers (CEC, 2001; EC, 2011; Geerlings & Stead, 2003). From the perspective of sustainable transport development, policy integration has been suggested as a valuable tool and a precondition for its development (see, e.g. Banister, 2005; Banister, 2008; Hull, 2011). Research has shown that regarding policymaking in European city-regions there is a widespread consensus that policy integration is a fine idea for transport development, and many would also like to claim that it is something that is going on (Hull, 2011; Stead & Geerlings, 2005; Stead et al., 2004).

SUSTAINABLE TRANSPORT DEVELOPMENT

The sustainable transport system has been defined as

one in which fuel consumption, vehicle emissions, safety, congestion, and social and economic access are of such levels that they can be sustained into the indefinite future without causing great or irreparable harm to future generations of people throughout the world. (Richardson, 1999, p. 29)

However, as a conception of sustainability, this definition is wide and seems to include a massive number of different things. To be able to concretize what a sustainable transport system may be it is valuable to first explain what it is not.

The conventional approach to transport development is that transport policy should be developed on the basis of transport demand in society and the technological solutions available to meet that demand (Banister, 2008; Goldman & Gorham, 2006). The underlying argument is that the existence of a working transport system is necessary for the maintenance of the current economic system, since transport both upholds the possibility of transporting resources from one place where they are plentiful to another where they are scarce, and is a precondition for specialization that contributes to productivity, quality and economies of scale (Button, 2010; Nunen, Huijbregts, & Rietveld, 2011). In addition, transport possibilities mean commuting possibilities, so that people are able to transport themselves to work, since work and residence are often separated in space. Trips are also needed for social interaction and the possibility for people to participate in activities such as recreation, culture and sports (Nunen et al., 2011). The transport system should thus supply a service to people and industry, so that they are able to fulfil their needs and demands. From this follows also that increasing transport strongly correlates with economic growth (Banister, 2008).

Central to the conventional approach is that transport in itself has no value; it is the resource, freight or activity at the destination that is considered to have value, meaning that transport needs to be as fast as possible (within certain limitations such as safety concerns) (Banister, 2008; Holmberg & Hydén, 1996). This has resulted in a major traffic focus of transport policy, and in particular, since it is a fast mode of transport, focus on the private car and motorized transport in general. The car is often described as an icon for modern society and increased wealth, a cultural object central to the conventional transport system (Banister, 2005; Falkemark, 2006). Increasing transport from this conventional perspective is thus the same as increasing motorized transport: development of roads and the possibility of travelling by car.

The sustainable approach to transport development, on the other hand, is, as indicated in the above quotation, based foremost on environmental and social concerns (Banister, 2008). The strategies associated with that comprise improving transport efficiency and reducing the impact of vehicles, pushing for more sustainable modes of travel and implementing initiatives to reduce the need to travel (Nykqvist & Whitmarsh, 2008). Technological innovations such as biofuels and electric vehicles are considered important to fulfil environmental concerns, but they are not sufficient. It is argued that to make transport more efficient and less motorized, the conventional planning for car transport needs to be transformed to focus on all modes of transport in a hierarchy with pedestrians, cyclists and public transport users at the top and car users at the bottom (Banister, 2008; Falkemark, 2006). Consequently, transport policy should manage tendencies of urban sprawl

and build denser urban areas with varied neighbourhoods where people could dwell and have access to most of the services and activities they need. In these sorts of areas public transport, walking and cycling would be both attractive and functional (Curtis, Renne, & Bertolini, 2009; Næss, Hansson, Richardson, & Tennøy, 2013; Newman & Kenworthy, 2015). In this way, the overall need to travel longer distances would diminish. The sustainable approach to transport development would also aim to change the view of travel, such that it would be seen as an activity with value in itself: travel time would thereby need not be as short as possible, but could take a bit longer (Banister, 2008).

SUSTAINABLE TRANSPORT POLICY IN THE EUROPEAN UNION AND SWEDEN

Sustainable transport is a common and popular label widely used in policy documents concerning transport development in the EU and Sweden. The meaning of “sustainable transport” in these cases does not always correlate with the expressions described above, but several ideas are incorporated. Hence, the EU view on transport development influences Swedish transport goals, and both of them influence transport policymaking on the regional level. I will here describe their content to provide a view of the empirical context of sustainable transport in which this thesis is placed.

The current European Commission white paper on transport, *Roadmap to a Single European Transport Area – Towards a Competitive and Resource Efficient Transport System*, focuses primarily (from an environmental perspective) on measures to achieve the target of a maximum of 450 ppm CO₂ emissions in EU by 2050 (EC, 2011). However, more important than the CO₂ emission target is the need for transport to ensure economic growth and personal mobility, because “curbing mobility is not an option” (EC, 2011, p. 5). Infrastructure and mobility planning are considered key elements together with new technologies to help reduce CO₂ emissions. Common rules, regulations and standards for member states are expected to help implement new solutions, for example, information campaigns to encourage people to choose less emitting transport modes. Urban area planners should be encouraged by a structure of plans and audits to help restructure transport infrastructure. Public procurement is considered helpful in increasing the uptake of new technologies. One goal is that cars should be used for less than half of the total middle distance travelled in 2050. Urban transport is treated specifically, as this sector has specific needs due to higher population density and short travel distances. A goal is set for urban transport to cut the number of conventionally fueled cars in half by 2030 (EC, 2011). The need for common policy is emphasized: “Coherence at EU level is vital – a situation where (for example) one Member State opted exclusively for electric cars and another only for biofuels would destroy the concept of free travel across Europe” (EC, 2011, p. 5).

The EU has also established a couple of directives and regulations that aim to increase use and supply of biofuels with lower greenhouse gas (GHG) emissions and decrease emissions from new cars and trucks (EU, 2009a; EU, 2009b; EU, 2009c; EU, 2011). Since the EU is a major vehicle market, it has great direct influence on international standards for transport development concerning fuel and vehicle development (SGOR, 2013).

The Swedish objectives for the entire transport system are basically the same as the European Commission’s, with economic growth, accessibility and sustainability as key points. Concerning environmental issues, in the latest general transport bill, *Future travels and transports – infrastructure for*

sustainable development (Framtidens resor och transporter – infrastruktur för en hållbar tillväxt), the former government established that transport development should contribute to fulfilling the goal that Sweden should reduce its climate impact and reduce net GHG emissions to zero in 2050. A step towards that goal is the specific transport system goal of having an entire vehicle fleet independent of fossil fuels in 2030 (SG, 2008; 2009; SGOR, 2013). To fulfil that goal, the bill suggests that fossil fuels be replaced by renewable fuels, electricity and fuel cells, and by other modes of transport, for example, public transport. The responsibility of choosing climate friendly means of transport is to great extent placed on private persons. CO₂ taxation is considered the chief policy instrument to guide consumers towards efficient alternatives (SG, 2008). With the aim primarily to push producers and consumers towards the governmental goals, in the years following the governmental bill several other measures have been established: tax credits for biofuels and public investments in biofuels, a CO₂-differentiated vehicle tax for cars produced after 2006, an exemption from vehicle tax for the first five years for “environmentally friendly cars”, a lower benefit tax for “environmentally friendly cars”, a grant for buying “super-environmentally friendly cars” (i.e. electric cars) and so forth (SGOR, 2013).

In 2012 the government launched a study on how to achieve the goal of fossil fuel independence by 2030. The focus for the investigation was on road transport, and about a year and a half later the Official Report was presented to the government. The proposed measures were summed up in two packages based on the same logic: taxes on vehicles with high emissions would finance bonuses to vehicles with low emissions (SGOR, 2013). However, the presentation in December 2013 was followed by an election year, and the conclusions of the Official Report were put on the shelf and have not yet been implemented.

As described above, both the EU and the Swedish government have a number of ambitious goals for transport development that are connected to environmental concerns. However, the fulfilment of these goals are not entirely managed on EU and Swedish national levels, but on the subnational levels of local and regional governments. Preconditions and characteristics of relevance to transport development are, however, different throughout different regions and localities, explaining why the international and national goals are managed differently. In addition, in the Swedish case the regional level of policymaking is organized differently throughout the country, which influences responsibilities and management of transport policymaking.

SWEDISH REGIONAL ORGANIZATION

Sweden is a unitary state with a traditionally strong national government complemented with internationally comparable strong and self-governing local authorities, the municipalities (Rose & Ståhlberg, 2005). The regional level has traditionally been weak, making the Swedish state look like an hourglass – large at the top and bottom and thin in the middle (Lind, 2010; Mörck, 2008). However, since the 1980s there has been ongoing change of the regional organization towards more regional self-government. Regional development used to be a national policy, but in correlation with the increasing regional self-government it has increasingly been transferred to the regional level (Andersson et al., 2008). Since 1998 sustainable development has been a formal policy objective for regional development policy (Storbjörk & Isaksson, 2014). There is no hierarchical relationship between the local and regional levels of government, which is why the strong municipalities still are major actors in regional policymaking (Stegmann McCallion, 2007).

Municipal self-government is based on constitutional law and deeply rooted in the Swedish institutional tradition. The main foundation for self-government is the income tax structure, which is established by the municipality (Montin & Wikström, 2004). In addition, and most important for regional transport development, the municipal governments have a land use planning monopoly within their territory. The monopoly includes land use planning matters such as industry localization, housing, and energy and transport system development. One major responsibility that may overrule the municipalities is the planning of infrastructure of national interest, such as highways and national railways (Montin & Wikström, 2004; Nyström, 2003; Nyström & Tonell, 2012). The land use planning monopoly puts the municipalities in a powerful position and makes them influential actors in the regional transport policymaking.

The public organization of the regional level has traditionally been allocated to two authorities: on the one hand, the self-governing County Council, and on the other, the national government's regional representative, the County Administrative Board. The County Council is subject to the same law as the municipalities, which gives them right to impose income tax on the citizens in the county. The major task of the County Council is provision of health care within its territory, but it is also responsible for public transport, regional culture and some promotion of regional economic development (Andersson et al., 2008). The County Administrative Board is the national government's regional cross-sectoral administration agency. It works as a regional representative for the national government in the region and as a link between the region and national government. The Board disseminates governmental decisions and goals applicable to the region within several policy areas and controls how the municipalities follow the law regarding, for example, land use planning and environmental development.

The trend towards regional self-government has, since the 1990s, led to the development of three different models of regional organization, which all are current today. The first model of regional organization concerning transport policymaking is the traditional one, with a County Council responsible for public transport and a County Administrative Board having responsibility for regional economic development and regional transport infrastructure planning (SNBHBP, 2015). In almost all cases the municipalities within the County also form a regional interest organization, which they use for intermunicipal collaboration and management of municipal issues of regional interest. Today, there are four counties that apply this first model of regional organization.

The second model of regional organization is the regional self-government, called the Region. Regions are directly elected parliaments, with health care, public transport and all regional development responsibilities; they make policy for regional development strategic work, decide and distribute state support, take care of EU structural funds, and develop and implement the regional transport infrastructure plan (SALAR, 2015). Regions are subject to the same law as County Councils and municipalities, which gives them the right to tax the income of everyone living within their territory. In regions applying this model the County Administrative Board has restrained responsibilities, concentrated in control of regional and local compliance with national policy. This second model of regional organization has developed from four pilot projects that were established in the late 1990s (SG, 1996). In 2011 two of these projects were made permanent, and two other counties gained the same status (SNBHBP, 2015). In 2015 another six counties transformed their County Councils into Regions, bringing to 10 the total of counties with this second regional model (SNBHBP, 2015).

The third model of regional organization is something in between the two described above. As Regional Development Councils have been formed, the municipalities have transferred some of their mandates to their common regional association, and the national government has followed suit, transferring its responsibility over regional development. Representatives of the Regional Development Councils are not elected directly, but by the municipalities. These Councils have no taxation right of their own. In this third model the Regional Development Councils are responsible for regional land use and development planning and for transport infrastructure planning. The County Council has the same responsibilities as in the first model, for example, for public transport, and the County Administrative Board still retains some of its regional development responsibilities. This third model of regional organization is applied in seven counties (SNBHBP, 2015).

The cases described and analysed in this thesis are examples of the first and the second models of regional organization. Stockholm is a first model case, but with some specific modifications, due to its being a large urban area. Västra Götaland is a second model case, one of the two pilot projects formed in the late 1990s and established as permanent in 2011. The Swedish regional organization and how it fits in the complete Swedish governmental structure is illustrated in Figure 1.

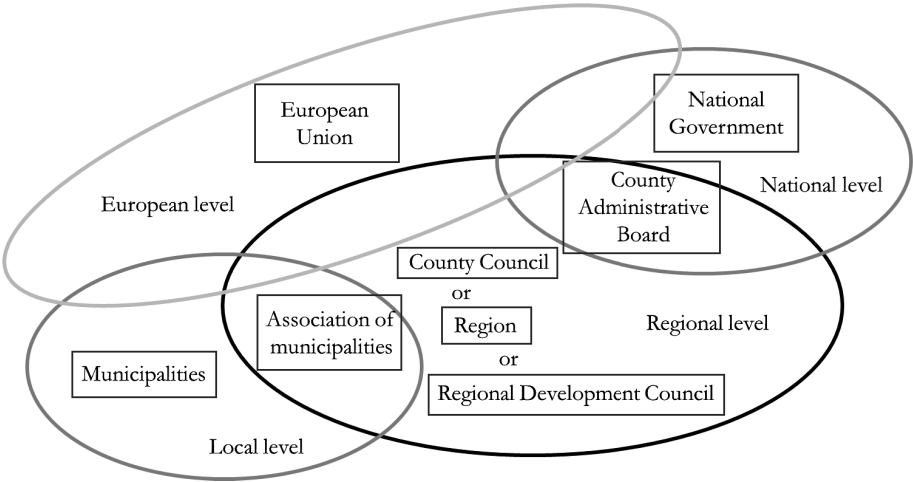


FIGURE 1 THE SWEDISH REGIONAL ORGANIZATION AND ITS PLACE WITHIN THE GOVERNMENTAL STRUCTURE

REGIONAL ACTORS

Regional transport policymaking, however, includes and is dependent not only on the above-described regional authorities but also on national sectoral authorities, private and voluntary organizations and also individuals. Relevant national sectoral agencies for the discussion in this thesis are, for example, the Energy Agency and the Traffic Agency. At the regional level the Energy Agency is mainly involved as a sponsor of projects relevant to energy development. The Traffic Agency is responsible for the long-term planning of national infrastructure. This is of relevance to regional policymaking, since it establishes the transport infrastructure development of national interest within the region. The Traffic Agency also develops and produces planning methods,

which are recommended for use by the regional and local authorities in their transport infrastructure planning (Nyström & Tonell, 2012).

Other actors important in regional transport policymaking are those in industry (Mobjörk, 2010), both as innovators, developers and producers of new and old transport technologies and as users of transport systems. The first category of private industry is directly influential in policymaking, since it has knowledge of recent innovations and development of technologies. These industry players are also relevant as possible collaborators in test projects with the regional authorities. Other industries, which are not involved in producing transport-related products, are most often dependent on extensive freight transportation as well as being interested in commuting possibilities for their employees; consequently, most parts of the regional industrial sector have interests in and may influence transport policymaking.

Further actors of relevance for regional transport policymaking are interest organizations for groups active within the region, for example, water and waste management associations, environmental organizations, and so on. These organizations are often active in certain parts of the policy processes concerning specific matters of interest to them. The Swedish structure of consultation in the land use planning processes makes that part of transport policymaking formally open to everyone interested, both organizations and individuals. However, studies have shown that even though everyone is invited to take part, it is rather difficult to actually influence the decisions (Wänström, 2009).

STOCKHOLM REGION

Stockholm is the Swedish capital and the largest urban region in Sweden (see its situation in Figure 2), with a total population in the county of about 2.2 million in 2015 (SCB, 2015). The City of Stockholm is the central municipality in the region, in which almost half of the total population in the county live. The county consists of 26 municipalities, all included in the local labour market of Stockholm (SCB, 2015). The county of Stockholm and especially the City of Stockholm have a growing population, and commuting within the region as well as from other neighbouring regions is also increasing. In terms of transport development this calls for new solutions to the extensive traffic congestion, emissions and noise problems. Stockholm has a fairly high degree of public transport use, which comprises a metro system, buses and commuter trains. To solve the problem with extensive traffic congestion, congestion charges have been in place since 2007 for driving into the city centre (Cederschiöld, 2007). Other initiatives such as rising the use of other transport modes as public transport, cycling and walking are also in place within the region (SCC & CABS, 2010; City of Stockholm, 2010).

The administrative regional level in Stockholm consists of different organizations with jurisdictions within different areas. As already described, the Stockholm region is organized in a traditional way, in line with the first model of regional organization defined above. This means that within the area of transport development the County Council; the County Administrative Board; the public transport company, SL; and the Stockholm County Association of Local Authorities (SCALA) all are involved in policymaking. Stockholm is, however, an extreme case within the first model category, since the County Council is appointed by the national government, with responsibility for regional land use planning and for regional economic development. Hence, the national government has, since the middle of the 20th century, considered it necessary to have

regional land use planning, complementing the local land use planning, in Stockholm, since the movement of people and things are extensive across the municipal borders (Andersson et al., 2008; Magnusson, 2013). It is thus the County Council, in cooperation with other actors in the region, that produces the regional spatial and economic development plan every ten years, called the Regional Development Plan (Magnusson, 2011). The County Council is also the owner of the public transport company, which is responsible for the development of public transport within Stockholm County. The public transport company was also given the general responsibility for transport development,¹ following the establishment of the Regional Development Plan in 2010. The County Administrative Board in Stockholm is responsible for regional transport infrastructure planning. The infrastructure planning is also negotiated with the County Council and all 26 municipalities. To coordinate issues that transcend the municipal boundaries, the municipalities in Stockholm County have created a regional interest organization, SCALA. SCALA does not have any jurisdiction of its own; it is the interests of the member municipalities that guide what the organization will work with. At the time of my case study, concerning transport-related issues, SCALA was foremost involved in biogas development and in representing the municipalities in negotiations about transport infrastructure planning.

In summary, the organizational structure of the Stockholm regional level includes limited hierarchical relationships between the actors. Even when there are relationships of ownership between the actors, as in the case of the County Council and the public transport company, the actors are still largely independent, due to their different responsibilities. The characteristics and organizational structure of the Stockholm region are summarized in Table 1.

TABLE 1 SUMMARY OF THE TWO CASES

<i>Characteristics of the cases</i>	The Stockholm Case	The Västra Götaland Case
Geography	Urban municipalities	Urban and rural municipalities
Inhabitants	2 205 105	1 644 603
Area	6 519 km ²	23 942 km ²
Municipalities	26	49
Local labour markets	1	8
Regional organization of municipalities	One association of all Stockholm municipalities	Four associations of municipalities: Fyrbodals, Skaraborg, Gothenburg and Sjuhärads
Responsibility of organizations concerning the transport system:		
Regional transport infrastructure (roads and railways)	County Administrative Board	Region Västra Götaland
Regional development planning (land use and economic)	Stockholm County Council and SL	Region Västra Götaland
Public transport	Stockholm County Council - SL	Region Västra Götaland – Västtrafik

¹ This was a new structure of transport policymaking when I conducted the case study; therefore, I have few results of this specific setting.

VÄSTRA GÖTALAND REGION

Västra Götaland is situated in southwest Sweden (see Figure 2), on the west coast, and is the second largest region in Sweden in terms of population, in total about 1.6 million (RVG, 2015a; SCB, 2015). Västra Götaland consists of 49 municipalities. The commuting is concentrated in eight different local labour markets. Gothenburg is the largest local labour market, and it is also the second largest urban area in Sweden (RVG, 2008; SBA, 2013). Apart from Gothenburg, there are four smaller cities spread out within the region that can be defined as urban areas² (Borås, Skövde, Trollhättan, Uddevalla) (SBA 2013). In total there are 16 municipalities that can be defined as urban, and about two thirds of the total population in Västra Götaland live there (RVG, 2014). The other 33 municipalities in Västra Götaland could be defined as rural.³ Concerning transport, the different geographical characteristics of the municipalities in Västra Götaland mean that the urban areas are characterized by extensive commuting and a dense population level, which suit an extended public transportation system; at the same time, the rural areas depend on good commuting opportunities to maintain their populations, which are either constant or decreasing (RVG, 2014).

Västra Götaland is a region much dependent on issues of transport development, mainly because of two user groups, a major logistics sector and a large vehicle industry. Gothenburg is Scandinavia's largest seaport, and there are several other important ports along the west coast. This makes logistics an important business sector for the region (RVG, 2005). A major part of the Swedish vehicle industry's research and innovation is situated in Västra Götaland, and about 4% of the total employment in the region is in the vehicle industry (RVG, 2013). These transport consumers, the logistics and vehicle industries, are thus important parts of Västra Götaland, in the business community, as employers and they are potentially also parts in policymaking.

The administrative regional level in Västra Götaland is based on one regional authority, Region Västra Götaland, here called the RVG (RVG, 2015b). As described above, the Västra Götaland region is organized in line with the second regional organizational model, which means that it was part of the national test of more self-governing regional authorities at the end of the 1990s and then established as a permanent form of regional organization in 2011. In addition, Västra Götaland is also new as a county, formed in the late 1990s by merging four formerly separated counties. Policy concerning regional transport development in Västra Götaland is the responsibility of the RVG, including issues such as regional land use planning and transport infrastructure planning. The RVG is also the owner of the public transport company, Västtrafik. However, between the RVG and the municipalities there is no hierarchical relationship, and the municipalities still hold land use planning monopoly within their territory, making the implementation of regional transport policy greatly dependent on municipal decisions. Regional transport policy is thus developed and established by the RVG, but the municipalities are included formally, through committees, and also informally in the policymaking processes (RVG, 2008).

² The definition of an urban municipality used here is that the population is at least 30 000, that the largest city has over 25 000 inhabitants or that a large share of the municipality's population commutes to a neighbouring municipality (SBA 2013).

³ The definition of a rural municipality used here is that the population is less than 30 000 and there is no city with more than 25 000 inhabitants. There could be smaller towns, but more than half of the total population lives outside of these towns (SBA 2013).

To manage these collaborations with the RVG, the 49 municipalities are organized into four subregional assemblies: Fyrbodal, Gothenburg, Sjuhärad and Skaraborg (RVG, 2011). Neighbouring municipalities form a subregion and represent a certain geographic area within Västra Götaland. Each subregion appoints external representatives from among their members to collaborative bodies, including RVG committees. Each subregion serves also as a collaboration platform for its member municipalities on issues where the municipalities need to cooperate with each other to solve common problems. The subregions consist primarily of political representatives and public officials of their member municipalities, but they also have administrative structures of their own to support their work. The subregions are different in size, population and responsibilities, the Gothenburg subregion being most resourceful and the one that has existed the longest. The Gothenburg subregion has also driven several projects aiming for sustainable development, for example the HUR2050 project, a network for planning officials to strengthen them in their work on sustainability issues and the K2020 project on the future public transport development (Polk, 2010). Apart from the RVG and the four subregions, there is also a County Administrative Board in Västra Götaland, but concerning transport development its role is mostly to control the municipalities' land use plans, and it is therefore not apparent in the articles that analyse the Västra Götaland case in this thesis.

In summary, this introductory chapter has outlined the relationship between sustainable development and policy integration, sustainable transport in research and in Swedish and EU policies. Finally, an overview of the Swedish regional organization and detailed descriptions of the two studied empirical cases have been provided. These things are a background to the following discussion. In the next chapter I describe and discuss previously published research on policy integration and sustainable transport that are relevant for the discussion in this thesis.



FIGURE 2 THE SITUATION OF VÄSTRA GÖTALAND AND STOCKHOLM COUNTIES

2. PREVIOUS STUDIES ON POLICY INTEGRATION AND SUSTAINABLE TRANSPORT

As shown above in the overview of the development of the concept of policy integration, it has been studied largely from an environmental perspective, focusing on how environmental considerations are integrated into all other policy sectors on the national level (see, e.g. Jordan & Lenschow, 2010; Persson, 2004). Policy integration, mainly at the national level (De Vries, 2008), has also been in focus in the public administration literature in research on crisis management and other complex issues characterized by ambiguity and uncertainty. In that context policy integration is, however, labelled policy coordination (Bouckaert et al., 2010; Christensen et al., 2013). Policy integration has also been studied within specific sectors at the international level, of which marine policy, including the environmental management of oceans, is a major research field (Rouillard, Heal, Ball, & Reeves, 2013; Underdal, 1980). Within the field of sustainable transport, policy integration is one of the aspects argued for as an important tool for achieving sustainability (Banister, 2008; Banister et al., 2000; Hull, 2011), because what stops a development towards sustainable transport is *not* lack of knowledge about technical, spatial and behavioural solutions, but the institutional structure of policymaking (Banister, 2008; Marsden, Ferreira, Bache, Flinders, & Bartle, 2014). The measures necessary for reducing emissions from transport and increasing energy efficiency are thus commonly known among policymakers, but they are not implemented, anyway. In accordance with these arguments for policy integration the interest in doing research on processes of policymaking and integration in the transport field has increased. These studies derive from many fields of research. I have divided this chapter into different themes to pinpoint aspects from earlier research that have been important for my study. I will consider several perspectives and describe a few studies more closely.

THE ROLE OF ACTORS IN TRANSPORT POLICYMAKING: POLITICIANS, OFFICIALS AND ORGANIZATIONS

Transport policymaking involves a wide range of actors, which have been variously recognized and discussed in the literature. The role and possible influence of citizens in transport planning processes have been recognized and analysed within the collaborative planning perspective (see, e.g. Healey, 1997; Healey, 2006; Innes & Booher, 2003). However, this thesis focuses on the public organizations that manage the transport system, not on the citizens. Within the public organizations there are several individual actors involved in transport policymaking, generally divided into two groups; officials and politicians. In a wide range of studies of transport development and integrated spatial planning the planning official, the professional planner, is in focus (Henriksson, 2014; Polk, 2011; Tennøy, 2012). The planning officials could be restricted to a certain profession or include all officials at an organization who engage with planning issues (Czarniawska, 2002; Henriksson, 2014). However, within the field of integrated transport and planning the planning officials are connected to a certain profession. The focus is then on how the planning officials integrate with other professions and on the relationships between planning departments and other departments within organizations at central and local levels (Hull, 2008, 2009; Stead et al., 2004; Tornberg, 2011).

Planners are thus a major focus of the research within the transport policymaking field, and few studies have been interested in the decision-makers, the politicians. Robert Hrelja's study (2015) of steering cultures in two Swedish municipalities is an exception. Hrelja has studied the interplay between officials and politicians in local transport planning and revealed two different cultures in the ways policymaking is governed. His conclusion is that the achievement of integrated planning requires working practices that enhance collaborative behaviour and thought (Hrelja, 2015). The focus of Hrelja's study is the processes between the individuals in official and political positions.

Mark Smith (2014) has discussed the inclusion of several different professions in integrated policymaking and how this relates to organizational structures. He studied integration in local government in England concerning spatial planning in a case study of a city transport development process. Smith's results show that professions and other sorts of divisions of the local organization, such as sectors and different "localities" with their own interests and objectives, may act to obstruct integration processes. Therefore, Smith argues that there is a need for organizational structures that promote and guide individuals towards integration, rather than, as in the case presented, leaving matters up to the actions of individuals (Smith, 2014). The profession is thus in focus for Smith, but he also recognizes other sorts of divisions within the local setting.

Mindful of the previous extensive focus on planning officials, I am nonetheless including them, other officials and politicians as important individuals of the organizations that are in focus for my analysis. I am not, as Hrelja has done, concentrating on the interplay between officials and politicians, but rather considering them and their relations as representatives of certain interests, due to their organizational identities and as such influential parts of the organizations and their relationships that I am studying. It is thus the organizations, their relationships and actions that are the major focus of my study. Building on Smith's argument that organizational structures are necessary for integration performance, I am analysing these settings in this thesis. In addition, I will further explore the divisions of different organizations based on sectors and localities, as identified in Smith's study.

SECTORAL INTEGRATION

Studies of policy integration in processes of sustainable transport policymaking have focused on integration between transport and other sectors such as land use (Hrelja, 2015; Smith, 2014; Stead, 2003), environment (Geerlings & Stead, 2003), health (Kidd, 2007; Stead, 2008) and energy (Hull, 2011). The starting position for all these authors is the need for and creation of a more integrated spatial planning for sustainable transport development. The idea of integrated spatial planning is based on the view that sectoral policies are less effective if they are not connected to a spatial area and that improved integration of spatially connected sectoral policies will enhance development towards sustainability (Kidd, 2007). Issues that are connected to spatiality, such as geographical resources and infrastructures, are considered to spur policy integration processes between organizations with neighbouring or similar spatial interests (Geerlings & Stead, 2003; Kidd, 2007; Stead & Meijers, 2009). The perspective of spatial planning is seen to improve policy integration, as well as the other way around. Policy integration has thus become part of the discussion of spatial planning (Stead & Meijers, 2009).

The transport system includes several different aspects, and as such, it may be relevant to talk about sectoral integration *within* transport policymaking. This has been clarified by Angela Hull in

her review of the differences in conceptualization of policy integration and sustainable transport in the academic and policy literature. She uses a ladder of integration to illustrate how differently integration can be understood within the transport field of research. It includes eight steps and symbolizes an increasing scale of the level of integration (Hull, 2005).

The first step of the policy integration ladder is the physical and operational integration of public transport, for example, involving fares, tickets, timetables and physical places for change between different operators. The second step is modal integration, the integration of all modes of transport such as walking, cycling, bus, rail, car and air, concerning regulation, planning, pricing and so forth. The third step is integration with market needs, which means integration of interests between transport planners and business. The fourth step on the ladder is integration with social objectives, concerning issues of equity, distribution and social inclusion of different groups in society. The fifth step of the ladder is the integration of environmental issues in transport policymaking and concerns the incorporation of environmental impacts in transport development through appraisal models, pricing and regulatory controls. The sixth step of the ladder is institutional and administrative integration, such that different public authorities with interdependent responsibilities coordinate their policymaking for transport. The seventh step is the integration of policy sectors; more specifically, Hull defines integration between land use and transport policy sectors to be better integrated. The highest and eighth step of the ladder is integration of policy measures, which means integration of fiscal, regulatory and soft measures (Hull, 2005).

Hull's ladder shows the complexity and breadth of integration issues within the transport sector and provides thereby a tool to discuss different understandings and sorting of policy integration. Not all steps are studied here. I am concentrating my discussion in this thesis foremost around the sixth and seventh steps of the ladder, institutional and administrative integration and integration of policy sectors. However, both the general discussion and the specific articles included in this thesis analyse and discuss policy integration for transport policymaking in a way in which almost all steps, except the first, may be considered to be included. I will therefore discuss transport policy integration from a general perspective.

INTEGRATION BETWEEN THE TRANSPORT SECTOR AND OTHER SECTORS

In the policy integration literature it is common to study sectoral integration between land use planning and transport policy (see, e.g. Hrelja, 2015; Smith, 2014; Stead, 2003; Stead & Meijers, 2009). One example of a Swedish study that explores this relationship is a thesis by Patrik Tornberg, which focuses on key conditions for an integrated approach to land use and transport planning (Tornberg, 2011). The thesis focuses on the interaction between different actors in the planning processes and how the presence of different perspectives influences the conditions for integrated planning. The major conclusion is that interaction and communication between individuals and professions could work as a tool to promote integrated spatial planning (Tornberg, 2011).

Another study that also focuses on sectoral integration other than only between spatial planning and transport is Angela Hull's (2011) book on *Transport Matters*. The book stands out, as it brings in the relevance of energy and the implications of the energy sector for land use planning in the context of sustainable transport development. Hull discusses energy and transport from several different perspectives, and her conclusion is that integrated spatial planning will have to take on a

much wider agenda than only transport, land use and environment, if synergies across policy sectors are to be secured and conflicts between policies resolved. In practice this means, for example, that the built environment must be equipped with infrastructure for electric and biofuel technologies if a sustainable transport system is to develop. However, in the three case studies included in the book Hull finds that these things are not so much in focus; instead, focus is on shifting the transport system from private to collective transport (Hull, 2011).

As described above, there are a number of studies about integration of transport and other sectors such as land use, environment and health. In this thesis, I take my point of departure in the argument by Hull (2011) to expand the discussion of policy integration concerning transport development to focus also on the interdependence between the transport system and other related systems such as energy and waste. In a Swedish perspective this wider discussion of transport policy integration seems relevant, since, as illustrated by Tornberg's study, policy integration has previously been discussed mostly with a focus on transport and land use and within the framework of specific projects.

COMPARATIVE STUDIES OF TRANSPORT POLICY INTEGRATION IN CITY-REGIONS

Within the field of transport research in general urban areas, cities, city-regions or other concepts that define a densely populated area are foremost in focus. This is the case also in the literature on transport policy integration, and one example is the previously mentioned book by Angela Hull (2011). There, she not only discusses energy and transport, but also makes a comparative study of city-regions in the UK, Germany and Denmark. Hull argues that to implement a more sustainable transport system each level of spatial governance needs to act in unison. However, in her case studies she recognizes a problem: the structures for unity of spatial governance are not in place, due to weak governance capacity at the city-region level. As a result, issues connected to sustainability are falling through the gaps between policy sectors. If city-regions are to be able to manage sustainability, Hull argues, the subnational authorities need to have the right geographical scope, powers and responsibilities. Based on this, Hull advocates for one public organization to rule the city-region on the subnational level (Hull, 2011).

Another comparative study of policy integration between land use planning, transport and environmental policymaking in city-regions in Denmark, England and Germany has been published by Dominic Stead, Harry Geerlings and Evert Meijers (2004). They find that across the three cases there is no formal monitoring of policy integration, even if it is a clear aim. Procedures for integrated policymaking are not formalized in structures or procedures, but are developed ad hoc. One example among the cases of an integrated policy is the land use "Finger Plan" of Copenhagen, Denmark. The plan has integrated land use and transport planning over a long time and has also had a wide acceptance over a long time. However, environmental aspects are missing in the Finger Plan, and they are presented in another plan in accordance with transport issues. The problem is that the environment-transport plan is more vulnerable to political change than the Finger Plan. In the UK there is a strong emphasis on policy integration on the national level according to the policy for so-called joined-up government. But in practice there are clear divisions between the land use, transport and environment policy sectors, and also within them. There are, however, better coordination possibilities on the local level and at the implementation stage. Germany is different from the other two cases, since its structure for policymaking is divided into

five to six layers. Policy integration has high priority, but is not performed in practice, and policies tend to be sectoral, especially at the Länder and national levels (Stead et al., 2004). The major finding by Stead and colleagues is that policy integration is a concept that is easy to subscribe to and claim is being done, but in practice, it is harder and is not actually performed across the cases. They argue based on the results that the city-region level offers good opportunities for policy integration, since it is not too large, not too small, but tightly focused (Stead et al., 2004).

Both studies described above are focused on the city-region as study object, and occur in the same national settings. The city-region approach is relevant in this thesis, too, since Stockholm County represents a case of a city-region. Therefore, the results of those two studies may be of relevance to the discussion of the Stockholm case and integrated transport policy. By putting Stockholm in focus for one of my case studies, I also contribute to the policy integration literature with a case of a city-region within another national structure. The other case in focus, Västra Götaland, could rather be defined as a multifaceted region containing several geographical characteristics, of which one is a city-region. By focusing on not only cities but also rural areas, this thesis contributes to the transport policy integration literature in adding another sort of region to the empirical cases studied. Both city-regions and multifaceted regions are standing before the challenge of sustainable transport development, and therefore, it is important to understand how and why (and why not) policy integration may be used in both these contexts. By including these two different case studies in a joint discussion in this thesis, I will also be able to discuss how the organizational and institutional structures influence policy integration processes and thereby contribute with a discussion of policy integration in two different regions, but within the same national setting. Finally, the conclusion to be drawn from the two studies described above is that it is not common that there are organizational structures for policy integration in place on a regional level. Therefore, the analysis of policy integration processes in the case of Västra Götaland will improve the knowledge of integration processes in practice, where there is a clear aim and organizational structure to achieve them.

VERTICAL INTEGRATION

Apart from sectoral integration, another important dimension of policy integration is vertical integration – ensuring that policies between different policymaking levels, in particular, local, regional and national levels, are integrated. Most policy integration studies reviewed here are focused on sectoral integration on one level and do not include the vertical dimension. Examples are Geerlings and Stead's (2003) study of EU policy and of research funded by the EU, and the works of Smith (2014) and Hrelja (2015), who studied local government integration processes in England and in Sweden, respectively. A few studies include several levels, such as those of Stead (2003), who studied the implementation of national government policy for policy integration concerning transport in local governments in the UK, and Tornberg (2011), who studied integrated approaches to land use and transport planning in both local projects and processes and one national process. However, in Tornberg's study, his researched processes are separated from each other, and he therefore does not discuss the interplay between the levels. Stead (2003), on the other hand, has a top-down perspective on policy implementation and does not discuss policy integration from both the local and national perspectives.

Another example of a study of the national and local interplay is Angela Hull's (2008) study of the intersectoral and vertical working practices between different professions in central and local governments to develop more sustainable transport infrastructure in five English local authorities. Hull finds that there are clear contradictions and tensions between the vertical tiers of government and also within the national and local levels connected to different sectors. Within the local authorities, for example, the results show that the organizational structures are composed around professional and departmental structures and that there are no management mechanisms for policy integration. She also points out that very few of the local officials are able to understand the structures in such a way that they can start working across them. Because of that, a wide range of policy sectors are disconnected in policymaking. Transport policy at the local level thus competes and often conflicts with other policy sectors. This has also led to a variety of visions of what a sustainable transport system is within different policy sectors and levels, and depending on the communication and cooperation within and between authorities, these visions are translated differently into transport policy (Hull, 2008).

In the city-region studies reviewed above (Hull, 2011; Stead et al., 2004), it is recognized that these regions often consist of several governmental levels such as local and regional, but the analysis handles the levels either separately or not at all. The interplay between the levels is not primarily analysed, but the potential problems with several levels of government are discussed (Hull, 2011; Stead et al., 2004). The relevance of the interplay between local and regional levels is, of course, different in different countries, depending on the institutional structure of the subnational governments. In the case of regional transport policymaking in Sweden it much depends on the municipalities. Therefore, the relationship between the local and regional tiers of government is important to the discussion of policy integration. I will, therefore, in this thesis discuss both the sectoral and the vertical policy integration to contribute to the field of policy integration with knowledge on how these two dimensions are related and how they interplay.

CRITICISM OF POLICY INTEGRATION AS A TOOL FOR SUSTAINABILITY

The studies detailed above present policy integration as a tool, one part of the solution, for the change of the transport system towards sustainability. Even though the authors are careful to stress that they are not considering policy integration as an end in itself but as a way of organizing and performing policymaking to achieve the goal of sustainability, it could easily be perceived as a successful and incontestable good that will solve all problems when in place. However, there is much criticism in the literature about this normative idea of policy integration. For example, the studies of Stead (2016) and Meijers and Geerlings (2004) point out that it is important to recognize that there are limits to the extent to which policy integration can be achieved in practice. The democratic political system involves multiple objectives, tiers, actors, instruments and timescales – practically a system built for incoherence. There will always be multiple, complex and conflicting goals within that system, and since they are not generally complementary, they require that choices be made between them (Meijers & Geerlings, 2004; Stead, 2016). Therefore, not all policies could or should be integrated. Meijers and Geerlings (2004) argue also that the call for policy integration may result in a high degree of central control, resulting in loss of flexibility and spatially specific concerns in the policymaking system.

Watson, Bulkeley and Hudson (2008) also criticize policy integration from a general point of view on the basis of their study of municipal waste policy in the UK. They argue that the two arguments for policy integration, that integration is needed to manage cross-cutting issues and that integration allows for coordination, do not always correlate with each other. On the contrary, organizational structures for the management of cross-cutting issues may not result in more coordination in policymaking. Watson and colleagues also point out the risk of emphasizing further central control to inducing policy integration from the perspective of legitimacy and accountability of the public policy processes. They question whether the visions of sustainability coming from such a central organization will be sustainable in all its senses. The conclusion is that a “one size fits all” approach to policy integration is neither possible nor desirable (Watson, Bulkeley, & Hudson, 2008).

Other studies have also questioned the ability of integrated institutions to manage sustainable transport development. Marsden and Groer (2016) find in a comparative analysis of urban carbon management in the UK and Germany that the more integrated and comprehensive German institutional structures have not resulted in better carbon management than in the UK (Marsden & Groer, 2016). This study thus shows that the possibility of institutional structures for integrated policymaking to produce more sustainable policy outcomes may be questioned.

Three central aspects of the criticism towards policy integration are brought up above, and they are the nature of conflicting interests in the democratic system, the risk of increasing central control in the case of integration and the fact that organizational structures are no guarantee of more integration or sustainable policy. They put the focus on issues that I analyse and discuss in this thesis. First, the analytical concepts that I use for the analysis are chosen for considering the conflicting interests current and relevant to the organizational analysis. Second, increasing central control could be interpreted as increasing regional control and decision-making within the framework of this thesis; the risks of this will thus be discussed. Third, it is the organizational structures that are in focus for my analysis of policy integration, and by asking the question of how integration processes are conducted, I will be able to consider the advantages and disadvantages of the organizational structures. In this way this thesis should be regarded as adopting a critical stance towards the normative idea of policy integration.

3. THEORETICAL FRAMEWORK

In this part the theoretical framework of policy integration, which is the basis for the analysis in this thesis and the four articles, is outlined. In addition, I describe in detail three of the analytical concepts that are pinpointed in the articles as central concepts for the joint discussion in this thesis. The three concepts are multiple policy logics, organizational identities and boundary objects. These analytical concepts are derived and developed from different theoretical frameworks, but they all focus on things that give rise to organizations' actions. The main part of this thesis is the articles, and therefore my priority has been to choose theoretical perspectives of relevance to the specific issue studied in each article. Therefore, this chapter will not end in a joint analytical framework, but a short summary of how the analytical concepts will be used in the joint discussion.

POLICY INTEGRATION

The concept of policy integration originates from three disciplinary research areas: political science, policy analysis and organizational studies (Meijers & Geerlings, 2004). In focus is the development of public policy and how it might change in content, organization and structure, due to complex challenges to the traditional policy system. Stead and colleagues have described the essence of policy integration in this way:

Policy integration concerns the management of cross-cutting issues in policymaking that transcend the boundaries of established policy fields, and which do not correspond to the institutional responsibilities of individual departments. (Stead et al., 2004, p. 10)

In their definition they emphasize policy integration as a tool or approach for society to use to manage complex problems that are not confined to one single sector. Policy integration thus refers to the management of responsibility for policy within a single sector and across sectors (Meijers & Geerlings, 2004). Policy integration has both a horizontal dimension, which describes integration between sectors at the same administrative level, and a vertical dimension between different tiers of government (Meijers & Geerlings, 2004).

Policy integration may be understood both as content and as a process. One of the founders of the policy integration approach, Arild Underdal, considered policy integration to be understood as content: "a policy where the constituent elements are brought together and made subject to a single, unifying conception" (Underdal, 1980, p. 159). Underdal argues that a policy is integrated if it is comprehensive, aggregated and consistent concerning broad scope, taking in different alternatives and penetration of policy levels and sectors (1980). Following this approach, it is the product of policymaking, a joint policy between several different policy sectors and levels, that is the criterion for policy integration. In the first article included in this thesis I analyse policy integration mostly in relation to the content of policy (Olsson, Hjalmarsson, Wikström, & Larsson, 2015), using an approach derived from Rouillard and colleagues (2013) that deconstructs the policy content into three different and interdependent parts. The approach puts focus on the policy content as more than one unit and determines how the components and their relationship affect

implementation of policy, as policy integration processes or not (Rouillard et al., 2013). For a detailed description of this perspective, see the first article.

Policy integration could also be understood as a process. Studying policy integration from a process perspective means not only considering the policy content, but also including the organizations' actions, relationships and structures. Hull (2011) visualizes the process perspective by dividing policy integration into two interdependent dimensions: conceptual integration and performance integration. Conceptual integration is the same as the content of policy, understood as joint policy in line with Underdal's (1980) argument. However, Hull argues that if conceptual integration is to be possible, it requires performance integration. Performance integration concerns integration of individuals and organizations that are involved in policymaking. This dimension put focus on the organizational structure of the policy process and its importance for the policy content (Hull, 2011). One way to analyse the relationship of conceptual and performance integration is using the stepwise model developed by Stead and Meijers (2009). The model focuses on how different actors act and organize themselves on different levels of integrated policy processes. It also considers the outcome, the level of integration in policy content, that each level of organizational integration may produce. The model has three steps describing different stages of the policy integration process: full policy integration, coordination and cooperation. There is a hierarchy between them, but the steps should be understood as interdependent parts of the policy integration process. They build on each other and describe policy processes as becoming more integrated the further up in the pyramid a process gets, with the top form of integration resulting in joint policy (Stead & Meijers, 2009). The stepwise level model is used as a normative analytical tool in the second article included in this thesis, to analyse the level of policy integration in the case of biogas development in Stockholm (Hjalmarsson, 2015). Thus, for a more detailed description, see the second article.

However, there are other perspectives on policy integration processes apart from the stepwise model. One example is Hull (2011), who recognizes that there may be integrated processes that result in separate policies. The policy process is then coordinated during policymaking, and thereby, contradicting policies can be avoided. From this perspective it follows that joint policy is not necessarily more integrated than two coordinated policies, since the latter may be better established among the participating actors than a joint policy (Briassoulis, 2004).

VERTICAL AND HORIZONTAL DIMENSIONS OF INTEGRATION

That differences between sectors and levels may give rise to problems of incoherence across government and administration has been recognized in research for a long time (Rayner & Howlett, 2009). In the literature a number of different concepts have been used to describe and analyse the situation of incoherence and processes to create coherence (see Meijers & Geerlings, 2004 and Stead et al., 2004 for an extended review). Policy integration is one existing concept that describes this; another is policy coordination, which is used in the public administration literature (Alter & Hage, 1993; Challis et al., 1988; Christensen et al., 2013). The problem of incoherence resulting from the division of government into policy sectors and levels is put in focus when issues that cannot easily be confined to one single sector or level need to be managed (Christensen et al., 2013; Stead et al., 2004). Within the policy integration literature the issue of sustainability that cuts across sectors is called a cross-cutting issue (Stead & Meijers, 2009). Authors working with the concept of policy coordination use the term wicked problem to label a concept similar to a cross-

cutting issue; this term has also been applied to sustainability (Head, 2008), but it is more widely used to cover crises and other sorts of sudden and non-perspicuous issues (Christensen et al., 2013). No matter the concept, because cross-cutting issues transcend several sectors they call for coordination and integration between different policymaking processes and organizations to make their management possible. According to the literature, the risk of incoherence across sectors managing the same cross-cutting issue may result in parallel or even contradictory policies (Ugland & Veggeland, 2006; Underdal, 1980).

As mentioned above, policy integration has two dimensions, one vertical and one horizontal (or sectoral). The *vertical dimension* of policy integration concerns integration between tiers of government from the international and national levels to the subnational regional and local levels. It applies to all policy sectors that are managed at different levels of government, both within the national state and in supranational settings such as the EU (Geerlings & Stead, 2003). Vertical integration is integration between the tiers of government involved in managing a certain issue from the top to the bottom of the hierarchy (Briassoulis, 2004). It implies a hierarchy in jurisdiction between the levels, that is, that one level has power over another. The idea is that the top level governs the other levels with goals and legislation. Often it is the national government or the EU that has the final jurisdiction and then the other levels of government follow in a descending scale. However, this is not necessarily the case. Between Swedish regional government and local governments there is no hierarchical relationship; instead, they have different jurisdictions (as described in the introductory chapter). Then there is a division in jurisdiction between different tiers of government, where some issues need to be managed by all levels, but other issues are differentiated between the levels and may, for example, only be the jurisdiction of either regional or local levels. However, the different administrative levels imply that vertical integration is about integration of different spatial scales that will jointly manage the same spatially bound issue (Kidd, 2007). The differences in spatial scales between these levels may have implications for policymaking.

The *horizontal dimension* is about sectoral integration between organizations or departments at the same administrative level concerning issues that need to be managed by several actors. Horizontal integration may, on the one hand, involve integration processes within one organization between otherwise divided departments and professions (Geerlings & Stead, 2003; Ugland & Veggeland, 2006). On the other hand, it may concern integration of two or more public organizations operating within different policy sectors (Geerlings & Stead, 2003). The horizontal dimension of policy integration thus presupposes the existence of different policy sectors.

What exactly constitutes a policy sector may, however, be debatable. A sector may be defined as being the same as a technical or social system, that is, the transport system as one policy sector. However, most systems can be divided into smaller parts, which often are managed within different spheres, as in the case of the transport system, where, for example, infrastructure, spatial planning, vehicles, fuels and public transport could be considered separate sectors based on the way they are managed. Then there are different departments and organizations that manage their specific parts of the transport system, separated from the other parts in policymaking, which might be considered different policy sectors. One way to explain how a policy sector differs from other sectors is to use the perspective of organizational fields, which explains why organizations within the same field often behave and look the same (DiMaggio & Powell, 1983). An organizational field

should be understood as organizations that share the same legal framework, recruit the same professions and follow the same paths. Organizations thus follow and are formed by the other organizations within the same field, producing joint values and behaviors that shape action (DiMaggio & Powell, 1983). Public organizations often include several fields, and therefore an organizational field can cross the organization, and the division is then between departments instead of organizations. However, the organizational field explanation of different policy sectors puts the focus on factors of importance for this thesis; that each policy sector has its own logics and traditions which shape policy processes and could make different sectors rather autonomous from each other (DiMaggio & Powell, 1983; Hendriks, 1999). In this thesis, what is considered as a policy sector is defined in each article, depending on the level of analysis.

POLICY LOGICS, ORGANIZATIONAL IDENTITIES AND BOUNDARY OBJECTS IN POLICY INTEGRATION PROCESSES

To be able to discuss the organizational actors' active roles in and for policymaking, while not avoiding the role of institutional context in structuring their actions, I have applied a new institutionalist approach towards policymaking. Within that perspective I regard policy from the tradition of sociological institutionalism⁴ (Hall & Taylor, 1996; Lowndes, 2010). This means that the institutional forms and procedures current in our society should be understood in cultural terms. Following this perspective, an institution, in this thesis, includes not only formal rules, procedures and norms, but also symbol systems, cognitive scripts and moral templates that construct the frames of meaning that guide human action. The institution in this sense is central to the action of an individual, since it affects strategic calculations, basic preferences and the identity of the individual. The individual interprets, works and reworks the available institutional templates to establish a course of action, but the individual has also its own acting space and may thereby also influence and change the institution (Hall & Taylor, 1996). Policy processes, from this perspective, are processes of interaction between several organizations and departments, consisting of individuals, which interpret the institutional templates available to form their framework for action towards specific issues, problems or fields. However, the institutions are also shaped and reshaped by the organizational actors participating in policymaking. The institutional structures surrounding policy processes are thus socially constructed.

In this thesis I use three analytical perspectives for the analysis of organizations in policy integration processes: institutional logics, organizational identities and boundary objects. The perspectives of logics and identities are used to examine the multiple interests and values that influence and relate to organizations involved in integration processes. These two perspectives are used in the most likely case of policy integration, Västra Götaland, thus, in a case where the organizational and institutional structures for policy integration should be in place. To be able to recognize what spurs policy integration processes in a setting without these structures for integration, as in the case of Stockholm, I have used the perspective of boundary objects.

⁴ There are several divisions of new institutionalism in different research fields. I have here used a political science definition that breaks new institutionalism into three divisions: historical institutionalism, rational choice institutionalism and sociological institutionalism (Hall & Taylor, 1996).

MULTIPLE POLICY LOGICS

In this thesis I base my analysis of logics on the institutional logics perspective, introduced by Friedland and Alford (1991) and developed foremost by Thornton, Ocasio and Lounsbury (2012). In the third article included in this thesis, I use the institutional logics perspective to develop my concept of policy logics as a way to use that perspective in an analysis of policymaking. I will continue to use policy logics and management of multiple logics for the discussion in this thesis. The logics perspective provides me with a metalevel perspective on policymaking, which is valuable for the understanding of the logics behind policy integration processes. In this part I describe the basis of the institutional logics perspective and how to analyse multiple logics as a background for the understanding of policy logics.

According to the institutional logics perspective, society is divided into different levels. The macro level is the societal level, which comprises a complex pattern of interinstitutional relations, the interinstitutional system (Thornton, Ocasio, & Lounsbury, 2012). The institutions at this level are the same as institutional orders that represent and govern “a commonly recognized area of life” (Thornton et al., 2012, p. 54). The institutional orders reflect how institutional logics on the societal level operate, and Thornton and colleagues (2012) argue that the orders are family, community, religion, state, market, profession and corporation. The meso level of the institutional logics model of society is the institutional field. The fields are a division of society other than the orders at the macro level, not necessarily following the same borders, but rather existing across institutional orders. Institutional logics on the meso level are shaped by both macro level forces, such as the institutional orders, and by the environment within that specific field (Thornton et al., 2012). The use of the logics perspective in this thesis is focused on this societal meso level and the field of transport policymaking. Transport policymaking is thus argued as constituting a separate policy field with its own legislation, ideas, values and norms that guide the transport actors in decision-making. In this thesis I thus use what I label policy logics to analyse transport policymaking and the organizations involved.

According to Friedland and Alford, institutional logics should be understood as “a set of material practices and symbolic constructions which constitutes its organizing principles and which is available to organizations and individuals to elaborate” (Friedland & Alford, 1991, p. 248). Thornton and colleagues (2012) have more recently developed that into a definition of institutional logics as “socially constructed, historical patterns of cultural symbols and material practices, including assumptions, values and beliefs, by which individuals and organizations provide meaning to their daily activity, organize time and space and reproduce their lives and experiences” (Thornton et al., 2012, p. 2). Institutional logics are thus the rules for organizational action that are implicitly or explicitly current within a certain field and which the actors relate to in decision-making. Thornton and colleagues emphasize in their definition that logics are socially constructed. Policy logics are thus both formed by the specificities of the field and by institutional orders at the macro level, and at the same time reconstructed and changed by the actors within the field. Logics can thus be discussed from the perspective of the context that they are currently in. Within the institutional field of transport policymaking there are several different values and principles that possibly could work as logics. In the third article I have identified three different, but partly overlapping, policy logics.

In the literature on institutional logic there is an ongoing debate about how the existence of multiple logics is managed and how it may influence actors' actions. The point of departure is that institutional logics overlap in how they influence different actors (Besharov & Smith, 2014; Friedland & Alford, 1991), and that the relationship among multiple logics may be understood as both competitive and collaborative (Waldorff, Reay, & Goodrick, 2013). In the third article in this thesis I use four concepts derived from the multiple logics perspective (De Jordy, Almond, Nielsen, & Creed, 2014; Thornton et al., 2012) to analyse how the existence of multiple policy logics may be managed by the actors in regional transport policymaking: blending, replacement, dominance and compartmentalization. The characteristics of these four concepts are described in more detail in Table 2. The concepts have been used to analyse the existence of multiple logics in several different contexts, but not commonly in policymaking. I will therefore outline how I interpret them and use them in the analysis of policy in the third article.

Blending has been studied with focus on vocabularies in the case of how critics' narratives to describe a strike by symphony orchestra members changed over time and were influenced by the musicians' narratives of their strike. In that case the critics' and musicians' logics merged to form a new logic, based, however, on the musicians' logic (Glynn & Lounsbury, 2005). Blending seems to describe a resolution to multiple logics that resembles integration of policy, since several logics are merged together to form one new common logic. The concept thus presents a model for how logics may be managed in an integrated way and is a point of departure for the discussion of policy integration in the third article. Replacement has, among all, been studied in a case of French gastronomy where the traditional authority-based logic was replaced by a professional autonomy logic that emphasized creativity and freedom (Rao, Monin, & Durand, 2003). In this thesis replacement is used to question whether the traditionally prevalent logic for transport policymaking is in a process of replacement by a logic connected to sustainability, since that change is what is prescribed in models for sustainable transport. Dominance is used to refer to multiple logics that exist at the same time, but only one of them is influential for decision-making; there is then a dominant logic that overrides the other logics (De Jordy et al., 2014; Thornton & Ocasio, 1999). Dominance is here used to examine the hierarchy of the existing logics and whether any logic permeates all transport issues. Compartmentalization, finally, have been used as concept in a case study of health care to explain the continued coexistence of two logics, the medical and business logics, current within different parts of the organization. The medical and professional logics were kept by the medical professionals, while the administration implemented a new business logic. For the coexistence to work the two compartments collaborated and negotiated decisions they had to make in common processes (Reay & Hinings, 2009). For me compartmentalization is a concept that represents an alternative concept to explain a resolution of multiple logics that does not result in only one logic guiding policy. Thereby, it emphasizes some of the complexity in policymaking. I use it to demonstrate that two different logics may both be relevant for policymaking but within different settings or compartments. In my case these compartments are not the same as different departments of an organization, but rather a division based on geographical characteristics.

TABLE 2 CONCEPTS OF RESOLUTIONS TO MULTIPLE LOGICS

<i>Resolution to multiple logics</i>	<i>Process and result</i>	<i>Number of logics guiding policy</i>
Blending	Combination and merging of different logics into one new logic	1
Replacement	A new logic replace an old logic	1
Dominance	One logic dominates others	1
Compartmentalization	Different parts embrace different logics, and they continue to coexist as relevant for certain actors but not for others	2 or more

CONSENSUS AND CONFLICT BETWEEN ORGANIZATIONAL IDENTITIES

The formation of organizations and their interaction on the meso level is, however, not in focus in the logics perspective. Therefore, for the purpose of analysing the role of the actors in policy integration processes, I have adopted the concept of organizational identity from the new institutional literature on organizational development (Albert & Whetten, 1985; Scott, 2014). The organizational identities perspective is used in the fourth article in this thesis, to analyse the determinant of an organization, that is, its identity, and how it influences interorganizational processes of joint policy formation.

Organizational identity can be understood as “a guide for what an organization’s members should do and how other organizations should relate to it” (Gioia, Patvardhan, Hamilton, & Corley, 2013, p. 161). The organizational identity thus forms both the internal and external actions of members of an organization. For the analysis of policy integration it is the actions performed in settings external to the organization, in interaction with other organizations, which is in focus.

An organization’s identity depends on both the internal and the external environments of the organization (Selznick, 1992; Selznick, 1996). The internal aspects of organizational identity are the founding beliefs and values, organizational narratives and past experiences of members (Gioia et al., 2013). In the external environment there are two aspects of importance to organizational identity: the institutional context and the surrounding organizations of the organization (Gioia et al., 2013). All these aspects taken together explain both differences and similarities between organizations on different levels of government and within different sectors. This means that the internal and external surroundings, such as procedures, legal frameworks, cultures and so forth that the identities of the involved organizations are based on, are relevant for the analysis of policy integration processes.

In the fourth article I combine organizational identity with the concepts of consensus and conflict to explain the relationships between different identities and the potential consequences. For the analysis I have adopted Koppenjan’s (2007) way of using the concepts of consensus and conflict in the policy network literature (see, e.g. Kickert, Klijn, & Koppenjan, 1997; Sørensen & Torfing, 2007). Consensus is described as a necessary factor for the function and existence of a network of

organizations, since the participant actors agree on a certain framework for interaction within the network. Consensus contributes to getting the necessary work done, ensures that transaction costs are low and makes complex issues manageable (Koppenjan, 2007). A certain level of conflict is, however, favourable to the functionality of such a network. Otherwise, there may be consensus overload, which means that the network becomes closed to the outside world and works against its functionality in terms of openness and innovations. The presence of conflict may indicate that the network is open and not static; it may contribute to innovative solutions, as new problems are brought in and promote the transparency of the network's processes (Koppenjan, 2007). From a policy integration perspective the concepts of consensus and conflict provide a normative view of how the interaction between different organizational identities should be performed. It thus emphasizes the organizations' differences as resources important to express in integrated policymaking.

BOUNDARY OBJECTS

In chapter two of this thesis on criticism of policy integration I acknowledge that research on sustainable transport and carbon reduction shows that institutional structures do not necessarily lead to policy integration processes and sustainable achievements. Therefore, to be able to analyse policymaking in settings without institutional structures for policy integration, I have used the concept of the boundary object, which describes processes of collaboration without already established structures (Star, 2010). In addition, the concept of the boundary object contributes to policy analysis in general by recognizing the influence of material objects on policymaking processes.

The concept of the boundary object originates from the science, technology and society (STS) field of research and was originally developed by Susan Leigh Star and James Griesemer in an article about the development of a museum of vertebrate zoology in California (Star & Griesemer, 1989). Star and Griesemer show how different objects link otherwise separated actors together and enable them to work together, even though they have completely different interests and do not share consensus concerning organization, decision-making and goals; that is to say, they are not part of an already established structure. The collaborations they describe are successful in the sense that they spur the development of the museum (Star & Griesemer, 1989). The discussion of boundary objects is situated in the perspective of social worlds and symbolic interactionism, which focuses on meanings and how they are created, maintained and changed in interactions between people. Therefore "object" in the term boundary object is defined both as a material entity and as something people or other objects act towards and with. The materiality derives thus from actions in relation to the object in question rather than from its being a physical artefact (Star, 2010). The object is concrete in that it exists simultaneously in different systems, and is abstract in that it is understood and interpreted differently among different actors. The object itself is stable in its concreteness; it is the understandings and interpretations of it, or the abstract part of it that are different within different groups of actors (Ewenstein & Whyte, 2009). Star (2010) has clarified that the term boundary is not meant to imply something like an edge or periphery; rather, boundary should be understood as a shared space for the actions of different actors. The concept of boundary object thus means an object that is concrete enough to act towards and with actors within different groups, but which is understood differently by the various actors, which creates a shared space for action between them. The flexible and polysemous character of a boundary object

is what facilitates translation and helps link actors. If different actors are linked by a boundary object, their interpretations of the object must somehow coincide with each other to enable them to collaborate (Law & Singleton, 2005; Star & Griesemer, 1989).

For the analysis of policy integration processes outside already established organizational structures, the concept of boundary object contributes a perspective on why collaborations may be established among actors that not share the same structures. In this thesis I analyse biogas as a boundary object in the second article, and in the general discussion I use it to investigate the issue of abstract and concrete objects and their relevance for policymaking. In this way I am able to open up the discussion of policymaking as something structured by institutional aspects other than the administrative borders alone. The analysis of the boundary object provides me with a perspective on policy that also brings physical borders and physical issues into the discussion of policymaking.

WHAT TO BRING INTO THE DISCUSSION

Policy integration, how it can be understood and what it means for the achievement of sustainable transport, is the framework of the joint discussion at the end of this first part of the thesis. Of specific interest in the discussion is the issue of joint policy and the relationship between vertical and sectoral (or horizontal) dimensions of policy integration. These issues will be discussed with the help of the three analytical concepts outlined above: policy logics, organizational identities and boundary objects. The concepts originate from different perspectives on knowledge and knowledge production and derive from various scientific traditions. However, even though that is the case, I prefer to consider it an advantage that will enrich my discussion and conclusions. The concepts are therefore used separately for different levels of analysis. Policy logics is a meta-level perspective that focuses on the different logics that underlie the involved actors' actions in policymaking. It connects the analysis in my specific case to the context of sustainable transport policy. Organizational identities explains the differences between various organizations. In combination with the concepts of consensus and conflict I am able to discuss the roles of these differences and how they relate to each other in policy integration processes. Boundary objects describes how collaborative processes between organizations may start in situations lacking an organizational structure for them, by focusing on the object as central to those processes. The boundary object perspective gives also rise to a discussion of abstract and concrete objects in policymaking and their relevance in sustainable transport achievement. However, before the joint discussion, where these analytical concepts will be used, the methodology for research in this thesis will be outlined in the next chapter.

4. METHODOLOGY

In this chapter I present and discuss the design of the study, the methods used to collect relevant material and the methods for analysis of the material.

CASE STUDY DESIGN

The focus of this thesis is to explain and understand the complex processes of policymaking: how they are organized and conducted, and why they end in certain results. In the literature on methodology it is then recommended as advantageous to design a case study to answer “how” and “why” questions of complex phenomena (Esaïasson, Gilljam, Oscarsson, & Wängnerud, 2003; Yin, 2014). The framework of policy integration is a theoretical and normative idea, for which I aim to develop both the understanding of such processes and the theoretical framework for their analysis. The case study design is valuable for its use of empirical knowledge in the development of theory, because it is considered more fruitful to study one or a few cases comprehensively and to gather in-depth knowledge in detail, rather than to gather less knowledge about several cases (Esaïasson et al., 2003; Flyvbjerg, 2006; George & Bennett, 2005). This close connection to the empirical material makes development of theory possible, since the original assumptions may be contested by the material, contributing to a process where the researcher needs to go back and forth between the empirical material and the theoretical framework and elaborate on alternative ways to explain the phenomenon (Flyvbjerg, 2006). This approach has led me to concentrate on different issues of policymaking in, on the one hand, the two empirical cases, and on the other, the four appended articles on which this thesis is based. This has resulted in a rather diversified selection of different analytical concepts with which to capture empirical phenomena that I have come across. In this thesis I have chosen to conduct two different case studies, the grounds for which will be further explained in the following part.

SELECTION OF CASES

In this thesis I present the results of two case studies of regional policy integration processes for sustainable transport development. The cases were chosen for both pragmatic and strategic reasons. The Stockholm case study started as an interdisciplinary prestudy run by me and three colleagues within the national research school, the Energy Systems Program. We chose Stockholm as a case, because of its urban characteristics and ambitious goals of renewable energy solutions for the transport system. The Stockholm region thus illustrates the specific problems and solutions that rise in an urban area in relation to the process of developing sustainable transport (Gullberg, Höjer, & Pettersson, 2007). As the results of the prestudy provided insights into the relevance of integration between policies, I found the discussion of policy integration interesting for my continuing PhD project. During the prestudy I came across the case of biogas, which I found to be an appropriate setting to continue the examination of policy integration processes.

The Stockholm case study revealed a least likely case of policy integration processes because of its lack of common organizational structure for regional policymaking. To facilitate discussion of policy integration from another perspective, I chose one more case to include in the analysis, a case where integrated policymaking was most likely. In Västra Götaland policy integration was one of the aims when the regional authority, the Region Västra Götaland, was formed (SGOR, 2007),

and thus I consider it a most likely case of policy integration. Bent Flyvbjerg (2001) has suggested that critical cases are valuable to use for improving generalizability of qualitative studies, since they have strategic importance in relation to the general problem. Critical cases may, however, be difficult to identify; therefore, Flyvbjerg suggests that the researcher look for least likely or most likely cases of the problem (Flyvbjerg, 2001). In this thesis I have thus, as argued, identified and included one most likely and one least likely case of policy integration. This selection aims to cover a wide perspective on integrated policymaking for sustainable transport in Swedish regions, and as such, to serve as a basis for developing more knowledge of policy integration processes and its consequences.

Stockholm and Västra Götaland have different regional characteristics concerning size, geographical and organizational structure, traditions and preconditions for policymaking, but they reside within the same institutional context, within the framework of the Swedish national government and the EU. As shown in the empirical descriptions of the cases in chapter 1 they are not only two critical cases of policy integration but also two different extreme cases in a Swedish perspective regarding geography and regional organization. As extreme cases they provide me with rich information concerning their typical regions that will enhance the joint discussion in a wider perspective of regional policymaking and the matter of geographical structure for policymaking (Flyvbjerg, 2001). The two case studies are not compared in the same sense as in the tradition of comparative studies, but their differences provide a relevant and generalizable basis for the joint discussion. There, I compare their extreme and critical positions for a deeper analysis of policy integration and sustainable transport development. Previous studies of policy integration that include two or more case studies have focused on comparing cases between countries (i.e. Hull, 2011; Stead et al., 2004). Therefore, I consider my approach to studying policy integration in two different regional cases within the same institutional context a contribution to the field of policy integration. Further details about the Stockholm and Västra Götaland case studies may be found in Table 3. The results from the Stockholm case study are included in the appended articles I and II, and the results from the Västra Götaland case study is presented in appended articles III and IV.

TABLE 3 SUMMARY OF THE WORK INCLUDED IN THE CASE STUDIES

	Stockholm Case Study	Västra Götaland Case Study
When?	Spring to autumn 2011	2012 to 2013
Interviews	7 interviews with centrally placed public and private officials and politicians	19 interviews with public and private officials and politicians
Documents	10 working policy documents concerning transport policy	Over 100 policy documents published between 1999 and 2013, and briefing papers and notes from the SDDC
Articles in this thesis	Articles I and II	Articles III and IV
Other products not included in this thesis	An Energy Systems Program report and a conference paper	Two conference papers

SDDC, Sustainable Development Drafting Committee

DOCUMENTS

The documents I have studied are policy documents, minutes and briefing papers of meetings in specific organizations. Throughout both case studies I have used documents to familiarize myself with the field of research and inform the preparation of interviews. Documents are, however, also used as objects for analysis. The following describes the different documents and how I interpret and use them in this thesis.

POLICY DOCUMENTS

Policy documents have been the major sample of documents for analysis. I regard them as representing the written part of policy, as signs of what has been decided and arguments for and (sometimes) against the decisions at a certain time in the policy process (Bacchi, 1999; Fischer & Forester, 1993; Parsons, 1995). The overall definition of them is that they contain arguments and decisions that constitute policy concerning a certain issue and/or policy sector. It does not mean that policy documents are exclusively authoritative and directly governing; policy documents could also be intended to guide and inspire the actual decision-making. Examples of the policy documents that are included are regional development plans, plans for regional transport infrastructure development, visionary statements, strategies, implementation plans and budgets. The reason for bringing all these types of policy documents into the analysis of policy is that they are interdependent and inform and explain different or similar parts of policy on the basis of sometimes different standpoints. All these types of policy documents make up an interdependent stock of written arguments, intentions and future scenarios, which represent the story of policymaking for sustainable transport development within a certain region (Flyvbjerg, 2001; George & Bennett, 2005).

This wide definition of policy documents is necessary when conducting case studies of a cross-cutting issue, since the theoretical assumptions prescribe that there potentially are many different policy sectors, levels and actors included in the process of study. It has thus been necessary not to limit the policy document material to one policy sector or organization, but more importantly to follow how the issue is discussed and decided upon within different sectors and organizations, and in cross-sectoral settings (George & Bennett, 2005). The premise of regional policymaking with several organizations included in policymaking, with different responsibilities and in different constellations, has made it important to not limit the sample of policy documents to one or a few previously identified organizations.

However, there is one especially negative implication of this wide mapping method of sampling documents: it is possible to have missed a document of importance that I have either not found or which did not seem to me to be of importance. If this has happened, it will have impact on the results of the study. Therefore, I have used a couple of strategies to minimize this risk. To start with, I have searched widely for policy documents of interest, limited to a certain time range. Often, policy documents refer to each other, and in that way I have been able to follow document trails to find additional relevant ones. Then, while interviewing stakeholders affected by and working with these documents I have asked about the relevance of specific documents. Sometimes it has also happened that they have tipped me off about other relevant documents (George & Bennett, 2005). These strategies are not conclusive, but I believe that the risk of missing documents is, at least, limited.

Policy documents in general are a convenient and transparent empirical material, since they are archived and easily available to the public (Bowen, 2009). I have collected most of them online, via specific organizations' and/or networks' websites. The regional authority Region Västra Götaland has an electronic archive online, open to anyone, where I have searched for the documents. Some documents relevant to the study of Västra Götaland have, however, not been available online. In these instances the very helpful staff at the RVG archive has helped me to search for them.

As my knowledge of the field of research increased, I was able to pick out a sample of documents for in-depth qualitatively analysis. In Stockholm I based this selection on the criteria that they should treat transport development in the Stockholm region and that they should be valid during the time of research, which was spring and autumn 2011. These criteria resulted in a limited sample of five policy documents used for the analysis in the first article. In the second article, which is also based on material from Stockholm, the criterion was that the documents should include discussions and decisions concerning biogas, valid at the time of research. In Västra Götaland the selection of documents was based on whether they concerned regional or subregional matters, whether they treated transport development and whether they were produced during 1999–2013. The documents studied in Västra Götaland are summarized in Table 4. The policy documents have not only served as material for analysis, but also as a source of information about the organizations and even individuals who have been involved in policymaking. I used this information to select the sample of interview respondents and to develop the interview guides.

TABLE 4 SUMMARY OF POLICY DOCUMENTS INCLUDED IN VÄSTRA GÖTALAND CASE STUDY

Organization	Documents
Fyrbodals subregion	Operational plans, 2003–2012 Budgets, 2003–2012 Development programs, 2003, 2008
Gothenburg subregion	Operational plans, 2001–2012 Budgets, 1999–2012 Development program, 2006 Structural picture, 2008 Transport strategy, 1999
Sustainable Development in Västra Götaland (collaboration)	Environment and climate policy, 2010
County Administrative Board	Energy and climate strategy, 2008 Road map to 2050, 2012 Environmental goals, 2008 Evaluation of the environmental goals in the Västra Götaland infrastructure plan, 2011
Environmental Advisory Group for Västra Götaland (collaboration)	Smart energy – strategy for a better climate and better economy (2 docs), 2007 Strategy for the environment, 2000 and 2011
Sjuhärads subregion	Operational plans, 2001–2012 Budgets, 2001–2012 Development programs, 2003, 2007 Public transport strategy, 2011, 2012
Skaraborg subregion	Long-term operational plan, 2010 Development programs, 2003, 2007 Public transport strategy, 2009, 2011
Swedish Traffic Agency	Agreement concerning the West Swedish infrastructure solution, 2009, 2010
West Development Group (collaboration)	Sustainable development in Västra Götaland – background documents for regional development strategy, 2003
Region Västra Götaland	Internal platform for the organization, 2006 Budgets, 2001–2012 Development programs, 1999, 2003, 2008 Action plan for energy and environment, 2001, 2008 Action plan for transport and environment, 2001, 2008 Regional transport infrastructure plan, 2003, 2010 Biogas West, 2010 Regional evaluation, 2007, 2012 Strategy for the climate, 2009 Regional transport system analysis, 2007, 2008 Transport strategy, 2012 Vision for the future development in Västra Götaland, 2005
Public transport company Västtrafik	Environment and climate policy and strategy, 2008, 2009 Operational plans, 2004–2012 Goal for the regional public transport, 2004 Plan for reducing fossil fuels, 2010 Plan for public transport when there is a congestion toll in Gothenburg, 2010
HUR2050 (collaboration)	Scenarios of a sustainable transport system in Gothenburg 2050, 2005

MINUTES AND OTHER DOCUMENTS

Official minutes and briefing documents from committee meetings, in both the Stockholm and Västra Götaland cases, were also used for the analysis. In the Stockholm case this was mostly relevant in the study of the biogas development. Then I collected and analysed minutes from the municipalities’ interest organizations. In the Västra Götaland case I specifically studied the regional–local committee for sustainable development and policy integration, the Sustainable Development Drafting Committee (SDDC). The official minutes and briefing documents of that committee were then studied and analysed. These minutes present the issues and discussions that took place at the committee meetings, and it is therefore possible to apprehend what was discussed in the committee and what was not. However, since these are official minutes, available to anyone, they do not report a detailed description of what has happened at the meetings, but a short and more general version. These minutes can therefore not be considered as the same as if I, the researcher, had attended the meetings and made my own notes. With such an approach I would have been able to gain a more detailed material on what the discussions actually concerned and how the decisions were made. However, because of time and access issues, direct observations were never possible, and therefore I had to go with the official minutes. The benefit of them is that I have been able to follow the committees’ meetings over time. In addition, in the fourth article the minutes are analysed in accordance with in-depth interviews with the participants and officials involved in preparing and presenting issues at the meetings, which make it possible to get a nuanced view of what actually happens within the committee.

TABLE 5 METHODS USED IN THE FOUR ARTICLES OF THE THESIS

	Case	Documents	Interview sample	Role of documents	Role of interviews
Article I	Stockholm	Policy documents	Snowball sample	Main objectives for analysis	Informing the document analysis and objectives for analysis
Article II	Stockholm	Policy documents and minutes from meetings	Snowball sample	Objectives for analysis and informing the interview analysis	Objectives for analysis
Article III	Västra Götaland	Policy documents	Strategic and snowball sample	Objectives for analysis	Objectives for analysis and informing the document analysis
Article IV	Västra Götaland	Briefing papers and minutes from SDDC meetings and policy documents	Strategic sample	Informing the interview analysis	The main objectives for analysis

SDDC, Sustainable Development Drafting Committee

INTERVIEWS

I have conducted interviews with stakeholders involved in regional policymaking concerning transport policy. This approach has provided me with interviews with regional and local politicians, almost all of them in top positions within their local and/or regional context. I have also interviewed officials serving national, regional and local authorities. The officials have been in different positions; many are high-ranked managers at departments that manage transport issues, and others are lower ranked, but could be defined as experts within their specific fields, due to their positions as policy writers or gatekeepers in decision-making networks. Finally, I have conducted a few interviews with representatives of private and public companies, who personally have taken part in regional policymaking. All interview respondents have thus been interviewed in their professional capacities, positions in which they have an ability to influence and change society. My interviews thus have some similarities with elite interviewing (see, e.g. Harvey, 2011), and I have been inspired by that literature in the interview set-up and performance.

I consider the respondents as parts of the puzzle of regional policymaking. The respondents are representatives of different organizations and have been interviewed because of their positions. However, they have their own apprehensions, ideas and interests of the policy processes they participate in and are affected by, and these are coloured by, for example, their experiences, ideologies and identities. The interview statements should thus be understood as personal constructions, shaped by each individual, of how they apprehend policymaking (Thoreson, 2015). The interview statements are not considered as facts, but as personal constructions of policymaking for sustainable transport development.

INTERVIEW SAMPLE

The first step in the process of interviewing is to make a sample of people who would be relevant to interview. This is not always easy when the aim is to investigate a societal phenomenon where the decision-making power is distributed among several organizations and individuals and when the actual involvement of individuals is not clear. Because the two cases were selected for pragmatic and strategic reasons, the sample of interview respondents was also guided by the case selection. In the Stockholm case, because I had no predefined idea of what I was initially looking for, I primarily used the out-in-the-field method of snowball sampling (Grønmo & Winqvist, 2006). In the Västra Götaland case my aim was better defined to start with, why I in the first step of interviewing used strategic sampling to pick out respondents. Through documents I had identified a group of politicians and officials who were relevant for my purposes, so I started the interviews there. However, to extend my sample and get a wider view of the entire case (George & Bennett, 2005), I chose to continue my interview sample in Västra Götaland by snowball sampling.

Snowball sampling can be described like this: the researcher chooses one respondent to interview first, and that person is asked to recommend other possible respondents who would be relevant for the researcher to interview next. The choice of the first respondent and the criteria on which the respondent is asked to base his or her recommendations are crucial for how the study then develops (Grønmo & Winqvist, 2006). In both my case studies the first respondents were selected on the basis of document research and knowledge of these individuals' positions within the field. Their recommendations of other respondents were based on the content of the interview. I asked

them to recommend respondents that would be able to improve my knowledge of what we had just talked about. Since a couple of the recommended respondents were people who are normally hard to get hold of, the snowball sampling method was probably helpful in reaching them (Goldstein, 2002), as the former respondents not only made recommendations, but also endorsed my contacting the others. Snowball sampling is advantageous when entering a new field of research and the aim is to explore it (Grønmo & Winqvist, 2006). It is also beneficial from a time perspective, since it takes rather a short time to select and contact respondents with knowledge of the study object (Merriam, 1998). A limitation of this sampling method is the delimited transparency of how the respondents interpret and use the criteria for recommendations: one might recommend people who have the same ideas as oneself, or have a limited view of who would be relevant for the researcher to interview (Grønmo & Winqvist, 2006; Merriam, 1998). The respondent recommending only people who share his or her ideas could lead to limitations in the diversity of the sample of respondents, and could potentially exclude critical actors (Esaiaasson et al., 2003). To limit these risks I strengthened the snowball sampling in my two cases by also using documentary information to confirm or disconfirm the relevance of the recommendations of new respondents for my aim (Falld, 2011). After I had conducted several interviews I was also able to draw conclusions about the recommendations made in the interviews, based on whether one person had been recommended by many, how the interviewees had argued for the persons' relevance, and so forth. All this information taken together gave an indication of which persons were relevant for my study.

However, it is necessary to discuss in the case of snowball sampling and elite interviewing whether it is a picture of the "powerful" that comes through in the interviews and my study (Palm, 2004). I chose to interview only politicians and officials along with a few representatives of the regional industry, since they are visible stakeholders in the regional policy processes. Actors that may have been excluded from the policy processes and who are not mentioned either in documents or interviews have not been included in my study, either. Other potential respondents that could have been included are representatives of relevant national agencies, interest groups, media and other representatives of the regional industry. If these had been included, my view of the policy processes and the development of sustainable transport in Stockholm and Västra Götaland could have been otherwise. However, due to time and access I had to delimit my case studies, and I made the choice to concentrate on stakeholders at local and regional administrations and governments that were active in the regional policy processes for sustainable transport development. Within that sample it is possible to question whether I covered enough respondents at the local government level, since I analyse the local-regional interplay. To solve this I have used written sources to complement, confirm or disconfirm the interview statements concerning this interplay.

The Stockholm case study was performed in two steps; thus, the interview outline also was in two steps. The prestudy was limited to a couple of months, and therefore I turned to an already established contact in the field for the first interview. To confirm the choice of that person and the relevance of that person's recommendations of other potential respondents, I studied policy documents in parallel. The number of interviews conducted was limited to five. Due to their positions and involvement in transport policymaking within the region, I would argue that they were all centrally placed stakeholders for the study object. The second step of interviewing in Stockholm had a prior defined aim, to gain more knowledge of the biogas development process

in the region. In the first five interviews I received recommendations of two persons who were centrally placed in that process. In addition, I confirmed these persons’ relevance by studying documents about the biogas development before selecting them as respondents. The Stockholm case study interview respondents are described in more detail in Table 6.

Concerning the Stockholm case I am not able to claim that all stakeholders relevant to the study object have been interviewed because of the restricted time in the first round, and more importantly, the difficulties getting hold of relevant respondents. The dropout was due to two reasons: several identified, probably relevant respondents declined to participate in an interview, and some respondents could not be identified. This was because of the organization of transport issues on the regional level in Stockholm; not many individuals seemed to have and take responsibility for regional transport issues at the current time. My difficulties in identifying the right respondents may have been connected to my sampling method of “snowballing”, that I never got hold of the right people that could lead me towards others, or that they, for some reason, did not recommend to me the right people to interview. In this case I was dependent on my respondents’ opportunities and willingness to lead me to other relevant respondents, since the documents did not give me any information on people other than those I already had contacted. However, for the purposes of the articles that are based partly on the interview material, I would argue that the interviews provided me with a nuanced and in-depth understanding of the case and the issues I followed, and therefore can be argued to be enough.

TABLE 6 DESCRIPTION OF INTERVIEW RESPONDENTS IN THE STOCKHOLM CASE

Title	Workplace	Role
Politician	Municipality	Chair of the Stockholm County Association of Local Authorities and local politician
Senior Administrator	Stockholm County Association of Local Authorities	Official at the Stockholm County Association of Local Authorities
Chief Executive Officer (CEO)	Publicly owned wastewater plant in the Stockholm region	Head of a company producing biogas and former representative of the Stockholm region’s wastewater company association
Project Manager	Municipality	Official working with introducing renewable fuels and energy efficient vehicle technologies in the City of Stockholm
Transport Strategist	Municipality	Official working on the development of Stockholm’s city plan
Analyst	Stockholm County Administrative Board	Official working on renewable fuels in Stockholm County
Transport Strategist	Stockholm County Administrative Board	Official working on regional transport infrastructure planning

The interviews in the Västra Götaland case were both strategically and snowball sampled. I started the Västra Götaland case study with an extensive study of documents, above all looking for signs of policy integration processes. From the document study I was able to draw conclusions about the importance of the regional authority, the RVG, and which of its committees that were involved

in policymaking concerning transport. I identified a committee of politicians, which was both centrally placed in regional transport policymaking and had policy integration intentions. This committee consisted of both regional representatives and local representatives of the municipalities in Västra Götaland. On the basis of these results I made a strategic sample and selected the president and the two vice-presidents at the relevant three RVG committees for interviews. Almost all of them were also members in the regional–local committee mentioned. So far, only politicians had been selected; therefore, I also selected the heads of departments connected to the political committees of relevance. By interviewing officials and politicians, I had the opportunity to hear different perspectives on policy processes and sustainable transport development. To confirm the strategically selected sample and to add other relevant people for interview, I asked for recommendations of other possible respondents at the end of each interview. I specifically asked for recommendations of politicians or officials at the local level, who represent the municipal opinions in regional policymaking. Furthermore, I asked for recommendations of representatives of the businesses and industry within the region that were relevant for regional transport policymaking. This snowball sample resulted in interviews with top local politicians and officials who represented municipalities within a subregion in local–regional committees, interviews with officials at the RVG who were considered centrally placed for the study object, and a few interviews with representatives of companies involved in regional transport policymaking. All the interviews conducted in the Västra Götaland case study are described in more detail in Table 7.

All but two of the strategically selected sample were interviewed. One of them was a newly elected politician with no prior experience of the policy area. I would not consider this dropout a problem, since the person had little experience, and I did another interview with a representative of the same party. The other dropout was an official and head of department, a person almost impossible to get hold of. This could have been a problem, but I would argue on the basis of the recommendations of new respondents and information I received in other interviews that it was not of major relevance for my results. This person's top position would probably have provided me with another perspective on the matter, but the detailed knowledge of transport policymaking was probably covered by my interviews with the politicians and lower-ranked but expert officials.

TABLE 7 DESCRIPTION OF INTERVIEW RESPONDENTS IN THE VÄSTRA GÖTALAND CASE

Title	Workplace		Role
Politician	Region	Västra Götaland	Chair of the Culture Committee and member of the Sustainable Development Drafting Committee (SDDC)
Politician	Region	Västra Götaland	Chair of Västtrafik, the public transport company; vice-chair of the Regional Development Committee; and chair of the SDDC
Politician	Municipality		Mayor in a municipality in Skaraborg and member of the SDDC
Politician	Region	Västra Götaland	Vice-chair of the Regional Development Committee and vice-chair of the SDDC
Politician	Region	Västra Götaland	Chair of the Environment Committee and member of the SDDC
Politician	Region	Västra Götaland	Chair of the Regional Development Committee and member of the SDDC
Politician	Municipality		Deputy Mayor in a municipality in Sjuhärad and member of the SDDC
Politician	Municipality		Deputy Mayor in a municipality in Gothenburg and vice-chair of the SDDC
Politician	Region	Västra Götaland	Vice-chair of the Environment Committee and member of the SDDC
Public Official	Region	Västra Götaland	Works with sustainable transport issues from a research and development perspective within the Regional Development Administration
Public Official	Region	Västra Götaland	Manager of the Environment Administration
Public Official	Fyrbodals subregion		Vice-president of the Fyrbodals subregion and works with spatial planning issues
Public Official	Region	Västra Götaland	Manager of the transport infrastructure and IT department within the Regional Development Administration
Politician	Region	Västra Götaland	Vice-chair of the Public Transport Committee
Public Official	Region	Västra Götaland	Manager of the Public Transport Administration
Politician	Region	Västra Götaland	Chair of the Public Transport Committee
Private Official	Multinational company		Director Environmental Affairs
Private Official	Multinational company		Director Corporate Public Affairs
Private Official	Science Park		Chief Executive Officer

CONDUCTING INTERVIEWS

Having selected prospective interviewees, I contacted them first by e-mail and then, if I did not receive any response, by phone. Trust is considered a cornerstone when performing interviews; the researcher needs to gain the respondent's trust if the interview is to result in a valuable empirical material. To gain trust, the first contact needs to be as transparent as possible (Harvey, 2011; Sandberg, 2005). Therefore, in the first e-mail contact I provided as much information as possible about me, my research, how the interview would be used, how the results would be presented, the anticipated length of the interview and what commitment I expected from the respondents (which was none, except to give me their time).

I conducted semi-structured interviews with open-ended questions. In this way I could pose questions decided beforehand, at the same time as I strived to make the interviews more like conversations. I achieved that situation by asking follow-up questions, answering questions from the respondents and letting the respondents offer examples and relate details about specific situations that occurred to them during the interviews (Kvale & Brinkmann, 2009). The use of open-ended questions is a generally recommended technique for interviewing elites and experts, since they are considered to prefer to articulate their views and be able to explain what they think of the issues at hand (Aberbach & Rockman, 2002) and I believe it worked in my case as well.

To remember my prepared questions, I had them thematically ordered in an interview guide (Kvale & Brinkmann, 2009) (see Appendix for an example). The themes divided each single question into a group of questions, which made it easier for me when I restructured the interview guide. Depending on the respondent's profession, organization and other characteristics, I reorganized the interview guide before each interview by varying the order of the questions. The rule was to ask questions in descending order of importance, beginning with the theme I most wanted to ask that specific person about. This was done because of the nature of the interview, combined with the limited time available. When I contacted the respondents I asked for a one-hour face-to-face interview, which was what the interview guide was adapted to. However, some respondents did not have an hour to give me, and I got 30 or 40 minutes instead (although some interviews lasted longer than an hour, even up to 90 minutes). In these cases the priority of themes in the interview guide was highly important. All interviews were conducted by me, as the only main interviewer. However, colleagues working on the same project participated in some interviews in the Stockholm study, not always contributing, but in some cases posing follow-up questions.

Because of the restricted time and the fact that the interview respondents were mostly used to the interview situation, I did not start with a "warm-up" question, as suggested in other kinds of interviews (Kvale & Brinkmann, 2009). Instead, I got straight to the point and started each interview with a short presentation about me and a sentence about why I wanted to interview the respondent in front of me. I then directly posed the first question. My experience is that it worked, probably since the questions were open-ended, and the respondent had the opportunity to talk about what he or she wanted to within the frame of the question.

However, sometimes the respondents did not answer the questions, or tell anything of importance to me. In such cases I used strategies suggested in the literature on elite interviewing (Harvey, 2011), sometimes posing the question immediately again if it fit into the conversation, or more often noting the non-answer and trying to pose the question later on when it could fit in. This

strategy worked well. My apprehension was that they were not intentionally not answering, and that therefore it was okay to remind them.

All interviews were recorded. In the case of elite interviews there is disagreement as to whether it is a problem or not to record them. Some scholars argue that this group often become more relaxed and willing to give information “off the record”, without a recorder (Peabody et al., 1990). It is possible that I might have gained other types of statements without a recorder, but my apprehension of the interviews was that the respondents were talking freely and trusted me with sensitive issues, as well. The recorder was not a problem for them, probably because they were used to the interview situation and to recorders. In my case the recorder was necessary, since I needed detailed transcripts of the interviews in textual form to analyse in detail and make sure that my interpretations were not taken out of context (Sandberg, 2005).

Since many of the respondents are in high-ranked and publicly known positions, confidentiality was not possible to achieve unless the empirical cases were made anonymous. Therefore, I asked my respondents if it was okay that they were *not* made anonymous in my study, which they accepted. I have not, on the other hand, used their names when referring to their interview statements, but when relevant, their positions may be mentioned. It is thus possible to know who said what, if you are familiar with the cases, but for most people the respondents’ identity is unknown.

ANALYSIS OF THE CASES

As already mentioned, the selection of case studies and respondents to interview has been different in different phases of my work. In the beginning I had an explorative approach in the sense that I started my research from an empirical interest. From the empirical results a theoretical interest developed, which then was used as a point of departure for the further empirical studies. I then identified circumstances in the empirical material that cannot be entirely explained by the theoretical framework (Alvesson & Kärreman, 2007). These mechanisms needed other theoretical concepts for their explanation, and thereby I have brought in other concepts that contribute to the theoretical explanation. The relationship between theory and empirical data has, so to speak, been dialectic; theoretical assumptions have guided the empirical work, but the interest has been to problematize and find surprises to reveal complementary theoretical concepts, which can solve the surprises (Alvesson & Kärreman, 2007). This interplay between theory and empirical data is a cornerstone for the claim of truth in interpretative approaches (Sandberg 2005), or in other words, the validity of the study (Maxwell, 1992).

In practice, this means that I have jointly analysed documents and interviews to map the cases and get a detailed view of the policy processes (Flyvbjerg, 2001). To allow an interpretational analysis, both documents and interviews were analysed qualitatively, focusing on the content and meaning of the texts (Tesch, 1990). To assure validity of my interpretations, statements in interviews have been checked against the documents as far as it has been possible, and I have also discussed some of my tentative results with respondents or other related persons. In this way I have been able to assure that there is an agreement between my interpretation and those of the individuals that are part of my study (Sandberg, 2005).

The practical analytical process of the two cases has been conducted in the following way: the documents were first read through in their entirety to obtain an overview of the content and mark interesting sections of relevance to the study objectives. They were then searched using keywords to find all passages in which matters connected to sustainable transport development were discussed. The interviews were analysed using meaning condensation: each transcript was read through and then passages from it were condensed into shorter statements. These statements could then be sorted into empirically and theoretically derived themes (Alvesson & Torhell, 2011; Kvale & Brinkmann, 2009). The role of documents versus the role of interviews differed in the four articles. In the first and third articles the documents were the main material for analysis, and the interviews were used in a complementary fashion to reveal the processes behind the documents: the values and reasoning the statements were based on and how they were perceived and used in the daily work. In the other articles the documents were used to complement the interview statements and gain an overview of the situations described in the interviews.

In summary I have used a case study design and chosen two different cases to examine. The empirical material are consisting of in-depth interviews and documents on policy development. These have been analysed using content analysis. Now follows a chapter of short summaries of the included four articles on which this thesis is based.

5. SUMMARY OF ARTICLES

This chapter includes short summaries of the appended articles and a table that summarize all four articles together. I present the aim, the main theoretical concepts and the main results of relevance for the concluding discussion.

ARTICLE I

Title: *Bridging the implementation gap: Combining backcasting and policy analysis to study renewable energy in urban road transport*

Transport Policy, 2015, 37, 72–82.

Coauthored with Linda Olsson, Martina Wikström and Mårten Larsson

Article I is about the possibilities and obstacles for urban road transport development towards a fossil fuel-free Stockholm in 2030. In the article two backcasting scenarios are used to identify implications for policy from the technological possibilities. These results are then combined with an analysis of policymaking in Stockholm, focusing on policy integration, to identify current policy-related constraints for the development towards the backcasting futures. The backcasting study is based on two scenarios, one illustrating an electric vehicle future and one illustrating a biofuel future. The scenarios are based on a literature study to identify the most likely fuels to be introduced in Sweden in the coming years. The policy integration study is based on content analysis of five selected policy documents important for regional transport policymaking at the time and five in-depth interviews with civil servants who were considered stakeholders in regional transport policymaking. For the content analysis three theoretically derived analytical concepts were used to put focus on the different components of a policy process, how they are related and what role they play for policy outcome. The three concepts are *problem definitions*, *policy goals* and *policy measures*. The results of the backcasting study suggest that there is a need for diverse fuels and vehicles and for immediate policy action. However, the policy integration analysis demonstrates that such action is impossible, given current policy structures. In addition, it shows that there is a fundamental lack of integration between energy and transport policy. This may lead to a situation of obstruction of measures to increase the use of renewable fuels and more energy-efficient vehicles, which in turn may restrain the reduction of CO₂ emissions from transport in Stockholm. To conclude, the results thus indicate that it may be hard to fulfil the goal of a fossil fuel-free Stockholm in 2030.

ARTICLE II

Title: *Biogas as a boundary object for policy integration – The case of Stockholm*

Journal of Cleaner Production, 2015, 98, 185–193.

Article II is about biogas development in Stockholm and its potential to be part of three different systems, waste, energy and transportation. The article focuses on whether there are policy integration processes between the systems and explores whether boundary objects can play a role in understanding policy integration. The way biogas is connected to a number of systems and policy sectors made the biogas development process in Stockholm a valuable case for the study of policy integration. The case study consists of 10 policy documents and 7 in-depth interviews, all

of which concern the ongoing biogas development of production, distribution and use within the region. In this article I derive the definition of policy sectors from the empirical setting, resulting in three different policy sectors of relevance within the transport system and one sector each for the energy and waste systems. A stepwise model of policy integration processes is used for a discussion of different levels of integration, where the first and lowest level is cooperation, the second collaboration and the third and highest step full policy integration. This model is complemented by the perspective of the boundary object for the analysis of the role of both a concrete and abstract object for policy integration processes that take place outside of preformed institutional structures. The results show that biogas development has resulted in integrated policymaking between the energy and waste sectors and that biogas has served as a strong boundary object, which has spurred that development. Between the energy and transport sectors there is little policy integration, and biogas is not working as a boundary object in the cases of transport infrastructure and spatial planning policy sectors. To conclude, the case of biogas development in Stockholm shows that a lack of presence of a boundary object suggests few preconditions for policy integration processes to start outside of institutional structures.

ARTICLE III

Title: *Integration of transport policy – Desirable goal or threat to sustainable transport development?*

Submitted to Journal of Environmental Policy and Planning.

Article III is about the underlying values, norms and interests that influence regional policy integration processes of sustainable transport development in Västra Götaland. In the article I use the perspective of multiple institutional logics as a point of departure to develop my analytical concept of policy logic, which is useful for the analysis of policymaking. I focus on how multiple policy logics are managed by the actors in a setting with an aim of policy integration. Therefore, I use four analytical concepts describing resolutions of multiple logics, namely, replacement, dominance, compartmentalization and blending. Three logics are then identified based on research on sustainable transport development and they are the car dependence logic, the sustainable energy logic and the accessibility logic. These logics are used for the analysis of the regional transport policymaking. Transport policy in Västra Götaland is about the formation of the integrated transport system, where all modes of transport have their specific place, due to energy and economic efficiency. This means that public transport is foremost devoted to the urban parts of the region, and the car is considered sustainable as long as it is used in rural areas to supply the public transport system. The analysis of the three logics shows that the accessibility logic dominates transport policymaking, but more interestingly, the other two logics also exist separately within the two different settings of urban and rural areas; they are compartmentalized. The sustainable energy logic has replaced the car dependence logic in the urban areas, but in the rural areas the car dependence logic is prevalent and even strengthened. There is, thus, a clear division between urban and rural areas in the logics that guide decision-making. To conclude, this has resulted in parallel solutions connected to different geographical areas within the region. This shows that the aim of policy integration in Västra Götaland is solved, rather, by compartmentalization that separates problems and solutions into certain areas to be able to form joint policy. For sustainable transport development this could mean both solutions adapted to specific localities that improve

sustainability and/or development of a parallel transport system, where rural areas are not the object of new solutions.

ARTICLE IV

Title: *The role of organizational identities for policy integration processes – Managing sustainable transport development*

Accepted for publication in Public Organization Review.

Article IV is about an extreme case of an organizational setting formed for integrated policymaking between sectors and between local and regional levels of government to address issues of sustainable development, for example, sustainable transport development. The organizational setting in focus is a political committee, the SDDC, with advisory status to the RVG Executive Committee and Regional Assembly in Västra Götaland. It consists of politicians representing either the RVG or representatives of the four subregional assemblies consisting of the region's 49 municipalities. The RVG members represent four different committees within the RVG, of which three represent different policy sectors. In this article I use the analytical concept of organizational identity, complemented with the concepts of conflict and consensus, derived from the policy network literature, to put focus on the role of the present identities, their relationships and how they influence the process of integrated policymaking. The aim is to contribute an understanding of policy integration processes by studying the committee as a most likely case and to focus on the role of identities in such processes. The case study of the SDDC is based on official minutes from the committee meetings, other documents where the policymaking in the committee is current and in-depth interviews with members of the committee, related civil servants and a few other stakeholders close to the committee. The results show that the SDDC is, apart from its advisory role, central to regional policymaking in Västra Götaland, both for processes within the region and for external processes. In the competition for national investments in transport infrastructure the SDDC forms the much-needed consensus among local and regional authorities to be rewarded by the national government. This consensus making is a risk to policy integration processes, since different identities become limited and not expressed. To conclude, the case of the SDDC shows that vertical policy integration may work to restrain sectoral policy integration and sustainable transport development, since the local municipal identities support traditional policymaking and traditional transport development.

TABLE 8 A SUMMARY OF THE APPENDED ARTICLES IN THIS THESIS

	Article I	Article II	Article III	Article IV
Title	<i>Bridging the implementation gap: Combining backcasting and policy analysis to study renewable energy in urban road transport</i>	<i>Biogas as a boundary object for policy integration – The case of Stockholm</i>	<i>Integration of transport policy – Desirable goal or threat to sustainable transport development?</i>	<i>The role of organizational identities for policy integration processes – Managing sustainable transport development</i>
Major research problem	How is implementation of renewable energy solutions managed by regional policy processes?	Is the management of biogas an example of integrated policymaking, and how could it be explained?	How are multiple policy logics managed and what do they mean for policy integration and sustainable transport development?	How is integrated policymaking conducted within an interorganizational setting formed for that reason?
Analytical concepts	Problem definitions, policy goals, policy measures	A stepwise model of policy integration, including cooperation, coordination and full policy integration Boundary object	Multiple policy logics: Blending, replacement, dominance, compartmentalization	Organizational identities, consensus and conflict
Method	Case study of technical and policy aspects of renewable road transport in Stockholm	Case study of policymaking concerning the biogas development process in Stockholm	Case study of regional policymaking concerning sustainable transport development	Case study of an interorganizational organization intended to develop integrated policy to solve regional sustainable development issues
Material	Policy documents and interviews with regional stakeholders	Policy documents and interviews with stakeholders involved in biogas development	Policy documents 1999–2013 and interviews with stakeholders in regional policy processes	Interviews with participants in and persons related to the studied committee, notes from committee meetings and policy documents
Study	Stockholm County	Stockholm County	Västra Götaland region	Västra Götaland region

Main findings concerning sustainable transport development	If a renewable transport system is to be achieved, policymakers need to understand that there is a need for several technologies	There is a lack of integration between energy and transport policy concerning biogas, which may be an obstacle for an increasing use of biogas in the transport system	Regional policy promotes environmental objectives from a regional perspective, but other sustainability objectives may be excluded	Vertical integration without sectoral integration may result in traditional transport solutions
Main findings concerning policy integration	There is a need for integration between energy and transport policy to generate policy with a wider perspective	Concrete objects may give rise to policy integration processes in situations without a regular structure for collaboration	Integrated policy may consist of parallel problems and solutions devoted to different geographical areas	The external benefit of consensus-making spurs vertical integration, but obstructs sectoral integration

6. CONCLUDING DISCUSSION

The aim of this thesis has been to study how and why (or why not) policy integration processes are being developed in regional policymaking and what this means for the achievement of sustainable transport development. The aim has been partly answered in the four appended articles. In this final chapter I draw conclusions from the joint results in the articles, and finally, discuss these conclusions in relation to the aim and what they mean in a wider sense. The first part of this chapter will thus be about the three research questions outlined in the beginning and the answers to them. These answers will then be further developed and discussed in the following part.

POLICY INTEGRATION IN VÄSTRA GÖTALAND AND STOCKHOLM

The first research question was descriptive and questioned whether there are policy integration processes concerning transport development in the two studied regions, and if this was the case, how they are conducted. The short answer to the first part of this question is yes, there are policy integration processes both in the least likely case of Stockholm and in the most likely case of Västra Götaland. However, these processes are initiated and conducted differently in the two cases. In Stockholm regional transport policymaking is allocated to different organizations with different mandates and responsibilities. This has resulted in a rather divided landscape of organizations and departments where certain issues are managed at one place and others at another, with few processes to connect them in the normal course of work. There are thus no regular structures or consensus of integration processes as collaborations between organizations on a regular basis. Instead, integrated policymaking is mainly conducted within certain projects, such as the biogas development process studied in the second article. However, that process also shows that the transport policy sector is separated from other sectors concerning certain issues, in particular, transport infrastructure planning.

In the case of Västra Götaland there is an organizational structure in place both for vertical integration between the municipalities and the RVG and for sectoral integration manifested foremost in the political committee, the SDDC, formed for that purpose. This organizational structure for integration seems to work for vertical integration, but not to the same extent for sectoral integration. The emphasis on vertical integration actually enhances the uneven power balance between the different sectors and works to obstruct sectoral integration. The organizational structure seems also to work against the aim of integration in the division of public transport and transport infrastructure into two separated policy processes, where there are vertical integration structures for public transport, on the one hand, and vertical integration structures for transport infrastructure, on the other. There is thus in Västra Götaland a partly similar division between different transport issues as in Stockholm. In both cases transport infrastructure seems to be difficult to include in other transport considerations, as issues of what vehicles and which fuels to use and goals of public transport development seem not always to correlate (i.e. Hull, 2011). The answers to the first research question point out, first, that specific objects or projects may spur integration in cases where there is no organizational structure in place for it. Second, in a case of organizational structure for policy integration the vertical and sectoral dimensions of

integration are shown to be interdependent, and vertical integration risks obstructing sectoral integration.

The second research question included the three major analytical concepts and questioned how policy integration processes can be understood from the perspectives of policy logics, organizational identities and boundary objects. The policy logic concept puts focus on the underlying values, norms and interests that permeate policymaking concerning a certain societal field. The perspective thus contributes an analysis of policy integration at a meta level, with less focus on the structure of different sectors or levels and more focus on the logics that guide their actions. In this way a policy process that seems to be integrated, because of, for example, the occurrence of joint policy, can be analysed with focus on integration of the underlying logics, which are not clear on the surface. The policy logics perspective thus shows that the integrated policy analysed in this thesis is, rather, parallel policy with parallel processes. The organizational identities perspective puts focus on the values, norms and interests specific to each actor that participates in policymaking processes. Each organization has its own identity or identities that form its external (and internal) actions and is therefore influential in policymaking that includes several different organizations. The organizational difference is a linchpin for policy integration processes, and thereby, the organizational identity concept puts focus on how these differences are manifested and sustained throughout integration processes. The organizational identities perspective has thus been used to show how different actors within the same organizational setting conduct integrated policymaking. The boundary object perspective contributes an explanation of how integrated policymaking may be initiated in situations lacking already established organizational structures for it. The boundary object thus puts focus on the starting point of integrated policymaking in settings where there is no regular consensus concerning an organizational structure of regular collaboration. The perspective also emphasizes the role of both abstract and concrete objects in policymaking in general and more specifically for bringing actors together to start forming collaboration processes that may continue in a more integrated way. Taken together, the three different concepts provide knowledge of the organizational processes of integration on different analytical levels and thereby provide a diverse collection of results.

The third and last question asked how policy integration processes can or cannot contribute to the formation of sustainable transport development. The answer is twofold; there seem to be integration processes that work for sustainable development, and at the same time there are integration processes that seem to work against sustainability. On the one hand, if the framework of policy integration defined as collaboration processes are supported and different organizations are coordinated in their policy work on the transport system, the possibilities for more coherent and coordinated solutions to be implemented will improve. This integrated policymaking offers the possibility to meet other actors, question one's own original standpoints, get new ideas and coordinate the possible solutions available, find common gains and make the solutions coherent from many perspectives (i.e. Storbjörk & Isaksson, 2014). In this way it is possible to at least make informed choices and choose the most likely sustainable measure(s) available. On the other hand, integrated policymaking seems to result in centralization processes on the regional level, which risks resulting in transport solutions that are not adapted to the locality where they are implemented, in which case, sustainability in that locality will not be achieved. In addition, policy integration risks becoming a goal in itself that results in wishy-washy policy. This is because wishy-

washy policy is the easiest way to achieve agreement among several different actors on joint goals and measures. Policy integration in my two cases thus both enables and obstructs the formation of sustainable transport development. Policy integration enables sustainable transport development when the process not only strives to form a joint policy but also focuses on sustainability as the issue to agree on. Thus, it risks obstructing sustainability when policy integration becomes the major goal and policymaking results in a joint policy that either is meaningless or is not followed by implementation, because it has not gained approval by the relevant actors.

POLICY INTEGRATION AND THE FORMATION OF SUSTAINABLE TRANSPORT DEVELOPMENT

In this part of this chapter I will discuss jointly the answers outlined above and explain my arguments in more detail. Of importance for the discussion is the analysis of the two empirical cases, their differences and similarities in regional policymaking and transport development and how they work within the same institutional context of Sweden and the EU, but with different geographical and organizational resources. This discussion will be held within the framework of my aim, but also in a wider perspective relevant foremost to the Swedish debate on regional self-government.

MULTIPLE INTERESTS AND THE PROBLEM OF JOINT POLICY

To start the discussion I take my point of departure in one of the founding principles of policy integration. It is the existence of multiple interests, norms and values in policymaking. Integration is a way to manage these multiple interests, and as argued by several others (e.g. Banister, 2008; Hull, 2011; Stead et al., 2004), is one way to achieve sustainability. The existence of policy integration processes postulates the existence of separate policy sectors and tiers of government. I would argue that this founding principle of multiple interests is fundamental to the perspective. In contrast to this fundamental principle of heterogeneity in policy processes there is joint policy, considered a central indicator for the occurrence of integrated policymaking in parts of the policy integration literature (see, e.g. Geerlings & Stead, 2003; Kidd, 2007; Stead & Meijers, 2009; Tornberg, 2011). For example, in Stead and Meijers's (2009) stepwise model of policy integration (used in the second article) joint policy is the final stage representing the fulfilment of policy integration. However, there are other authors (Briassoulis, 2004; Hull, 2011) who argue that joint policy is a difficult criterion for policy integration. Hull and Briassoulis argue that collaboration processes that result in two separate policies may be as integrated or more integrated than a joint policy. I would argue that joint policy in relation to representation of multiple interests in the policy process is not a contradiction; if the different actors can agree on the same problem descriptions, solutions and measures in a process where they have been all active and represented their interests, joint policy becomes the result. However, it may be hard to agree on the same policy framework while still sustaining different interests; if that is the case, then collaboration processes that result in different but coordinated policies may be a solution that better targets the problems than a joint but wishy-washy policy. This relationship between multiple, represented interests in policymaking and joint policy has implications for how policy integration works in the formation of sustainable transport development. I argue, in line with Hull and Briassoulis, that joint policy should not automatically be interpreted as being the same as integrated policy, because it could restrict

sustainability (Briassoulis, 2004; Hull, 2011). It may thus be problematic regarding an aim of policy integration, because it risks ignoring other values for policymaking behind a goal of joint policy. This conclusion will be explained by the analysis of Västra Götaland, using the perspectives of policy logics and organizational identities.

First, in the analysis of policy logics in Västra Götaland in the third article it becomes clear that the aim of policy integration is managed in parallel processes on the meta level. The goal of integration has created a separated policy divided into urban and rural parts. In the article the concept used to describe this management of the two policy logics, car dependence logic and sustainable energy logic, is compartmentalization (De Jordy et al., 2014; Reay & Hinings, 2009). The geographical characteristics thus work as two different compartments; the rural compartment follows the car dependence logic and the urban compartment follows the sustainable energy logic. This means that, on paper, joint integrated transport policy in Västra Götaland in fact is separated and parallel concerning the logics that guide policymaking for different geographical characteristics. This suggests that the intention of integration ends up, rather, in processes that may lead to parallel policymaking, which may be the opposite of integrated policymaking. Consequently, the aim of integration may produce parallel processes within the framework of policy integration. This implies, I would argue, that the consequence for sustainable transport development is divided: the transport systems within the urban areas have a good chance to become more sustainable, since the resources for that are put there, which means that new ideas, innovations and solutions are developed for urban areas. The transport system in the rural areas, on the other hand, continues to look like it does today, and there is risk of few resources being left to spur more sustainable ideas, innovations and solutions.

Second, in the analysis of organizational identities in Västra Götaland in the fourth article the aim of policy integration for the political committee studied is shown to actually be a process of homogenization of expressed identities to achieve an externally needed consensus. The process to reach joint policy was thus a matter of forming consensus, and this included eradication of the different identities represented in the committee, letting one sectoral identity dominate policymaking. The analysis of organizational identities focused on the role of vertical policy integration for sustainable transport development. The municipalities are important for the legitimacy and the implementability of regional policies; consequently, their role and influence in regional policymaking is highly emphasized by the regional decision-makers. Vertical policy integration is therefore emphasized as most important for regional policymaking, and in the case of the political committee studied in the fourth article, vertical integration works against sectoral integration. The reason is that the municipal and subregional identities support the regional development identity, which becomes dominant and guiding for the joint transport considerations. This follows from multiple municipalities' dependence on the transport solutions in place today and the unsettled future if they were to emphasize solutions other than the existing car and public transport. They cannot afford to lose transport possibilities, and therefore they see their only alternative as sticking to the solutions that are in place and can be improved. The municipalities thus believed that they had more to gain if they agreed with and supported the dominant sector that represented traditional transport solutions. This confirms previous research on German local mayors' sceptical actions towards sustainable energy measures; that they always put the good of the municipality first and abstract issues play a minor or no role at all (Busch & McCormick, 2014).

The joint policy that all actors could agree on was shown to be a result of vertical integration that supported traditional transport solutions and not sectoral integration, which possibly could have led to a discussion of alternative solutions. However, vertical integration may be as important as sectoral integration for sustainable transport development, at least concerning important values other than the environmental objective. Furthermore, as Busch and McCormick (2014) suggest, policies that support new sustainable transport solutions need to be framed otherwise for the municipalities to understand that there may be co-benefits of sustainable transport solutions for the local community.

Based on the results presented above, I would argue, in line with Hull (2011) and Briassoulis (2004), that joint policy cannot automatically be interpreted as being the same as an integrated policy. There is, however, a risk that policy integration is too closely related to joint policy among the decision-makers themselves, as officials and politicians. If that is the case, an aim of integrated policymaking resulting in joint policy could ignore other, more important principles for integration processes (i.e. Watson et al., 2008). I would therefore like to claim that an important conclusion of this thesis is that sustainable transport solutions will not necessarily be the result of policy integration processes, especially if it is considered to be the same as joint policy. However, if policy integration is regarded in a wider perspective of collaboration and cooperation processes, it may have an important impact on the development towards sustainability, since cross-sectoral and cross-level working processes could lead the actors to understand different standpoints and to negotiate their own interests to achieve sustainability (i.e. Storbjörk & Isaksson, 2014; Tornberg, 2011).

In accordance, the policy logics and organizational identity analyses reveals other divisions in integration processes than the commonly recognized; the one between politicians and officials (e.g. Hrelja, 2015) and the one between different professions (e.g. Smith, 2014). The organizational approach put instead focus on divisions based on geography and institutional positions as influential for integrated policymaking. The different localities within the region have thus major impact on the regional policymaking. This has also put focus on the relationship between vertical and sectorial integration and how they relate, something which has been little discussed in the previous literature on policy integration. My results concerning this both confirms the results of Hull (2008) where she recognizes clear contradictions between different tiers of government, and suggests a revers picture. Vertical integration has, at least in regions with it as a central purpose, potential to be successful, but it leads necessarily not to sectorial integration.

CONCRETE AND ABSTRACT OBJECTS IN INTEGRATION PROCESSES

The analysis of biogas as a boundary object in the second article shows that policy integration processes may arise without a strong institutional structure (i.e. Marsden & Groer, 2016) and that single processes thereby may integrate different sectors when unified by an object. These results should be contrasted with the argument for the policy integration perspective, that an organizational structure that favours and supports collaboration processes is necessary for integration and sustainable policy development (Hull, 2011; Stead & Meijers, 2009; Tornberg, 2011). The question that arises from these two arguments is what role the object and its characteristics play for integration processes of value to sustainability in relation to the role the organizational structure plays for the achievement of sustainable transport development. Valuable

for this discussion is the matter of concreteness and abstractness, which are core issues of the boundary object perspective (Star, 2010; Star & Griesemer, 1989). A boundary object is described as both concrete and abstract, with a polysemous character that makes it exist for all actors, although they may have much different interpretations of it, and these interpretations may also change over time (Star & Griesemer, 1989). The question is what is concrete enough to work as a boundary object and whether it matters that the organizational structure for collaboration is in place. I would argue that my results show that a favourable organizational structure for integration processes does not necessarily promote sustainable transport development, but concrete objects such as biogas may spur both integration processes and sustainable transport.

First, the Stockholm case presents the example of an object that I have already suggested works as a boundary object: biogas. Biogas is a gas and is not visible, which make it more abstract than an object in the classic sense. However, it is nonetheless concrete in the sense that it can be turned into a product through a production process of several steps and that a vehicle can then be fuelled with it and driven. In the biogas case these concrete characteristics make it exist for all actors, and the necessary production, distribution and use processes are never contested in the sense that they are necessary for the existence of biogas. As an object, biogas works as the concrete thing that actually spurs meetings and collaboration processes between actors. The biogas case shows that a concrete object may create new solutions concerning both organization and the integration of energy, waste and to some extent also transport policies. Biogas as a boundary object shows that there is a possibility for actors to cooperate and collaborate around a concrete object. Even if the single object, and the single process it creates, does not solve everything, it may work as one bit in the puzzle in the development towards a sustainable transport system. This confirms the idea in the original article on boundary objects (Star & Griesemer 1989), where several of these small processes surrounding objects in the end created an entire museum. The goal in my case is sustainable transport, and for that matter the result of the boundary object analysis suggests that concrete objects are necessary parts of processes of sustainability.

Second, Västra Götaland is in this thesis used as a most likely case of policy integration, since the RVG has organized regional policymaking to initiate integration both between local and regional levels and between different sectors. The best example of this is the SDDC, the political committee for sustainable issues consisting of regional representatives from different sectors and representatives of the municipalities. The object in focus for the committee is thus supposed to be sustainability. However, as shown in the introduction to this thesis, sustainability is a very abstract concept whose meaning is controversial, and thus it lacks on a general level a concrete materiality. This is also visible in the SDDC; hence, sustainability becomes an issue that is supposed to be included in all issues, but my results rather question whether that is the case. Transport infrastructure development is one of the key responsibilities of the committee, but the abstract objective of sustainability is hard to follow in these processes. Instead, regional development aspects of the infrastructure dominate the discussion, and environmental concerns are not included to the same extent. As argued above, the municipalities mainly support traditional transport solutions, due to their current dependence on them. These are thus concrete transport solutions for the municipalities, whereas possible alternative solutions are only abstract imaginings of the unsettled future; therefore, they choose to support what they know. Vertical integration between the region and the municipalities is thus possible concerning concrete problems and

objects that are visible and well-known for both the municipalities and the RVG. The interest of different localities become thus the most prioritized goal, before sustainability (i.e. Smith, 2014).

What the Västra Götaland case shows is that even in the case of an organizational structure for integration processes, sustainability is too abstract an “object” to be something that unites several different actors and starts collaboration processes. Consequently, even though the organizational structure for sectoral integration is in place, sustainability is so abstract for the policymakers that they stick to other, more concrete problems to manage in transport policy. Vertical integration between the municipalities and the RVG works because of the occurrence of well-defined concrete problems and objects to work with. Since these concrete problems often are not primarily connected to sustainability, the formation of a sustainable transport system in Västra Götaland may be hard to achieve.

From this discussion the question arises whether policy integration is a sound goal for public organizations to work towards. Is it actually a valuable tool to create sustainable solutions, or is it better for public organizations to focus on the formation of concrete problems that could gather many actors and spur collaboration between them? The short answer to the question is that a combination of integration and concrete objects and problems probably would be most beneficial for sustainable transport development. Hence, the issue of concrete objects shows that sustainability needs to be concretized for actors to understand its value for them (i.e. Busch & McCormick, 2014). I would therefore suggest that sustainability should be interpreted and substantiated as far as possible into specific objects that could gather all relevant actors. Since the organizational structure provides a framework for collaboration over time, I argue that these objects would be best managed and sustained if they were conducted within a regular structure of collaboration between organizations. One way to concretize sustainability, suggested by contemporary research, is using scenarios of the future to explain the future consequences of today’s actions (see e.g. Gunnarsson-Östling & Höjer, 2011). Scenarios could work as the necessary boundary object for sustainability work, but based on the common use of such tools in today’s planning I am not sure it is concrete enough. However, this is a valuable question for further research.

A REGION FOR SUSTAINABLE TRANSPORT DEVELOPMENT?

The discussion of policy integration in the two different regions of Västra Götaland and Stockholm brings up the question of the best size and other characteristics for a region to have to conduct integrated policymaking for sustainable development. In the policy integration literature it is specifically pointed out that sharing geography and/or interest in the same resources and infrastructure may spur integration processes between different organizations (Geerlings & Stead, 2003). In line with that argument it is considered, by Hull (2011) and Stead and colleagues (2004), that a city region would benefit from integrated transport policymaking for achieving sustainability. Spatial issues are thus regarded as suitable for and best managed from an integration perspective (Kidd, 2007). In a Swedish context this would mean that urban areas such as Stockholm and Gothenburg are the best fit for policy integration concerning transport development. In one way there is a structure in place today for such processes in both Stockholm and Gothenburg. They are obliged by the national government to make plans for the urban land use. In Stockholm planning is conducted in the form of the Regional Development Plan, and in Gothenburg in an

ongoing collaboration between the different municipalities in the subregional organization of Gothenburg and in the development of a joint land use planning tool.

In Stockholm it has been argued that the process to develop the Regional Plan is considered important for policy coherence and coordination by the actors involved (e.g Magnusson, 2013). However, as shown in the first and second articles, Stockholm's regional policymaking is managed by different organizations, which have their own responsibilities. Even though they come together and cooperate through the development of the Regional Plan, they seem sometimes to make decisions that are disconnected and scattered. One example is the department at the County Administrative Board that manages the transport infrastructure planning. As the first article shows, it is clearly stated in the plan and in the interviews that considerations concerning energy and environmental influences are consciously left out and that the infrastructure planning includes only considerations of which projects will receive funding from an accessibility perspective. The transport infrastructure policymaking is rather disconnected from other discussions and decision-making, since other issues connected to the transport system have more involvement from several interests and sectors. One example of that is the biogas development process, which is shown in the second article to be a project rather disconnected from other regional transport policy. My study of Stockholm thus indicates that regional transport policymaking consists of several parallel policy processes with little coordination among them (i.e. Storbjörk & Isaksson, 2014).

Gothenburg, on the other hand, is one part of the larger Västra Götaland, and the Gothenburg subregion, the association of municipalities in Gothenburg, participates in the RVG organizational structure as one of four subregions. As shown in the fourth article, Gothenburg is the only almost entirely urban subregion, and even though it has a population as big as the other subregions together, they each have the same number of representatives in the political committees for collaborations as the others. Regional transport policymaking is thus not developed foremost at the city level, but in the larger regional setting of Västra Götaland, where several different geographical characteristics are represented.

In a Swedish context the organizational structure on the regional level is thus not designed on the basis of geography or resources, following suggestions in the policy integration literature. The two extreme cases of regional organization show one end point on a scale of transport policymaking as having management divided among different organizations, and the other end point having transport management gathered on a regional level larger than the city. Regarding the integration of policy, the divided model in Stockholm seems to separate transport issues. Without regular collaboration it may be difficult to coordinate decisions, and for sustainable transport development this is a potential problem. Based on the results in this thesis I would suggest a solution where one organization have a coordinating task. The larger regional level in Västra Götaland could imply a too large and diversified area to integrate, since, as the articles describes, there are major differences between urban and rural areas, as well as between the priorities of the different subregions. From a sustainable transport perspective it may have been more beneficial if Gothenburg had been one region responsible for transport policymaking. Gothenburg subregion could then have concentrated only on its own urban problems and solutions, as well as potential conflicts between its different municipalities, without being forced to negotiate with the other subregions that have other geographical characteristics (i.e. Polk, 2010). On the other hand, an understanding of the

larger regional transport system that the regional area of Västra Götaland provides is probably also of relevance to the development of the Gothenburg transport system.

INTEGRATION AND REGIONALIZATION TOWARDS CENTRALIZATION?

In the Stockholm case it is indicated that the municipalities are sceptical towards more regionalization, and also integration, because they fear that it would result in more centralization (i.e. Meijers & Geerlings, 2004; Watson et al., 2008). In the light of this statement it is relevant to discuss whether policy integration implies regionalization, and to question whether regionalization and integration mean more centralization, and also the possible consequences for transport development. This is relevant for the matter of further development of regional self-government in Sweden and what it could mean for the Swedish institutional model.

The question then, is whether policy integration leads to regionalization. Based on my results, I am not able to fully answer that question, but it seems that regional policy integration is easier to achieve if there is one organizational structure for collaboration, as in Västra Götaland. However, the emphasis on multiple represented interests as a precondition for integrated policymaking shows that one regional organization may not necessarily be desirable from an integration perspective, either. The relationship between policy integration and regionalization is thus mixed. Regardless, the case study in Västra Götaland shows an example where policy integration and regionalization are closely connected. The regional self-governing authority, the RVG, provides a regional structure for integration processes, and in that way, regionalization may contribute to policy integration and also to centralization. This is based on the discussion above about joint policy and in particular, about the integrated transport policy in Västra Götaland, where public transport devoted to the cities and cars to rural areas show a centralized, or regionalized, view of the development of the transport system. This shows a risk of new and innovative solutions for every locality being left out and policy becoming too general to actually change the transport development towards sustainability.

On the other hand, the Västra Götaland case also shows that it is possible to form the organizational structure to restrict regionalization to being only about centralization. The municipal involvement in regional policymaking is regarded as a natural and important part, and the regional representatives enhance and support it (i.e. Hull, 2008). The urban–rural divide in policymaking, as discussed earlier, could thereby be considered a necessary division, due to the different characteristics of municipalities in Västra Götaland. Even though vertical integration obstructs sectoral integration, and even strengthens the division into sectors, the division can, from a sustainable transport development perspective, be seen as an opportunity to create solutions that are adapted to the geographical characteristics of urban and rural areas. The division of policymaking into specific solutions for urban and rural areas may thus be a precondition for sustainable transport development in Västra Götaland. Municipal influence could in this instance be considered important for sustainable policymaking.

Centralization is pointed out in the literature (Meijers & Geerlings, 2004; Watson et al., 2008) as a potential risk to policy integration, and the Västra Götaland case partly confirms this as a risk if the goal of policy integration is joint policy. However, as shown above, the Västra Götaland case also shows how to avoid centralization by emphasizing vertical integration. For the matter of further regional self-government in Sweden, this is an important lesson to bring into the

discussion, that regionalization may provide a valuable structure for integration processes, but that there is a risk of centralization, with not necessarily good consequences for sustainability. Notwithstanding this, a structure of vertical integration can prevent regionalization from ending up in centralization, if it is also supported and promoted by the actors involved. This may, however, prevent some sustainable goals, while fulfilling others.

SUGGESTIONS FOR FUTURE RESEARCH

As shown in this thesis, policy integration and sustainable development are closely connected concepts in theory, but in practice this connection could be contested. Even so, because the organization of policymaking matters and influences the outcomes of policy, there is a need for studies that focus on the organization and have a critical perspective on the issues of integration to improve our knowledge of organization for sustainability. Within the field of public administration there are numerous studies of collaboration processes within the public sector, especially at the national level and especially concerning issues such as crises, risks and health care (Bouckaert et al., 2010; Christensen et al., 2013; Head, 2008; Verhoest & Lagreid, 2010). To improve the knowledge about organization of policymaking for technical systems, which are in a process of transformation or need to be changed to achieve goals of sustainability, it would be beneficial if more public administration research focused on these issues. In addition, as shown in this thesis, regional and local policymaking matters to sustainable development; therefore, public administration research in general needs a more multilevel approach, focusing on all policymaking levels (i.e. De Vries, 2008). My case studies in this thesis are a contribution, but if sustainability is the goal, we need to know more about how to achieve it and question organizational models that currently are taken for granted to work (i.e. Marsden & Groer, 2016).

In this thesis I have brought in three analytical perspectives to be able to analyse organizational issues in integrated policymaking and thereby to contribute to the framework of policy integration. Neither institutional logics (Thornton et al., 2012), nor organizational identities (Gioia et al., 2013) nor boundary objects (Star, 2010) are commonly used concepts for policy analysis in general. I have not been able to elaborate and use the concepts to their full potential in the articles or in the above discussion of this thesis. That being said, for organizational analysis of policymaking there are several potential ways to use these concepts to put focus on mechanisms of importance that are not otherwise in focus for policy analysis. In a multilevel approach to policymaking, for example, a combination of the institutional logics and the organizational identities perspectives would be beneficial for capturing the values, norms and interests that permeate different levels and how they relate to each other. Such an approach to sustainable transport issues would probably reveal new results concerning why sustainability can be implemented and why it cannot, as well as knowledge about how the connections between the levels influence policy. The boundary object perspective contributes to policy analysis with its focus on objects as central for the initiation of collaboration processes outside of organizational structures. This is perhaps relevant for perspectives such as those of governance networks and the like, which focus on governance processes outside of the institutional setting, involving several different actors. The boundary object approach puts the focus on the object itself and how it works as something concrete that is interpreted differently by different actors. In the management literature this concept has increased the knowledge of the relevance of concrete objects for success of large and heterogeneous projects

(e.g. Ewenstein & Whyte, 2009). The results in this thesis indicate that such analysis also may be relevant for policy analysis.

I have in this thesis focused on regional policymaking and the relevant regional–local relations. However, in the Swedish context for the development of regional self-government and the management of sustainability, the regional and local relationships would be valuable to study from other perspectives and in different ways than I have done. In my case the study has focused on regional policymaking, and thereby the perspective on regional–local relations has been formed by the regional setting. Therefore, studies that focus on local–regional relationships from the municipalities’ perspective and in the context of increasing regional self-government would be valuable for that discussion. As shown in this thesis, the models for regional policymaking are several, and it is largely up to each region how to organize. More knowledge of the different organizational models and their consequences for both democratic values and the ability to manage complex issues such as sustainability is needed. If regional self-government in, for example, the Västra Götaland sense is to be a future part of the Swedish institutional model, more knowledge of how it works, what implications different organizational models have and what may be changed by this new level of decision-making in terms of policy outcome and policymaking is necessary.

Another relationship between levels of government that I have found plays a central role for both organization of policymaking and the outcome of policy is the relationship between regional and national levels. In my study the Swedish national government has mostly been relevant to the discussion in the case of framework for the national infrastructure investments, which are highly germane to the organization of such decision-making and its outcome in Västra Götaland. In the Stockholm case it is still the national government through its regional authority, the County Administrative Board, that is responsible for the regional transport infrastructure and, as indicated in the results, seems to bypass concerns such as environmental issues in its planning. The national government seems, from these two scattered results, to provide an institutional structure that discourages sectoral integration and even emphasizes logics other than those connected to sustainability. It would be valuable to gain more knowledge of these potential differences in focus between regional and national levels for the sake of sustainable transport development. From a Swedish perspective better understanding the role of the County Administrative Board and its relations to the new regional self-governing organizations would also improve the understanding of a new Swedish institutional structure with a stronger regional level.

In the above discussion I ask whether size and other characteristics of the regional level matter to the achievement of sustainable transport. This discussion is relevant in a Swedish context concerning the ongoing formation of regional self-governing authorities. The formation of regions is based on the needs of the health care sector, which has been argued to need to cover larger geographical areas than the traditional County Councils to meet challenges of cost, efficiency and knowledge and on the possibilities for each region to manage regional economic development issues. Therefore, the proposed new division of regions, which was presented in June 2016, suggests fewer and larger counties than today (SGOR, 2016). I have no answer regarding what size is ideal for a region to be able to manage the transport system towards sustainability, but there are indications that smaller regions based on geographical characteristics are better suited than large ones (i.e. Hull, 2011; Stead et al., 2004). For the development of new, larger regions in Sweden the question of size would be relevant. Suggested questions for future research, then, are these: Should

the large health care regions also be responsible for the regional transport system? Would it be easier to manage the transport system towards sustainability if regional policymaking concerning this issue covered another regional area?

7. REFERENCES

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APPENDIX

Example of the general questions in the average interview guide, used in the Stockholm and Västra Götaland cases.

- 1. What is a sustainable transport system?**
 - a. How does a sustainable transport system in Västra Götaland/Stockholm look like?
 - b. What are the major preconditions and problems for such a development?
- 2. Are there coordination between transport policy and other sectoral policies? For example energy policy?**
 - a. Does the presence of energy related problems within the transport policy field mean that energy and transport policy are coordinated in any way?
 - b. How, why, when are they coordinated?
 - c. Is it possible to talk about policy sectorial boundaries or not? Why?
- 3. Which actors participate in the policy processes and why?**
 - a. Are the actors collaborating and coordinating concerning transport policymaking or not?
 - b. In which way and in which settings are there collaborations for policymaking?
 - c. Which opportunities and restrictions are there for policymaking collaborations?
 - d. What spawn the collaborations?
 - e. Does representatives for other sectors, for example energy, participate in sustainable transport policymaking?
- 4. Which actors are influential in the policy processes and why?**
 - a. How does you and/or your organization influence decisions and the implementation of policy concerning transport?
 - b. Who are influential in the policy processes and why are there differences between actors?
- 5. Something else you would like to add?**
 - a. Could you, based on this interview, suggest someone else for me to interview? Someone who is either centrally placed, have another perspective or a certain position.

Papers

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