Regional development zones in spatial development in Finland

Governing spatial development through new territorial frames

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Summary

This research is about regional development zones (RDZs), which have arisen to the center of spatial development in Finland as potential instruments for more competitive, cohesive and ecoefficient spatial structure. Here regional development zone refers to a spatial development strategy that aims at guiding the future development of spatial structure and through which various actors are engaged in cooperation in a zonal area that crosses many administrative borders and is connected by a commonly used physical infrastructure. The connectivity of actors along a single core infrastructure plays a key role in a zone-based development together with the functional specialization of diverse areas along the zone and their division of labor. Instead of directing growth solely to the urban nodes and creating new infrastructures to their surrounding areas, a zone-based approach guides development towards both urban nodes along the zone and the areas between these nodes and thus focuses on the more efficient use of the existing infrastructure.

The change in thinking from a nodal urban-based approach towards a linear zone-based approach to development reflects the changes taking place in spatial development at a wider European scale, where interregional cooperation has become a key theme in spatial development. Territoriality in the context of spatial development is constantly changing as people cooperate and move increasingly across regional and national borders. Due to the globally interrelated economy, the traditional administrative units have increasingly less power to determine the development direction of their territories. Interregional and national networks together with the resilience and the adaptability of regions to react to sudden changes have arisen as important competitive advantages in the global economy. A phase of interterritorial cooperation has emerged, where actors from diverse territories, scales and sectors are getting together to solve common challenges, exchange ideas and get synergies from cooperation to increase competitiveness. In Europe, diverse polycentric approaches to spatial development are especially promoted as a means towards increased competitiveness, more balanced growth, and a more fruitful interaction of centers and peripheries. The emphasis is on comprehensive development approach that highlights both horizontal and vertical integration of diverse sectors and scales into cooperation regarding competitiveness, cohesion and environmental sustainability.

In this research regional development zones in spatial development in Finland are analyzed from the perspectives of changing territoriality and governing in European spatial development. The theoretical framework intertwining the aspects of territoriality and governing in the context of spatial development is important in explaining the

practical development potentials and challenges of concrete RDZs at the regional level. Empirically RDZs are discussed outside the networked metropolitan area in Finland (covering the urban areas of Helsinki, Lahti, Tampere and Turku), focusing particularly on Oulu-Kajaani, Bothnian Arch, Jämsä-Jyväskylä-Äänekoski and Joensuu-Kuopio RDZs. The main research questions are, how regional development zones in Finland have been implemented as tools of spatial development relative to European and national spatial development objectives, and how different dimensions of territoriality and spatial development governing are related to the development of regional development zones in non-metropolitan areas in Finland. Spatial and regional development strategies and documents, thematic interviews and questionnaires, and geographic information have been used to study the rise of RDZs in the strategies and practices of spatial development in Finland and Europe.

In spatial development visions, RDZs clearly reflect the wider European spatial development objectives as they emphasize comprehensive spatial development by aiming simultaneously at economic, social and environmental sustainability and policy integration. Despite their seemingly potential comprehensive approach, however, in practice RDZs in non-metropolitan Finland have so far been rather weak instruments for spatial development. In the current situation, there is a clear gap between visions and practices regarding RDZs, and flexible cooperation between actors, sectors and scales has been often hindered by the statutory planning system and related mental frames. RDZs as instruments of polycentric development have concentrated more on creating urban-urban cooperation between public regional development authorities and selected economic development actors, rather than promoting connections between diverse urban and rural areas for example in common land use planning and placing of activities, service provision and deepening division of labor regarding economic development.

RDZs appear both as a possibility and a challenge for areas outside the networked metropolitan area in Finland. If used more as a pro-growth urban policy tool to network actors between the urban nodes, the objective of balancing development becomes questionable. Instead, being a tool for more balanced development requires that RDZs be implemented more thoroughly in the planning system. An RDZ as a comprehensive spatial development strategy has to also be tied to the local land use planning level to have an effect on the spatial structure. In addition, without the wide participation of citizens, firms and other important actors to the strategy making it is difficult for an RDZ to gain political legitimacy for comprehensive spatial development and to deepen the division of labor between the multiple actors and areas along the zone. Altogether, comprehensive spatial development in a new zone-based territorial setting would require a notable change in the collective mindset of diverse actors when it comes to governing spatial development: zones should be seen more as strategies for governing spatial development.

In conclusion, RDZs can be developed as a concrete development frame to link the current spatial planning theories and visions influenced by the poststructural emphasis on relational space to the practical demands of economic, social and territorial cohesion in the EU, as expressed in the Europe 2020 vision and the Territorial Agenda. However, more attention should be directed to their careful and concrete implementation as tools that guide not just cooperation but also the organization of spatial structure in the

future. Clearly, much more emphasis is still needed in the translation of 'the relational paradigm' into spatial development practices and reducing the gap between vision and practice in spatial development. In particular, the efficient integration of sectors and scales for comprehensive spatial development has to be delivered to achieve the objectives set for Finland's spatial structure for future decades.

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List of original papers

I Moilanen H 2009. Ohjelmallista aluekehittämistä muutoksen kynnyksellä: pienet ja keskisuuret aluekeskukset kilpailukyky- ja/vai koheesiopolitiikan ytimessä? *Kunnallistieteellinen aikakauskirja* 1/2009, 68–91 (published in Finnish, translated in English: Program-based regional development in transition: small and medium-sized regional centres in the core of competition and/or cohesion policies?).

II Jauhiainen JS, Harvio S, Luukkonen J & Moilanen H 2007. Regional development zones in Finland: territorial cohesion and competitiveness. *Fennia* 185: 1, 31–47. *

III Luukkonen J & Moilanen H 2012. Territoriality in the strategies and practices of the territorial cohesion policy of the European Union: territorial challenges in implementing "soft planning". *European Planning Studies* 20: 3, 481–500. **

IV Jauhiainen JS & Moilanen H 2011. Towards fluid territoriality in European spatial development: regional development zones in Finland. *Environment and Planning C, Government and Policy* 29, 728–744. ***

V Moilanen H 2012. Comprehensive spatial development in Europe: regional development zones in Finland. Planning Theory & Practice, in review.

Contributions

* All authors are together responsible for the study design, analysis and writing of the article. The chapter "Polycentric development and peripheries" is mainly written by the author.

** Both authors are together responsible for the study design, analysis and writing of the article. The chapter "Regional development zones as expressions of soft planning spaces" is mainly written by the author, whereas the chapter "Territorial cohesion policy in the light of changing territoriality" is mainly written by the co-author.

*** Both authors are together responsible for the study design, analysis and writing of the article. The chapter "Three cases of RDZs in Finland" is mainly written by the author.

Illustrations

1. Introduction: the new spatial development

Spatial development as an active attempt to improve the spatial organization of society (Faludi 2002a) is always based on certain prevailing concepts and discourses – and spatial visions – that change over time as new ideas take their place (Zonneveld 1989; Jensen & Richardson 2004). In the European scale, the contemporary spatial development discussions are characterized by polycentric development and interregional cooperation that simultaneously pursue economic competitiveness, social cohesion and environmental sustainability, and the overall policy integration of diverse sectors with direct impacts on spatial development. This comprehensive approach to development is representing a change in wider European planning discourse from previous land use oriented planning based on a statutory planning system, and thus to many academics, appears as a new approach to spatial development (e.g. Jensen 2002; Harris & Hooper 2004; Dühr et al. 2010; Haughton et al. 2010). In particular polycentrism as a spatial development framework is promoted as a means toward simultaneously competitive and cohesive spatial structure emphasizing 'balanced competitiveness' and 'territorial cohesion' across the European Union (EU) (Meijers et al. 2007).

Following the globally growing appreciation of urban regions as motors of economic competitiveness, in Finland the country's competitiveness is also increasingly argued to be dependent on economically viable urban regions (e.g. Himanen 2007; Moisio 2008). The demands for competitiveness and innovativeness related to the global economy have questioned the traditional Finnish ideal about the spatially balanced welfare state. However, the strong legacy of Finnish regional policy in supporting lagging areas through settlement, subsidies, income transfers and industrialization still influences the policies made today. Balanced development is still seen as an important objective in spatial development visions and strategies in Finland (e.g. Ministry of the Environment 2006; Ministry of Employment and the Economy 2010a) and it is being pursued under the framework of polycentric development.

The focus of this research – regional development zone (RDZ) – is an increasingly important concept in spatial development in Finland that reflects the broader policy emphasis on city networking and the need to deepen the division of labor among major urban areas in the country through a polycentric development framework. An RDZ refers to a spatial development strategy that aims at guiding the future development of spatial structure by conforming to, and strenghtening, the existing infrastructure routes between major urban areas. This zone-based approach represents a change compared to previous node-based urban network policies: in a spatial structure that is both polycentric and zonal, in addition to directing growth to the centers, diverse land uses

related to residential and economic development and recreation are directed selectively to the areas in between the RDZ's centers. Furthermore, in Finland, the zone-based approach represents a new kind of an attempt to realize the comprehensive European spatial development objectives in a particular, largely sparsely populated, national context. This national context makes the implementation of RDZs different than those in more densely populated areas in Central Europe. Overall, in the zone-based development in Europe, the contemporary spatial development is largely about balancing inequalities and working towards "areas that function well economically, socially and environmentally" (Haughton et al. 2010: 26).

In the European scale, cooperation across diverse territorial borders has arisen to the center of spatial development (see e.g. Territorial Agenda... 2011). Interterritorial cooperation is also an important aim in RDZs as they cross several local, regional and even national borders along their way. Territoriality in the context of spatial development is evidently changing, as the traditional bounded notions of space related to administrative territories are no longer adequate to capture the complexities of current societies. A period of interterritorial cooperation has emerged, where actors from diverse territories, scales and sectors are increasingly getting together to solve challenges related, for example, to the globalizing market economy, climate change and changing population structure.

Accordingly, notions such as soft spaces and fuzzy boundaries have arisen to define the contemporary academic planning discussions, as the new cooperation networks function increasingly alongside with, and partly irrespective of, the boundaries of traditional administrative units and territories (Allmendinger & Haughton 2010). In theory, soft planning spaces that cross traditional territorial boundaries to many academics indicate the rise of relational space characterized by increasing interdependency of actors across space (e.g. Amin 2002; Massey 2005; Murdock 2006; Thrift 2006). To others, instead, the debates concerning city-regions, new localism and devolution suggest that the meaning of bounded territories will even increase in importance (e.g. Morgan 2007). In any case, the debates between territorial and relational views on space indicate the fluid meaning of territoriality.

Both as a result of and alongside with these developments, regional development zones as tools for spatial development appeared in the Finnish context in the 1980s, although their importance rose in the 1990s along with Finland's EU membership, and the increasing awareness of global market economy and connectivity of actors across territorial borders. Among the first RDZs was the HHT from the national capital Helsinki via Hämeenlinna to Tampere connecting the two largest urban agglomerations of the country, which was later extended to cover also the cities of Tallinn and Riga across the Baltic Sea. The first spatial development vision for Finland in 1995 and the early notions of polycentric spatial structure increased consciousness about RDZs in the country (Ministry of the Environment 1995; Haarni & Vartiainen 1996), and in the early 2000s, likewise the Ministry of the Interior and other key regional development actors paid attention to RDZs (Antikainen 2005; Antikainen et al. 2006). In addition, at regional level cities increased their cooperation in the form of RDZs in diverse parts of the country.

1.1. Research objectives

This doctoral thesis is about regional development zones (RDZs) in spatial development in Finland. The RDZs are analyzed particularly from the perspective of changing territoriality as a framework for governing spatial development. In the context of zone-based development, the emerging territoriality that rises from new interterritorial cooperation has not been studied analytically as a framework for wider spatial development governing, although the recent policy emphases on comprehensive spatial development often imply that these new spaces of cooperation particularly function as 'metagovernance' frames for intersectoral and interterritorial cooperation (see Allmendinger & Haughton 2009). These soft cooperation spaces thus imply a new kind of geographical framing of development which challenges the traditional conceptions of spatial development governing based on statutory administrative territories. Overall, territoriality in its diverse forms creates an important frame for contemporary spatial development practices, which is why it is studied in this research in relation to diverse forms of governing spatial development. It is crucial to understand the arising logic that comes with the new type of cooperation that crosses traditional administrative boundaries and that has to work simultaneously with the spaces of flows and the spaces of places (Castells 1996), i.e. the relational and territorial manifestations of space (Jones 2009).

The RDZs and Finnish spatial development in general are reviewed in relation to changes taking place in the broader European spatial development arena. The 'new' spatial development characterized by changing territoriality, and the discourses of polycentrism and economic, social and environmental sustainability are discussed here as important factors influencing Finnish planning realities (e.g. Dühr et al. 2010; Faludi 2010; Haughton et al. 2010). However, determining the level of 'Europeanization' of Finnish spatial policies is not the purpose here, although an assumption has been made based on previous research that EU policies have had an important effect on spatial planning in the level of member states in general, and in Finland in particular (e.g. Böhme 2002; Jensen & Richardson 2004; Antikainen & Vartiainen 2005; Böhme & Waterhout 2008; Moisio 2008; Eskelinen & Fritsch 2009; Luukkonen 2011). Less attention is paid to RDZs as tools of transport, rural or environmental policy, even though these policy areas are recognized as important aspects of RDZs. Previously, RDZs in Finland have been studied for example by Harvio (2007) and Välimaa (2011) in their theses, as well as by Haarni and Vartiainen (1996) and Andersson (2001, 2010). This thesis broadens the perspectives of these works by discussing RDZs in the context of European spatial development and related conceptualizations of human spatiality in the academic disciplines of planning and human geography.

RDZs' potentials and challenges are discussed empirically regarding the development of zone-based spatial structure outside the networked metropolitan area in Finland. The major part of this area is characterized by long distances and sparse population density, with the exception of a few large urban centers and small regional centers. The prerequisites for implementing polycentric policies in these areas are thus crucially different than in more densely populated areas with relatively coherent spatial structure. This also separates many Finnish RDZs from zone-based developments in Europe. The RDZs in the networked

metropolitan area covering the urban regions of Helsinki, Turku and Tampere are not discussed here as they arise from different geographical starting points when it comes to their spatial structure, population density and accessibility, and the overall resources of development. In addition, the RDZs in the networked metropolitan area are almost automatically seen to be in the core of spatial structure in the future (e.g. Moisio & Vasanen 2008; Andersson 2010; Jauhiainen 2011). In this research, instead, the interest is on the areas, where this belonging to the core is not obvious, and where there is therefore an increasing pressure to rationalize spatial structure in the future in terms of costs related for example to service delivery and infrastructure investments.

The research framework of this article-based doctoral thesis brings together three types of questions, dealing with 1) conceptualization of RDZs as regards contemporary spatial development policies and practices, 2) positioning of RDZs as regards different theoretical conceptions of territoriality and spatial development governing, and 3) implementation of RDZs in practice in non-metropolitan areas in Finland. These three diverse, but constantly overlapping and interacting dimensions of institutions, theory and practice are first analyzed in separate chapters after which they are discussed more comprehensively in the discussion. The main research questions that pull together these dimensions are:

1. How regional development zones in Finland have been implemented as tools of spatial development relative to European and national spatial development objectives?

2. How different dimensions of territoriality and spatial development governing are related to the development of regional development zones in non-metropolitan areas (Oulu-Kajaani, Bothnian Arch, Jämsä-Jyväskylä-Äänekoski, Joensuu-Kuopio) in Finland?

By discussing changing territoriality and its relations to governing spatial development through the case of RDZs in Finland, the research contributes to two different, but constantly overlapping, discussions: the human geographical debate about the changing meaning of territoriality in organizing socio-spatial relations (e.g. Amin 2002, 2004; Paasi 2003, 2009; Delaney 2005; Massey 2005; Harvey 2006; Murdock 2006; Thrift 2006; Jessop et al. 2008; Jones 2009; Adey 2010), and the European spatial planning discussion regarding the new 'soft' spaces of planning in an increasingly interdependent world (e.g. Allmendinger & Haughton 2007, 2009, 2010; Davoudi 2003, 2009; Janin Rivolin & Faludi 2005; Healey 2006a; Gualini 2008; Dühr et al. 2010; Faludi 2010; Haughton et al. 2010). The extensive discussions of human spatiality in human geography have focused mostly on the debate *between* territorial and relational conceptions of space, whereas less attention has been paid to the changes in territoriality *per se* as a framework for organizing activities in space: territoriality in the context of spatial development is having increasingly relational characteristics. Therefore, this research takes "the conceptual middle road" (Jones 2009: 496) between territorial and relational views on space in reviewing RDZs as territorial frames that are however constantly changing in between the overlapping (and thus not mutually exclusive) territorial *and* relational realities.

When it comes to European spatial planning, this research contributes to the discussions about the widely acknowledged gap between theory and practice in spatial planning by linking the poststructuralist planning visions to their territorial realities by studying RDZs as tools that have been promoted in Finland as potential for implementing the soft spatial

development visions in practice. The research contributes to the ongoing discussions by arguing that the new soft spaces of spatial development should be more linked to the discussions about governing spatial development to be able to efficiently execute the new comprehensive spatial development strategies.

In addition, the focus on peripheral areas outside the large European urban centers and metropolises makes the study both academically and empirically relevant as the vast majority of studies and theories related to spatial development deal with successful core regions with a relatively dense spatial structure (e.g. Heeg ym. 2003; Zonneveld & Trip 2003; Albrechts & Lievois 2004, cf. Copus 2001). This narrow urban-led focus on research "leads to theories that are based on only a very small and very biased sample of regions" (Terlouw 2001: 83). This highlights the importance of a different research approach in studying the implementation of European spatial development. Constructing new territorial frames for spatial development in areas where there is not necessarily physical proximity between actors, the relational forms of connectivity become more important characteristics of territoriality. This research contributes to the discussions about the implementation of European spatial development by studying the potentials and challenges of soft planning tools in the particular context of sparsely populated areas in northern Europe.

By discussing European spatial development objectives in relation to theoretical conceptions of spatiality and spatial development practices it is possible to highlight certain fundamental and in-built challenges in the existing rhetoric in European and Finnish spatial development related to the gap between visions and practices in spatial development. These challenges, then, are reflected to the practical implementation of RDZs in Finland. As stated by Massey (2005: 9, also Madanipour et al. 2001; Amin 2004),

> *"thinking the spatial in a particular way can shape up the manner in which certain political questions are formulated, can contribute to political arguments already under way, and – most deeply – can be an essential element in the imaginative structure which enables in the first place an opening up to the very sphere of the political".*

According to Amin (2004), the fact that whether space is seen territorially or relationally has profound political consequences and thus that difference in perspective matters. Furthermore in the context of this research, several questions related to policy and practice of RDZs can be reduced to the question how territoriality is understood. Following from this, the ultimate objective of this research is to participate in the ongoing discussions regarding the Finnish spatial restructuring, and to critically examine the existing practices related to the use of a certain policy terminology related to zone-based development.

After the introduction, in the second chapter, the European spatial development approach is discussed together with related strategies and policies. The objective of polycentric development is discussed more in-depth together with its relations to peripherality in European spatial development. In the third chapter, the theoretical background of the research is discussed, dealing with contemporary conceptions of space and territoriality in human geography together with related conceptions of governance. In the fourth chapter of the research, the empirical research framework is presented, discussing the case areas, methodological setting, and methods and materials of the research. In addition, the Finnish planning system together with important actors involved in spatial

development are briefly introduced. The results of the thesis, i.e. of the five original papers, are discussed in the fifth chapter, which are then reviewed in the sixth chapter in a more comprehensive manner in relation to theoretical and policy context. Finally, conclusions are made concerning the gap between the visions and practices in spatial development, and the implementation of RDZs in Finnish spatial development context.

1.2. Zone-based approach to spatial development

Zone-based spatial visions are examples of new 'soft' planning spaces promoted in the European spatial development, where the idea is to network actors from diverse administrative territories along connecting infrastructure framework. Development zones were raised in central position in the European Spatial Development Perspective (ESDP) highlighting their comprehensive potential for integrating policy sectors and balancing development (CEC 1999). In this chapter the manyfolded aspects of zone-based development are briefly discussed, which are reviewed more in-depth in the fifth original paper of this research (Moilanen 2012).

Different linear frameworks such as zones and corridors have been visible in planning in different times, scales and contexts (Whebell 1969; Albrechts & Coppens 2003; Priemus & Zonneveld 2003). For a long time even before the institutionalization of urban and spatial planning, linear routes along diverse humanmade and natural paths were a natural base for human settlement and interaction (see Whebell 1969). Accordingly, the development of zones is highly path dependent, because they rely, and build on, the older systems of infrastructure (Priemus & Zonneveld 2003): the physical structure created in the past continues to have an effect on the ways in which policies can be implemented today. Therefore, "traffic infrastructure has a structuring impact on spatial planning, spatial developments, and economic and social changes" (Priemus et al. 2001: 168) as the areas near transport routes become attractive locations for firms and citizens (Hidding & Teunissen 2002). This has largely been affected by the growth in trade: "as trade grew, and later, manufacturing, some routes…began to evidence greater attractiveness for traffic of goods and people" (Whebell 1969: 3). Therefore, major transportation routes also today often form the core of zone-based development policies. Accordingly, the zone-based framework in organizing diverse activities in space is assumed to hold several possibilities when it comes to guiding the spatial structure in the future (Priemus & Zonneveld 2003, see Moilanen 2012).

Nowadays the notions of zones, or corridors, are much dependent on their scalar context: at the European level, they are often attached to the Trans-European Networks (TENs), and at a regional level, they are more closely intertwined with the process of urbanization (de Vries & Priemus 2003). Zonneveld and Trip (2003, see also Andersson 2010) emphasize three approaches that characterize most of the zone-based development around connecting infrastructure: 1) an infrastructure axis, emphasizing transportation and logistics; 2) an economic development axis, highlighting the impacts of connecting infrastructure on creating functional economic relations, and; 3) an urbanization axis, focused on directing the future urbanization and public transportation. In addition to these, the concept of zone has been used frequently in the context

of land use and tax regulation for example in the United States and China, where the emphasis has been on creating special statuses and incentives to attract (foreign) direct investment and promote regional economies. Examples of such incentives are exemptions or deductions of taxes, increased assess to investment credits, loans and reduced government and public sector regulations (Ge 1995; Wong & Tang 2005).

In the second original paper of this research (Jauhiainen et al. 2007b), the concepts of zones and corridors are separated depending on the role of physical planning and functional cooperation in the linear development framework. The concept of zone refers to a physical-functional network with emphasis on tackling common development challenges and enhancing economic development and cooperation between key actors in a territorially connected area. Here, geographical proximity plays an important role, as well as a proper infrastructure facilitating material and immaterial flows within the zone. The zone derives both from physical connection and collective development goals, and aims at enhancing the endogenous potential of regions along the zone. The concept of corridor, instead, refers to a physical connection in which geographical proximity and territorial continuity are crucial elements. This approach points to the infrastructure axis determined by Zonneveld and Trip (2003). Such corridor follows major infrastructures, for example, roads, railroads or rivers that tie the partners physically together. The aim is to enhance the connection between infrastructure and land use within the area to intensify material flows between corridor's centres.

In the corridor development, the objective of increasing mobility has been the key driver for infrastructure development, and at the European scale, the construction of the TEN-T network has been the most important indicator of this development (Jensen & Richardson 2004). In the ESDP (CEC 1999: 20), it is stated that "the creation and enlargement of several dynamic global economy integration zones provides an important instrument for accelerating economic growth and job creation in the EU, particularly also in the regions currently regarded as structurally weak". Here, the creation of the TEN-T has been a crucial prerequisite for both efficient mobility between core regions and increased accessibility for areas in the periphery. Altogether, in regional policy in the EU, there has long been a firm belief that infrastructure improvements can stimulate the economic performance of peripheral areas (Vickerman 1995; Copus 2001; Peters 2003; Priemus & Zonneveld 2003; Trip 2003; Holl 2007). Therefore, there is a supposed relationship between economic development and the traffic route with the assumption that the infrastructure has an effect on economic competitiveness (Priemus & Zonneveld 2003).

Transport routes have also been used as a backbone of an urban plan, and the zone-based frame in urban planning is in fact rather old. When a transport route ties urban centers and smaller towns together, it functions as a framework for efficient locating of diverse residential, commercial and work-related land uses (Priemus 2001; Romein 2003). In an ideal situation, zones generate growth as they connect urban centers together. People do not just move between these two points, but potential in living and working in between equally exists. In a linear development framework, secondary urban centers in between the main urban centers increase their importance and even new ones are created as a result of the established connection (Whebell 1969; Priemus & Zonneveld 2003). Linear models of urbanization are, in fact, often attached to the idea

of the 'beads on a string', which implies avoiding ribbon development along major transport routes by carefully selecting centers for economic and residential development (de Vries & Priemus 2003). According to Chapman et al. (2003), zones with only a few access points will encourage stronger concentration of activities towards these urban nodes, whereas zones with many access points will have more spread effects due to the stronger car-dependency.

A notion often attached to zone-based spatial development is that zones represent the core in relation to periphery (Vickerman 1995; Peters 2003; Herrschel 2009), although zones in the contemporary spatial development discussions are often represented as tools that bring cores and peripheries closer by spreading the prerequisites of development to the areas in between the cores (e.g. RDZs in Finland, see Ministry of the Environment 2006). Also these zones, however, aim at developing into the core of spatial structure in the long term. Already in the 1960s, Whebell (1969: 12–13) outlined the main political tension deriving from the sparse and dense settlement patterns that separated zones from more sparsely populated hinterlands:

> "*at the national level, it would appear that the ecumene of a state consists of the network of corridors it has developed. These linear zones comprise the main, if not the exclusive loci of 'net revenue production' – that is, areas which contribute more to national accounts that they receive. In these days of political concern over rural populations and heavy farm subsidies, the non-corridor areas are clearly not part of the ecumene in these terms, being net consumers of revenue*".

This concern over the development of rural and peripheral areas continues to polarize political discussions today. In addition, transport corridors are closely linked to the spatial concentration of activities along the main transport routes, mostly due to the claims for economic efficiency. According to Trip and Zonneveld (2003: 10), "the bundling of infrastructure is often accompanied by a concentration and scaling-up of the nodes in the network". Accordingly, zones often promote 'concentrated deconcentration' around important transport nodes (Trip 2003).

One of the best known examples of the use of the zonal image to distinguish the competitive core from the hinterland has been the Blue Banana in Europe (Brunet 1989, Fig. 1). The banana reached from London to northern Italy, representing the strongest economic core of Europe and separating economically weaker regions from the core (Dühr et al. 2010). At the same time, a Sun Belt along the Mediterranean was also identified, as well as several other development axes such as Hamburg-Copenhagen, Berling-Warsaw, Munich-Vienna and Paris-Madrid (see Dühr et al. 2010: 61–62). As a spatial image, the Blue Banana had a great influence on European planning, and although it can be criticized as a rather simplistic mode to represent the then-emerging core Europe, the image became central to transnational and national planning discourses and their visualization (Faludi 2010; Jauhiainen & Moilanen 2011). In addition, the report "Vision and strategies around the Baltic Sea 2010: towards a framework for spatial development in the Baltic Sea region" (Conference of Ministers... 1994) envisioned several important connections around the Baltic Sea that were later utilized in several planning documents and research reports around the EU (e.g. Ministry of the Environment 2006).
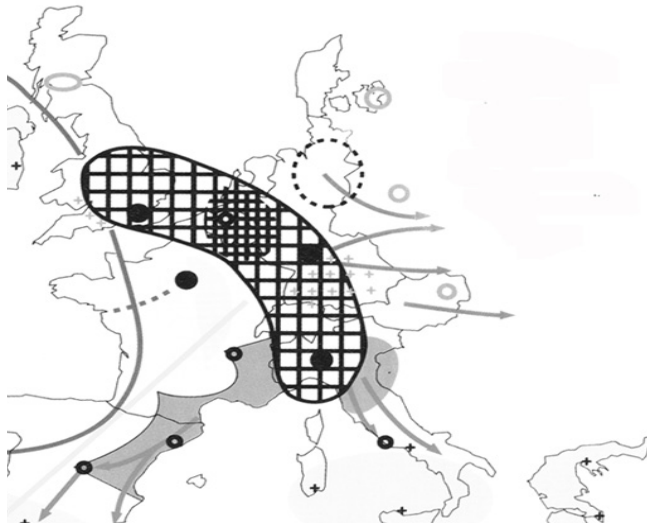
Fig. 1. The Blue Banana (Brunet 1989).

In 1999, the zone-based development framework was brought to a new level as it was introduced as a comprehensive planning idea in the ESDP, supporting the idea of a polycentric Europe (CEC 1999). The document raised several important metaphors and conceptual tools into discussion, such as hubs, gateways, corridors and zones, which have in some member states been influential concepts in envisioning new spatial strategies, and therefore, also in formulating new policy discourses under polycentric development (Davoudi 1999; Haughton et al. 2010). The concept of Euro corridor was used to refer to this new linear development framework (CEC 1999: 36):

> *"The spatial concept of Euro corridors can establish connections between the sectoral policies, such as transport, infrastructure, economic development, urbanization and environment. In the development perspective for Euro corridors, it should be clearly indicated in which areas the growth of activities can be clustered and which areas have to be protected as open space."*

Hence the concept of Euro corridor was used in the ESDP as a visionary tool for comprehensive spatial development.

The Euro corridor was not, however, a commonly agreed upon concept. Priemus and Zonneveld (2003) discuss the conflicting nature of the concept in the preparation of the ESDP as the concept lost importance in the final publication. Earlier versions of the ESDP discussed these corridors as important tools in enhancing cohesion in Europe (British Presidency 1998: 67, in Priemus & Zonneveld 2003: 170):

> *"Eurocorridors could be used as a conceptual tool for integrating policies relating to the development of multimodality, cooperation between cities, the improvement of infrastructure and transport in more peripheral areas, the reduction of congestion, international accessibility, etc. Such corridors could contribute considerably to the cohesion of the European territory".*

In addition, concrete Euro corridors were introduced in the 1998 document. This, according to Priemus and Zonneveld (2003), was probably against the national spatial planning policies, and thus caused the deletion of these concrete corridors from the fi-

nal document. Furthermore, the concept of Euro corridor in itself was rejected. In fact, the political challenges in pointing out these core zones from maps challenged their efficient implementation. In addition, when connected to issues such as unregulated urbanization and erosion of support for existing cities, corridors have also been viewed with certain degree of suspicion and as a threat to cities, or as in Netherlands, they have even become a taboo in planning (Priemus 2001; de Vries & Priemus 2003; Ipenburg 2003).

According to key scholars studying evolving spatial development practices in the EU, the ESDP, despite its contested nature, has had an eye-opening effect on the spatial development practices in many member states (e.g. Böhme 2002; Faludi 2010). In many countries, the ESDP has functioned as a moving spirit behind 'new' spatial development discourse. It introduced concepts such as polycentric development, and linear development frameworks such as zones and corridors. Due to the comprehensive nature of the document, corridor concept was also strongly linked to the notion of integrated development approach, intertwining competitiveness and balanced development as well as diverse policy sectors with spatial impacts (Albrechts & Coppens 2003). As a result, different zone-based approaches have found their ways in many national and transnational planning documents, including "Perspectives for spatial structure and land use in Finland" (Ministry of the Environment 2006). In the next chapter, the European dimension of spatial development is discussed more in-depth as it has had an important effect on the national spatial planning contexts in many EU member states.

2. Background: European spatial development

The spatial metaphors, such as zones, corridors, hubs and nodes, have been seen to be representing something often called the new spatial development. These new spatial images and development frameworks are also often attached to the particular European way of doing spatial development (Faludi 2007a). Spatial development in this research is mainly discussed against this European background, meaning that theories of changing spatiality are primarily reviewed in the policy and planning contexts in Europe. However, the aim is not to provide an extensive review of the history and development of what is called European spatial planning, or development (for this, see Williams 1996; Faludi 2002a, 2010; Martin & Robert 2002; Jensen & Richardson 2004; Dühr 2007; Dühr et al. 2010), but instead introduce the key angles in the ongoing debate. In this chapter, the aim is also to outline the main aspects and discussions around the discourse of new spatial development, which Jensen (2002: 119) describes as:

> *"a new form of transnational planning, where planners develop new capacities for networking and collaboration: creating new vocabularies for dealing with spatial issues and establishing such notions of space and knowledge as the natural way of perceiving European space".*

2.1. Spatial planning and development

Spatial development is not at all an unambiguous term nor should it be treated as such. In the contemporary European context, it is mostly considered as an umbrella term for different scalar and sectoral combinations aimed at somehow improving and rationalizing the spatial organization of society (Faludi 2002a). Here the word development thus refers to an active (often public-led) approach to change the prevailing spatial organization of societies. In its pursuit of economic, social and environmental sustainability and overall policy integration across scales and sectors, spatial development is also far from being a neutral policy instrument. It contains clear normative assumptions about the preferable spatial structure of society (Vigar 2009; Haughton et al. 2010). The meanings of the term also change over time (Faludi 2002a, 2010; Haughton et al. 2010), and the vague use and meaning of spatial development has both advantages and disadvantages. On a positive side, it allows actors to discuss and share different mental frames, policies and practices without having to deal with the concrete challenges of implementation. Deriving from this, however, on a negative side, there is a danger of

'empty' strategy talk that has no or only little meaningful impact on development practices (Davoudi 2003; Dühr et al. 2010).

In this research, the term *spatial development* is preferred over *spatial planning* due to its wider reference outside planning authority to active role of diverse actors in creating and making, and indeed developing, the new spaces of development. Planning, however, is also used because of its specific meanings in European spatial planning and national planning contexts (for the terms spatial planning and development, see Faludi 2002a, 2010; Böhme & Waterhout 2008). According to Williams (1996: 7), *spatial policy*, instead, is any EU policy:

> "*which is spatially specific or is in effect spatial in practice, whether or not it is deliberately designed to be, and any policy which is designed to influence land use decisions, to be integrated with local planning strategies or to be implemented by local and regional authorities as part of their spatial planning responsibilities. Spatial planning is more specifically defined as a method or procedure to influence future allocations of activities to space or space to activities. It makes use of urban and regional planning instruments to set out and implement spatial policy at whatever spatial scale.*"

Here, then, spatial development appears as "the systematic preparation of spatial policies" (Faludi 2002a: 5).

Regional development and *policy*, instead, are important parts of spatial development, although targeted more at an operational regional level of development. Spatial development, then, is not a synonym for regional development: "whereas the former embraces any spatial scale, regional is used here in the sense of policy applied to the scale of a region or regional authority of a country" (Williams 1996: 7). In fact, the focus of this research, i.e. regional development zone, is a good example of the complex and complementary relationships between the two, because RDZs function simultaneously as spatial and regional development instruments. As a strategic and normative concept of spatial development, they represent the desirable spatial organization of society, and as instrumental concepts, they function as a frame for concrete regional development (cf. Dühr 2007).

The term spatial planning in general is most often attached to the particular European model of society (Faludi 2002a, 2007a), and it has been considered as a Euro-English concept (Williams 1996). In fact, "European spatial planning is promoted on the basis that it can help to achieve EU goals" (Dühr et al. 2010: 17). What is the European way then? The specific simultaneous focus on economic, social and territorial aspects of cohesion is said to be particularly related to European values emphasizing balance between individuals, state and market. Furthermore, to others, this emphasis on balance is the reason for Europe loosing its competitiveness, whereas to others, it represents the future asset of Europe (see Faludi 2007a). European spatial development, then, is not solely about funding (a notion often attached to EU regional policy), but about how to use funds in a coherent manner (Faludi 2010: 181), although "at the EU level the structural funds are extremely important in the context of polycentric development and cohesion" (Meijers et al. 2007: 18).

Related to the divisive nature of the European model, the notion of 'European spatial planning' is also a highly contested field, referring at least two different contexts

(Dühr et al. 2010: 26, see also Böhme & Waterhout 2008; Haughton et al. 2010):

- *the name of the governance system for managing spatial development and/or physical land use in a particular place (the national or regional planning system); and*
- *a specific term to describe a particular idea or definition of spatial planning as a coordination mechanism that has arise through debate at the European level (the spatial planning approach).*

Here, the new spatial development is discussed mainly as a strategic mechanism to co-ordinate and guide the ways in which human activities are distributed and developed in space, on whatever scale. This relates also to coordinating the territorial impacts of sectoral policies, and thus, indicates an important move away from regulatory land use planning to 'spatial planning' approach, new spatial planning being more strategic in approach (Allmendinger & Haughton 2009; Faludi 2010; Haughton et al. 2010). The following developments are emphasized as key factors in shaping the contemporary discourse of new spatial development (Dühr et al. 2010: 16; Haughton et al. 2010: 5): the growing transnationality of spatial relations; the EU's goal to achieve more balanced and sustainable development; the need to coordinate the spatial impacts of sectoral policies and to bring coherence to fragmented systems of governance and; the overall emphasis on long-term strategic thinking.

Spatial planning, in relation to spatial development, is sometimes labeled by its complex and restrictive regulatory approaches involved in land use, property rights etc. Spatial development, instead, is often attached to more neutral approach to develop space according to some general principles (Faludi 2002a, 2010). According to Krätke (2001: 105):

> *"the emphasis on spatial development instead of spatial planning (which does not belong to the competences of the EU) gives way to a more appropriate understanding of spatial policy which includes the coordination of sectoral policies and a more active approach to the economic, social and spatial development of Europe's cities and regions".*

In addition, the focus on spatial development has turned the attention towards the increasingly important role of non-planners in the planning process, such as citizens and third sector parties (Haughton et al. 2010; Jauhiainen & Moilanen 2011).

When spatial development is reviewed in its broader European context, it can be easily advocated with the argument of transnationality, or intergovernmentality (Nadin 2002; Dühr et al. 2010). In this sense, it is closely related to the discussions regarding European integration (for more detailed discussions, see e.g. Nadin 2002; Faludi 2002b, 2008; Jensen & Richardson 2004). Often development issues are 'rescaled' outside the regulatory competence of single member states (Brenner 2004). European spatial planning has long been voluntary cooperation among member states, and this in fact is one of its particularities (Faludi 2002a). An important part of planning has been the common envisioning of the European territory (Nadin 2002). Furthermore, interregional approach is increasingly relevant in envisioning cross-border cooperation, since the role of regions and their public and private actors, and different territorial administrations, has increased in importance in the EU planning scheme due to the increasing devolution of policy responsibilities (Vigar 2009; Haughton et al. 2010).

One of the clearest characteristics of the new spatial development is its simultaneous

attempt to promote economic competitiveness, social cohesion and sustainable development (Dühr et al. 2010; Faludi 2010; Haughton et al. 2010). Here, social cohesion is often linked to the notion of balanced development. Spatial development is thus largely about balancing inequalities, and working towards "areas that function well economically, socially and environmentally" (Haughton et al. 2010: 26). It is argued, that supporting social and environmental sustainability in the long run also enhances economic competitiveness by avoiding the negative effects of concentration and by putting the potentials of every region into more effective use (Dühr et al. 2010). The viewpoint of cohesion in general addresses the 'fair' and 'equal' territorial distribution of income and employment. The perspective of competitiveness, instead, focuses on economic performance highlighting territorial strengths and potentials (Waterhout et al. 2005, for the discourse of competitiveness, see Bristow 2005). In balancing development, spatial development works together with regional policy to secure more equal living and working possibilities irrespective of physical location (CEC 2004: 27).

As the simultaneous pursuit of competitiveness and cohesion has been seen as the strength of the new spatial development, it is at the same time its major weakness. The objectives of competitiveness and cohesion sometimes work against each other (Jensen 2002; Davoudi 2003; Jensen & Richardson 2004; Schön 2005; Dühr et al. 2010), and simultaneously aiming at both can erode both of their effectiveness. Many authors have recently argued that this rhetorical pursuit of competitiveness and cohesion can even lead to widening disparities, if economic competitiveness is pursued under the flag of social and environmental sustainability (e.g. Haughton et al. 2008; Allmendinger & Haughton 2010). From this perspective, these objectives should be kept separate to be able to follow their realization.

Another key characteristic of the new spatial development is the attempt to coordinate the territorial impacts of diverse sector policies and cooperation networks (Faludi 2002a). According to Nadin (2002: 130):

> "in European planning discourse there is a sense of the need for a spatial planning approach that transcends sectoral divisions, one that should act as an umbrella of policy as a territorially based strategy shared by each sector. This sense has grown in response to criticism of the poor coordination of the sectoral activities of the EC (although this might apply equally in many member states)."

In fact, the new spatial development has to do with the comprehensive 'governance of governance', or 'metagovernance', and a need to give the development a new integrated framework that surpasses the previous territorial, sectoral and scalar limits to cooperation (Jessop 2003; Allmendinger & Haughton 2007, 2009, 2010; Haveri et al. 2009; Kooiman & Jentoft 2009; Sorensen & Torfing 2009; Vigar 2009; Faludi 2010; Moilanen 2012). To some, this indicates an increasing policy importance of spatial development in the future (Faludi 2010).

Allmendinger and Haughton (2009, 2010; Haughton et al. 2010, also Deas & Lord 2006; Faludi 2010) have recently referred to this comprehensive development approach with notions of soft spaces and fuzzy boundaries. Soft spaces have risen as new planning spaces and metagovernance arrangements to reflect the contemporary planning challenges and potentials, and to fill in the gaps between different statutory approaches

in the formal planning system. These new soft spaces can be informal and build on bottom-up arising functionality related for example to economic development networks, or they can be top-down imposed, thus realizing more formal agenda. Examples of these more formal spaces are diverse metaregional governance arrangements such as development zones that unite multiple traditional administrative regions under new strategic cooperation framework. The new soft spaces reflect the new understandings of possibilities related to spatial planning:

> *"by operating outside the formal regulatory 'hard spaces' of planning that align to electoral boundaries, sometimes a level of creativity is unleashed and new possibilities for consensus building emerge in ways that do not necessarily exist through the formal planning system"* (Haughton et al. 2010: x).

Here, fuzzy boundaries help "to enable flexible policy responses or to mask politically sensitive proposals" in situations where some actors are in more favorable positions than others (Allmendinger & Haughton 2010: 812).

Overall, the new spatial development appears as intriguing hybrid intertwining traditional 'government' and new-style 'governance' practices and theories about spatial governing and organization of diverse activities (Allmendinger & Haughton 2009; Haughton et al. 2010). Soft spaces and fuzzy boundaries reflect the history of the European spatial development that has always moved forward through new concepts and ideas, developed usually by the internal and external experts (Martin & Robert 2002). These ideas "are essentially important in a multinational context where each planning culture uses its own concepts, which often are colored by specific national or institutional characteristics and are therefore mutually incompatible" (2002: 57). Common concepts are vital in creating future-oriented international cooperation and communication across national, sectoral and scalar boundaries. After all, the new spatial development is more than anything working with a set of discursive tools which then have to be put to practice in a certain territorial context (Jensen 2002). An important aspect in any meaningful planning concept is that it "gives insight into the way the spatial structure of a certain area should develop" (Zonneveld 1989: 40).

Abstract spatial metaphors, however, constitute also a major challenge for the new spatial development. As regional analysis in general, spatial development is characterized by fuzzy concepts that lack clarity and that are thus difficult to operationalize (Madanipour et al. 2001; Markusen 2003). This has been clearly reflected in problems of producing maps related to new spatial development (Faludi 2002a; Nadin 2002; Zonneveld & Waterhout 2005; Dühr et al. 2010). The use of vague concepts allows multiple interpretations, but maps, instead, demand a high degree of consensus. The European spatial development perspective (ESDP) is a good example: it contains no policy maps (Faludi & Waterhout 2002). At best, strong metaphors, either verbal or visual, can be very powerful in representing the rising issues and challenges related to spatial development, and they can function as a bridge between different planning cultures in an international planning arena (Dühr 2007). At worst, however, they create a wide gap between visions and practice as their connection to physical reality is not clearly visible. In addition, they can be used as a tool for manipulation (2007: 1): "the decision on what should be 'put on the map', and how it is going to be presented, opens up a great potential to shape discourse, to empower some parts of the public or

the territory, and to disadvantage others".

In addition to the challenge related to the creation of deliverable policies and spatial visions, there are many limitations to planning on state or international scale, and thus the whole idea of spatial planning has also long been questioned (Dühr et al. 2010). Critiques towards European dimension of planning often have to do with the issue of competence, since states have the primary authority to act within their territory (Faludi 2010). According to Dühr et al. (2010: 10), one central question is:

> "is it possible for planning to define and act in the common or public interest? The reality even at the local level is of many competing interests, and experience demonstrates how powerful interests are well represented in planning decisions, not least in the tendency for government to prioritise economic and business interests."

At the wider geographical scales, planning is almost inevitably a work done by the selected few, and it is questionable whether these views represent those of the wider public.

In fact, one of the biggest challenges spatial planning has to face has to do with its legitimacy. At the European level, the EU has no direct competence in the field of spatial planning. Indirectly, however, it has a major effect on spatial development through other policy areas such as regional development, transportation, agriculture, and economic competition where it has competence (Williams 1996; Dühr et al. 2010). In addition, there is the challenge of democracy. As spatial planning at international and national levels is increasingly dependent on expertise, this has led to the situation, where "politics and planning explode out of representative organizations (e.g. national parliaments) and implode into semipublic and closed institutional settings outside the realm of democratic control" (Jensen 2002: 112; Markusen 2003). The focus on 'evidence-based' justification of certain policy choices has been also made at the expense of more transparent discussion of perhaps more innovative options (Gualini 2008). In addition, the literature on the rescaling of governance has highlighted the conflicting, rather than complementary, relationships between diverse scales and spatio-temporal fixes (Brenner 2003), which points out the challenges in implementing fuzzy spatial visions at lower scales of development.

Whether the EU has been successful in balancing development across territories is also much debated, as well as its means to measure the realization of polycentricity through the European Spatial Observatory Network (ESPON) (Vandermotten et al. 2008). Based on different evaluations, the common viewpoint is that the development between the member states of the EU is more balanced, but the member states themselves are getting more polarized (e.g. Giannetti 2002; Geppert & Stephan 2008). In the ESPON 2013 synthesis report (ESPON 2010: 55) it is stated that "demographic change and especially migration trends will foster territorial imbalances and polarizations between the richer and poorer areas. More prosperous cities and regions need to anticipate further in-migration".

Arising from the role of spatial planning in the current policy sphere, Faludi (2010: 6) highlights the future role of planning at the European level:

> "as the formulation of strategies or visions, European spatial planning needs to be soft, as the spaces are to which it relates. Hard planning for hard spaces

> *should be left to national and subnational governments and/or sector policy makers who have the means and authority to do so. European spatial planning cannot do any more than formulate strategies, offering them to others to avail themselves of as they see fit. Spatial planning at this level can never do more than formulating a discourse – a program – letting others get on with identifying whatever action may flow from it."*

Hence the spatial planning at the European scale has to do before anything with envisioning, and this should be kept in mind when judging its efficiency (Nadin 2002; Chapman et al. 2003). These visions can be powerful in starting a political discussion about the future spatial structure (Waterhout et al. 2005; Zonneveld & Waterhout 2005), and then ultimately, also new spatial practices (Jensen & Richardson 2004). Faludi (2002b: 196, also 2010) also links the discussions of the role of European spatial planning to the processes of European integration: "people should look at the EU as if it were an emergent state, and consequently view European spatial planning as potentially a form of super-planning on behalf of this new formation".

2.2. Spatial development policies and strategies in the European Union

In this chapter key spatial development policies and strategies in the EU are briefly analyzed, because as already mentioned in the introduction, an assumption has been made in this research based on previous studies that EU policies have had an effect on spatial planning strategies and practices in the member states, and thus also in Finland (e.g. Böhme 2002; Jensen & Richardson 2004; Antikainen & Vartiainen 2005; Bachtler & Polverari 2007; Böhme & Waterhout 2008; Moisio 2008; Eskelinen & Fritsch 2009). Therefore, it is important to shed light on the key objectives of these strategies that aim at guiding spatial development for the member states. In this chapter, the emphasis is on the key documents and strategies that have shaped the formation of the European spatial planning from the early 1990s, after its actual turning, under the influence of the EU, towards politically oriented action (Martin & Robert 2002, see also Dühr et al. 2010). Particularly the ESDP and the objective of territorial cohesion are discussed because of their structuring impact on European spatial development (Waterhout 2007, 2008). Spatial visions, instead, in this context dealing particularly with regional development zones in Finland, are later discussed as tools to implement the ideas of these important strategies to specific national and subnational contexts (cf. Zonneveld & Waterhout 2005: 15).

The European spatial planning approach was clearly recommended in the *European Spatial Development Perspective* (ESDP), which was published in 1999 as a result of many years work of intergovernmental voluntary cooperation and bargaining (see Faludi 2002a, 2007a; Faludi & Waterhout 2002; Jensen & Richardson 2004; Janin Rivolin & Faludi 2005). As is stands, the ESDP is thus a compromised viewpoint of the then 15 member states (Faludi & Waterhout 2002). In the introduction (CEC 1999), it is stated that:

> *"the ESDP is a suitable policy framework for the sectoral policies of the Community and the Member States that have spatial impacts, as well as for*

> *regional and local authorities, aimed as it is at achieving a balanced and sustainable development of the European territory…It will serve as a policy framework for the Member States, their regions and local authorities and the European Commission in their own respective spheres of responsibility."*

Hence, the ESDP was formulated to guide the development of diverse sectors with spatial impacts in the member states. The document clearly proposes the member states to reflect and take into account the guidelines of the ESDP (CEC 1999: 44–45):

> *"It is proposed that the Member States now take into account the policy aims and options of the ESDP in their national spatial planning systems in the way they see fit and inform the public of their experiences gained from European co-operation in spatial development…It is proposed that Member States also take into consideration the European dimension of spatial development in adjusting national spatial development policies, plans and reports."*

The main goals of the ESDP are to develop a balanced and polycentric urban system and a new urban-rural partnership; secure parity of access to infrastructure and knowledge, and; achieve sustainable development, prudent management and protection of nature and cultural heritage (CEC 1999). Behind the underlying objectives, there exists a key idea "that cities and regions in Europe are increasingly interdependent" (Doucet 2002: 59). Importance of the document is both on territorial and sectoral integration, linking it to the discussions of new spatial development in metagoverning spatial development (Haughton et al. 2010: 50, also Allmendinger & Haughton 2007, 2009, 2010; Vigar 2009; Faludi 2010).

However, the implementation of the ESDP is challenging because it is not a legally binding agreement. Its application remains mostly on voluntary grounds, and therefore, even though its guidelines have to be taken into account for example in some EU community initiatives, it has been critiqued to be ultimately a weak document (Faludi et al. 2000: 130). As Faludi and Waterhout (2002) clearly express, the ESDP is not a 'masterplan' designed and implemented by Brussels. Instead, the ESDP is more informal compromise between different traditions of spatial planning in various European countries (Janin Rivolin & Faludi 2005) and between these countries and the Commission (Schön 2005: 389). Accordingly, Zonneveld (2007: 206) has noted that:

> *the European Spatial Development Perspective, although thought to be a milestone on a road that ultimately could lead to some sort of territorial governance within the European Union, could hardly be called a vision. Apart from the concept of polycentricity, which in itself can be interpreted in many ways, the ESDP does not give a vision of Europe's territorial structure. Key players in the ESDP process equated vision with a master plan, and so the route to articulating spatial concepts, let alone maps, was not taken."*

Critiques against the ESDP have also noted that the document creates an illusion of balanced development. Although there is seemingly a balance between economic competitiveness, social cohesion and sustainable development, the dominance of economic competitiveness is still evident (Davoudi 1999), and this might lead to increased polarization (Copus 2001).

In any case, majority still think of the ESDP as a key achievement in the process of creating a common ground for European spatial development and enhancing inter-Eu-

ropean spatial development policies and practices. Among these goals are cross-border development, territorial structure based on interactive and linked urban centers (poly-centrism) and trans-European networks tying European regions together. The effects of the ESDP on national and regional planning practices have in fact been widely studied, and the "in-depth research consistently reveals learning effects" (Faludi 2010: 138, also 2008). Instead of looking at mere indicators, which are difficult to measure or even point out, the success of the document has to be reviewed through its ability to shape the spatial imaginaries of social agents (Faludi 2001).

Soon after the appearance of the ESDP, the European Commission turned its attention to territorial cohesion with the support of member states, Commission's aim being to contribute to the Lisbon Strategy that aims to make the EU the most competitive and dynamic knowledge-based economy in the world (Faludi 2007a; Dühr et al. 2010). In the Leipzig informal ministerial conference in 2007, the ministers responsible for spatial development in the European Union member states agreed on the policy document *Territorial Agenda of the European Union*. The document clearly expressed the need to strengthen territorial cohesion in the EU (Territorial Agenda… 2007). The Territorial Agenda can be seen as a continuum from the ESDP as it is built upon the latter's main objectives (2007: 3). As Faludi (2006: 13) expresses, the ESDP agenda has been modified "under the flag of territorial cohesion", and since the mid-2000s, the coordination of spatial impacts of sector policies has been put forward under the discourse of territorial cohesion (Faludi 2007a, 2007b).

According to Dühr et al. (2010), one of the reasons behind this turning away from the concept of planning towards territorial cohesion has been to move away from narrow conceptions of spatial planning as land use, and also to loosen the burden of central-led planning practiced under socialism. The objectives of economic, social and territorial cohesion fit better to the working methods of the EU instead of using planning as means to get to some end. Accordingly, it has been recently discussed whether there has been a change in discourse from spatial planning to territorial cohesion in the EU (e.g. Dühr et al. 2010; Faludi 2010). In any case, spatial planning and territorial cohesion resemble one another in their simultaneous attempt to pursue economic competitiveness, balanced development, environmental sustainability, and good governance (Faludi 2010; Janin Rivolin 2010). In addition, member states have actively attached the objective of territorial cohesion to their spatial planning practices (Dühr et al. 2010).

An important aspect both in the ESDP and the Territorial Agenda is that they emphasize bottom-up development and cooperation (Faludi 2010). This is supported also by the Barca report emphasizing the role of place-based development (Barca 2009). The report is aimed at helping the necessary reforms of the European cohesion policies, and it supports the mobilization of the place-based development policy (2009: VII):

> *"a place-based policy is a long-term strategy aimed at tackling persistent underutilization of potential and reducing persistent social exclusion in specific places through external interventions and multilevel governance. It promotes the supply of integrated goods and services tailored to contexts, and it triggers institutional changes…In a place-based policy, public interventions rely on local knowledge and are verifiable and submitted to scrutiny, while linkages among places are taken into account."*

In the place-based approach, the active role of local actors is crucial for the successful implementation of spatial policies.

Overall, there has been much discussion about the meaning of territorial cohesion (e.g. Schön 2005; Zonneveld & Waterhout 2005; Faludi 2006, 2010; Gualini 2008; Luukkonen & Moilanen 2012), but it is most commonly attached to the aspirational notion of balanced development aimed at balancing the often concentrative effects of the free market economy: "territorial cohesion can be translated into policies for sustaining the polycentric system of towns and cities in Europe" (Faludi 2002b: 207; Bialasiewicz et al. 2005; Waterhout 2007). In the Territorial Agenda, territorial cohesion means focusing on development opportunities to encourage cooperation and networking, bringing coherence and coordination between regional and sectoral policies, paying attention to the strengths of individual areas and targeting policy instruments more effectively (Faludi 2006). As stated in the third Cohesion Report (CEC 2004: 27), "people should not be disadvantaged by where they happen to live or work in the Union". Thus, "territorial cohesion is about a just distribution of opportunities in space", and unlocking dormant place-based potential and path-dependent territorial capital related to regions' special social and physical characteristics (Faludi 2007a: 568, also Zonneveld & Waterhout 2005). This, instead, connects territorial cohesion closely to the concept of polycentric development (Schön 2005; Meijers et al. 2007), which is discussed more in the next chapter.

In its general significance, cohesion has always, before anything, referred to the objective of regional convergence measured in GDP (gross domestic product), first within the EU15 and later within the enlarged EU (Faludi 2010). According to Communication report on cohesion policy (CEC 2005: 30), however, territorial cohesion "extends beyond the notion of economic and social cohesion, its objective being to help achieving a more balanced development, to build sustainable communities in urban and rural areas and to seek greater consistency with other sectoral policies which have a spatial impact". Functioning thus as an umbrella for development, the territorial cohesion also pursues 'good' and inclusive territorial governance (Faludi 2007a, 2010). Recently, Faludi (2010: 170) has given a comprehensive definition to territorial cohesion, highlighting the meaning of territorial governance. Here, territorial cohesion refers to:

> *"a situation whereby policies to reduce disparities, enhance competitiveness and promote sustainability acquire added value by forming coherent packages, taking account of where they take effect, the specific opportunities and constraints there, now and in the future. Territorial cohesion policy refers to measures promoting good territorial governance with the aim of achieving coherence."*

However, this comprehensive and all-embracing approach to territorial cohesion contains challenges related to policy integration and multilevel governance that have not been sufficiently catered for in the preparation or implementation of spatial policies. The good territorial governance in new comprehensive development frameworks that surpass the traditional administrative territories is often hindered by the territorial realities of the nationally determined administrative units and their functions (Allmendinger & Haughton 2010; Luukkonen & Moilanen 2012). This is addressed in the revised version of the Territorial Agenda, TA 2020, where it is stated that "European Territorial Cooperation should be better embedded within national, regional and local

development strategies" (Territorial Agenda... 2011: 8). The emphasis of the document is thus on *integrated* development, referring to policy integration of diverse sectors with territorial impacts, integration of rural and urban areas to functional cooperation, multilevel governance and vertical and horizontal coordination, and overall, to cooperation and networking. In addition, the document emphasizes the need for concrete action and the need to develop indicators and monitoring and evaluation practices for territorial cohesion.

The background document for the Territorial Agenda (The Territorial State… 2011) discusses these issues by suggesting that actors from local, regional and national planning levels integrate the objectives of the revised Territorial Agenda into their strategies and action plans. The integrated development approach should be eased with tools such as territorial impact assessment that would deepen the understanding of sector policies' territorial impacts and "encouraging the preparation of integrated place-based programs and projects which integrate sectors and funds in a given territory" (2011: 86, see also Faludi & Peyrony 2011). It is highlighted that "land use oriented physical planning, strategic regional planning and relevant sector policies do need to be integrated, but to do this requires institutions and methods" (2011: 87).

Altogether, the vague meaning of territorial cohesion has been one of the major reasons for its critique; there is no common understanding, or agreement, of its meaning (e.g. Faludi 2006). This imposes obvious challenges for implementation. Despite grand visions, territorial cohesion policy is still very much in the making. Following from this, as in the case of the ESDP, territorial cohesion does not have a legal binding status in the spatial development plans of the European Union member states. In addition, there has been a lack of discussion about the division of labor between territorial and spatial policies (Schön 2005; Faludi 2009; Luukkonen & Moilanen 2012), tension between the objectives of economic competitiveness and solidarity (Polverari & Bachtler 2005; Davoudi 2007), and scale on which territorial cohesion will most successfully be implemented (Robert 2007: 34). The definitions of territorial cohesion policy still lean on traditional administrative territories, whereas there should also be new ways of governing the new spaces of spatial development (Luukkonen & Moilanen 2012).

Against the critiques concerning vagueness, however, Faludi (2007a: 580) has discussed territorial cohesion as a tool to concretize the abstract European model of society:

> *"to conceptualize spatial structure is essential for territorial cohesion policy.*
> *Disregarding, as it does, the concrete shape of the territory to which it applies,*
> *the European model as such is more abstract. Territorial cohesion policy is one*
> *of the ways of rendering it more concrete."*

This concretizing, however, cannot happen without active agency, clear responsibilities, and ownership from the local level (also outside the actual planning profession), and without transparent communication of policy outcomes (Nadin 2002; Allmendinger & Haughton 2009). So far, true bottom-up development has been limitedly considered and mostly considering agency as a rather simple participation by inhabitants and institutions (Jauhiainen & Moilanen 2011). As already discussed, due to the variety of actors and perspectives involved in the development, it is also questionable whether it is possible to achieve concensus about the concrete 'shape' of the European territory. At

the end, the effectiveness of discussed policies arises from the local level from efficient governance arrangements with clear and transparent responsibilities of development (Markusen 2003; Janin Rivolin & Faludi 2005; Gualini 2008; Barca 2009). Here, the background document of the TA 2020 encourages raising the sense of civic responsibility of citizens to increase their contribution to the development of local-regional communities (The Territorial State…2011: 88).

Overall, after the challenges in meeting the goals of the Lisbon Strategy, the new strategy for the 2010s in Europe, the Europe 2020, puts more strain on places and regions to achieve smart, sustainable and inclusive growth. It emphasizes knowledge and innovation, resource efficiency and environmental issues behind sustainable economic development (European Commission 2010a). European spatial development and the territorial cohesion policy are centrally intertwined with these goals through the place-based approach aimed at searching the 'dormant' innovation potential across the diversified European territory. The revised Territorial Agenda (Territorial Agenda... 2011, also CEC 2010) emphasizes this place-based territorial potential by linking territorial cohesion closely to the Europe 2020 strategy and place-based development approach, highlighting before anything the integrated approach on spatial development. Although some tools are proposed to further the integrated approach, still more emphasis has to be put on its concrete implementation. In fact, the supposed added value of territorial cohesion has so far had to do with quite an abstract level envisioning of 'harmonious' development of diverse territories and policy sectors, and the notion of territorial cohesion is justified with its integrative character (The Territorial State… 2011: 14). However, at some point concrete evidence about the efficiency of this approach has to be delivered, as well as practical tools to further the aspirational integration of territories and sectors have to be developed.

2.3. Polycentric spatial development

The concept of polycentrism was introduced in the ESDP to highlight the view of the balanced Europe, and to some, this indicated a move forward from the traditional core-periphery model of the European 'Pentagon' and its surrounding hinterlands (Waterhout 2002). The concept of polycentrism was proposed as one of the underlying concepts in organizing the European space. In addition, it has become a buzzword amongst spatial planners in Europe (Waterhout et al. 2005). The many angles of polycentric spatial development are discussed in this chapter as important factors influencing also the concrete implementation of RDZs in Finland. At the end of the chapter, peripherality is also briefly discussed in relation to polycentric development, as polycentrism as a spatial development framework has in many ways changed the meaning of peripherality in European spatial development.

Polycentrism has been usually reviewed from at least three different perspectives related on the one hand to the organization of settlement structure and economic activities and on the other hand to wider political discourses guiding the organization of spatial structure (Jauhiainen 2011, see e.g. Kloosterman & Musterd 2001; Davoudi 2003; Governa & Salone 2005; Meijers et al. 2007; Meijers 2008; Herrschel 2009). The first

perspective is morphological, related to the intra- and inter-regional organization of spatial structure. The second is the functional perspective emphasizing interaction of actors and regions, their specialization and division of labor, and organization of diverse activities in the spatial structure in relation to one another, including the urban-rural interaction. The third perspective, instead, highlights the politics behind the organization of spatial structure and its functionality.

Although notions of polycentricity can be traced back to the early 1900s, "its conceptualization at inter-urban level is still at early stages of development" (Davoudi 2003: 994). According to Faludi and Waterhout (2002, also Dühr et al. 2010), the origin of polycentrism as a normative spatial development concept related to reducing economic and social disparities dates back to the late 1980s, when also the foundations of the European model of society were created in the seeking of "a balance between the interests of the market, the state and society to ensure that economic growth is combined with social cohesion in a mixed economy with high levels of social welfare and protection from inequality" (see Dühr et al. 2010: 197).

In the ESDP, in 1999, the notion of polycentric Europe was presented as a new way to organize objects in the European territory (Copus 2001; Waterhout 2002; Davoudi 2003; Governa & Salone 2005; Vandermotten et al. 2008; Dühr et al. 2010; Faludi 2010). Polycentrism arose to the center of the ESDP from the concern that the EU has only one globally competitive economic area, the Pentagon, whereas in the USA, there are several economically vital integration zones. This was considered a problem for European competitiveness (CEC 1999). Therefore, at the level of metaphors, there should be a move from 'Blue Banana' towards the 'Bunch of Grapes' kind of Europe that represents a more diversified view of the European territory (Fig. 2, for specific phases in the development of the concept of polycentrism, see Waterhout 2002; Faludi 2010).
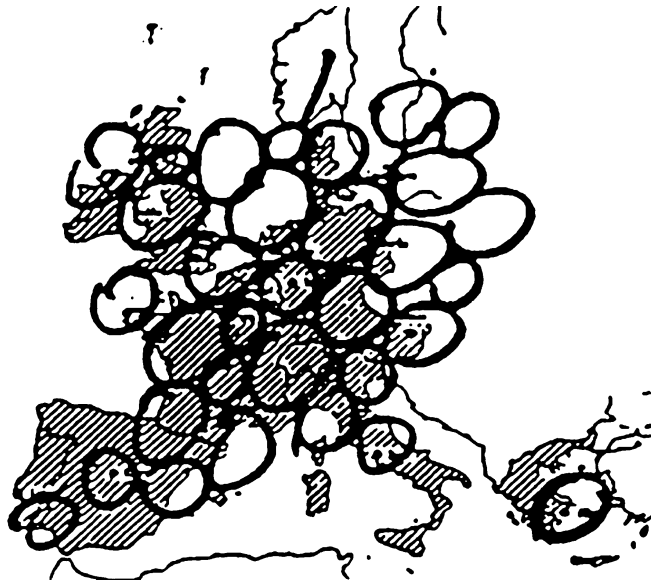

Fig. 2. The Bunch of Grapes (Kunzmann & Wegener 1991).

A polycentric development of the EU territory is presented as one of the key guide-lines in the ESDP, and "development of a polycentric and balanced urban system and strengthening of the partnership between urban and rural areas" is highlighted (CEC 1999: 19). Accordingly, "this involves overcoming the outdated dualism between city and countryside". Overall, the idea of the polycentric Europe in the ESDP is presented as follows (CEC 1999: 20–21):

> *"Previous policy measures affecting spatial development were primarily con-cerned with improving the links between the periphery and the core area through projects in the field of infrastructure. However, a policy is now re-quired to offer a new perspective for the peripheral areas through a more poly-centric arrangement of the EU territory. The creation of several dynamic zones of global economic integration, well distributed throughout the EU territory and comprising a network of internationally accessible metropolitan regions and their linked hinterland (towns, cities and rural areas of varying sizes), will play a key role in improving spatial balance in Europe. Global and high quality services have also to be taken more into consideration in metropolitan regions and cities outside the core area of the EU."*
>
> *"A spatial development perspective restricted to a polycentric development of individual metropolitan regions is not in line with the tradition of main-taining the urban and rural diversity of the EU. For this reason a polycentric settlement structure across the whole territory of the EU with a graduated city-ranking must be the goal. This is an essential prerequisite for the balanced and sustainable development of local entities and regions and for developing the real locational advantage of the EU vis-à-vis other large economic regions in the world."*

In these quotations, polycentrism is thus centrally linked to balancing development within the EU territory, directing the attention to cities and towns of diverse sizes out-side the main metropolitan cores of Europe. Instead of highlighting the traditional policy means of improving the peripheral areas' accessibility to the cores by strenghten-ing physical infrastructures, more attention is directed to the balanced development through networking and intergration of diverse sized urban and rural areas. The crea-tion of several economic integration zones is seen as a means towards more balanced development. Nevertheless, as already discussed, the document left the location of these integration zones open (e.g. Zonneveld 2007). However, as these globally integrated and internationally accessible zones are highly dependent on the infrastructure invest-ments, the EU transportation policy is likely to have a strong role in determining the locations of these zones in practice. Related to this, it has been debated whether the infrastructure investments of this policy sector have balanced, or in fact further concen-trated development along these important connecting routes (Trip 2003; Trip & Zon-neveld 2003; Jensen & Richardson 2004). In sum, the link between economic integra-tion zones and balanced development in the ESDP is unclear as is the link between polycentrism and balance in general. At the end, the notion of balance is always related to the scale in which it is reviewed.

In any case, the promotion of 'balanced competitiveness', as expressed in the ESDP, is the underlying objective of the document, and the concept of polycentrism was in

fact introduced as a compromise to bridge the conflicting views concerning competitiveness and cohesion (Krätke 2001; Waterhout et al. 2005; Johansson et al. 2009; Dühr et al. 2010, see also Moilanen 2009). Bridging concepts are needed to reconcile differences, and despite of the ambiguous nature of the concept of polycentrism, it has been useful as a mental frame in portraying the territorial organization of the European space. It has also provoked a 'positive' image of the purposes of spatial development (Davoudi 2003); "its prime function is to keep member states in the process, while providing an instrument for reaching the situation described by the Bunch of Grapes" (Waterhout 2002: 102).

As a result of the compromise between competitiveness and cohesion, however, the concept has been determined vague (e.g. Waterhout 2002; Davoudi 2003; Jensen & Richardson 2004; Vandermotten et al. 2008). "Polycentrism means different things to different people" (Davoudi 2003: 979), and despite its wide use, there is no clear definition of its meaning (also Waterhout et al. 2005; Meijers et al. 2007; Vandermotten et al. 2008; Eskelinen & Fritsch 2009). The problem partly is that "polycentric spatial development is used as both a policy objective (i.e. what is to be achieved) and a policy tool (i.e. how to achieve it)" (Davoudi 1999: 368). When applied in different scales, the notion of polycentrism means totally different things (Davoudi 2003). In the European scale, polycentrism can refer for example to largest urban areas in each member states. From the national point of view, however, this appears more like monocentric view on development, thus causing a potential for conflict (Meijers et al. 2007). In an intraurban scale, the concept, instead, refers to multiple centers in one area. Therefore, at the local and regional level, the concept of polycentrism is mostly used as an analytical tool of regional development, whereas at national and EU level, it is also an expression of a normative agenda about the ideal organization of spatial structure (Davoudi 2003).

At the regional level, urban networks are promoted, because they are unambiguously seen "to create more critical mass by fostering cooperation between two or more cities located relatively close to each other and regarding them as a coherent functional entity" (Waterhout et al. 2005: 167). Important to note here is the division of labor between the nodes in a polycentric area. One of the key principles behind polycentrism is in fact complementarity, aiming at increasing cooperation and specialization between cities and regions instead of increasing competition for resources (CEC 1999; Waterhout 2002; Pike et al. 2006). The territorial assets of one area should thus be complementary to those of another, and in this light, then, polycentrism is very much about being able to create certain division of labor in a polycentric area in question. However, as Davoudi (2003: 993) notes, "there seems to be an over-reliance on the role of spatial and physical planning in the development of functional interrelationships". Rather, they should arise from local initiatives. However, spatial development still has an important role to play in facilitating networking, and this, rather than determining the cooperation areas *per se*, should be its important objective (Faludi 2010). In creating a new functional area based on polycentrism, the area should be thought of as a whole, as a new 'soft space' with a certain division of labor between areas involved. This is discussed later in the context of governing spatial development.

Furthermore, Davoudi (2003: 995, see also Meijers 2008; Vandermotten et al. 2008) highlights the naive use of the concept of polycentrism as an advocator of a win-win

situation between policies pursuing competitiveness and cohesion: "in the absence of theoretical vigor and empirical evidence, it would be misleading to promote the development of PUR [polycentric urban region] (understood as a specific model of spatial structure rather than a political agenda for collaboration) as a panacea to economic competitiveness". There might also exist "an illusion of 'balanced development' at a broad brush scale" (Copus 2001: 548; Herrschel 2009). Overall, there is a clear "lack of understanding of how competitiveness, on the one hand, and cohesion, on the other, relate to each other in practice" (Waterhout et al. 2005: 171). Only in a few countries an explicit political choice has been made concerning what cities eventually belong to the sphere of polycentric spatial structure. In addition, polycentrism is related to a much discussed gap between theory and practice, which is present in the key issues of the European spatial development (e.g. Davoudi 2009). It has not been clear what policies have to be used to reach the polycentric spatial structure in Europe (Governa & Salone 2005; Waterhout et al. 2005), and how polycentrism takes into account geographical and socioeconomic particularities around the EU. Different spatial structures and path dependent trajectories in different countries impose very different possibilities on the feasibility of polycentrism. Here, the making of spatial visions and strategies is seen as an important means to clarify the concept as it is applied to concrete territorial settings.

2.3.1. Polycentrism and peripherality

The construction of peripherality has long been strongly related to the traditional core-periphery conceptualization in regional and spatial development visions and practices in Europe (Dühr et al. 2010). Traditionally, periphery has been defined in relation to core, such as the 'Blue Banana' (Brunet 1989), reaching from London to the northern Italy, and representing the 'heart of Europe'. Over time, cores and peripheries have shifted, but the meaning has stayed somewhat the same. In the ESDP, 'the Pentagon' defined by London, Paris, Milan, Munich and Hamburg represented the core of Europe.

According to Dühr et al. (2010: 61, also Governa & Salone 2005), however, there has been a change in the policy debate concerning European space "towards a more diversified perspective on European territorial development". There is no explicit definition of core anymore in the cohesion policy reports. The emphasis has shifted, instead, on the urban areas more generally, and their diverse coalitions. In the 1990s, the 'Europe of regions' discourse emphasized the potentials of every region, and highlighted the importance of diversified spatial structure. The 'European bunch of grapes' vision emerged to present a clear normative statement about the polycentric structure of multiple competitive urban cores (Dühr et al. 2010). Due to this development, the peripherality of border areas has changed in many countries because of the growing emphasis on cross-border cooperation and zone-based development along major infrastructure routes. Here, new peripheral areas are suddenly those that are not situated along or near these routes. The new zones bring economic potential to traditionally peripheral areas, but at the same time create new peripheries around them.

Overall, the change in discussions towards more polycentric organization of the Eu-

ropean territory has blurred the meaning of periphery, since the cores are suddenly many, and they are seen to be spreading their vitality to the areas around them. In the visual representations, there are now only centers and their spheres of influence. When it comes to the traditional cartographic representation of core and periphery, the message was still quite clear as the core was clearly separated from the periphery with diverse cartographic forms and styles (see Dühr 2007). The situation has, however, changed as the periphery is now left for every individual to define. As Dühr (2007: 124) highlights, "there is a structural distortion in favor of urban areas, infrastructure and designations (for example for environmental protection or economic development). Rural areas for example tend to be underrepresented in the visualization of spatial policy". Currently, the debate on polycentrism is interested in larger centers and focused on the well-developed areas of Europe, although as much as 72 per cent of inhabitants in the EU in 2007 lived in towns and villages with less than 100,000 inhabitants (Council of European… 2007).

Regarding previous discussions concerning polycentrism, Waterhout et al. (2005: 171) discuss the fact that only a few countries have had the political courage to determine the 'winners' from the spatial structure. In many countries, instead:

> *"there is a tendency to elaborate the principle of polycentricity in such a way that all sorts of smaller urban centers and regions are seen as playing an important role in bringing about polycentric development of the national territory. Of course this may be true, but sharing the budget between 100 cities with low or average potential or then with high potential makes a difference. The question is: how and under what circumstances can a policy make a significant contribution or, in other words, cause a significant change?"*

Vandermotten et al. (2008: 1216) also discuss the polycentric European project in the light of peripheral areas, as polycentrism, to them, seems not to be delivering its supposed outcomes:

> *"the main thing is thus perhaps not so much the content of the policy than the possible partnership that might come out of it. This is perhaps the reason why polycentrism is so rarely questioned, insofar as it keeps the advocates of the two views of Europe's future satisfied, while pretending to give pledges to the peripheral areas with a political weight".*

Ideally, then, polycentrism is seen as a method to intertwine centers and their hinterlands, conceptualize and communicate competing strategies and prepare development options. It supports the spreading of economic growth potential to secondary cities and regions to avoid internal polarization (Schön 2005: 394). Here, "'virtual clustering' could be used for combining the operations of actors which are far away from each other" (Böhme 1998: 81). What makes balanced development challenging is however that it is necessarily and closely tied to the ability of people to cooperate and act as a promoter of their own area. In fact, Davoudi (2009) discusses the often neutral and objective use of the balanced regional development in contemporary development practices, despite its highly political nature. Fuzzy representations have arisen as policy tools "in order to defuse the political and social tensions" (2009: 240). In reality, the larger urban areas are often more apt and able to establish cooperative relationships, due to their accumulation advantages and skilled labor (Haughton et al. 2010).

Waterhout (2002: 102) notes that, "because of the normative debate on cohesion and competitiveness, with polycentricity as the outcome, the ESDP also has an urban bias". While focus is on urban development, less attention is being paid to issues of sustainability and diversity. This city-centric thinking is also visible in issues related to growth and governance (Morgan 2007). As the new spaces of spatial development are often insufficiently mapped, and thus, the boundaries are fuzzy and difficult to identify, this is a challenge for areas that are not situated in or near these new territories. In the making of development strategies, the new 'soft spaces' are often easily approved, because they show only loosely defined spatial imaginaries, but in practice, these loosely bounded imaginaries can be used to pursue new urban-led growth strategies past the regulatory planning system (Allmendinger & Haughton 2009). Therefore, there exists a potential danger for widening regional disparities, instead of narrowing them with deliberately loose development instruments (Herrschel 2009). Cartographic representations do not only represent but may also reinforce the power structures in a society (Dühr et al. 2010).

Altogether, there has been discussion that the ESDP is still based on rather traditional understandings of peripherality in terms of geographic remoteness from the core (Davoudi 2003). In promoting networking between actors and regions, the focus of development should be on aspects of governance, since ultimately who are networked and how creates the basis for successful spatial development. "Challenged regions can develop into economically vital development areas. To a large degree the success of such convergences is related to governance structures capable of delivering results" (ESPON 2010: 55). If policy integration and governance are just left in the normative and rhetorical level, however, the democratic base and transparency of development can be easily questioned. As Allmendinger and Haughton (2009: 622) have stated, "integration inevitably opens up new networks and opportunities but is not infinite: it has to be created and established as a political process". In the context of zone-based development, this means creating institutional framework for collective action that encourages networks to emerge, which can, then, later lead to increased cooperation also in the field of physical planning.

3. Theoretical framework: changing territoriality in spatial development

The new spatial development is characterized by the notions of soft spaces and fuzzy boundaries, and is thus closely linked to the debate concerning relational and territorial space in human geography. Allmendinger and Haughton (2010: 813) describe the presence of territorial and relational space in spatial development as follows:

> "relational geographies have provided one of the theoretical foundations of spatial planning... Moreover, for all its attention to themes such as flows and nodes, spatial planning has to work within the realities and complexities of bounded space. Indeed, it is clear that there are multiple spaces and scales that planners must negotiate, some of which are more fixed and formal than others."

Therefore, it is important to understand both territorial and relational manifestations of spatiality.

In this chapter, spatial development is first discussed in relation to bounded and more relational understandings of space, followed by a focus on the changing territoriality and governing of spatial development. Although theoretical in focus, the reflection of contemporary EU policies related to spatial development and polycentrism cannot be avoided, since theory and policy are inseparably linked when it comes to organizing and imagining spatial development. The territorial and relational understandings of space are discussed as underlying factors behind spatial development, because these two different understandings have profound and direct consequences on the ways we understand, and do, spatial development (Massey 2005; Morgan 2007). The aim is thus to build a solid understanding of different human geographical understandings of space and the relations between territoriality and spatial development governing, since these understandings have a concrete effect on spatial development practices, and thus the implementation of RDZs in practice. And another way around, these practices have an effect on ways in which we as individuals understand space and act with and in it. Overall, the aim in this chapter is also to pinpoint the different logics of spatiality behind the notion of spatial development, and to identify the key aspects and challenges that relate to the usage of a certain policy terminology.

It is commonly recognized among human geographers (and increasingly also among social scientists) that geography – or *space* – matters, and that what is social needs inherently to be spatial, and vice versa (Massey 1984; Massey et al. 1999; Elden 2009). It has long been a key driver of geography as an academic discipline to understand space (Elden 2009; Kitchin 2009). According to Elden (2009), key philosophical questions about space in geography have concentrated on questions whether there is a thing called space outside our experience, and what are the relations between space and place,

and space and time. Space is in fact often understood as being one of a pair of terms (e.g. space and time, space and place), or a (spatial) process within space, instead of focusing on space itself (Harvey 2006; Kitchin 2009). Authors such as May and Thrift (2001) and Massey (2005) have discussed the inseparable nature of space and time: it is not just that time and space exist in four dimensional space-time, but that multiple coexistent and dialectic space-times are relational, complex, and even contradictory to each other (see May & Thrift 2001).

The notion of space in the philosophy of science has transformed from mathematical space towards mental and social understandings (Lefebvre 1991). For a long time, deriving from the works of theoretical physics and philosophy, space was implicitly seen as a container of all happenings. It was only in the 1970s in geography since the descriptive positivist-oriented 'spatial science' geography started to be increasingly questioned and the discipline started to open up towards cognitive and socially produced understandings, and relational ontologies of space (Kitchin 2009). Since then, space has been categorized and conceptualized through numberless standpoints (e.g. Lefebvre 1991; Murdock 1998; Harvey 2006; Smith 2008; Elden 2009; Kitchin 2009). Here, the notions of absolute, relative and relational space are shortly reviewed as they have important implications on how spatiality can be understood in the context of spatial development.

The division of space to absolute, relative and relational has been one of the most influential categorizations of space as it captures the different philosophical traditions of how space can be differently understood (Elden 2009). Harvey (1973: 13) describes the tripartite division as follows:

> *"if we regard space as absolute it becomes a "thing in itself" with an existence independent of matter. It then possesses a structure which we can use to pigeon-hole or individuate phenomena. The view of relative space proposes that it should be understood as a relationship between objects which exists only because objects exist and relate to each other. There is another sense in which space can be viewed as relative and I choose to call this relational space - space regarded in the manner of Leibniz, as being contained in objects in the sense that an object can be said to exist only insofar as it contains and represents within itself relationships to other objects".*

The *absolute* space is the often taken-for-granted view of space that derives from classical physics, treating space as fixed background where things exist and occur. "Space is simply a given universal of existence" (Smith 2008: 95). Importantly, the absolute space is often thought to exist independent from matter, which contrasts it with the relative and relational positions to space, where "spatial relations are actually relations between specific pieces of matter, and thus are purely relative to the movement, behavior, and composition of matter and material events" (2008: 95).

The division between relative and relational points of departure, instead, is that in the *relative* view, space "cannot be understood solely in relation to the single point, but only in relation to others around it" (Smith 2008: 95). It is thus context specific and depends on the relations of people or material objects. The development of a city, for example, has to be always considered in relation to the areas around it. In *relational* view, to develop the point further, space itself is a "product of interrelations, as con-

stituted by them" (Elden 2009: 265). In this light, spaces are continuously changing as they are created and recreated in the interactions of subjective individuals and their environments. Even though ideally these three different spaces should be reviewed interactively, usually "there is some hierarchy at work among them in the sense that relational space can embrace the relative and the absolute, relative space can embrace the absolute, but absolute space is just absolute and that is that" (Harvey 2006: 275–276). In the next chapter, the key human geographical debate between territorial and relational space is reviewed more in depth in the light of these categorizations as this debate importantly explains contemporary spatial development and its possibilities and challenges.

3.1. Territorial and/or relational space

Building on the previous discussions of absolute, relative and relational space, in human geography there are basically two different, but constantly and increasingly overlapping logics in organizing practices and objects in space, and in imagining the spatial form: territorial and relational. According to Elden (2009: 263), these two positions relate on the one hand to mathematical understanding of space, and on the other hand to more personally experienced conceptions of place in geography; "other ways of seeing this are attempts to mediate between the two positions". In fact, in the human geographical readings of space there has been an extensive debate going on for at least three decades between the territorial and relational views on spatial organization of human activities (Jessop et al. 2008).

The *territorial* perspective relates to the so called Euclidean understanding of space, where spatiality is contructed through different geometric forms building from points to lines (Law 1999: 6). In this kind of understanding, objects exist in two or three dimensional space, and space is often paralleled with the land and sea, and "space seems like a surface; continuous and given" (Massey 2005: 4). It is also strongly influenced by the positivist tradition, since space is seen as something that can be calculated and measured and something where physical proximity between objects plays a key role in determining space (Elden 2009). Time and social interactions are largely neglected (Dühr 2007).

According to Amin (2004), the mainstream geographer still conceptualizes cities and regions through the territorial frame. In human geography, the authors such as Storey (2001), Paasi (2003) and Delaney (2005) have seen space to be constructed through diverse spatial units such as regions and territories, which, according to Law (1999: 6, also Amin 2004; Harvey 2006), can be seen to be representing the Euclidean understanding of space: "here…the idea is that the world takes the form of a flat surface which may then be broken up into principalities of varying sizes. Regionalism, then, is a world of areas with its own topological rules about areal integrity and change". Furthermore, relative views of space to some geographers reflect seeing space through the lens of spatial science and geometry (although dependent of the standpoint of the observer), as strong emphasis is put on "a positional quality of a world of material things" (Elden 2009: 264–265).

Another perspective often associated with territorial logic is the notion of scale, which, instead of spatial boundedness, puts strong emphasis on the scalar and overlapping (and thus often hierarchical) nature of spatial relations (Amin 2002). In fact, territories are often seen to be in scalar hierarchic relation (usually top-down) to each other (Jonas 2006), and thus scales are often constituted in territorial terms. Although the scalar logic of nested hierarchies and the overall existence of scales have been recently much debated (see Marston et al. 2005; Sayre & Di Vittorio 2009), from 'pro-scale' perspective "scalar concepts are fundamental to the organization of human-geographical narrative" (Jonas 2006: 400, also Swyngedouw 1997). The abstract concept of scale – as constantly reconstituted social product (Marston 2000) – has for many functioned as an important tool to conceptualize the changing spatiality in local, regional, national and global levels, such as the changing state space (Brenner 1997, 2004).

The other perspective to spatiality, instead, is that of *relational*, reflecting the 'relational turn' in human geography. This is a space without territorial boundaries and scales (Amin 2002; Marston et al. 2005), and where the space itself is made in and through relations (Massey 2005). In this way of understanding, "there is no such thing as space or time outside of the processes that define them", and importantly, "processes do not occur in space but define their own spatial frame" (Harvey 2006: 273). Here, strong emphasis is put on globalization, spaces of flows, connectivity, interdependency, networks, and on different spatial arrangements that are no longer constrained by the scalar or territorial logic of space (e.g. Latour 1993; Castells 1996; Law 1999; Amin 2002, 2004; Thrift 2006; Adey 2010). Connectivity is seen more important than proximity (Dühr 2007). Altogether, the ideas of poststructuralist geographies emphasize space as becoming, and as open, dynamic and fluid (Doel 1999; Murdock 2006). For Massey (2005), relational space is the product of interrelations, always under construction and characterized by multiplicity in space. Spatial identity, often understood through place or nation, can be equally redefined in relational terms through networked spaces (also Murdock 2006).

Whereas the world through territorial lens is presented through territories and scales, or so called spatial fixes, the relational space is often characterized by more spatially loose metaphors (Kitchin 2009; Adey 2010). Terms like fluid, mobile, porous and fuzzy have been much used in the poststructuralist readings of space to describe its actively present and changing character (Urry 2007; Adey 2010). In Castells's globalized network society (1996), the space of places is replaced with the space of flows, indicating the deterritorialization of diverse governance practices. Here, individual action should be considered in relation to other actors in a network (Leitner et al. 2002), where the repetition of dealings holds networks together (Brown & Capdevila 1999: 37).

Importantly, relational space cannot be determined in relation to physical distance, as opposed to territorial space, because the notion of distance in these different spaces builds on different foundations, hence making them somewhat incommensurate. In fact, in relational space different webs of relations build on "'connected presence' where small gestures or signs of attention are significant in indicating that others are there but at a distance" (Urry 2007: 212). Overall, Elden (2009: 264, also Murdock 1998: 358) highlights that an important implication of relational space, and the 'connected presence' is that the notion of spatial proximity differs from the socially produced no-

tion of physical distance characterizing absolute and thus positivist views of space. This, instead, is clearly reflected in the challenges of cartographic representation in the new spatial development concerning for example the appropriate representation of functional relationships and and connectivity (see Dühr 2007).

The central argument around the relational metaphors is that the world cannot be described through diverse snapshot views such as territories, because the world is constantly changing. Massey (2005: 13) suggests to move away from thinking space in a representative form, and "to settle it among another set of ideas (heterogeneity; relationality; coevalness…liveliness indeed)". In this mode of thinking, the emphasis is more on *spatial practices* that do not easily fit into representative form; they are habitual and sometimes unconscious, and not always subject to rational thought based on administrative territories and statutory planning processes. Thrift and his colleagues have responded to this challenge of representation with the debated non-representational theory that urges the geographical research to go beyond representation (Thrift 2008). According to the non-representational viewpoints, "the visual and the representational have often come at the expense of issues of practice, performance and the more sensual experiences of movement" (Adey 2010: 173). In this light, the territorial lens is incapable of capturing the fluidity of the contemporary world. More attention should be paid on networked practices that are not subordinate to existing political divides.

Spatial practice, in fact, is the keyword behind the constantly evolving spatiality: "consciousness of space is a direct efflux of practical activity" (Smith 2008: 96). Therefore, it is the practice that needs to be paid attention also in the theoretical work (Thrift 2008; Jones & Murphy 2011). In determining the individual conception of space, here also it is the practice that defines the perspective to spatiality (Harvey 2006; Kitchin 2009). This, instead, turns the focus towards agency, which emerges from the complex relational practices (Murdock 2006). Agency, together with actors and participation, is discussed more in the latter chapters dealing with the governing of space through different forms of territoriality and practical development of RDZs.

The ultimate problem characterizing relational views of space has been the inability to turn the fluid space from the theoretical level into practice (for more extensive critique on relational thinking, see Jones 2009). This is especially evident in disciplines such as planning (Markusen 2003; Healey 2006a; Davoudi 2009). Almost unavoidably, the discussions will end up with some kind of territorial frame. In addition, Lefebvre (1991: 34) pays attention to this 'unavoidability' of the spatial form:

> *"from the point of view of knowing (connaissance), social space works (along with its concept) as a tool for the analysis of society. To accept this much is at once to eliminate the simplistic model of a one-to-one or 'punctual' correspondence between social actions and social locations, between spatial functions and spatial forms. Precisely because of its crudeness, however, this 'structural' schema continues to haunt our consciousness and knowledge (savoir)."*

Accordingly, pure relational thinking becomes problematic when put in the context of spatial development and practicing relational theories, as "measurement becomes more and more problematic the closer we move towards a world of relational space-time" (Harvey 2006: 274). In the contemporary regional development, territorial frameworks such as administrative units still act as important intermediaries in ena-

bling development (e.g. allocation of funding). Spatial development based on relational thinking should arise from a different logic of spatial development governing, but so far new territorial development frameworks have still mostly been governed through traditional and bounded administrative territories (Luukkonen & Moilanen 2012).

Leitner et al. (2002: 297–298) emphasize the interactive relations of new and traditional spaces in governing spatial development:

> *"The increasing importance of transnational networks in shaping contemporary life and governance does not result…in a deterritorialization of governance and politics – that is, it does not result in the replacement of the space of places with spaces of flows. Although the relational spaces of transnational networks transcend the boundaries of local, regional and national territories, territories remain important places of coordination and identification."*

In this view, even relational space cannot thus escape geography, since individuals also in relational space are ultimately tied to certain territorial realities.

Altogether, due to the challenges in capturing the essence of human spatiality in one single conceptual frame, there are multiple variations between territorial and relational perspectives about the socio-spatial organization of contemporary human activities. As already noted, the absolute, relative and relational spaces can, to some authors, coexist and it is the practice that defines the dominant spatial logic (Harvey 2006; Smith 2008). In this way, the networked elements of relational space can exist in a territorially bounded frame, and it is the practical activity that defines the roles of different spatialities. Thrift (2008: 98) highlights the importance of absolute space behind the relative understanding:

> *"it must be noted that these sensings would be impossible without the fine grid of calculation which enables them: they are not, as many writers would have it, in opposition to the grid of calculation but an outgrowth of the new capacities that it brings into existence. A carefully constructed absolute space begets this relative space."*

Furthermore, Jones (2009: 489) discusses this issue with the concept of phase space that "acknowledges the relational making of space but insists on the confined, connected, inertial, and always context-specific nature of existence and emergence". In sum, it is the coexistence of territorial and relational understandings that is important, which is discussed more in discussion in the light of regional development zones in Finland.

3.2. Territoriality in governing spatial development

In this chapter, summarizing the discussions in the original paper IV, territoriality is discussed as a framework for governing spatial development (see Jauhiainen & Moilanen 2011). Three types of territories are distinguished on the basis of their relations to different modes of governing spatial development. Territoriality as a framework for governing spatial development is thus reviewed in bounded, networked and fluid terms, reflecting the previous discussions about absolute, relative and relational space. Here, the ideas of relational space are, however, brought in the territorial context of spatial development.

Bounded territoriality refers to the governing of territory as an administrative region, characterized by public top-down hierarchical planning and well-defined planning and governmental authority. This absolute space is treated as a neutral container where uncomfortable power juxtaposition can be downplayed and planning can be executed as a technical process.

Networked territoriality, instead, relates to thematic networks where actors are engaged in cooperation related to common, usually economic development, interest (Leitner et al. 2002; Jauhiainen et al. 2007b). Here, geographical proximity is only of secondary importance to a small group of business oriented private and public developers (Healey 2006b). Altogether, the functionality of an area is strongly defined through its economic functions (Davoudi 2008), and the governing of spatial development is built narrowly around capitalist interests. Actors in the network develop a division of labor in relation to other actors in the network, in this sense resembling relative characteristics of space where the network can be understood only through the complementary relationships between actors in the network. In fact, according to Leitner et al. (2002: 291), an important difference between networks and bounded territories in the context of spatial development is that networks:

> "span space without covering it. Thus, they imply a different geography than that of the familiar political map that organizes and divides the world into non-overlapping, spatially contiguous territories. The boundaries of these new political spaces are not fixed but are fluid and continually changing as new members join or as old members leave a network, and as networks are themselves initiated and terminated. Finally, networks generally overlap and interpenetrate one another on the ground, with some cities belonging to many different networks."

Although bounded territories still exist in various administrative practices across Europe and provide the political legitimacy for development, and functionally networked territories are present in many regional development strategies and practices around the EU, the *fluid* territories are emerging as territorial expressions of relational space. Here, relational space is still rooted on territorial logic in organizing socio-spatial relations, but the functioning of the territory is crucially shaped by its internal and external connectivities. Therefore, a fluid territory consists of multiple relationships that hold things together while others make it more fluid (Law & Mol 2001). Overall, the functioning of these new territories is a complex outcome of balancing between endogenous and exogenous challenges and potentials, and between various interests. As new planning is a complex phenomenon, it requires complex understanding (Madanipour et al. 2001: 8): "static, single viewpoint is not enough to understand it".

The governing of fluid territories is about balancing between many simultaneously existing spaces, multiple interests and actors, temporal and scalar dimensions, and diverse vertical sectors of society (Hillier 2007). Governing is about building an "understanding and consensus around how to reconcile widely divergent views of what constitutes good design, sustainable development, 'the good society' and competitive economies" (Haughton et al. 2010: 3). Spatial development governing is thus closely related to comprehensive spatial development that builds on the integration of diverse policy sectors with spatial impacts, such as competitiveness and cohesion oriented and

environmental policies. In this light, fluid territories appear as comprehensive frameworks for spatial development governing. As the new spatial development is often about governing diverse simultaneously existing and hybrid governance processes and networks, the governing of fluid territory is about *metagovernance* in its focus in uniting scales, sectors and actors into new kind of cooperation (Jessop 2003; Goodwin 2009; Haveri et al. 2009). Governing is thus about framing rather than regulating the new spatial development (Faludi 2010: 1, see also de Vries 2003; Zonneveld 2007; Sorensen & Torfing 2009).

Problematic is, however, that without statutory or democratic legitimacy, fluid territories as wider frameworks for governing spatial development still often have to rely on some degree of consensus, whereas networked territories can be built around narrow economic interests of a few powerful actors. In fluid territories that are built more broadly on the interactions between, for example, regional development authorities, enterprises and inhabitants, the execution of comprehensive spatial development objectives requires some consensus and shared mental frame about the pursued objectives. Therefore, priorizations and making of difficult choices concerning the future development of an area are necessary to gain meaningful results (see Zonneveld & Waterhout 2005). In fact, Zonneveld and Waterhout (2005: 21–22) have noted that:

> "when it comes to governance it is important to note that analyzing the structure of an area is not just a matter for experts or an inner circle of administrators, politicians and civil servants. Generating images of spatial structures is an example of what is sometimes referred to as 'collective learning', a socialised form of knowledge development and dissemination between as many stakeholders as possible. Reaching agreement on the spatial structure of an area involves creating a mental frame that enables stakeholders to coordinate their policy instruments and investments. Developing a strategic framework –as we may term an agreement on spatial structure – is thus a preliminary investment, as it was, in operational decision making."

Therefore, in order for the EU spatial development policies such as territorial cohesion policy to gain meaning, they have to be tied in more closely with multiple local and regional governance actors and their practices (Gualini 2008; Luukkonen & Moilanen 2012).

The framing of spatial development relates closely to Foucault's notions of power, since the discourse power of spatial development is an outcome of a complex interplay between bottom-up and top-down forms of powerrelations. To Foucault (1976/2007: 156, see also Allen 2004), "society is an archipelago of different powers", which are continuously rearranged in societal interactions. The power of spatial framing is thus based not on top-down imposed juridical power, but instead, on a strategic combination of different forms of power towards common goals (see also Moilanen 2009). This also includes affecting individual people's thinking. This kind of spatial development governing is centrally related to the previously discussed aspect of metagoverning spatial development. The spatial framing, here, is not the result of territorial exercise of power, but it is constantly produced and reproduced in action in different actors' interactions. Importantly, then, power should be seen as a technique, and action, which is perfected and endlessly developed in societal practices (Foucault 1976/2007: 158). Like Faludi

(2010), Foucault has also noted that there are many overlapping strategies in space that might be in conflicting relations against each other (see Alhanen 2007: 130–131). Here, wide-ranging exercise of societal power can only succeed if it is rooted on locally arising power. This means that no top-down imposed strategy can work without its goals going all way through to the local level and its individualized practices. In the light of spatial development, then, local and national are centrally intertwined, and also local governance needs to be part of larger strategies to be effective (Alhanen 2007).

4. Empirical research setting

The rise of regional development zones in spatial development in Finland is studied in this research through several different materials and methods (e.g. spatial and regional development strategies and documents, thematic interviews, questionnaires, content analysis, Q-methodological discourse analysis, and GIS-data) and case areas. In this chapter, the actors and planning system in Finland are first discussed, after which are presented the case areas and materials and methods of the research.

4.1. Actors and planning system in Finland

In practice, polycentric policies and RDZs in Finland are implemented through the formal planning system, which includes actors and policies from EU to local level. As stated in the Ministry of Employment and the Economy's strategy for regional development (2010a: 26):

> *"the best possible utilization of regional potential and effective operations require the development of strong civic society, coordination, and effective governance. The actors in different scales have to find a common strategy and common definitions of policy".*

Here, common concepts, perceptions and directions are in key position for diverse areas in working in this multi-scalar governance environment. Figure 3 presents the most important actors involved in the development of RDZs in Finland, which demonstrates the cross-scalar and -sectoral nature of contemporary spatial development practices. Here, the integration of diverse policy sectors is necessary to pursue comprehensive spatial development. In addition to presenting the main actors related to RDZs' development, the figure portrays their engagements in the new zone-based territorial frame that is seen potential in uniting scales, sectors and actors into new comprehensive cooperation.

As already discussed, a certain assumption has been made in this research about the Europeanization of the Finnish spatial development. As the member states are obliged to cater for certain guidelines and objectives coming from the EU level, these policies can be assumed to have an affect on the development practices in the national and lower levels of spatial development in Finland. For this reason, then, the ESDP and the territorial cohesion policy are assumed to have an effect on the implementation of RDZs in practice, as well as the latest Europe 2020 strategy with its relations to place-based development approach. In addition, the EU structural funds play a crucial role in the implementation of RDZ-based projects as these projects are often at least partially funded

SCALE	MAIN ACTORS	GUIDING DOCUMENTS/ POLICIES	MAIN TASKS/OBJECTIVES	TERRITORIAL DEVELOPMENT uniting scales, sectors and actors
EU	Member states	ESDP	Polycentrism and sustainability	Economical, social and environmental sustainability
	European Commission	Territorial Agenda/Cohesion	Balanced and integrated development	Potential-based approach — Comprehensive planning
		Europe 2020	Smart, sustainable and inclusive growth	
		Structural funds	Reduce disparities	Cohesion funds — Place-based approach
NATIONAL	ME	Vision for spatial structure 2030	Competitiveness, welfare and eco-efficiency	National guidelines for spatial development — Infrastructure investments
	MEE	Regional development strategy 2020	Balanced competitiveness through place-based development	Laws and regulations
	MTC	Transport policy	Infrastructure development	Regional development intruments for cooperation and networking — Division of labor
REGIONAL	Regional councils	Regional plan	Regional planning and development	Urban-rural interaction — Consolidation of projects, programs and land use planning
	CEDTE	Environmental protection, promotion of entrepreneurship, and transportation	Regional implementation and development tasks of the state administration	
LOCAL	Municipalities	Basic regional administration	Public and entrepreneurial services, town planning	Municipal interests and budget limitations — Everyday requirements of firms and citizens
	Firms	Business activities	Make a living, increase competitiveness and profit	
	Citizens	Everyday requirements and activities	Balance between work, home and leisure	Notions of good living environment

Fig. 3. The main actors and policies related to the development of RDZs in Finland, and their engagements in the comprehensive territorial development framework. ME = Ministry of the Environment, MEE = Ministry of Employment and the Economy, MTC = Ministry of Transport and Communications, CEDTE = Center for Economic Development, Transport and the Environment.

through the European regional development funds (Jauhiainen et al. 2007a; Moilanen 2008). It is not, however, just a top-down hierarchic relationship in the implementation of the EU level objectives, but importantly, the national objectives concerning spatial and regional development strongly shape the content of EU programs in the member state level. Therefore, in Finland, the EU cohesion policy is seen as an integral part, and a crucial tool, of the national regional policy that determines the emphases of cohesion policies nationally (Ministry of Employment and the Economy 2010a).

The vision concerning the development of the spatial structure in Finland comes from the Ministry of the Environment, which is responsible for land use planning and environmental protection. The Ministry formulates the national land use objectives that are part of the Land Use and Building Act, the most important legislation guiding land use and spatial planning in Finland (Ministry of the Environment 2010). The Ministry of Employment and the Economy, instead, is responsible for preparing national regional development targets together with other ministries and Regional Councils. These objectives then form the Regional Development Act and the government decision on national regional development objectives for its own four-year-long term of office (the current Government was elected 2011). Regional Development Act promotes the regional development system that is based on networking and cooperation, and defines the Government's Special Programs to attain its objectives. Currently, these programs are the Center of Expertise Program and the Regional Cohesion and Competitiveness Program (see Moilanen 2009 for their detailed description). EU cohesion policy complements these national policies. In addition, other ministries have to draw up their regional development strategies, which are then consolidated in regional programs (Ministry of Employment and the Economy 2010a, 2010b). When it comes to the infrastructure development, the Ministry of Transport and Communication is the most important actor in guiding the development of transport infrastructure in the country.

At a regional level, 19 Regional Councils, as representatives of municipalities, are responsible for pursuing the higher level objectives in their regions. The objectives are taken into account in long-term regional plans (20 to 30 years), and the regional strategic program and regional land use plan, instead, are used to implement the regional plan (Ministry of Employment and the Economy 2010c). Regional Councils are also responsible for drawing up the regional strategic programs every four years that have to give a general picture about the reconciliation of diverse programs in the region. These are monitored and evaluated by the Ministry of Employment and the Economy. Regional Councils also formulate the regional proposals concerning the EU funding programs (Ministry of Employment and the Economy 2010a). As a counterpart to Regional Councils, also the Regional State Administrative Agencies and the Centers for Economic Development, Transport and the Environment, coordinated from the Ministry of Finance, are involved in the practical execution of diverse regional development programs at the regional level, since they are the regional authorities responsible for environmental protection, promotion of entrepreneurship, and transportation, as well as other important national objectives (Ministry of Finance 2011a).

Along the state and the Regional Councils, the municipalities (336 in 2011) act as a key regional development authority. According to the Finnish Constitution, a municipality in Finland forms the basic unit for the self-government of the citizens and thus also

for political participation, and in addition, the municipalities function as basic regional administrative units of the country. Municipalities also organize most of the public services, and function as key actors in creating operational and innovation environments for enterprises, and living environments for their citizens. At the national government level, several ministries are involved in organizing municipal affairs (Ministry of Employment and the Economy 2010a; Ministry of Finance 2011b).

Whereas the state, regions and municipalities act more as organizers of cooperation, local actors such as entrepreneurs, research institutes, diverse organizations, and finally, citizens are those who ultimately execute spatial development in their daily practices. Local firms contribute substantially to the economic competitiveness of an area, and this is why networking of diverse business-related actors is seen highly important also in RDZs in creating a new 'zone-based innovation environment'. As the zone-based spatial frame is supposed to have an effect on people's living environments, this makes local inhabitants and their notions of a good quality of life important in RDZs as well.

4.2. Case areas

Finland as a country is usually referred to as peripheral in relation to European and global economic core regions (e.g. Gloersen et al. 2005). Within the EU, northern sparsely populated regions are recognized as special regions in need of compensations (European Commission 2010b). In fact, Finland in general, with the population of 5,375,276 (Statistics Finland 2010a), faces the particular challenges of having a sparse population, long distances, limited amount of relevant public and private actors, and peripheral location and low accessibility compared to the core areas in the EU and the world (Gloersen et al. 2005; Ministry of the Environment 2006). Accordingly, the country's spatial structure is also characterized by sparse population, long distances and remote location, which poses challenging conditions for spatial development. Even in the Nordic comparison, Finland's spatial structure is fragmented and dispersed (Ministry of the Environment 1995). In addition, the general challenges related to globalization, economic crises, global warming, energy, aging and accessibility are constantly changing the development potential of Finland and its diversified regions (Lindqvist 2010; Ministry of Employment and the Economy 2010a).

Finland has only one metropolis with about one million inhabitants around the capital Helsinki and only a few cities with more than 100,000 inhabitants. A huge part of the country's territory is sparsely populated and distances between agglomerations are large. Since the recession in the early 1990s, the material transformation of Finland has shown an increasing spatial concentration to the largest urban areas and especially to the metropolitan area in and around Helsinki. In the future, due to the rapid change in the age structure and declining birth rates in remote areas, the disparities between regions are getting even wider, concentrating activities and the spatial structure increasingly to core urban centers in the country (Ministry of the Environment 2006; Ministry of Employment and the Economy 2010a; Statistics Finland 2010b; Kaarna & Mella 2011).

Interestingly, however, Finland and other Nordic countries do not seem to suffer from other problems often attached to peripherality, such as low GDP and low quality of life

and economic performance (Böhme 1998; Lindqvist 2010). According to diverse international comparisons, Finland has succeeded in indicators measuring economic competitiveness and sustainable development. The country's strengths are seen to be its national innovation system and high technology, environmental conditions, transparent organizations and relatively balanced spatial structure (Ministry of the Environment 2006). It has been traditionally strong in export oriented areas such as basic metal, machine and transport equipment, and wood and paper, as well as high technology products related to Nokia and related mobile cluster (Steinbock 2009). Recently, the Finnish national innovation system has, however, been increasingly criticized for its too broad focus and overemphasizing of process and structures instead of effects of innovation policy; lack of attention to talented individuals, enterpreneurialism and risk-taking; lack of understanding of user-engagement and; being less international than often thought (Evaluation... 2009). Overall, the country's economic competitiveness has decreased in global comparison (Steinbock 2009).

As the competition is tightening in the high technology related areas that have also been Finland's strengths, this has meant increasing pressure to specialize on a few carefully selected industries (Ministry of Employment and the Economy 2010a). This, however, is highly risky putting individual regions in a challenging position regarding the allocation of resources to increase their competitiveness. There is a strong pressure to concentrate research and development activities to large urban areas in the country (Steinbock 2009). In this light, the versatile economic utilization of forests and other renewable energy resources, and natural and cultural areas for recreation and tourism, combined with careful conservation of nature are increasing in importance regarding the economic renewal of the areas outside the large urban areas in Finland (Ministry of the Environment 2006).

Areas outside the main urban concentrations (Helsinki, Vantaa, Espoo, Turku, Tampere and Oulu) thus face many common challenges dealing with changing population structure as there is an increasing brain drain towards the educational centers in the country. Areas outside the main urban centers are becoming more wretched, as the age structure is worsening, and at the same time, there is continuing pressure to rationalize the expenses in the public sector. When it comes to service delivery, the administrative units are getting bigger, and services are moving further away from the individual citizens living outside and in between urban centers. There is a strong need to develop new solutions for service provision and employment in the peripheral areas, such as call and online services, and increase the production of renewable energy (Ministry of the Environment 2006).

Despite increasing concentration of activities towards a few of the largest centers in the country, there are, however, many vivid cities and towns in Finland, which are recognized in regional policies and programs as having versatile development potential. In the urban network studies of the Ministry of Employment and the Economy (former Ministry of the Interior), there are five types of centers recognized with different roles in the national urban network: Helsinki metropolitan area, versatile university cities, provincial centers, specialized industrial regions, and small regional centers (see Appendix 1). As stated in the Ministry of the Environment's vision (2006: 11), Finland's spatial structure is, in fact, "largely a result of economic activities. It still retains traces of a dispersed agricultural society, of workplace centers based on industries, and of urban hierarchies

based on services". The development of the high technology sector and knowledge based industries have also left their mark on spatial structure in the form of growing concentration of jobs to major urban centers.

From the six major urban areas in Finland, only the city of Oulu (139,881, or 220,000 inhabitants in the FUR, City of Oulu 2010) is located outside the networked metropolitan area, thus being an important center for the whole of northern Finland. The next biggest cities in the non-metropolitan Finland are Jyväskylä (129,437) and Kuopio (92,533) (Population register center 2010). These cities are important university centers of their regions, and they also function as important concentrations for business life in their respective areas. Altogether, in the contemporary policy discussions it is still an important goal to maintain the necessary prerequisites for business activities, services and good quality of life in the centers outside the networked metropolitan area.

One important aspect is the accessibility of peripheral areas: it is seen necessary that the smaller regional centers also belong to the sphere of national road and railway network (Fig. 4). Above all the availability of public transport is a key issue in peripheral areas that do not belong to the immediate sphere of nationally supported road-, rail-, sea- and air-connections. In addition, uncertainties related to the global markets, such as the extent of exploitation of natural resource bases in the Barents region, may significantly affect the development of the spatial structure in Finnish peripheral areas (Ministry of the Environment 2006). In general, it is seen in the Ministry of the Environment's vision for Finland's spatial structure that balanced development is important to secure the high-quality environment as Finland's strength and international competitive advantage, and also to provide livable environments for citizens as "a good quality of life is increasingly built upon healthy, secure, peaceful and natural surroundings" (2006: 33).

Within the context of nationally important transportation network, there are lots of diverse material and immaterial flows traversing major roads and railways. These diverse flows then naturally create versatile linear zones in the country that follow the national tranportation network; in addition to daily commuting, goods and freights also travel on a daily basis between the major travel nodes in the country (see Finnish Road Administration 2008). Regional development zones along major transport routes in Finland have been partly created on the basis of these diverse flows between urban centers, but partly also due to the increasing pressure to form creative partnerships with nearby cities in search of resource pooling, economic cooperation and synergies from joint physical planning. Hence both material and immaterial flows between centers have had an effect on creating an RDZ-based cooperation.

Appearing in the Finnish spatial development context in the 1980s, several RDZs have been created since then in diverse parts of the country. According to the most recent development plans of Regional Councils and the national spatial development vision for Finland for 2030, approximately a dozen RDZs in Finland can be identified. Figure 5 portrays these RDZs as well as the primary case areas of the research, i.e. the Bothnian Arc (BA), the Oulu-Kajaani RDZ (OuKa) and the Jämsä-Jyväskylä-Äänekoski RDZ (JJÄ), of which only the BA belongs to the EU27 core transport network that is aimed to be completed by 2030 (see European Commission 2011). In addition, Joensuu-Kuopio RDZ (JK) was studied in the original paper IV as a possible idea for future spatial development in eastern Finland (Jauhiainen & Moilanen 2011, see also Jauhiainen et al. 2010).

However, the JK is not presented on the map, because the RDZ's development only as one possibility for regional development in the area is so far discussed mainly among a small group of regional development authorities (for JK's location, see Jauhiainen & Moilanen 2011). The presented RDZs, instead, represent existing projects and strategies in Finland. In Table 1, basic descriptive figures are given to present the overview of the case areas' geographic and demographic conditions (for more detailed descriptions, see original papers and also Jauhiainen et al. 2007a, 2010; Moilanen 2008).
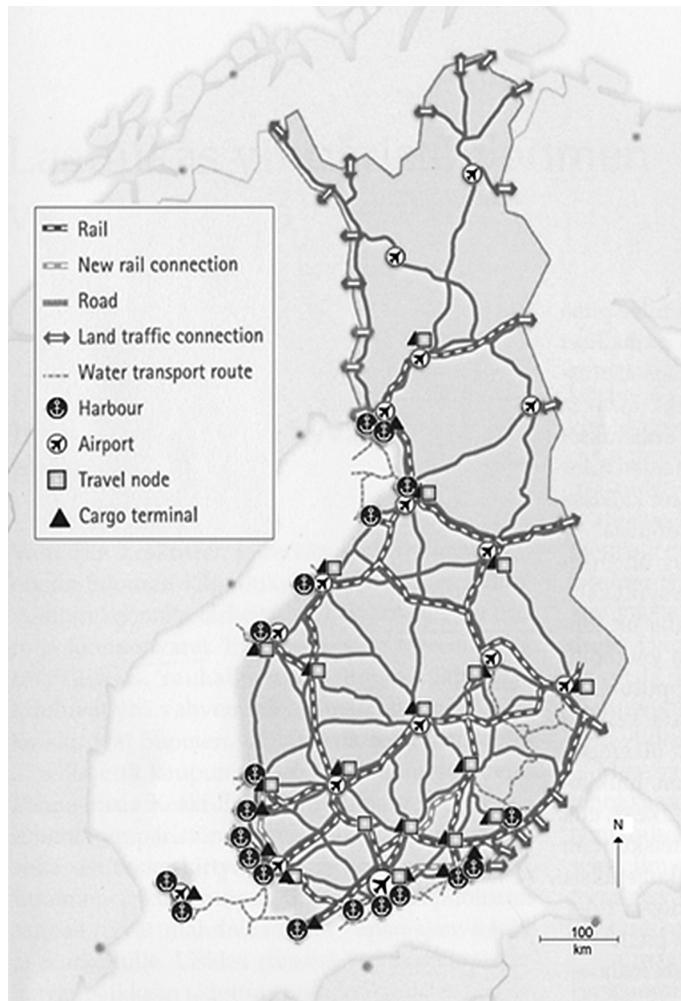
Fig. 4. Transportation networks of national importance (Ministry of the Environment 2006: 31, modified).

In size and population, the Bothnian Arc is the largest case RDZ in the research. When extented to also cover the member municipalities in Sweden, the total population of the zone is approximately 700,000 along the 600 km long basis (Bothnian Arc 2011, Swedish municipalities are not presented in the table due to the lack of comparable statistics). The different geographical and population base of the zone makes it different from the rest of the case areas, which is discussed more in the results of the

research. Other RDZs, instead, are more coherent in their population and size JJÄ being the most densely populated and compact with its approximately 100 km long core. The OuKa (300 km) and JK RDZs (140 km) are more dispersed and loosing population in the municipalities in between the main cities. Furthermore, the percentage of population over 65 years of age in these two zones is well beyond the country's average. The concentration pattern is taking place in all case RDZs (Appendix 2a, 2b, 2c & 2d) even though the population in general in all RDZs is growing, and in the future, the population seems to be concentrating even more to the main cities and their nearby municipalities according to the forecast reaching the year 2025 (Table 1, note the difference in administrative units). In fact, the GIS-based examination of the case RDZs, and the figures in Table 1 all illustrate that in their current or forthcoming situations, the case areas do not represent any natural zonal development patterns, but instead increasing concentration of activities to the urban nodes (Appendix 2a, 2b, 2c & 2d, see Jauhiainen et al. 2007a, 2010 for more GIS-based analyses on case RDZs). This has to be borne in mind when implementing and assessing RDZ-based strategies.

1. Arctic Corridor
2. SK Quality Corridor
3. J J Ä
4. Bothnian Arc
5. Mid Nordic
6. OuKa RDZ
7. Barents Corridor
8. E18 Corridor
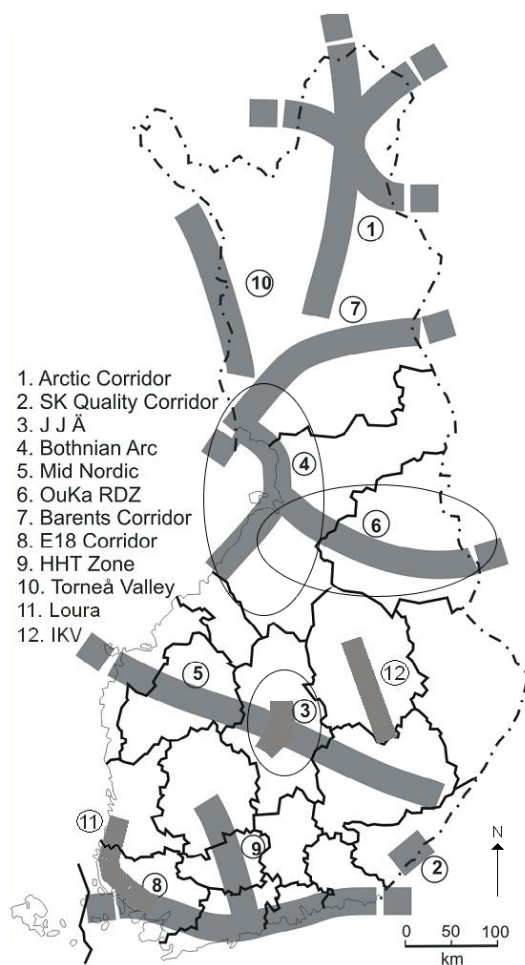9. HHT Zone
10. Torneå Valley
11. Loura
12. IKV

Fig. 5. Regional development zones in Finland and the primary case areas (Jauhiainen et al. 2007a: 23, modified).

Table 1. Descriptive figures of case RDZs (Statistics Finland 2010a; Association of Finnish Local and Regional Authorities 2011a). * = The Bothian Arc covering both Finnish and Swedish administrative units had a total population of 706,522 in 2010. ** = The figures presented are only suggestive, since the JK RDZ is only discussed as a possible idea for spatial development and is thus not an actual geographically defined RDZ.

RDZ	Member of RDZ	Administrative unit	Size (km2)	Population 2010	Population forecast 2025	Pop.change 2010-2025 (%)	Population density (inh/km2)	Population 0-14 (%)	Population 15-64 (%)	Population over 65 (%)	Unempl. rate (%) 2008	University degree (%)
BA												
Finland	Kemi-Tornio	sub-region	4 915	60 556	61 031	0,8	12,3	16,7	64,9	18,4	13,1	16,7
	Oulu Arc	sub-region	9 631	23 396	23 115	-1,2	2,4	20,0	60,2	19,9	16,0	12,9
	Oulu	sub-region	4 698	226 402	264 699	16,9	48,2	21,1	67,0	12,0	11,0	29,0
	Raahe	sub-region	2 607	34 731	35 317	1,7	13,3	19,6	63,8	16,5	11,0	14,9
	Ylivieska	sub-region	3 347	43 800	45 866	4,7	13,1	20,8	61,9	17,4	10,2	15,4
	Central Ostrobothnia	region	5 019	68 321	71 060	4,0	9,0	18,7	63,4	17,8	9,0	18,5
Total*			*30 217*	*457 206*	*501 088*	*9,6*	*16,4*	*19,5*	*63,5*	*17,0*	*11,7*	*17,9*
OuKa	Oulu	city	1 410	141 671	158 913	12,2	100,5	17,0	70,2	12,9	11,6	31,4
	Muhos	municipality	784	8 857	10 524	18,8	11,3	25,2	60,8	13,9	8,7	18,2
	Utajärvi	municipality	1 671	2 998	2 647	-11,7	1,8	17,1	60,8	22,0	14,8	9,6
	Vaala	municipality	1 303	3 370	2 973	-11,8	2,6	14,3	59,5	26,3	18,3	11,9
	Paltamo	municipality	919	3 884	3 679	-5,3	4,2	14,9	61,6	23,4	18,4	11,9
	Kajaani	city	1 835	38 157	38 620	1,2	20,8	16,5	66,0	17,4	15,1	21,0
	Sotkamo	municipality	2 650	10 702	11 004	2,8	4,0	15,7	63,9	20,4	12,1	17,4
	Kuhmo	city	4 807	9 492	8 161	-14,0	2,0	12,6	62,2	25,3	21,0	11,9
Total			*15 379*	*219 131*	*236 521*	*7,9*	*18,4*	*16,7*	*63,1*	*20,2*	*15,0*	*16,7*
JJÄ	Jämsä	sub-region	2 232	25 245	23 494	-6,9	11,3	14,7	61,5	23,9	13,4	14,7
	Jyväskylä	sub-region	3 701	173 651	194 476	12,0	46,9	17,4	67,7	14,9	11,2	26,9
	Äänekoski	sub-region	1 398	23 207	22 628	-2,5	16,6	17,1	62,6	20,3	13,6	13,8
	Laukaa	municipality	649	18 142	20 836	14,8	28,0	21,7	63,4	14,9	9,5	19,2
	Muurame	municipality	144	9 256	11 077	19,7	64,3	22,5	65,0	12,4	8,2	26,9
Total			*8 124*	*249 501*	*272 511*	*9,2*	*33,4*	*18,7*	*64,0*	*17,3*	*11,2*	*20,3*
JK	Joensuu**	sub-region	9 424	122 985	125 022	1,7	13,1	15,8	66,2	18,0	14,7	20,8
	Koillis-Savo**	sub-region	3 545	19 823	18 566	-6,3	5,6	13,8	60,9	25,4	13,1	10,9
	Kuopio**	sub-region	2 465	121 636	126 384	3,9	49,3	16,4	67,7	15,9	10,5	24,0
Total			*15 434*	*264 444*	*269 972*	*2,1*	*22,7*	*15,3*	*64,9*	*19,8*	*12,8*	*18,6*
FINLAND			*303 907*	*5 378 165*	*5 440 546*	*1,2*	*17,7*	*16,5*	*66,0*	*17,6*	*6,4*	*21,6*

Altogether, several RDZs and regional centers are used in this research as examples of a wider spatial development phenomenon. As Vennesson (2008: 237) has noted, "cases are often deeply connected to one another, even embedded in one another, and the task of the researcher becomes accounting for both the distinctive and the common dimensions of the cases". "When there is less interest in one particular case, a number of cases may be studied jointly in order to investigate a phenomenon" (Stake 2005: 445). The rise of RDZs as a spatial development phenomenon in Finland is in fact studied in this research through diverse examples and scales of development to understand not just the context-dependent cases in themselves (Stake 1995), but also the more common possibilities and challenges that come with the overall phenomenon. Through studying diverse informative cases in the peripheral context mostly in a qualitative manner, it is assumed that some general conclusions can be drawn from the phenomenon.

The RDZs are studied selectively through the lenses of different theoretical frameworks present in diverse articles (for different types of case studies, see e.g. Stake 2005; Vennesson 2008). In each of the original papers, a certain theoretical framework has been applied to understand the dynamics of a single case or a few case areas related to this particular conceptual framework. The cases are selected because of their information value concerning the development of non-metropolitan areas in Finland, and on the grounds of their relevance and applicability as regards each theoretical framework in question. The case selection, then, has been intentionally theory-driven (for case selection, see Stake 2005; Barbour 2008; della Porta 2008; Mabry 2008). In the case of the second original paper (Jauhiainen et al. 2007b), however, the geographical characteristics of the zones related for example to their location, size and population density have also influenced their selection, since the aim in that particular study was to review multiple RDZs that differed in size and the overall context and phase of development (see Jauhiainen et al. 2007a). In the original paper I (Moilanen 2009), instead, the cases of Raahe and Oulun Eteläinen were selected, because they were seen as informative, but also different, areas regarding the implementation of regional innovation policy programs in the Northern Ostrobothnia region, and in general they were seen to be representing small and medium -sized regional centers in non-metropolitan Finland.

4.3. Materials and methods

Methodologically this research is conducted by using the principles of methodological triangulation. The term between-method triangulation, also called multi-strategy research (Bryman 2004), refers to the usage of multiple, usually qualitative and quantitative, research methods in answering one research question, or understanding a single research phenomenon (Denzin 1978, for another modes of triangulation, see also Flick 2006). Essential is that quantitative and qualitative methods are seen as complementary to each other instead of being mutually exclusive (Jick 1979). As stated by Denzin and Lincoln (2005: 5), "the use of multiple methods, or triangulation, reflects an attempt to secure an in-depth understanding of the phenomenon in question". Treating different methods in a more technical manner instead of attaching them to their epistemological and ontological backgrounds allows the mixing of methods and makes it feasible

and even desirable (Bryman 2004: 454; Denzin & Lincoln 2005: 6). As Stake (2005: 454) puts it, "the qualitative researcher is interested in diversity of perception, even the multiple realities within which people live. Triangulation helps to identify different realities".

The combination of different research methods such as interviews, questionnaires and Q-methodology in the context of this research has been made, because different article-specific research questions have required different research methods. The aim has been to study the rise of RDZs in spatial development from the viewpoints of both actors and institutions, and theory and practice. Therefore, methodological triangulation has been chosen to cover different aspects of the many-sided research problem, dealing on the one hand with the development of material reality and on the other with subjective meanings attached to it. The challenging question behind the research design has been, how to study RDZs that are simultaneously 1) aspirational visions and products of ongoing policy discourses affected by the 'relational turn' with the emphasis on networks and flows, 2) concrete policy instruments executed by regional development authorities and bordered by administrative boundaries, and 3) finally realized in the everyday material and immaterial practices of individual actors. It is assumed that this complex starting point necessarily requires a multifaceted research approach.

The different ways of knowing the studied reality necessarily lead to different perceptions of reality (see Sayer 2006), which should be acknowledged in the implementation of policies as these perceptions have an essential effect on the ways in which policies are realized in practice (see Jones & Murphy 2011). Fractions of diverse philosophical traditions can in fact be recognized from the current spatial development practices, since the contemporary relational views of space often coexist and build on the more traditional ways of seeing and imagining space in organizing spatial development (see Davoudi 2009). In this light, the study of RDZs with comprehensive research strategy then means that the plurality of methods and beliefs can coexist and be discussed in a single research framework. Following research methods and materials have been used in studying RDZs and competitiveness and cohesion oriented policies: spatial and regional development strategies and documents, thematic interviews, questionnaires, content analysis, Q-methodological discourse analysis (having its basis both in qualitative and quantitative research traditions), and GIS-based analysis. These materials and methods are described more in-depth in the rest of this chapter.

4.3.1. Spatial and regional development strategies and documents

The research setting of this dissertation builds on several different visions, strategies and documents concerning the development of RDZs and polycentric spatial structure in supranational, national, regional and local scales. Some strategies have been analyzed more systematically with content analysis (described in more detail in the next chapter), and others have been used more as a background material in collecting general information about the case areas. Key spatial and regional development strategies and documents are studied in a twofold manner, as they are examined in terms of their content and their role in, and linkage to, wider development actions (see Prior 2008). For example, the EU lev-

el strategies and documents, and likewise the national level strategies, aim at steering the development at lower development scales, and thus have an important effect on the chosen paths of development in regional and local scales. In fact, the key policy documents in EU and national scale have been important in delivering new spatial development ideas into concrete regional level practices concerning RDZs and their development (for Europeanization of spatial policies, see e.g. Jensen & Richardson 2004; Böhme & Waterhout 2008; Clark & Jones 2008; Luukkonen 2011). In addition, local and regional level ideas have affected the development of national and supranational policies and, for example, the Finnish lower than average population density is a crucial factor to be taken into account in the EU policies. Furthermore, Europeanization of spatial development can be seen to be taking place in various spaces of Europeanization instead of just within and between various hierarchical levels of governance (Clark & Jones 2008).

These strategies have been usually produced by some kind of public authority, and they are reflecting the wider changes taking place in regional and spatial development governing in general. The purpose in which these documents have been created, and who has created them, are important issues to be catered for: "documents represent a specific version of realities constructed for specific purposes" (Flick 2006: 249). As the documents represent the wider institutional views of their creators, they can be helpful in understanding social realities behind them (2006: 252). According to Prior (2008: 491), however, both content and discourse analysis tend to treat text more in terms of their content, "as something to be read and understood". The consideration of what text 'does' is left to the responsibility of the researcher.

The most important document behind this research has been the Ministry of the Environment's vision of the Finnish spatial structure for 2030 (Ministry of the Environment 2006), called "Competitiveness, welfare and eco-efficiency, perspectives for spatial structure and land use in Finland". In part, the research builds on this document as it assumes that the role of RDZs is increasing in future spatial development. This assumption is, however, also based on empirical studies (e.g. Jauhiainen et al. 2007a). The document, concerning both text and figures, has been studied systematically through content analysis as regards the role of RDZs in the vision. Here, texts and images concerning RDZs are seen to "form a persuasive component of spatial policy discourse" (Jensen & Richardson 2004: 61). In addition, the strategy titled "Land use and regional structure in year 2017" from the 1990s was studied to investigate the continuity of the zone-based policy (Ministry of the Environment 1995).

Several EU level documents concerning spatial development have been important background material for this research. The European Spatial Development Perspective (CEC 1999) has been among the key documents influencing the wider European spatial development discussions. Furthermore, other documents, such as the Territorial Agenda of the European Union (Territorial Agenda… 2007, 2011), Green Paper on Territorial Cohesion (CEC 2008a, 2008b), Europe 2020 strategy (European Commission 2010a), and the Lisbon (Conference of the Representatives… 2007) and Gothenburg processes in general have been key documents in determining the particular European perspective on spatial development.

At the national level, in addition to the already mentioned visions of the Ministry of the Environment, the Ministry of Employment and the Economy has also an impor-

tant role in enhancing zone-based development. Whereas the Ministry of the Environment functions more as a trendsetter as regards the development of the national spatial structure, the Ministry of Employment and the Economy takes a more active role in its practical implementation. Through Regional Development Act and the government's decisions on national regional development targets, general strategies (Ministry of Employment and the Economy 2010a), and nationally-led regional programs based on these strategies, the Ministry of Employment and the Economy creates and maintains program and finance structures that enable the zone-based development in practice (see Ministry of Employment and the Economy 2010b). In the original paper I, several program and project reports and action plans were also analyzed related to Government's Special Programs and their implementation in the case areas.

At the regional level, the most recent regional development plans as well as regional strategic programs and land use plans of each Regional Council with an RDZ were analyzed (Regional Councils of Lapland, Kainuu, Oulu region, Ostrobothnia, Central Finland, Pohjois-Savo, Etelä-Savo, North Karelia and South Karelia). The study included investigating whether and, if so, how, the RDZs were discussed in these plans. Furthermore, key spatial development documents of the areas were investigated systematically as regards the objectives, the overall planning process and the participants of the RDZs. In addition, several project plans and reports were analyzed concerning explicitly or implicitly RDZs and their development.

4.3.2. Questionnaires and interviews and their analysis

In addition to documents and strategies, two questionnaires and several interviews were used in studying the contemporary spatial development in general and its implementation in particular. When it comes to the realization of policies in practice, questionnaires and/or interviews were used at some level in all of the original papers. Questionnaires and interviews are in fact the two most common types of data collection used in the social sciences, although variations within these two types exist (de Leeuw 2008). In this research, the two methods were used to pursue two types of understanding of RDZs: an extensive semi-structural survey was used to collect basic information concerning the perceptions of diverse actors about the role and functioning of RDZs as a frame of regional development, and thematic interviews, either by phone or face-to-face and lasting from 15 to 45 minutes (original paper II), were used in deepening the understanding achieved through the questionnaire (for practicalities concerning questionnaires and interviews, see e.g. Robinson 1998; Bryman 2004; Barbour 2008; de Leeuw 2008). In the case of Q-methodology, thematic interviews between one to two hours (original paper I), were used to complement the groupings of statements (Q-methodology and its use is described more in detail in the next chapter). Altogether, thematic interviews were used to allow a certain degree of openness and flexibility in the interviewing situations (Bryman 2004: 332). In addition, in summarizing the findings of the original papers, some emails were sent to the interviewees and other civil servants working on spatial development to confirm the author's interpretations concerning the results of the empirical research.

In the original paper III, a questionnaire was used in itself to understand a certain phenomenon as the EU member states' responses to the Commission's questionnaire about territorial cohesion were analyzed in studying the notions of territoriality in the context of territorial cohesion policy. The material was mainly analyzed by the co-author of the paper in more qualitative terms with theory-bounded content analysis (Tuomi & Sarajärvi 2009). The questionnaire consists of 26 answers from almost all EU countries, excluding Estonia (see Luukkonen & Moilanen 2012).

The questionnaire concerning 6 Finnish RDZs and their governance was used among key regional development actors dealing with economy, politics and regional development in the Artic Corridor, Bothnian Arc, OuKa RDZ (Oulu-Kajaani), Mid-Nordic, JJÄ (Jämsä-Jyväskylä-Äänekoski) and South Karelia Quality Corridor. In total, 373 persons from these RDZs, mostly from public and non-governmental sectors involved in regional development issues, completed a four-page semi-structural questionnaire sent by e-mail in 2006 (response rate 25.5%, for more detailed description, see Jauhiainen et al. 2007a). The methods used in the analysis of the closed-ended questions were basic frequencies and cross-tables.

In general, content analysis was used to analyze the data gathered through interviews and open-ended questions in the questionnaires, as well as to analyze the previously described documents. The content analysis was used as a tool of qualitative research to outline the thematic and contentual variations within a subject under study (George 2009; Tuomi & Sarajärvi 2009) instead of a more systematic quantitative method to arrange and summarize data (for quantitative content analysis, see Neuendorf 2002; Bryman 2004; George 2009). In general, the content analysis in this research has been used in different contexts, and also in different ways, to analyze different materials. In most cases the working practices of content analysis were used as a general framework to analyze the phenomenon as it is presented in the text (original papers I, II, IV and V), whereas in the original paper III, the content analysis was conducted more systematically to get a detailed picture of the perceptions of territoriality (for content analysis as a single method and as a broad research framework, see Tuomi & Sarajärvi 2009).

4.3.3. Q-methodology

The clearest example of triangulation in this research is the Q-methodology used in the original paper I, because the method in itself unites qualitative discourse analysis with quantitative factor analysis in answering a single research question. Due to this particular hybrid characteristic, the method has gained popularity in social studies and also geography (Eden et al. 2005, see e.g. Robbins 2000; Babcock-Lumish 2005; Previte et al. 2007; Rajè 2007; Fairweather & Klonsky 2009; Cuppen et al. 2010; Duenckmann 2010; Jauhiainen & Moilanen 2012). The method was introduced already in the 1930s as an alternative to R factor analysis (Stephenson 1953). Since then, it has developed into more extensive method of studying and revealing subjectivity in social structures (Brown 1996). Whereas R analysis studies the correlations between diverse variables, the Q instead focuses on the correlations between subjects (Robbins & Krueger 2000). When created, the objective of the method was to unite survey-type research based on

large sampling with qualitative research aimed at understanding subjective individuals (Aalto 2003: 118, for a combination of Q and R methods, see Danielson 2009). According to Eden et al. (2005: 416), in Q-methodology:

> *"it is the correlation between subjects (sorters) that is important. This means that individual viewpoints are kept whole, rather than atomized across variables, and that a larger number of statements across a smaller number of sorters can provide the same validity in a statistical sense as the usual R-type approach".*

In studying subjectivity in social structures and discourses, Q-methodology pays attention to both discourses and structures that guide subjective beliefs, and also vice versa to the role of these subjective beliefs in constructing societal discourses. In Robbin's and Krueger's terms (2000: 637) "subjectivity is defined as a person's own point of view (or self-referent perspective) about a real or perceived specific situation". The discourse instead is, in simple terms, understood as "a way of seeing and talking about something" (Barry & Proops 1999: 338). A discourse is a shared view of actors that can coexist in social practices alongside other discourses, guiding and affecting the things that can be said and not (Foucault 1969/2005; van Dijk 1997; Wylie 2006; Alhanen 2007). Important is that a discourse does not just describe a phenomenon, but instead creates it, and makes it real (Wylie 2006).

What makes Q-methodology a particularly interesting form of discourse analysis is that the method has been called a tool for the scientific study of subjectivity (Stephenson 1953; Brown 1980). An important advantage of Q-methodology, compared to more traditional single-method settings such as interviews or surveys, is that it brings together the benefits of both quantitative and qualitative research in uniting systematic and repeatable (and, thus, to some more reliable) quantitative research and more understanding and subjective oriented qualitative research (Aalto 2003). The claim for subjectivity has, however, also been the main reason for criticism towards the method (see e.g. Robbins & Krueger 2000).

In this research, the claim for subjectivity has been the reason for the method selection in the context of studying the implementation of regional innovation policy in Finland in the light of competitiveness and cohesion oriented policies (Moilanen 2009). The concrete practices of regional innovation activities are created through diverse nationally and locally arising discourses. Diverse discourses are then intertwined with existing power structures in a society (Foucault 1969/2005). Hence, the discourses do not exist solely on the level of language, but instead, have a very concrete and physical dimension as well as affecting the concrete ways in which policies are realized in diverse local practices. For example, the resources of regional innovation policy can be allocated differently depending on the discourse affecting the national ways of policy making such as zone-based organization of spatial structure. In the context of regional innovation policy, the national government acts both as an important producer and as a central executor of the discourses guiding innovation-based development.

There are many ways to conduct a discourse analysis (see e.g. Antaki 2008), but the usual way to conduct Q-methodological research is to do it in five steps (Aalto 2003, cf. Robbins & Krueger 2000). The nature of most of the steps is qualitative. In the original paper I (Moilanen 2009), the Q-methodological research has followed this five-step

approach. In addition, the method has been complemented with thematic interviews. In note 1 of this paper the five steps and their implementation are briefly described, whereas the empirical part of the paper presents the results of the Q-methodology. The participants of the Q-methodological research have been listed in Appendix 3 of this dissertation (for a more detailed description of the use of the method, see Moilanen 2007).

4.3.4. Geographically referenced data and its analysis

Geographically referenced data was used in the original paper II to analyze regional development and geographical contexts of the case areas, as well as possibly emerging linear development patterns in spatial structure (settlement and jobs) along the core infrastructure routes (Appendix 2a, 2b, 2c & 2d, see also Jauhiainen et al. 2007a for more detailed description). More specifically, follow-up data concerning the community structure (YKR) in Finland that is provided by Finland's environmental administration was used as a background material and examined at the accuracy level of 1 km^2.

The social resources of case RDZs were studied in terms of population density (in 2005) and population development in a 10-year period from 1995 to 2005. The results were visualized in maps and presented at an accuracy level of 1 km^2. This way the possible concentration tendency in RDZs was taken into account. A classification concerning population density was developed to reflect the development patterns of the spatial structure: under 13 inhabitants/km^2 represented very sparse population density; 13–50 inh/km^2 sparse; 51–200 inh/km^2 moderate; 201–1000 inh/km^2 dense; and over 1000 inh/km^2 very dense. Also in the EU the definition of very sparse population density is 12,5 inhabitants per km^2. Instead in examining population development, major growth signified over 10 per cent and at least 10 people growth in population, whereas major decline meant over 10 per cent and at least 10 people decline in population. No significant change occured, when population change was under 10 people and at the most 10 per cent between 1995 and 2005.

The economic resources in RDZs were analyzed in terms of the amount of jobs (in 2003, excluding primary production) in RDZs and changes in working population in a period from 1995 to 2003. Again the results were visualized in maps and presented at an accuracy level of 1 km^2. Regarding the amount of jobs, the same classification principle was used as in analyzing population density. In analyzing job development, major growth signified over 10 per cent and at least 50 people growth in working population, whereas major decline meant over 10 per cent and at least 50 people decline. No significant change occured, when change in the amount of working population was under 50 and at the most 10 per cent between 1995 and 2003.

5. Empirical results: regional development zones in spatial development in Finland

In this research regional development zones were studied empirically through several case areas. The empirical results are based on five original papers that each contribute to the discussion regarding the rise of regional development zones in spatial development in Finland. In addition to discussing the Finnish spatial development context, however, the papers contribute to the theoretical and policy-oriented discussions about European spatial development by reviewing zone-based development as an approach to contextualize the comprehensive European spatial development objectives to particular national spatial development context. This way, the research discusses the implementation of poststructuralist planning visions to concrete territorial settings by reviewing development zones as possible metagovernance frames for the new spatial development.

Original papers IV and V build mostly on the empirical evidence presented in original papers II and III, but they add new theoretically relevant and policy-oriented perspectives on zone-based development and on wider governing of comprehensive spatial development through new territorial frames. Original paper I does not discuss directly RDZs and their development, but instead focuses more on a wider policy background discussing the program-based regional development policies in small and medium -sized regional centers in Finland. Here, the attention is paid to the positioning of these small peripheral centers in relation to competition and cohesion oriented policies. In this context, the contribution of this article to the topic of the dissertation is to outline the broader policy and discourse realms that are present in, and that affect, the contemporary regional and spatial development practices in Finland. Their understanding is crucial in contextualizing the rise of RDZs in the Finnish spatial development context in the 21st century.

The original papers II, III, IV and V instead focus directly on RDZs in Finland. In these articles, RDZs are discussed in relation to European spatial development, Finnish regional and urban policies, diverse theoretical views about spatial organization of human activities, and the development of non-metropolitan areas in Finland. In Table 2 the article-based research questions, key concepts, and main results of each original paper are summarized. In this chapter, Finnish spatial development based on the objective of polycentic and networking spatial structure is first discussed in the contexts of spatial visions and regional and urban policies in Finland. Second, the concept of regional development zone is carefully reviewed in the light of key visions and strategies, namely "Perspectives for spatial structure and land use in Finland" (Ministry of the Environment 2006) and "Finland's regional development strategy 2020" (Ministry of Employment and the Economy 2010a). Third, the potentials and challenges of RDZs are discussed through the empirical case areas.

Table 2. Summary table of the original papers.

Original paper	Key concepts	Research questions	Main results
I Program-based regional development in transition: small and medium-sized regional centers in the core of competition and/or cohesion policies	program-based regional development, regional innovation policy, small and medium-sized regional centers, G overnment's Special Programs	1. What is the position of peripheral areas, namely small and medium-sized regional centres, in the nationally-led Regional Center Program and Center of Expertise Program in Finland? 2. How the actors in the small and medium-sized regional centres see the role of Government's Special Programs in developing their innovation systems? 3. How the viewpoints of national and regional scales meet in regional innovation policy?	- There is a lot of innovation potential in small and medium-sized (peripheral) areas that could be within reach of national innovation policy - National programs have a central role in increasing the strategic awareness and knowledge of innovation system development in peripheral areas, and thus, also, in supporting balanced spatial structure in Finland - The divergence between top-down and bottom-up approaches is challenging the cooperation between different scales - There is no clear view about the role of small and medium-sized areas in contributing to national competitiveness in Finland
II Regional development zones in Finland: territorial cohesion and competitiveness	regional development zone, polycentric spatial development, competitiveness, territorial cohesion, periphery	1. What are the regional development zones in Finland? How are they defined in strategies at different spatial levels, presented in regional development plans and implemented in practice when connecting central and peripheral areas? 2. How does one important Finnish regional development zone, the OuKa crossing the country in west-east direction, relate to the European Union's Territorial Agenda?	- There is not yet a proper understanding about the specific possibilities of RDZs in contemporary regional development - RDZs have many challenges as tools to combine competitiveness and balanced development - Actors question the political accountability and legitimacy of RDZs. RDZs activities need to be open to people and enterprises to justify them as tools of territorial cohesion and to advance the actors belongingness to the RDZ - To achieve territorial cohesion, more focus ought to be placed on the functional activities of RDZs. This also means efficient concentration of activities and land use to the core structure along each RDZ
III Territoriality in the strategies and practices of the territorial cohesion policy of the European Union: territorial challenges in implementing "soft planning"	territory/territoriality, territorial cohesion, European spatial development, regional development zone	1. How the territoriality is considered in the territorial cohesion policy of the EU and more particularly in the Member States' conceptions of territorial cohesion policy? 2. How the new spatial thinking promoted by the territorial cohesion policy is actualized in the practices of spatial planning at a regional level in the case of the Bothnian Arc RDZ?	- Territoriality as a spatial category is still mainly defined through administrative and hierarchical relations - RDZs can be seen as potential tools of territorial cohesion, but there are several challenges related to territoriality - It has to be more carefully specified, how the territorial cohesion policy can support the emergence of new forms of fluid territoriality from the starting point that spatial development is still today mostly governed from the traditional, bounded administrative territories

IV Towards fluid territories in European spatial development. Regional development zones in Finland	territory, governing, spatial development, European Union, regional development zone	1. What territorial forms the contemporary spatial development governing takes, and how governing techniques and different territorial forms are connected to each other as recognized in the contemporary academic literature? 2. How the bounded, networked and fluid notions of territory are visible in regional development zones (RDZ) in Finland?	- Considering territory as a strategy for governing spatial development is important in increasing the awareness of the territorial strategy making; different modes of territoriality have different implications to governing spatial development - In the zone-based development framework, the different modes of territoriality are brought together for contemporary spatial planning. - The consideration of agency and participation in RDZs is still narrow: bottom-up development has been limitedly considered - So far fluidity is in the spatial imagery of development visions and flexible strategies. Much more emphasis is needed in the translation of 'the relational paradigm' into spatial development practices
V Comprehensive spatial development in Europe: Regional development zones in Finland	comprehensive spatial development, regional development zone, corridor, policy integration, Finland	1. How zone-based development is related to the 'comprehensive spatial development' promoted by the EU? 2. How the RDZs in Finland promote comprehensive spatial development?	- In many RDZs in Finland, there is an over-emphasis on potential economic relations created by the zone-based framework, even though much of the assumed potential of the zone-based development lies in the more efficient organization of diverse land uses - RDZs have not functioned as frameworks for guiding the organization of land use, transportation or more ecoefficient organization of spatial structure - In their current situation, RDZs cannot have a significant impact on spatial structure in Finland. There is a clear gap between comprehensive spatial development visions and regional development practices - In the future, much more attention needs to be directed toward the efficient integration of sectors and scales for comprehensive spatial development

5.1. Polycentric and networking spatial structure and related policies

"The areas that have sufficiently versatile entrepreneurship and knowledge and that have good and functional physical infrastructure have the best possibilities to survive in the global competition. These are among others the Helsinki metropolitan area and the largest centers with a university. Also areas near urban centers and core rural areas that manage to utilize the globally growing appreciation of and possibilities related to local food production, tourism and bio-energy will succeed. The biggest challenge globalization imposes on small areas with one-sided industrial structure and on remote rural and island areas, whose knowledge base and industrial structure, as well as networking with bigger centers, has to be supported. Due to globalization, the skillful workforce, services and specialized entrepreneurship continue to concentrate on the largest urban centers. The networked urban structure can, however, decrease the disadvantages of concentration." (Ministry of Employment and the Economy 2010a: 34, translations by the author).

The argument behind contemporary spatial development is that even though activities continue to concentrate on largest urban areas in the country, and although this development trajectory can hardly be stopped, its intensity can at least be balanced and development directed by promoting a polycentric and networked spatial structure and by supporting the urban-rural cooperation and the development of remote areas. The networked relations are seen to be compensating for the lack of geographical proximity (for the adaptation of the concept of polycentrism in Finland, see Antikainen & Vartiainen 2005; Eskelinen & Fritsch 2009). At the national level, polycentric spatial development is pursued through sector ministries' strategies and visions that offer national guidelines concerning the topics that should be catered for in regional development and planning at lower scales. These planning guidelines vary in their steering effect: others such as the Ministry of the Environment's vision for land use in Finland (2006) are more informal documents meant to offer common vocabulary and ideas on development, and others such as the national land use objectives are more formal as they for example guide zoning decisions made at the regional and municipal level.

In the 21st century, there are two documents that have most visibly promoted the development of regional development zones in Finland. These are the Ministry of the Environment's vision for land use in Finland (2006), and Ministry of Employment and the Economy's strategy for regional development (2010a). These documents offer strategic guidelines and directions for development, as well as a common vocabulary for regional development actors at diverse development scales. It is advised that actors involved with regional development and planning take these guidelines into account when creating strategies for regional development and land use. The Ministry of Employment and the Economy's strategy outlines the vision for regional development in Finland for 2020, and its purpose is to guide the regional development activities in Finland and for example to create a basis for the next government's program regarding future regional development. The strategy's contents should be taken into account by

the other sector ministries and lower development scales and authorities, most importantly the Regional Councils. The Ministry of the Environment's vision, instead, "is intended for use as support and background information for Regional Councils and the government administration in their long-range work to direct land use and spatial structure" (2006: 3).

In addition, other documents have addressed the development of RDZs, and have importance in their development. Already the Ministry of the Environment's vision for national spatial structure for 2017 in 1995 indicated the increasing importance of RDZs between the largest cities in Finland (Ministry of the Environment 1995), which was then reflected also to the the vision for regional development for 2010 (Ministry of the Interior 1995). Currently, national land use objectives that are issued by the Council of State define the most important traffic networks of national importance, and are thus highly important together with the actions of the Ministry of Transport and Communications in creating the prerequisites for RDZs and their connecting function (see Ministry of the Environment 2009; Ministry of Transport and Communications 2011a). Furthermore, the Association of Finnish Local and Regional Authorities whose membership consists of towns and municipalities in Finland has mentioned the RDZs as important tools in enhancing regional cooperation (2010). The Association provides services for municipalities for example in social and healthcare services; education and culture; community, technical and environmental concerns; regional and industrial development; and municipal finance (Association of Finnish Local and Regional Authorities 2011b). In addition, some regional level strategies and plans provided by the Regional Councils promote the development of RDZs (e.g. Joint authority of Kainuu region 2005; Regional Council of Lapland 2009; Council of Oulu Region 2010; Regional Council of Central Finland 2010). In this chapter the two most important documents setting guidelines for the development of networking spatial structure and polycentric policies are discussed, after which RDZs and their objectives are discussed more in detail in the next chapter.

First important spatial development guideline in the 21st century is the Ministry of the Environment's vision of the national spatial structure for 2030 (Ministry of the Environment 2006), called *"Competitiveness, welfare and eco-efficiency, perspectives for spatial structure and land use in Finland"*. In this document the Ministry of the Environment's views on the long-term development of spatial structure and land use in Finland are presented. It is not a legally binding document, but it still has an important effect on creating a common vocabulary for the actors dealing with the development of the spatial structure. According to one key civil servant, the document did not have a significant connection to the government of that time due to the government's unclear commitment to spatial structure and land use development. After its publication, however, it has affected the contents of the next governments' platforms and also the contents of other important national strategies such as the national land use objectives (Ministry of the Environment 2009) and the national strategy for regional development (Ministry of Employment and the Economy 2010a).

The vision was prepared by a group of approximately six civil servants from the Ministry of the Environment in an interactive cooperation with multiple actors in different stages of its formation. Among the ministries the cooperation was between civil serv-

ants, mostly between the experts from the Ministry of the Environment, the Ministry of Transport and Communications, the Ministry of the Interior and the Ministry of Agriculture and Forestry, Ministry of Transport and Communications being the most important partner. The vision as an informal discussion document with no statutory effects on land use offered the Ministry of Transport and Communications a means to present its nationally important transport network on a map, which was not possible in preparing the national land use objectives due to their concrete statutory role in guiding land use. The 'soft' visionary role of the document thus enabled the envisioning of the polycentric spatial structure in a close cooperation with the sector ministry responsible for the development of the transportation network that is often incapable of presenting its concrete objectives on maps due to their politically unacceptable effects on spatial structure. In addition to this 'soft' element, the document was widely accepted because of its emphasis of the importance of spatial structure, comprehensive approach on spatial development integrating competitiveness, welfare and ecoefficiency, the emphasis on place-based potential, and finally the open participation in its preparation. During the preparation, several actors from other ministries, universities, Regional Councils and other important regional development organizations were also involved in developing the vision.

Several regional, national and international planning strategies and documents were studied by the group in preparing the vision. At the regional level were studied all the regional plans of Regional Councils and other important plans related to the development of megaregions and regional development zones. At the national level, national land use objectives and other ministries' plans with spatial impacts were important, most important being the national plans of the Ministry of Transportation and Communications and the then-current regional development strategy of the Ministry of the Interior. From the international documents instead were studied the ESDP and documents related to TEN-network, the plans related to the development of the Baltic Sea (VASAB, BSR) and the OECD's evaluation of Helsinki metropolitan area (OECD 2003). In addition, national spatial plans of some European countries were studied in outlining the role and representation manner of the vision.

The vision is meant to serve as a supporting document for the Regional Councils and for the national level administration in their long-term work to guide land use in Finland. In fact, it has encouraged actors from diverse scales to consider the wider development perspectives of the national spatial structure from various different angles. The international perspective has been important, and the document has been used in international cooperation to bring forth Finnish perspectives and needs. According to the vision (2006: 3), "for Finland, success in a global economy means that its spatial structure has to be integrated with developments in Europe and in the neighboring areas". Here, the importance of multiple international cross-border cooperation areas is highlighted. The international perspective, in fact, is quite evident in the document (see Ministry of the Environment 2006: 29) as it highlights the international and intergovernmental nature of current spatial development practices. Accordingly, networking and cooperation are obvious keywords in the vision, and it is emphasized that "those regions which are capable of networking and co-operating will meet with success" (2006: 3). The balanced development is advanced through intensifying the polycentric spatial

structure that supports the more efficient use of resources and infrastructure in every region of the country.

Reflecting the broader spatial development objectives coming from the EU level, the Finnish vision also emphasizes competitiveness, cohesion and environmental sustainability: 1) better international competitiveness; 2) increased well-being of the population, and; 3) improved eco-efficiency are the central objectives of the vision. In Table 3, these objectives are listed together with essential prerequisites mentioned in the vision.

Table 3. Main objectives and prerequisites for spatial structure in Finland (Ministry of the Environment 2006: 17–18).

Main objective	Essential prerequisites
Better international competitiveness	- Finland remains a strong actor in Europe, and the overall preconditions are supported by close contacts especially with the Baltic Sea and Barents regions; - Europe heads towards a polycentric spatial structure based on division of labour, specialisation, and the utilisation of the potential in different regions; - Finland builds up an internationally attractive and dynamic network of cities and links to the European network; - Finland's international and national accessibility is improved, and logistics costs are competitive; - The economic importance of regional natural and cultural environments is enhanced.
Increased well-being of the population	- Communities function well, services are easily accessible, and good and safe living environments preserved both in growth areas and depopulation areas; - Communications are easy, and especially the basic service level of public transport safeguarded; - Our unique natural and cultural environments are maintained so as to retain their attractiveness for use in creating high-quality living environments; - Finland has a polycentric spatial structure based on the potential and strengths in all regions, and on mutual co-operation.
Improved eco-efficiency	- The existing built environment and infrastructures are used extensively; - Regional and community structures are geared to decrease transport need; - Energy consumption for transports is reduced by means of environmentally less harmful modes of transport and through technological development; - Good preconditions are created for the utilisation of renewable energy sources; - The loss of biological diversity is stopped and a favourable environmental state is created in co-operation with adjacent areas.

A polycentric and networking spatial structure is seen as a way to simultaneously pursue these three objectives (Ministry of the Environment 2006: 22):

> *"In the long run, Finland's spatial structure should become polycentric, which will contribute to a strong cohesive urban network with internal labor division, so that the centers and regions are mutually supportive. By means of a polycentric spatial structure it will be possible to guarantee access to urban services and functions in all parts of the country, and this will also make it possible to utilize effectively the strengths and existing infrastructure and facilities in each region. A polycentric structure fortifies the economic advantages of scale, all over the country. At the same time, it may also build up the potential of the Helsinki Metropolitan Region so that it grows into a strong European metropolitan area."*

> *"Finland's varied spearhead centers for knowhow and economic activities are located in different parts of the country and are, together with their influence areas, of primary importance. With regard to spatial structure, these urban centers should be developed as international, national and regional meeting points. In the urban regions, the community structure should be well-functioning and living environments attractive and easily accessible. An improved polycentric spatial structure will require networking between cities, as well as improved division of labor and specialization between them on the basis of regional and local factors, strengths and circumstances. Additionally, these urban regions should initiate co-operation and organize a division of labor with other centers and rural areas in their influence area. From a European viewpoint, Finland is sparsely populated indeed, and the mutual interaction between cities and rural areas especially needs strengthened and mutually supportive development efforts."*

The vision for polycentric spatial structure based on extensive urban network thus emphasizes networking based on regional strengths, and the more efficient use of the existing infrastructure. The diverse skills and knowledge scattered in various urban centres should be utilized through this urban network that then would also spread its well-being to the surrounding influence areas. At the regional level, this also means the development of coherent urban structures, and creation of growth corridors and good public transport (Ministry of the Environment 2006). Altogether in the vision, polycentrism is presented as a means to overcome the challenges of sparse population density and long distances for example in organizing services, although the concept of polycentrism itself is loosely defined and is not clearly related to the concrete physical development of the spatial structure. This vagueness is indeed seen as a problem in Finland, since there is no commonly agreed polycentric network that guides diverse sectors in the development of spatial structure. Therefore, there is a need to clarify the concept of polycentrism in the future, and a need for a concrete vision about the development of Finnish spatial structure. This would then also tie transportation and land use planning to work towards the same goals (Jauhiainen 2011; Turunen 2011). A new, more politically binding vision has in fact been discussed in cooperation with diverse sector ministries (most importantly Ministry of the Environment, Ministry of Employment and the Economy and Ministry of Transport and Communications), and its content is

being formulated in the period of Prime Minister Katainen's administration.

The other key guiding document addressing RDZs in Finland is the *Finland's regional development strategy 2020* (Ministry of Employment and the Economy 2010a), which was prepared by taking into account the alignments in the Ministry of the Environment's vision, as well as in other important documents such as diverse EU level strategies including Europe 2020. The then-current government's program was also catered for, although it did not act as an important definer of the strategy due to its shorter time frame. The strategy was prepared by a wide working group of civil servants from the sector ministries (Ministry of Employment and the Economy, Ministry of Transport and Communications, Ministry of the Interior, Ministry of the Environment, Ministry of Agriculture and Forestry, Ministry of Education, Ministry of Social Affairs and Health, and Ministry of Finance), different regional level organizations and other multidisciplinary group of experts (see 2010a: 3–6 for the list of all participants). The working group also consulted experts outside the group and regional level actors in regional seminars. The group of experts consisted of professors and researchers in the field of rural policy, economics, urban research and regional science.

Finland's regional development strategy 2020 was published in 2010 to serve as a long-term strategy for regional development and also for the preparation of EU funding period after 2013. Here, only the aspects regarding the development of the polycentric spatial structure and related policies are discussed due to the comprehensive nature of the document. The strategy functions as a guiding principle for regional development actions in the 2010s, and its content has been catered for in preparing the current government's program and the national regional development objectives. Furthermore, the sector ministries have to take it into account in the decisions that have impacts on territorial development. In addition, the strategy functions as a guideline for the regional level actors such as Regional Councils and Regional State Administrative Agencies and the Centres for Economic Development, Transport and the Environment.

In the vision for regional development for 2020, Finland's competitiveness is seen to be based on a wide-ranging utilization of place-based resources. "Regions will succeed, if they specialize, develop strong core know-how and create dynamic cooperation networks between key actors, who are willing and able to network both nationally and internationally" (Ministry of Employment and the Economy 2010a: 24). Importantly, the vision strongly supports the balanced development of the national spatial structure, and accordingly, strong local self-government and on a more general level, more flexible multiscalar governance. In addition to the core innovation centers of international significance, the local resilient knowledge centers function as an important part of the networked spatial structure that reflects the wealth also to surrounding areas. Ideally, the innovation activities and tailor-made regional development strategies rise more bottom-up from place-based practical needs, and enterprises are more actively involved in networked cooperation. Different regions have different roles in the urban network, and it is seen crucial in the strategy, that these diverse roles are identified and utilized through more intensive national division of labor. Ultimately, this, and the stronger role of regions in determining their focus areas in development, is seen to be enabling balanced development (Ministry of Employment and the Economy 2010a). In Appendix 4 are presented the central principles of regional development in 2010s in Finland in more

detail as listed in the regional development strategy 2020 (Ministry of Employment and the Economy 2010a: 31–32).

Altogether, the document is a broad strategy outlining the wide sphere of regional development issues and challenges, but at the end, it functions mainly as a collector of diverse branches of the national government instead of introducing new and concrete initiatives for regional development. As in the case of the Ministry of the Environment's vision, the objectives of regional development strategy are loosely defined, and they do not have concrete guiding effect on regional development practices. Instead, the implementation of these objectives in practice depends on the actions of for example regional development authorities and firms at the local and regional level, which can in economically difficult times challenge their efficient execution.

When it comes to the development of the polycentric spatial structure in Finland, both documents discuss the major challenges of the spatial structure that are then also clear challenges for the realization of the visions. "The urban network does not sufficiently cover the whole of the country, so that quite obsolete areas will remain between the urban regions. Those rural areas which lie close to cities have the best opportunities of attracting businesses and residents" (Ministry of the Environment 2006: 12). One of the greatest challenges then is how the development of centers can be linked to the development of the surrounding areas. In a dispersed community structure and areas with dispersed population, it is increasingly challenging to provide equal or even sufficient services at a reasonable cost.

After Finland's EU membership, urban areas have increased their importance as the primary targets of regional policy, whereas remote areas have decreased, and are increasingly decreasing in importance (Jauhiainen & Niemenmaa 2006: 95–96, 113). According to Moisio (2008), to some key actors behind national economic policy, the peripheral areas in fact represent the inefficient space that has to be allowed to decline in order to maintain national competitiveness and survive in global competition. In this view, to support peripheries therefore means reducing the potential national competitiveness that would be gained through concentrating activities to large urban centers. Recently, many researchers have pointed out that Finland is turning from welfare state to competition state, and that this transformation has crucial effects on the development of the future spatial structure, such as depopulation of peripheral rural areas (Moisio 2008; Moisio & Vasanen 2008; Remahl 2008; Leppänen 2011).

However, due to Finland's regional policy history of balancing development through subsidies and income transfers (for the development of regional policy and state spatiality, see Vartiainen 1998; Moisio & Leppänen 2007; Jauhiainen 2008; Moisio & Vasanen 2008; Remahl 2008; Moilanen 2009; Sippola 2011), it is argued that it would cause remarkable expenses to leave these areas unused (Ministry of Employment and the Economy 2010a, see also Ministry of the Interior 1995). Furthermore, this scattered spatial structure has been seen as an important enabling factor in creating a polycentric urban network in a country that, in some standards, has no prerequisites for polycentric policies (see Eskelinen & Fritsch 2009), and where the legacy of the spatially balanced welfare state and related physical structures have been argued to be hindering the development of a truly internationally competitive nation-state (Moisio & Leppänen 2007). Here, the highly developed transport and communication infrastructure related

for example to rapid rail and flight connections is seen to be playing a crucial role for the development potential of the remote parts of the country (Ministry of Employment and the Economy 2010a). Therefore, the integration of land use planning and transportation is also seen as crucial for the future development of spatial structure (Turunen 2011).

In general, the concept of polycentrism, related especially to functional spatial structure, has been said to be more suitable for spatial development in densely populated areas for example in central Europe. According to Eskelinen and Fritsch (2009: 617, see also Johansson et al. 2009), however, in Finland, "polycentric development potential is not perceived to be dependent on geographical proximity but rather on cooperation and connections". The authors point out that, "the spatial structure of eastern Finland is changing from an areal to a nodal one, with no evidence that corridors or zones of development and population growth are forming between the widely dispersed urban centers" (2009: 613). Furthermore, they continue that:

> "first, very long distances between the urban centers do not facilitate the functional integration and pooling of resources between cities. Second, even if the focus of developing polycentricity would be set on relational linkages according to the Finnish model, it remains open whether the relatively isolated small- and medium-sized towns in the region would be able to enhance their competitiveness by specializing and linking up with distant partners or whether this strategy represents whisful thinking in a globalizing world. Thus far, experiences suggest that local resources are important factors in building up these external linkages, illustrated by the fact that larger urban regions, particularly those with a university, have been much more successful in this than smaller town - not to mention rural areas" (2009: 615).

According to Waterhout et al. (2005), however, Finland has been among the most advanced countries in the implementation of polycentric policies, and this is due to the program-based policies emphasizing bottom-up initiatives, including instruments enhancing contracts, partnerships and project-based approaches. Here, the objectives of cohesion and competitiveness policies appear more or less the same thing: "national polices are directed to a better use of endogenous potential of cities and urban regions outside the capital region in various corners of the country" (2005: 171). Nordic countries are also said to have paid more attention to environmental and social aspects of polycentrism compared to their European counterparts (see Janin Rivolin & Faludi 2005). In this light, regional development zones, in line with the concept of polycentrism, are seen as a tool in contemporary policy discussions to bring competitiveness and cohesion closer together in creating economically, socially and environmentally sustainable spatial development.

Notwithstanding, the importance of urban centers as motors of national and international competitiveness of Finland is increasingly emphasized in national policies. For example the current government is especially committed to supporting new growth-oriented firms that have positive effects on employment and internationalization as well as supporting education, research and development that contribute to Finland's economic competitiveness (see Katainen 2011: 8). These firms and their subcontractors, and universities and research institutes, are often situated in large urban regions. Furthermore,

the direction of diverse resources points to the increasing importance of urban centers in spatial development. After the creation of national urban policy at the end of 1990s (OECD 2005), in recent years still increasing effort has been put on its strenghtening. This perspective is highlighted to need even more attention in the future in order to maintain Finland's competitiveness in the global markets (Himanen 2007; Steinbock 2009; Von Bruun & Kirvelä 2009). The metropolitan policy for Helsinki region that was launched in 2007 is developed as an important factor contributing to the competitiveness of the whole country (see Ministry of the Environment 2011, also Alanen 2009; Alanen et al. 2010). This competitiveness, then, is commonly seen to be contributing to the competitiveness of other non-metropolitan cities and areas. In addition to networked metropolitan area, including larger urban areas of Lahti, Turku and Tampere (the definitions of the metropolitan area vary), at least the cities of Oulu, Kuopio and Jyväskylä are recognized as important contributors to the national economy (for diverse definitions, see Ministry of the Interior 2006; Steinbock 2009; Von Bruun & Kirvelä 2009).

5.2. Regional development zones in visions and strategies

Regional development zones as tools for spatial development appeared in the Finnish context in the 1980s, although ideas about zone-based development along connecting infrastructure routes have existed at least from 1940s in the plans of Alvar Aalto for Kokemäki River Valley (see Jauhiainen & Niemenmaa 2006: 207, 210; Välimaa 2011: 38–41). In the 1970s and 1980s, instead, the ideas of central places and their spheres of influence strongly guided the development of spatial structure (Välimaa 2011: 15, see Palomäki et al. 1967). Among the first RDZs was the HHT from the national capital Helsinki via Hämeenlinna to Tampere connecting the two largest urban agglomerations of the country. First the cooperation was built mostly on common physical infrastructure and relatively coherent settlement along the zone, but later, economic development related cooperation and lobbying were also emphasized. The importance of HHT made national authorities to consider other RDZs in Finland (see Haarni & Vartiainen 1996; Välimaa 2011).

The first spatial development vision for Finland in 1995 increased consciousness about RDZs (Ministry of the Environment 1995, also Ministry of the Interior 1995). The vision clearly highlighted the RDZs as the core of the urban and spatial structure in Finland. Furthermore, Jakobson, in his report about urbanization in Finland already in 1992 (p. 86) suggested that:

> *"the development policy that puts emphasis on infrastructure development leads up to spatial structure that is based on the economically efficient grid of development zones, where intermediary areas are connected laterally with other different sized functional urban centers along the zone".*

In this vision, efficient spatial structure of Finland would build on a few development zones that would also be the primary targets of transportation policy and regional policy incentives (Fig. 6). Other areas outside these zones would be designated primarily either for agriculture and forestry or conservation, leisure and tourism. The purpose of

the primary zones would thus be to position national, regional and local level activities economically, socially as well as in infrastructure terms to more efficient locations (see Jakobson 1992: 92–95).
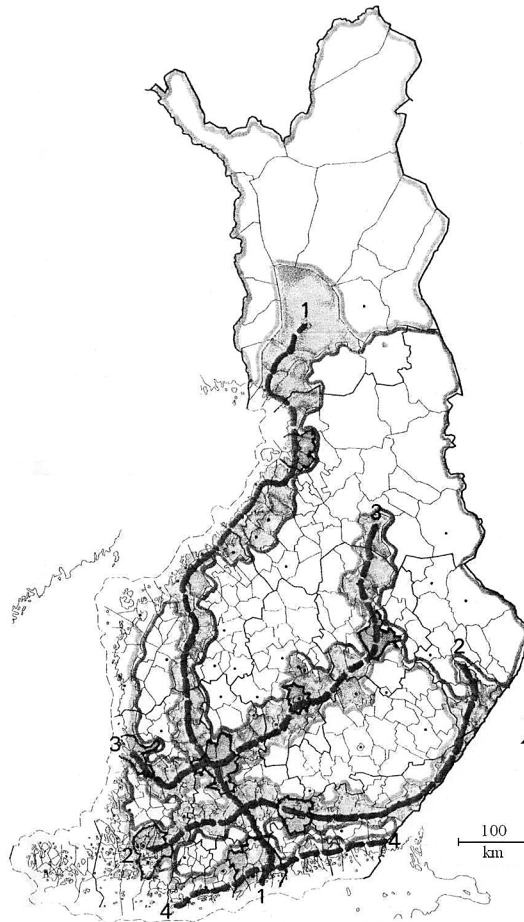

Fig. 6. Zone-based spatial structure in Finland as presented by Jakobson in 1992 (p. 95). 1 = Runkokäytävä, 2 = Salpausselkä zone, 3 = Lake zone, 4 = Culf of Finland zone.

In the Ministry of the Environment's vision for 2017 (1995: 30), it was stated that zone-based development enables:
- *the networking of activities;*
- *the facing of the challenges posed by internationalization of economic activities and related specialization, concentration and efficiency- and cooperation claims;*
- *the decentralization of activities along the zone. The production along the zone can be situated basically everywhere, because the area's good transport connections, high quality communication network, the availability of educated workforce, and the proximity of services ensure the favorable development possibilities in every part of the zone, and;*
- *the efficient use of the existing infrastructure. The additional advantage is a certain flexibility that makes possible for example both centralized and decentralized applications in energy management and other municipal engineering.*

The argument thus is that the cooperation between urban centers along important infrastructure routes increases the synergies and efficient use of resources, and allows the directing of growth to the intermediary areas along the zone. Cooperation across administrative borders is seen necessary to create more efficient spatial structure in Finland. In 1995, the Ministry of the Environment's vision suggested clear geographically determined cooperation zones around the country (Fig. 7).
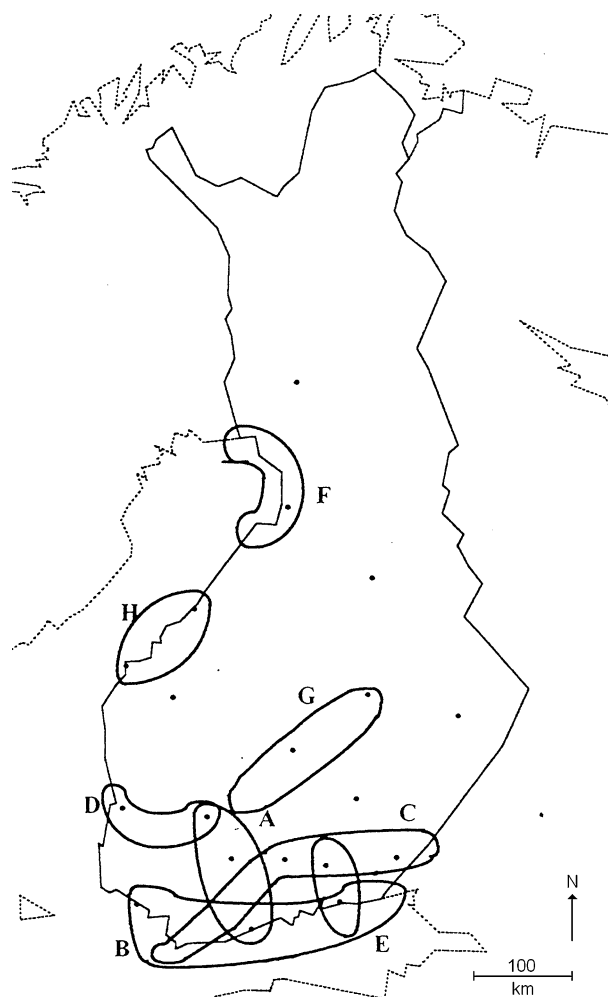

Fig. 7. The cooperation zones in the development of the spatial structure (Ministry of the Environment 1995: 39). A = Helsinki-Tampere, B = Southern Coast, C = Salpausselkä, D = Kokemäki River Valley, E = Kymi River Valley, F = Bothnian Coast, G = Central Finland, H = Quarken (Merenkurkku).

These geographically labeled zones were not so clearly visible in the newer vision of the Ministry of the Environment for 2030 (2006, Fig. 8). This reflects the change in wider EU level spatial development, where the soft spaces and fuzzy boundaries have emerged to arbitrate the development ideas that would otherwise cause conflicts among diverse administrative units regarding where these zones should be situated. In the re-

cent vision the 'functional many-sidedness' of the RDZs is only indicated through a slight change in a color tone, adapting thus the fuzzy representation of planning ideas. Overall, it is not anymore the central government that determines the cooperation areas, but, instead, it is the responsibility of regions to determine their cooperation partners and development interests. In fact, only some of the zones proposed by the Ministry of the Environment have been realized in 2011, but instead some new RDZs have emerged that were not visible in the vision for 2017 (Jauhiainen et al. 2007a, see also Haarni & Vartiainen 1996). This indicates the importance of bottom-up strategy making in creating successful spatial development practices. Local regional development actors and consultants have been important actors in establishing the new conceptual framework for development.
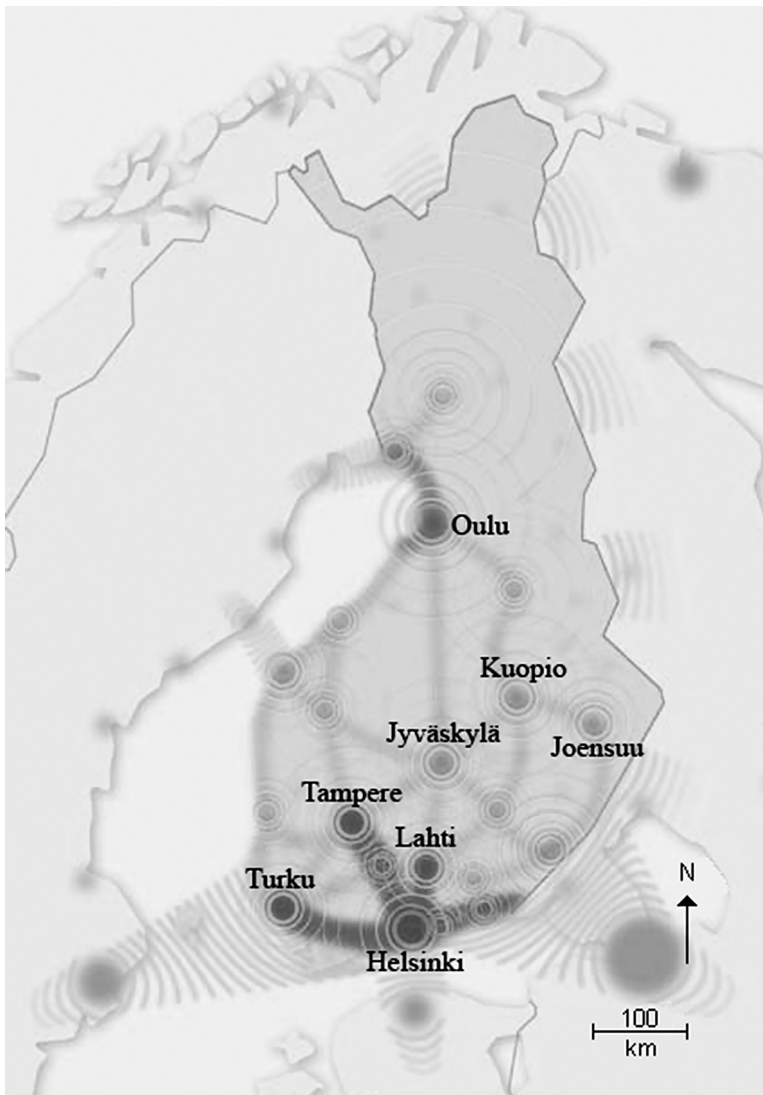

Fig. 8. A vision of polycentric and networking spatial structure of Finland for 2030 (Ministry of the Environment 2006: 25, modified).

The concept of polycentrism was clearly visible in the newer Ministry of the Environment's spatial development vision (see also Eskelinen & Fritsch 2009), and the vision also linked RDZs closely to polycentric development. This was a clear change in discourse, and represented a move towards common European vocabulary. RDZs were explicitly presented as tools to promote polycentric spatial structure. According to the Ministry of the Environment's vision (2006: 23):

> *"a promotion of the polycentric spatial structure and the networking will call for development zones with well-established traffic connections. These will serve as links between main urban regions and promote co-operation, while indicating the direction to take. By developing these zones, it is possible to create functionally better market conditions and co-operation areas and, in the long run, a network of zones supporting a polycentric spatial structure in the whole country. Co-operation based on these zones should, by means of comprehensive planning, improve the preconditions and attractiveness of these areas with regard to the placing of activities, more effective transport systems or, for instance, building up tourism. The possibilities of creating functionally diverse zones differ in different parts of the country."*

Furthermore, the strategy of the Ministry of Employment and the Economy (2010a: 13) clearly positions RDZs in the center of the future polycentric spatial structure in Finland:

> *"urban areas create a functional polycentric urban network, and in between these urban areas are formulated diverse regional development zones. Regional development zones tie urban centers and the surrounding population centers and rural areas to intensive interaction, hence broadening the functional commuting area".*

In addition, it is stated in the national land use objectives that the Regional Councils are obliged to track down where possible interregional zones could be created in cooperation with other councils (Ministry of the Environment 2009: 9):

> *"in regional planning, those actions related to spatial and urban structure and other land use must be clarified in cooperation between Regional Councils that could further the emergence of transregional development zones and their devopment prerequisites. Regional planning must present the nationally important zones and networks of urban and population centers and their development principles."*

Instead in the programs of the current and past three governments, regional development zones were not presented as the future basis for the country's spatial structure; in fact they were not even mentioned in these programs. Balanced development was highlighted in Prime Minister Matti Vanhanen's government's first program (Vanhanen 2003), as well as polycentric and place-based development, and networking among regions in his second program (Vanhanen 2007: 25). Instead in the current government's program (Katainen 2011), direct references to balanced development or polycentrism cannot be found. This could indicate the government's pulling away from the objective of balancing development among regions in Finland. However, as previously discussed, balanced development and polycentrism as spatial development objectives are still visible in the strategies of diverse policy sectors.

Overall, in visions and strategies regarding zone-based development, the development of infrastructure and growth in urban structure are guided selectively along and near the infrastructure core both in central and in more peripheral parts of the zone by means of land use and transportation planning. In addition, zone as a development framework unites actors to new cooperation across borders. Typically, an RDZ crosses a rather large geographical area consisting of several administrative regions such as municipalities or sub-regions and divided by their respective borders, sometimes even national borders. Ideally, an RDZ covers broad issues ranging from economic growth-oriented innovation and technology development to social balance oriented housing and employment and to environmentally more sustainable land use planning, daily mobility and more efficient use of the existing infrastructure (Jauhiainen et al. 2007b; Jauhiainen & Moilanen 2011; Moilanen 2012). This way, as a territorial strategy of governing spatial development, the RDZ ideally connects many public, non-governmental and private actors and individuals to cooperation and common development practices.

Due to its role as the most important concentration of economic actors and firms in Finland, the concentration of research and education, and the dense transport network and relatively high population density, Helsinki is seen as a main hub for RDZs in Finland. Furthermore, previously discussed large urban areas such as Tampere, Turku, Lahti, Jyväskylä, Kuopio, Joensuu and Oulu are seen as important nodes in zone-based spatial structure (see Fig. 8). Outside the networked metropolitan area in southern Finland, the spatial structure is more scattered as the sparsely populated areas are 'dotted' with urban centers of regional, national, and international significance. The interaction of these centers with each other is the prerequisite for the polycentric spatial structure. In addition to networking with the metropolitan area, for example eastern cities should form cooperation towards Russia, as well as northern cities towards both the Barents and the Baltic Sea Region (Ministry of the Environment 2006; Ministry of Employment and the Economy 2010a). In addition to just networking, the specialization of centers in an RDZ, and thus intensified division of labor, is seen as a crucial part of the cooperation (Ministry of the Environment 2006: 22):

> *"an improved polycentric spatial structure will require networking between*
> *cities, as well as improved division of labor and specialization between them*
> *on the basis of regional and local factors, strengths and circumstances."*

Altogether, from the perspective of European spatial development, it is important that RDZs connect less developed areas with growing cores and diverse administrative territories to a new type of strategic cooperation and practices. RDZs, with their internal division of labor, can provide an alternative to the current spatial development characterized by concentration and uncontrollable and untenable sprawl of the large urban centers and shrinking of peripheral areas. Hence in visions and strategies, an RDZ refers particularly to a sustainable zone-based development between urban concentrations, highlighting the use of the existing built environment. However, as becomes evident especially from the zone-based illustration of Jakobson (1992, Fig. 6) regarding the development of Finnish spatial structure, a zone-based strategy also necessarily involves making difficult choices about the concentration of spatial structure in the future.

5.3. Regional development zones in practice

In this chapter, the rise of regional development zones in spatial development in Finland is briefly discussed on the basis of empirical research. It is presented in more detail in the original papers. The empirical research was conducted mainly in the Oulu-Kajaani, Bothnian Arc and Jämsä-Jyväskylä-Äänekoski RDZs in Finland (in addition to the original papers, see Moilanen 2008). Observations were also made from other zones, as they were studied in the projects in which the author worked during the doctoral studies. These other zones in Finland were Arctic Corridor, Southern Karelia Quality Corridor, Mid-Nordic Region, and Joensuu-Kuopio RDZ (see Jauhiainen et al. 2007a, 2010).

According to the most recent development plans of Regional Councils and the national spatial development vision for Finland for 2030, one can identify approximately a dozen RDZs in Finland (see Fig. 5). Local and regional authorities have taken the initiative to implement RDZs, however, with the support of the national policies. Among the first RDZs were HHT zone (Helsinki-Tampere axis) in southern Finland, launched in 1987, and the Bothnian Arc in northern Finland and Sweden, launched in 1998. Later, in the early 2000s, several zone-based strategies and visions emerged across the country such as the Ouka RDZ in northern Finland, the Jämsä-Jyväskylä-Äänekoski zone in central Finland, and the Loura zone in southwestern Finland (see Jauhiainen et al. 2007a). Currently several RDZs exist in regional strategies, and respective development projects are being implemented by private consultant-driven endeavors and by the public-led initiatives around Finland (see e.g. Idea FinlandNet 2010). Some RDZs are a few kilometers wide corridors along transport and communication structures. Others are broad, sparsely populated and consist mostly of unbuilt areas. The more advanced zones have their own organization, funding and staff, while the less developed are still mostly ideas. RDZs are often based on an agreement between administrative organizations involved in their activities, and not so much on functional coherence (Jauhiainen et al. 2007a, 2007b, 2010), even though in some RDZs settlement has extended from urban areas along major transport routes (see Jauhiainen et al. 2007a).

Regional development zones in Finland are mostly public-led projects that are coordinated from different organizations including Regional Councils (e.g. OuKa), city administrations (e.g. Bothnian Arc, members form registered association) or regional development companies (e.g. JJÄ, executed through Regional Cohesion and Competitiveness Program). RDZs' development is often managed by a project coordinator or leader, and usually decisions are made in the management group consisting of representatives for example from member regions and municipalities. Coordination is usually funded by the member municipalities and regions, but the actual development projects are mostly funded from external sources such as the EU's regional policy funds and the national Government's Special Programs.

In the studied cases (Oulu-Kajaani, Bothnian Arc and Jämsä-Jyväskylä-Äänekoski), RDZs are also visible in regional plans outlining the regions' development until 2025 or 2030 (Joint authority of Kainuu region 2005; Regional Council of Lapland 2009; Council of Oulu Region 2010; Regional Council of Central Finland 2010). Develop-

ment in RDZs consists of diverse subprojects and programs related for example to networking of diverse enterprises and industries, tourism and transportation development, marketing, sustainable development, and organization and commercialization of services. In addition, private consultants are actively involved in RDZs' activities by drawing up diverse reports for RDZs' future development related for example to general strategy making, logistics, transportation and economic cooperation.

According to key regional development actors at the regional and local level, RDZs should address quite basic regional development issues, such as employment and economic structure (see Jauhiainen et al. 2007a, 2007b), and rather few see RDZs as important strategic or practical tools for regional development let alone wider spatial development governing. For many regional development actors, RDZs have not yet been truly established as regional development tools. A challenge is that RDZs cross many municipal and regional administrative borders and require intersectoral cooperation. Many actors have not found a proper position for RDZs among traditional strategic planning by Regional Councils or detailed land use planning by municipalities. Public sector authorities lead the RDZs, and most private sector and non-governmental actors, and citizens, have not participated to zones' activities. Due to the project-based administration of RDZs, many actors question the political legitimacy of RDZs in regions and municipalities.

The answers to the questionnaire and the analyzed planning documents of Regional Councils and functional urban regions show that RDZs have, at the moment, many challenges as tools to combine competitiveness and balanced territorial structure. For many, RDZs still remain aspirations rather than focused strategies and practices of regional development. One of the biggest challenges is their weak integration into plans from wider spatial planning scale to accurate land use planning level. RDZs are mentioned in some Regional Councils' plans, but they do not guide the land use planning at the local level. In addition, as for example in the case of Bothian Arc, the borders between diverse administrative regions constrain the cooperation, making the applying and allocation of the EU, national and other public funding difficult for infrastructure and projects aimed at crossing these administrative borders. Hence, traditional territorial boundaries still hinder the practices of spatial development based on these new soft planning spaces (Luukkonen & Moilanen 2012).

There are various structural and organizational reasons for today's challenges of RDZs in Finland. First, many so called RDZs are in fact passive transport corridors or extensions of towns along major roads. They have not been integrated into regional development plans, and transportation planning has been mostly separate from other land use planning and regional development practices (Moilanen 2012, see also Moilanen 2008). In addition, different actors at regional level consider the possibilities of RDZs differently. Some claim they are important, while others in the same region consider them insignificant. Second, the activities of RDZs are mostly narrow cooperation between public regional development actors and some actors related to economic development. Openness and participation to the activities of RDZs are mostly unsatisfactory. In addition, the large size of many RDZs makes it difficult to find commonalities between actors and interests. Fragmentation of physical structure, development almost exclusively based on the public sector, and lack of resources for concrete activities hinder the

development of RDZs. Furthermore, it is difficult to establish one best practice because RDZs differ very much from each other (Jauhiainen et al. 2007a, 2007b; Luukkonen & Moilanen 2012). Altogether, there is not yet coherent understanding about the specific possibilities of RDZs in contemporary spatial development in non-metropolitan areas in Finland.

Nevertheless, the national and regional authorities see RDZs as tools to overcome disadvantages rising from peripheral location by intertwining centers and more peripheral localities into partnership to foster their endogenous potential, as exemplified by the case areas. For example in the case of the Bothnian Arc, the most important aim is to bring forth the 'natural' zonal area of cooperation to the key actors, and to cross former barriers to cooperation. From the perspective of public authorities, the zone is seen to be holding lots of potential especially for enterprises in overcoming the constraints of peripherality (Luukkonen & Moilanen 2012). This way, RDZs gain importance as concrete tools to build mental frameworks for spatial development. These mental frames promote the vital elements of territorial cohesion and comprehensive spatial development, namely territorial integration and cooperation.

6. Discussion: the challenge of dichotomies in regional development zones

Based on the empirical results of this research, RDZs in Finland are still more projects among other regional development projects than comprehensive frameworks for spatial development governing that would guide the spatial structure towards the zone-based development framework and simultaneously enhance economically competitive, socially cohesive and environmentally sustainable spatial structure. So far, the function of RDZs has been mainly to network diverse public and private sector authorities to economic development related cooperation along major infrastructure routes. This is important, but not sufficient to also realize the social and environmental objectives related to comprehensive spatial development framework. Here, contradictories emerge when RDZs are simultaneously promoted as tools for enhancing economic, social and environmental sustainability (Moilanen 2012).

Interestingly, however, RDZs' potentials are often seen to be arising precisely from their unifying element. They are seen to be bringing together diverse dichotomies such as urban and rural, core and periphery, and elements of 'old' and 'new' regional policy (Jauhiainen et al. 2007b). The importance of both infrastructure and endogenous development are highlighted in RDZs, and both agency and structure are interestingly present in their development. In addition, the realities of territorial and relational space are both present in the governing arrangements.

In fact, diverse binaries such as agency-structure and nature-society have been much discussed in geographical research, and they have been seen as a challenge for innovative thinking (Murdock 1998; Law 1999; Cloke & Johnston 2005). According to these views, binaries are narrowing our capability to think differently. These dualities that are at the end social constructs created and reproduced in our daily practices are "hardwired into beliefs and assumptions at both the popular and the intellectual levels" and thus have an effect on the creation and execution of diverse policies and practices (Wylie 2006: 301).

Furthermore, in the case of RDZs, diverse juxtapositions are a challenge for their comprehensive implementation. Currently, the traditional binaries such as competitiveness-cohesion or territorial-relational impose contraints on our thinking creatively that is necessary to realize the potential of RDZs as new forms of spatial development. This new spatial frame should not primarily build on the division between core and periphery, urban and rural, or territorial and relational space, but on a new spatial framing that creatively reorganizes the society. In this chapter, RDZs are discussed in the light of three underlying binaries – competitiveness-cohesion, territorial-relational and agen-

cy-structure – as these dichotomies are clearly present in the development of RDZs, and challenge the ways they are implemented in practice. After discussing these binaries, RDZs are then reviewed from the viewpoint of the 'chicken and egg' dilemma, i.e. whether it is the physical structure or the mental frame that ultimately contributes to an RDZ's development. In addition to just pointing out the challenge, the attempt here is to bring forth ideas to the discussion and future research.

6.1. Competitiveness and/or cohesion in zone-based development

The mismatch between competitiveness and cohesion oriented policies is a challenge when it comes to the practical implementation of RDZs, although RDZs are precisely seen as potential tools to simultaneously intertwine these two in the contemporary policy discussions. The objective of competitiveness is more easily pursued in project level development that can be executed without public approval or wide participation, but the objective of cohesion, instead, as well as environmental sustainability, more often require wide agreement that is visible in land use plans. Here, Eskelinen and Fritsch (2009) note that the concept of polycentrism in Finland is overall used more as a regional development concept (i.e. as a tool to network diverse actors to cooperation) rather than a framework for spatial development (including land use planning level), and also the findings of this research related to the focus on economic development cooperation in RDZs supports this view.

In this research, RDZs have been discussed as tools to implement in practice the vision of polycentric spatial structure in Finland. Discussing RDZs as tools of polycentrism is, however, problematic in the sense that this context easily turns attention towards the nodes, and the poly*nodal*, or poly*centric*, spatial structure, instead of focusing also on what is in between, i.e. on the basic idea and potential of the *zonal* model of development. In RDZs, it should be the zone that is privileged together with its nodes (cf. Adey 2010: 40), but so far, on the basis of empirical research, the true potential arising from this zone-based development framework has not yet been realized in Finland (Moilanen 2012, see also Siukonen 2011). This conceptual challenge related to the urban bias is also clearly reflected in the policy realm of the Finnish RDZs. Although in strategy level discussed as tools of urban-rural interaction, in practice they have mainly served as a new tool for urban-urban cooperation. This observation is not to say that this cooperation does not make any difference, but it sets aside important potential that is attached to the RDZs as a framework for spatial development, and even more importantly, as a potential core of the future spatial structure.

In the light of competitiveness and cohesion-oriented policies, then, RDZs appear both as a possibility and a challenge for peripheral areas in Finland. If used more as a pro-growth urban policy tools under the flag of cohesion oriented regional policy, the objective of balancing development appears questionable or at least narrowly defined to include only largest urban centers of only some regions in Finland. This perspective can lead to increasing regional disparities, if areas outside urban nodes represent nothing but 'white' in the development visions. Furthermore, this puts peripheral areas, in this case areas outside the large urban areas, in an increasingly difficult position, if the

policies are not transparent in their objectives (Herrschel 2009; Moilanen 2009). What is meant with the concepts of competitiveness and cohesion could thus be more clearly defined. To Herrschel (2009), polycentrism, in fact, together with 'corridors of connectivity', appears only as a new way to organize regions into winners and losers instead of making the development potentials more equal. In addition Haughton et al. (2010: 230) have noted, based on the study of contemporary European spatial development that:

> *"while we had hoped to find more evidence of planning providing a forum for challenging neoliberalism's privileging of economic growth and subordination of social and environmental objectives to this, in practice we found economic growth was very much in the ascendant in all the post-devolutionary planning systems covered here".*

This challenge is also clearly present in Finland as the 'integrated planning approach' covering simultaneously competitiveness and cohesion is becoming generalized in spatial development.

Sometimes a less likely strategy can be more innovative, and it is also possible that the sources and inspirations for Finnish future competitiveness are not found solely from the major urban areas in Finland. This is why Sitra (the Finnish Innovation Fund) has also set up new program to discover new innovation potentials in rural areas in Finland (see Sitra 2011). In the context of RDZs in non-metropolitan Finland, in fact, it is important to recognize that in addition to just directing growth, in sparsely populated areas with aging and declining population, RDZs can also act as supportive strategies to reorganize services and spatial structure in general along the important infrastructure routes. In the case of RDZs, then, the turning of the urban bias towards the rural one is not the issue, but instead, the fruitful intertwining of the two is the potential source of innovation. Balancing work and personal life through flexible working arrangements and versatile living environments, organizing services and public transport more efficiently along and utilizing major transport routes, and using diverse incentives to support zone-based organization of activities are examples of the measures that could be catered for in enforcing RDZ-based strategies (see Ministry of the Environment 2006: 12). When it comes to studying RDZs, explorative research based for example on actor-network approach, that in addition to interactions between human actors pays attention to the role of material objects in a network, could be done to reconsider the potentials of these zones, where the connecting infrastructure core plays a crucial role in organizing spatial development instead of urban-rural dichotomization of built-environment.

6.2. Territorial and/or relational space in governing spatial development

This dissertation discusses RDZs as new territorial frameworks for spatial development, thus making the assumption that territoriality has not lost its importance in contemporary spatial development practices. Because spatial development has a direct impact on shaping physical environment as it organizes diverse activities in space, territoriality as a framework for this organizing is still very much a relevant manifestation of human

spatiality. As discussed in the original paper IV, RDZs in Finland should be seen more comprehensively as strategies for spatial development in order to realize their potentials related to economic, social *and* environmental sustainability. For this reason, RDZs as new territories of spatial development should be more thought of as metagovernance arrangements and new spatial frames for diverse projects and programs (cf. Välimaa 2011: 73).

The challenge in seeing RDZs more comprehensively is however the fact that diverse territorial frames challenge their efficient, and flexible, execution. The challenge is to develop a governing instrument that simultaneously functions in the territorial logic of local and regional development and land use planning, and in the relational logic of global connectivity that is increasingly emphasized in regional and spatial development strategies and practices. As already discussed in the theoretical section of this research, the territorial and relational understandings of space should not be seen as mutually exclusive, but instead, relational connections could be seen to be building on the strenghts of a territorial frame.

When it comes to current spatial structure, it is clear that none of the studied RDZs forms a functionally cohesive zone based on unbroken settlement pattern. Instead, RDZs in non-metropolitan Finland are fragmented, and thus different governance challenges emerge than in more densely populated areas. In the absence of physical proximity, other forms of connectivity become equally important (see Eskelinen & Fritsch 2009). In RDZ-based development, however, physical connectivity (and thus to some extent proximity) still plays a crucial role, because connectivity is often understood in quotidian terms, i.e. what is reachable in one (work) day. Physical proximity is then necessarily an important factor if the aim is to benefit from the connecting infrastructure core in organizing mundane mobilities. This, then, would suggest that there are important limits to RDZ-based policies that have to be considered in the Finnish context. At regional level, there are clearly limits in how far the division of labor can be reached so that it would still serve the needs of citizens and entrepreneurs in the RDZ in their daily territorially-based practices. Of course, zones can be implemented in more narrow ways for example in the form of logistic corridors and economic development networks, but then, the goal setting of these zones should be crucially different than that discussed in this research, and thus not comparable in equal terms.

In physically connected RDZs that cross many territorial borders along their way and that pursue more coherent spatial structure, the need for new 'soft' and more relational forms of governance has become increasingly important in their succesfull implementation. The development of strategic frames for more comprehensive spatial development is still restricted, or at least slowed down, by the regulatory planning system based on administrative territories, and its limits for comprehensive cooperation. At the end, it comes down to the municipal level and the willingness of actors to execute the zone-based strategy together with other municipalities along a connecting transport route. In the current situation, municipal land use planning and service provision are ultimately those that can effectively contribute to the zone-based organization of spatial structure, but at the same time, it is particularly this territorial factor that often hinders the implementation of zone-based strategies. Municipalities often want to be part of some new strategies related to economic development, but when it comes down to their land

use planning, this would require more solid consensus of the public and new kind of understanding of spatial organization of activities to put forward a zone-based strategy in practice. In addition, inside geographically wide municipalities, the commitment on zone-based development often means the concentration of activities along main transport routes, thus placing citizens in an unequal position regarding their location in relation to the zone's core.

In some case RDZs, the territorial borders of Regional Councils have acted as a barrier for comprehensive cooperation. The allocation of funding and coherent land use planning become challenging because of the borders dividing RDZs. Furthermore, concentrating activities along an important transport route inside geographically vast provinces is challenging, because other municipalities that do not belong to the sphere of this transport route have the possibility to weaken the development possibilities of the RDZ. This in fact raises the question about the relevance of the contemporary borders and functions of Regional Councils, related especially to their relevance in organizing and governing spatial development (see Jakobson 1992; Haughton et al. 2010, also Koistinen 2011 for municipal reform in Finland). However, as important governmental authorities for managing regional development, Regional Councils today still act as key players in affecting RDZs' practical development. At best, Regional Councils can contribute to the development of RDZs and work in favor of their development.

Altogether, the issues related to territorial boundaries show the power, and challenge, of bottom-up development in executing successful spatial development strategies. When there is some consensual and bottom-up arising support for an RDZ-based strategy, as in the case of JJÄ, it is possible to pursue comprehensive spatial development through this strategy, but still more flexible governance mechanisms could be created to ease these strategies' fluid execution, including more flexible use of funding and organization of services inside an RDZ. Here, citizens' identification to the RDZs would help their effective governance thus making them more efficient tools also for spatial development.

6.3. Agency and/or structure: the role of diverse actors in development

The contradictions between top-down and bottom-up development are clearly present in the RDZ-based development, and from the empirical research it comes evident that the current emphasis on structure has not yet delivered the expected outcomes related to zone-based organization of spatial structure. It is emphasized in diverse visions and strategies that national spatial structure needs to be made more efficient, but at the same time, this change should be largely made through involving citizens and the agency of individual actors, which leads into a difficult dilemma between citizens freedom of choice and the national interest in rationalizing (and hence often concentrating) development.

It has been lately discussed that devolution of powers might even increase regional disparities instead of equalizing them (Allmendinger & Haughton 2007), and this clearly highlights the importance of state's role in guiding spatial development together with local actors. Infrastructure development is one clear factor where the role of the

state is important in determining the prerequisites for RDZ-based development outside the networked metropolitan area. However, initiatives and projects regarding infrastructure development have often had a rather piecemeal approach, and thus, a lack of consideration of projects' wider spatial implications related for example to zone-based organization of spatial structure (Romein et al. 2003: 210; Moilanen 2008; Moilanen 2012).

Accordingly, it has been lately emphasized that infrastructure and spatial development should be more intertwined (Romein et al. 2003; Ministry of the Environment 2006; Kavonius 2010; Ministry of Transport and Communications 2011b; Turunen 2011; Moilanen 2012), and that national infrastructure development should be made in much closer cooperation with other policy sectors involved in spatial planning, and with other scales (international, regional, local) involved in RDZ-based development. This highlights the importance of metagovernance approach in organizing spatial development policies and practices (Jauhiainen & Moilanen 2011, also Chapman et al. 2003). In Finland, the Ministry of Transport and Communications has a strong role in determining the conditions for zone-based development, although the envisioning of the spatial structure is in the hands of Ministry of the Environment, and the execution of regional and urban policy in the Ministry of Employment and the Economy. This division of labor between sector ministries is a challenge regarding zone-based development. As there exists a need to prioritize infrastructure investments in the future (Ministry of Employment and the Economy 2010a: 59), these priorizations should be consistent with the development of RDZs that also necessarily require priorization of certain (zonal) areas over others in the development of zone-based spatial structure.

As stated in the strategy of the Ministry of Employment and the Economy, in the multi-level governance, the role of the state becomes more strategic, its key functions being foreseeing the important development potentials and challenges and creating flexible policies for facing them (see 2010a: 140). The Ministry of the Environment's vision for spatial structure for 2030 is established to cover this function of foreseeing the future challenges and potentials, and it has indeed started important discussions for changing the spatial structure of Finland. However, its practical role in organizing and guiding growth and urbanization along major infrastructure routes has so far been rather weak, which raises a question concerning the role of this document in guiding development, and whether it should be more powerful in guiding the decisions made concerning the development of the spatial structure (see Moilanen 2012).

Furthermore in the RDZs' implementation, the emphasis on structure (i.e. on the development of institutional framework for zone-based development) has taken much attention away from the locally arising agency that at the end is necessary in creating a functional RDZ. Many important actors including citizens have been left out from the implementation of RDZ-based projects, and this has made them more network-like territories focusing on economic development oriented cooperation. Also Gualini (2008: 18) highlights the importance of agency in the level of local-regional practices: "…the EU-wide 'framing' of spatial development policies should combine conceptual innovation with a commitment to innovative forms of agency". Here, broadening the citizen participation to include employers, entrepreneurs and service organizers that could contribute to the zone-based organization of spatial structure would be impor-

tant to materialize the framework in practice. Overall, the inclusion of citizens would strengthen their ownership of the zone-based strategy, thus reinforcing the (self)governing of the zone through identity formation.

Therefore, innovative means to broaden the notion of agency especially in peripheral RDZs are called for. Furthermore, the role of national actors in steering the creative approaches on zones' development is important in areas where there are only a few people that are specialized in regional and spatial development issues that comprehensively cover diverse sectors and scales of society. The role of local actors is, paradoxically, in crucial position particularly in those areas that have the least competence for creative spatial development. At the end it comes down to the ability of an area to continuously position itself spatially in relation to other actors in a global economy, and reframe its spatial strategies accordingly.

In general, when it comes to the RDZs' objective of integrating diverse actors, sectors and scales into cooperation, the aspect of metagovernance becomes increasingly important in uniting diverse spatial frames and projects under one coherent entity. In some RDZs, especially in JJÄ, the role of nationally-led regional development programs such as the Regional Centers Program and the Regional Cohesion and Competitiveness Program has been important in increasing the strategic awareness of regional development actors towards governing spatial development, because they have acted as a strategic umbrella and a tool of metagovernance for different policy objectives. In JJÄ, the zone-based strategy started locally, binding from the beginning the local actors into cooperation and thus creating a basis for collective enthusiasm. In other zones, instead, the ideas concerning the RDZ's development have been mostly made by the regional development and public authority. Also in JJÄ, however, the actors have been only limitedly considered: the definition of actors is based narrowly on their active expression of interest through formal participation processes such as meetings and answering to a questionnaire. Crucial for finding innovative action in organizing transportation, services, and land use, etc., is that the actual and potential interest parties involved in concrete action are actively included in the planning process.

6.4. What at the end constitutes a regional development zone?

The empirical dissection of RDZs has shown that there is no clear definition of RDZs in Finland, and that the term has been used to describe very different projects in different geographical settings. In general, the case RDZs of this research were implemented in two different contexts, which then leads to a mismatch between regionally practiced activities and nationally pursued objectives, hence challenging also the evaluation of RDZs:

1. On the one hand, RDZ are seen as more spatially loose mental frames for networking of diverse public and private actors to cooperation and as a tool for image promotion and lobbying, i.e. focus being more on regional development (e.g. Bothnian Arc, OuKa).
2. On the other hand, RDZ are seen as a comprehensive framework for spatial development (that includes the aspects of regional development and land use),

building on territorial characteristics, and aiming at contributing to the wider spatial development objectives of economic competitiveness, social cohesion and environmental sustainability through networking of actors *and* framing land use planning practices, i.e. focus being more on governing spatial development (e.g. JJÄ).

Whether RDZs are seen as connectors of diverse actors or as frameworks for comprehensive spatial development including land use and interregional cooperation makes a huge difference regarding their potential to achieve economically competitive, socially cohesive and environmentally sustainable development.

Here again, the division of labor between the sector policies is clearly visible in the practical implementation of RDZs: in some RDZs, spatial development is somehow disconnected from regional development, and regional and spatial development, in fact, have seemed almost as two separate frames for RDZs and their implementation, not to mention the separation of infrastructure development from these two frames. Importantly, the nature of the RDZ depends on its physical core: geographically wide RDZs tend to function more as mental frames and image tools for regional development, whereas geographically compact territories with some existing functionality have focused more on creating functional spatial structure and thus more comprehensive strategy for spatial development.

When it comes to the dichotomies in spatial development, the question then arises whether it is the physical structure or the mental frame that first defines an RDZ and contributes to its further development. Put it another way, is it the physical structure that promotes the creation of an RDZ and its mental frame, or other way around? It can be both, but in the light of the objective of utilizing more effectively the existing infrastructure, it seems more costefficient in Finland to direct new land uses in areas where there is already existing structures for creating an RDZ, although creating an RDZ from scratch based only on a mental vision would certainly offer new potentials for its implementation. One important factor is also that an efficient RDZ-based development affecting also the future location and organization of land use can only be promoted in areas where there is some growth or otherwise demand for new land uses. The existing dispersed spatial structure in Finland and the depopulation of rural areas in northern and eastern parts of the country thus pose clear limits on the implementability of an RDZ-based strategy. As already mentioned, an RDZ-based strategy can, however, also be implemented in areas with declining population to support the more efficient provision of services etc. However, RDZs based on growth and withdrawal of the spatial structure build on clearly different starting points that have to be taken into account in strategy formation. The first step is thus to recognize the development dynamics in the RDZ and its distinct centers.

For the implementability of an RDZ-based strategy it is important that spatial visions are based on some kind of existing potential. In particular RDZs, building in practice along concrete physical infrastructure and land uses, cannot be implemented efficiently without their appropriate consolidation to land use planning practices. Lefebvre (1991: 30) has discussed the disappearance of physical space from the conceptualizations of social space, and this indeed is the challenge faced by many projects trying to implement these physically estranged spatial development visions in practice. According to Jensen

and Richardson (2004: 65), "policy discourses dealing with representations of space must be understood in relation to their spatial 'objects'". The networking of actors in RDZs is crucial, but it can only act as a starting point towards more comprehensive cooperation. The current spatial development vision of Finland indeed reaches the year 2030, but already in the 2010s it is important to tie the RDZ-based strategies more to their physical definers in order to reach the goals set for 2030.

Is it then possible to find certain common denominators to identify the core zones from the existing spatial structure? This is obviously a complicated issue since the RDZs built both on material structures and on socio-cultural elements of an area, as well as ultimately also on individual people's imaginations. Furthermore, Davoudi (2003: 994) has noted that there have been problems in measuring functional interdependencies between cities in a polycentric area, but there have been attempts to "move beyond the simple criteria of labour market flows and to incorporate other indicators of interconnection such as business links, flows of resources, goods and information". In addition, what constitutes a reasonable proximity is a highly subjective matter that depends not only on transport modes and time distance but also on individual people's perceptions of what is reasonable.

At the end, however, there has to be some kind of indicators on how to measure the realization of spatial development objectives related to zone-based development. To Jensen and Richardson (2004: 173), "this is one of the crucial (but difficult to track) steps between rhetoric and institutionalization, where policy ideas become embedded in new frameworks for compartmentalizing our understanding of the world, and articulating or foregrounding certain ways of looking at it". Accordingly, at least the following factors have to be taken into account when discussing the implementation of an RDZ-based strategy in Finland, although further research is needed to develop concrete indicators for their practical measurement and identification (see also Whebell 1969; Davoudi 2003; Vandermotten et al. 2008):

- connecting physical infrastructure (highway and/or railway and public transportation) that enables (daily) connectivity
- the development dynamics of spatial structure (is there demand for directing growth to the zone or are the centers in or near the zone loosing population)
- material and immaterial assets in diverse parts of the zone, and flows of goods, labor, capital, services, knowledge, etc. (mapping of existing assets and networks between diverse actors in the zone, including urban *and* rural areas, that could potentially enable specialization and division of labor)
- internal and external accessibility and spatial positioning regarding especially those national and international economic centers that are situated near the zone and thus have an effect on its development potential.

Ultimately, reflecting the contemporary definitions of polycentric development, the key issue behind the zone formation is the functionality of the zone, i.e. the division of labor between diverse areas and their functional interdependencies. The mapping of key assets in the zone and bringing them into open discussion is important in planning the potential cooperation and future specialization. From this light, creating an RDZ as an institutional framework for development should act as a guiding strategy for different areas and their specialization for the division of labor to emerge. Furthermore,

this would necessitate that the diverse actors in the area would have the courage to specialize on the basis of this strategy. Instead, if the actors question the legitimacy of the zone-based strategy, that is often the case in Finnish RDZs, the actors compete for the same resources and thus work against the functional zone to emerge. At the end, the successful establishment of a zone depends on skilled and motivated individuals. When it comes to the socio-cultural elements along the zone that could potentially enhance its execution, the people's attitudes towards zone-based development have to be studied on a case-by-case basis. Similarity in culture and common history may ease the co-operation, but also cooperation between culturally diverse regions is equally possible. Leadership is the key issue, since someone has to act as a spokesperson for the new strategy to gain ground.

When assessing the effectiveness of spatial policy instruments, it is important to emphasize that the networking of actors in itself should not in every case be thought of as a *tool* for spatial and regional policy. Instead, it should be seen more as a *framework* where new concrete tools for spatial and regional development potentially emerge (Laakso 2009). This, instead, is dependent on the individuals that take part in these networks, which cannot be determinated by the means of policy, although people's competencies can be improved by regional development related education. Also in the context of RDZs, the concrete tools that ultimately shape the spatial structure are created in the cooperative multiscalar networks of skilled individuals, which would then suggest that the networking of actors along the zone could be a promising starting point towards more comprehensive cooperation. It should be borne in mind, however, that the networking of actors is just the first step towards achieving the set objectives, and not an achieved goal in itself. At the end, economically, socially and environmentally sustainable spatial structure can be only achieved through long-ranging cooperation, which is often forgotten amidst the local actors searching for immediate benefits from economic development networks.

On the basis of this research, following, and partly overlapping, points can be summarized for the future discussions concerning RDZs and their development in Finland:

1. If the objective of an RDZ is to promote simultaneously economically, socially *and* environmentally sustainable development, they should be seen more comprehensively as *strategic frameworks for governing spatial development*. This means implementing them more thoroughly in the planning system.
2. An RDZ-based strategy should be extended to the level of *citizens and firms and their daily practices*, related for example to the location of diverse land uses. By focusing solely on institutional framework it is not possible to create an efficiently funtioning zone.
3. *Deeper division of labor* is necessary to create a functional RDZ. This means that instead of competing for resources, actors in diverse parts of the zone should think more collaboratively the division of labor based on specialization and place-based resources.
4. RDZs can be used solely as *more geographically loose cooperation frameworks* for regional development authorities, but then, other objectives should be imposed on them. Instead, if the goal is the economically, socially and environmentally more sustainable spatial structure, the already established cooperation networks can be utilized to put forward more comprehensive cooperation to achieve the goals set for future spatial structure.

7. Conclusions

In this research, regional development zones in spatial development in Finland were analyzed from the perspective of governing spatial development. Empirically RDZs were discussed in the context of non-metropolitan areas in Finland, focusing particularly on Oulu-Kajaani, Bothnian Arch, Jämsä-Jyväskylä-Äänekoski and Joensuu-Kuopio RDZs. Theoretically RDZs were reviewed as territorial frameworks for governing spatial development through comprehensive approach that simultaneously aims at economic, social and environmental sustainability and policy integration. The main research questions were, how regional development zones in Finland have been implemented as tools of spatial development relative to European and national spatial development objectives, and how different dimensions of territoriality and spatial development governing are related to the development of regional development zones in non-metropolitan areas in Finland. In European spatial development, concepts such as soft spaces and fuzzy boundaries have been used to describe the new spatial development frameworks that cross traditional administrative territories and pursue comprehensive spatial development through integrating actors from diverse scales and sectors to cooperation to increase competitiveness and solve common challenges. In this research, these new soft spaces of planning, and particularly regional development zones in Finland, were reviewed as new territories of spatial development that function in the realities of both territorial and relational spatiality.

In spatial development in general, there is a need for a more comprehensive approach on development, because in addition to economic factors, social and environmental issues increasingly affect the competitiveness of regions and states as both working and living environments of their citizens. Indeed, several comprehensive planning visions have been recently drawn in Europe to outline new development frameworks. However, there has been a lot of criticism towards the high level nature of these visions and their inability to engage with regional development practices at the local and regional level. New creative approaches are thus needed for the integration of sectors and scales for comprehensive cooperation, where recently both policy actors and academic researchers have had only modest success in presenting new ideas to discussion. Also the revised Territorial Agenda of the EU points out the need to concretize the integrated approach to development and encourages the creation of concrete institutions and methods, but this is so far only a rhetorical step towards the concrete implementation of comprehensive development approach. Also in the future, administrative borders of regional government continue to challenge the implementation of soft planning spaces.

Instead of repeatedly confirming the gap between vision and practices, the next step has to be an attempt to narrow that gap through new policy approaches and innovative research agendas. Much more emphasis is still needed in the translation of 'the relational paradigm' into spatial development practices and reducing the gap between vision and practice in spatial development.

In Finland, RDZs have been proposed as concrete instruments to implement the comprehensive objectives of the EU spatial policies. However, the results of this research also suggest that there is a clear, partly scale-related, gap between nationally and supranationally drawn visions and local and regional practices regarding RDZs, and flexible cooperation between actors, sectors and scales has been often hindered by the statutory planning system. RDZs in their current practices are regional development strategies and projects through which a few public and private actors are engaged in strategic cooperation networks and development practices in a territory crossed by many administrative borders and connected by a physical infrastructure. In spatial visions and strategies, instead, RDZs are presented as comprehensive frameworks for spatial development that simultaneously pursue competitiveness, welfare and ecoefficiency and cross many administrative, sectoral and scalar boundaries by connecting multiple actors into new functional cooperation, division of labor and land use along efficient core infrastructure and zone's diversified resources. In the visions, RDZs thus aim at realizing the wider European spatial development objectives in Finland, but their practical implementation reveals the difficulties of this comprehensive approach. RDZs as comprehensive frameworks for spatial development with guiding impacts on spatial structure are still more visions than practiced reality in areas outside the networked metropolitan area in Finland, even though strategies for their implementation have existed over a decade.

Bounded forms of territoriality related before anything to traditional administrative units of regional and local government have been a challenge for the more comprehensive development of RDZs. Common land use planning and allocation of funding has been difficult due to several municipal and regional boundaries. In addition, in geographically wide zones, RDZs have resembled more regional development networks focused narrowly on economic development, image promotion and lobbying, instead of pursuing comprehensive development including the land use planning. Fluid forms of territoriality that would consist of several intertwining networks working towards a common goal under a zone-based territorial governing framework are still difficult to implement among the existing administrative divides and related mental frames. In addition, the Finnish, relatively sparse population density sets clear limits to the implementability of an RDZ-based strategy. Altogether, comprehensive spatial development in new zone-based territorial setting would require a notable change in the collective mindset of diverse actors when it comes to governing spatial and regional development: zones should be seen more as strategies for governing spatial development. Being a tool for more comprehensive development would require that RDZs would be implemented more thoroughly in the planning system. An RDZ as a comprehensive spatial development strategy has to also be tied to the local land use planning level to have an effect on the spatial structure. In addition, without the wide participation of citizens, firms and other important actors to the strategy making it is difficult for an RDZ to gain political

legitimacy for comprehensive spatial development and to deepen the division of labor between the multiple actors and areas along the zone.

In conclusion, RDZs can be developed as a concrete development framework to link the current spatial planning theories and visions influenced by the poststructural viewpoints to the practical demands of economic, social and territorial cohesion in the EU as expressed in the Europe 2020 vision and the Territorial Agenda. However, more attention has to be directed to the governing of spatial development through this new territorial frame. The key seems to lie in the hands of local and regional actors, who at the end can create the collective mental framework and action for new kind of spatial development governing, but national actors are also in an important position in enabling comprehensive spatial development that intertwines diverse policy sectors with spatial impacts. In addition to policy actors and researchers, however, local actors have also had challenges in imagining different spatial forms and governing mechanisms than those based on existing forms of regional administration. Therefore, it is crucial for the successfull implementation of RDZs that multiple actors from diverse scales and sectors are engaged in this mental exercise to imagine even radically different spatial development through the zone-based territorial frame.

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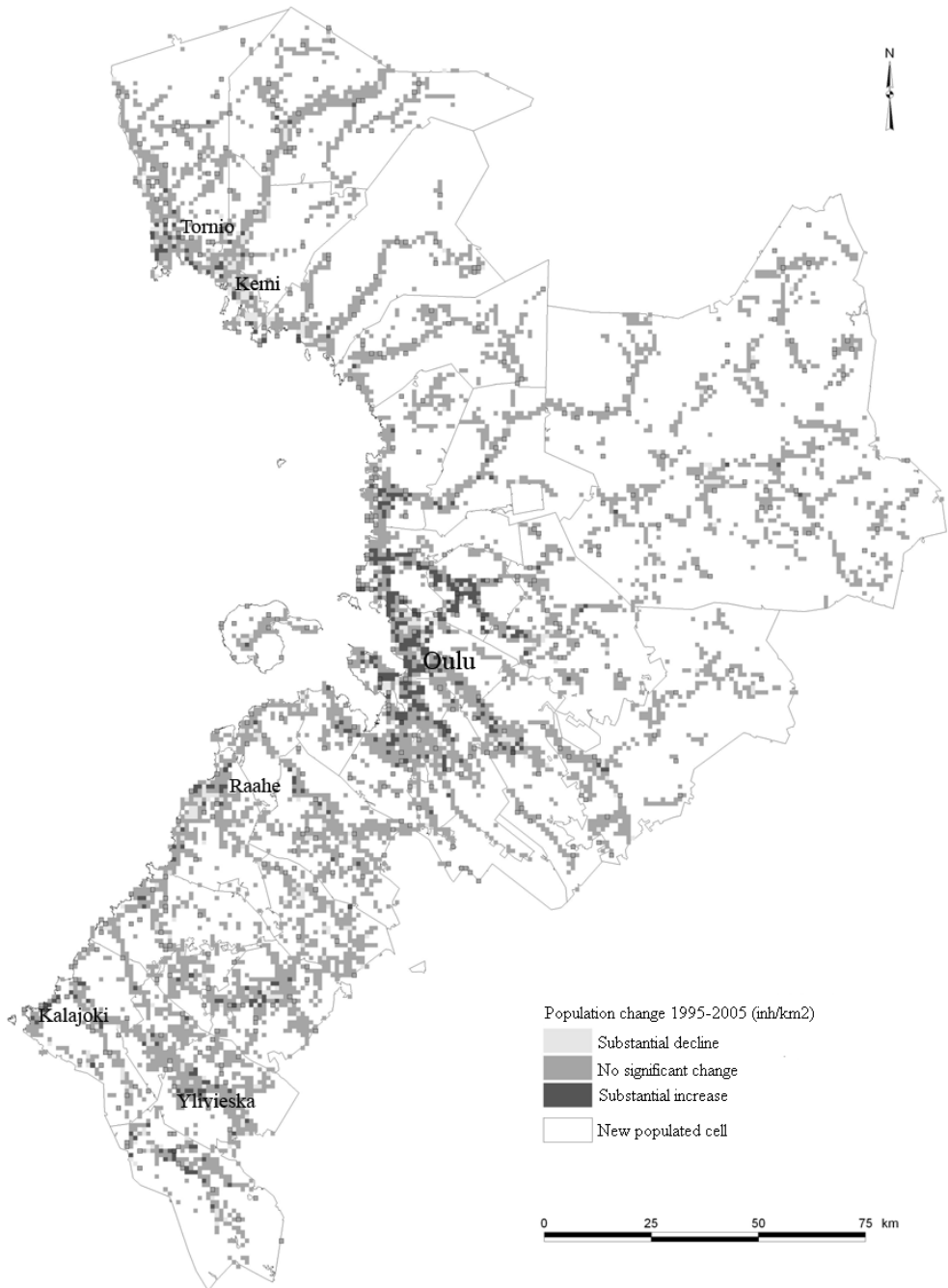Zonneveld W & Waterhout B 2005. Visions on territorial cohesion. *Town Planning Review* 76: 1, 15–27.

Appendixes

Appendix 1. Typology of the Finnish urban network (Antikainen et al. 2006: 30, also for more detailed description of the typology).

TYPO 1	TYPO 2	CENTRAL CITY IN THE URBAN REGION
A Metropolitan area	A1 Helsinki region	Helsinki
	A2 Sub-regions	Porvoo
		Lohja
		Riihimäki
	A3 Neighbouring region	Tammisaari
B Versatile university cities	B1 Technology centers	Tampere
		Turku
		Oulu
		Jyväskylä
	B2 Other versatile	Kuopio
		Joensuu
		Vaasa
C Provincial centers	C1 Versatile and strong industrial	Lahti
		Pori
		Kouvola
	C2 Other provincial centers	Kotka
		Lappeenranta
		Mikkeli
		Rovaniemi
		Seinäjoki
		Maarianhamina
		Hämeenlinna
		Rauma
		Kajaani
		Kokkola
D Specialized industrial regions	D1 Strong specialized industrial	Salo
		Imatra
		Kemi-Tornio
	D2 Small specialized industrial	Uusikaupunki
		Valkeakoski
		Varkaus
		Jämsä
		Äänekoski
		Pietarsaari
		Raahe
E Small regional centers	E1 Special cases	Iisalmi
		Savonlinna
	E2 Regional centers outside national urban network	Forssa
		Kuusamo
		Ylivieska
		Kauhajoki

Appendix 2a. Population development in the Bothnian Arc, 1995–2005 (Jauhiainen et al. 2007a: 114, modified).

Population change 1995-2005 (inh/km2)

Substantial decline

No significant change

Substantial increase

New populated cell

0   25   50   75 km

Map template: National Land Survey of Finland 2006
Population: YKR/Finland's Environmental Administration & Statistics Finland 2006

COUNCIL OF OULU REGION 2006

Appendix 2b. Population development in the Oulu-Kajaani RDZ, 1995–2005 (Jauhiainen et al. 2007a: 122, modified).

Population change 1995-2005 (inh/km2)

Substantial decline
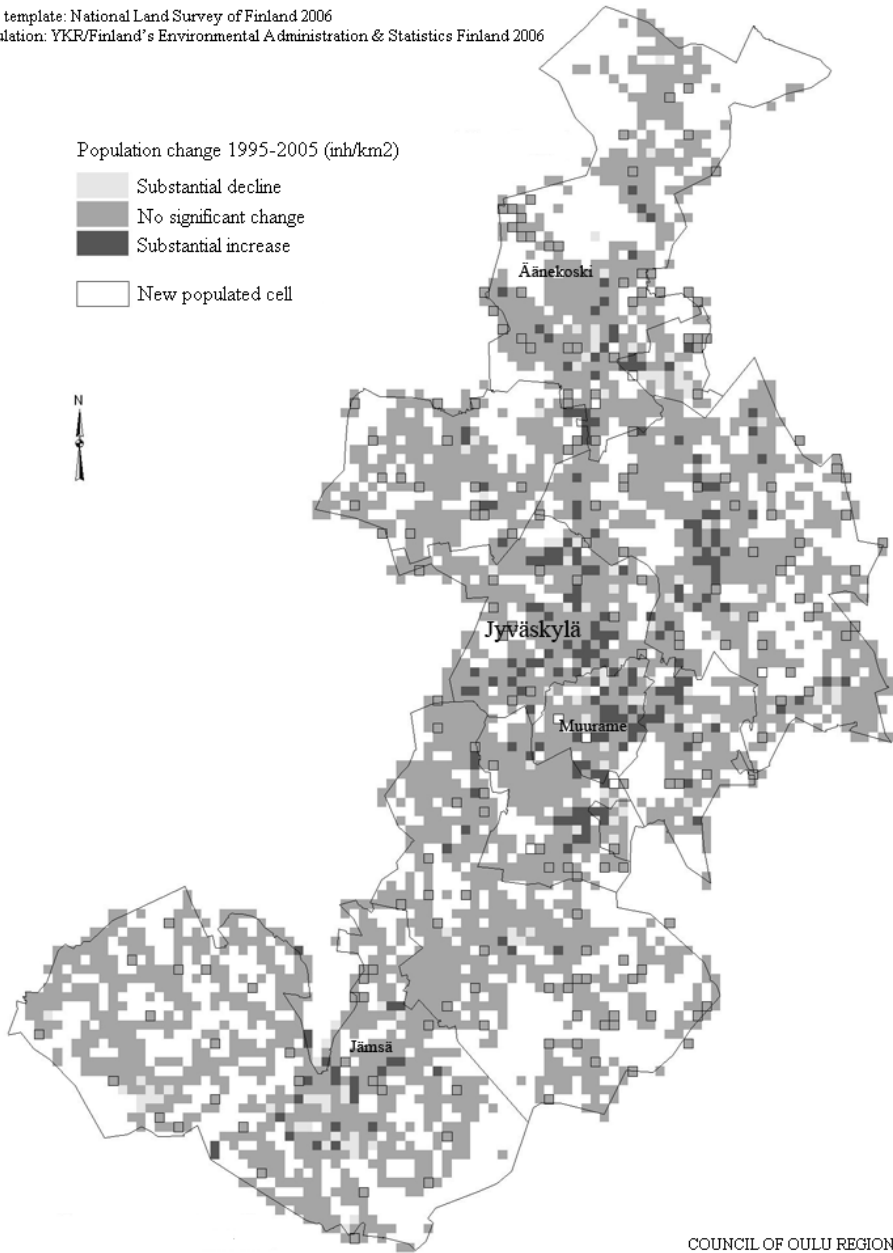No significant change
Substantial increase

New populated cell

Map template: National Land Survey of Finland 2006
Population: YKR/Finland's Environmental Administration & Statistics Finland 2006

COUNCIL OF OULU REGION 2006

Appendix 2c. Population development in the Jämsä-Jyväskylä-Äänekoski RDZ, 1995–2005 (Jauhiainen et al. 2007a: 110, modified).

Map template: National Land Survey of Finland 2006
Population: YKR/Finland's Environmental Administration & Statistics Finland 2006

Population change 1995-2005 (inh/km2)

Substantial decline
No significant change
Substantial increase

New populated cell

N

Äänekoski

Jyväskylä

Muurame

Jämsä

COUNCIL OF OULU REGION 2006

Appendix 2d. Population development in the Joensuu-Kuopio RDZ, 1995–2005 (Jauhiainen et al. 2010: 41, modified).

Population change 1995–2005 (inh/km2)

New populated cell
Substantial increase
No significant change
Substantial decrease
Emptied cell

Map template: National Land Survey of Finland 2008
Population: YKR/Finland's Environmental Administration & Statistics Finland 2008
Licence number MML/VIR/PSAVO/001/08
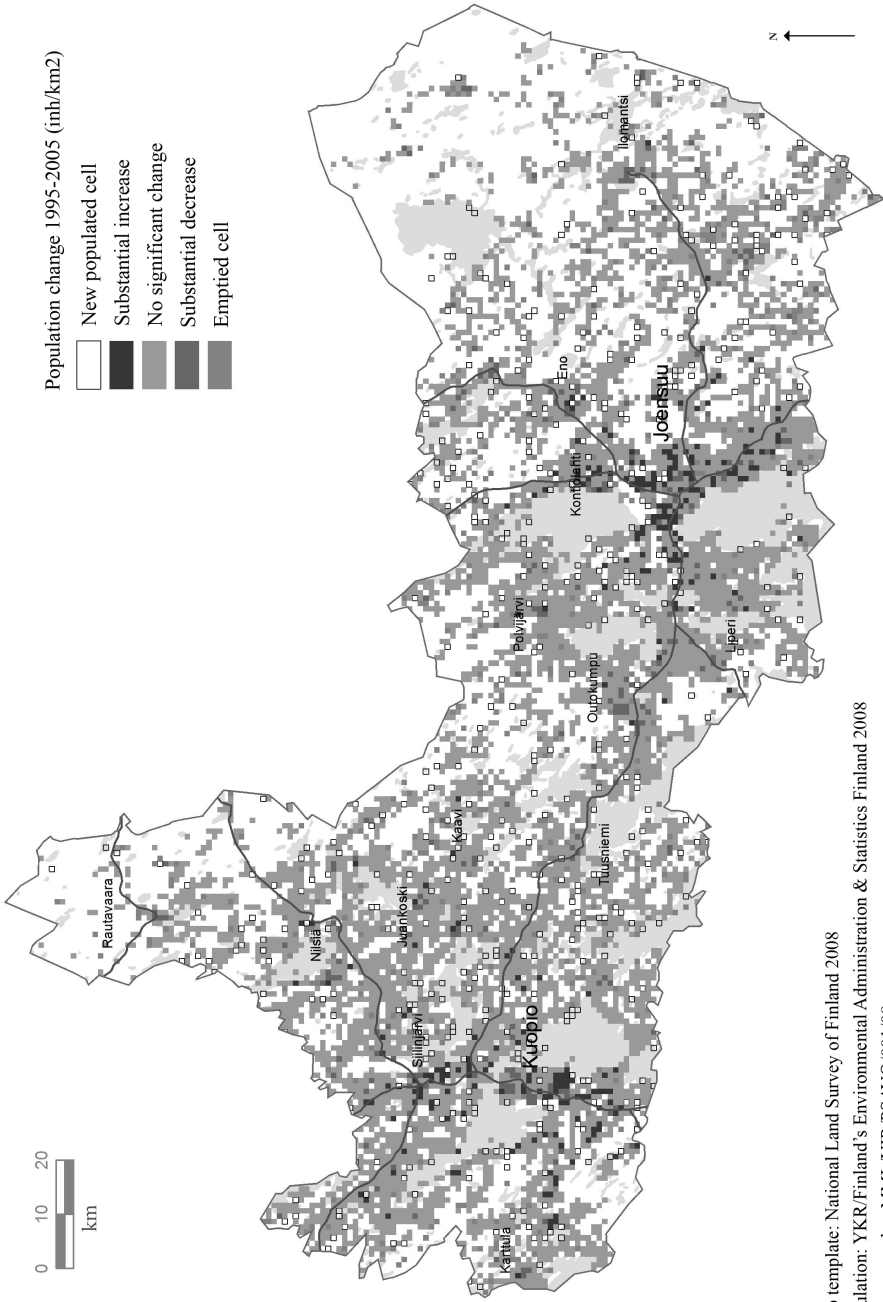
Appendix 3. Participants in Q-methodology (Moilanen 2007, Appendix 3).

Number	Participant	Organization	Position	Date
1	Veijo Kavonius	Ministry of the Interior	Regional development director	2.11.2006
2	Mika Pikkarainen	Ministry of the Interior	State official	2.11.2006
3	Janne Antikainen	Ministry of the Interior	Senior researcher	3.11.2006
4	Ulla-Maija Laiho	Ministry of the Interior	Development director	6.11.2006
5	Marja Taskinen	Ministry of the Interior	State official	6.11.2006
6	Petteri Kauppinen	Ministry of Education	State official	7.11.2006
7	Jukka Mäkitalo	Ministry of Trade and Industry	Planning director	20.12.2006
8	Heikki Ojala	Council of Oulu region	Regional centers coordinator	27.11.2006
9	Terttu Väänänen	Council of Oulu region	Regional development director	5.12.2006
10	Sirkka Kylmänen	Council of Oulu region	Regional development director	14.12.2006
11	Pekka Similä	Development center of Raahe region	Director of the development center	8.1.2007
12	Mari-Selina Kantanen	Techonology center of Raahe region	Program director	8.1.2007
13	Lauri Laajala	Regional center program of Raahe region	Project manager	9.1.2007
14	Risto Pietilä	Enterprise services of Raahe region	Business director	9.1.2007
15	Hannu Saarinen	Development center of Siikalatva	Director of sub-region	15.1.2007
16	Ari Saine	Regional center program of Oulun Etelainen	Program director	16.1.2007
17	Kari Valtanen	Nivala industrial park	Managing director	16.1.2007
18	Esa Jussila	Nivala-Haapajärvi sub-region	Executive manager	17.1.2007
19	Antti Lauhikari	Centria research and development	Director of research and development	18.1.2007
20	Timo Kiema	Ylivieska sub-region	Director of sub-region	18.1.2007

Appendix 4. Central principles of regional development in 2010s in Finland (Ministry of Employment and the Economy 2010a: 31–32).

1. The regional development strategy is executed by promoting economically, socially and ecologically sustainable development.
2. The effectiveness of regional development is improved by increasing the active participation, cooperation and networking of citizens and diverse actors and regions.
3. The special challenges of regional development are answered by rapid allocation of actions.
4. The specialization of regions based on their strengths, and the capability of enterprises to utilize them, are strengthened. In the innovation activities the attention is paid especially on user- and customer-based actions in public-private partnership.
5. The resources are allocated on regions' specialities and strengthening of creativity, diversifying firm structure, developing operational and innovation environments and enhancing creative economy. The top know-how of regions is utilized and fortified.
6. The role of urban areas as economic motors and strong innovation environments are strengthened, as well as polycentric urban network as a basis for sustainable spatial structure.
7. The existing strengths and development potential of different types of rural areas are supported. The sustainable use of material and immaterial resources of rural areas, such as natural resources, biodiversity, natural and cultural environments and landscapes, tranquillity, and open space, is improved.
8. The possibilities of regions to answer the challenges brought by aging are improved.
9. The regionally extensive supply of education is secured and people's readiness and possibilities to lifelong learning are strengthened.
10. The governing procedures are simplified and the active partnership across sectoral borders is promoted at every governmental scale.
11. The ability of regions and firms to prepare themselves for challenges brought by the global economy is strengthened by developing statistical, anticipation and follow-up mechanism at regional level and by ensuring the availability of the sufficiently detailed regional statistics.
12. The cooperation with the Baltic Sea and Barents regions are increased and their traffic routes developed. The possibilities brought by high-speed train between Helsinki and St. Petersburg are increased in cooperation between Finland and Russia.
13. The operations to implement the regional development strategy are assessed and specified yearly as part of the assessment of regional development and its efficiency.