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**THE DISCURSIVE CONSTRUCTION OF INNOVATION
POLICY IN PERIPHERALISING ESTONIA**

Abstract. An innovation-driven agenda in regional development policy has emerged in the European Union against the backdrop of peripheralisation, especially in Central and Eastern Europe. Using a discursive analytical framework, the article investigates the ways in which peripheralisation is manifested through language, practices and power-rationalities in Estonian innovation policy discourse. The analysis is footed on key strategic policy documents and semi-structured expert interviews. Findings suggest that Estonian innovation policy's main narrative of the 'knowledge-based economy' accepts growing disparities on sub-national level in order to overcome peripherality at European scale and narrows the range of policy solutions perceived as suitable.

Key words: discourse, innovation policy, Estonia, peripheralisation.

1. INTRODUCTION

An innovation-driven agenda in regional development policy has emerged in the European Union against the backdrop of current processes of regional polarisation, especially in Central and Eastern Europe (CEE). Most noticeably, EU Cohesion Policy has been adjusted towards competitiveness and innovation goals. It increasingly focuses on innovation in larger centres and metropolitan areas and emphasises the logic of competitiveness and growth-based concentration (Bristow, 2010; Hansen and Winther, 2011). Recent research has shown that policies on European and national level play a role in the polarisation of urban and regional systems (Ehrlich *et al.*, 2012; Lang *et al.*, 2015). Estonia, for example, chose to put strong emphasis on innovation in its approach to regional development (cf. Bachtler *et al.*, 2005). Ascribing par-

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ticular spaces as having ‘central’ or ‘peripheral’ qualities within strategic policy documents has material consequences, e.g. the concentration of resources, and affects the potential for future development of spaces (Beetz, 2008). This is accompanied by an increasing quantity and intensity of market-oriented and place-based policy elements, the effectiveness of which varies in different economic and institutional contexts and tends to have polarising spatial effects (Swyngedouw *et al.*, 2002; Weichhart, 2008). In this article, innovation-based regional policy is defined as a set of measures which aim at promoting socio-economic wellbeing and reducing regional disparities by means of innovation, thereby emphasising the dominant position the innovation agenda has acquired in regional policies.

The article investigates the ways in which peripheralisation is manifested through language, practices and power-rationalities in Estonian innovation policy. Having inherited a set of economic and institutional legacies from state socialism, Estonia has been argued to be particularly strong proponent of neoliberal reforms among CEE countries since the 1990s (Bohle and Greskovits, 2007). The article discusses the ways in which Estonian innovation policy has been shaped by the continuous (re-)imagination of European, national and regional spaces through regional development paradigm of innovation and examines the response of Estonian innovation policy to the evolving ideas and objectives of innovation-based EU Cohesion Policy. It is argued that Estonian innovation policy discourse articulates a new meaning about Estonian space,¹ driven by the language and ideas of ‘innovation’ and the ‘knowledge-based society’. It is suggested that besides studying innovation policy in CEE in terms of adaptation and learning, it also should be approached as an inherently political process in which particular understandings of space are selected (i.e. become regarded as legitimate and institutionally entrenched), depending how well they fit existing discourses (cf. Varró and Faragó, 2016).

The article is structured as follows: it starts with a brief overview of approaches to innovation-based regional development policy in the CEE context. Building on this, a discursive analytical framework is employed which views policy formulation as a multi-scalar discourse, i.e. as a process in which narratives around the innovation-based rationale of EU Cohesion Policy are appropriated or contested by various actors at different scales. The following section shortly outlines the contours of current innovation-based EU Cohesion Policy and presents the innovation policy context in Estonia. It then proceeds by applying the analytical framework to Estonian innovation policy and draws some conclusions.

¹ Spaces are understood as social and discursive products (Lefebvre, 1991), with policies at different levels as agents which perpetually construct and shape these spaces.

2. LINKING PERIPHERALISATION AND INNOVATION POLICY DISCOURSES – A CONCEPTUAL FRAMEWORK

The article takes on a constructivist approach, examining how centrality and peripherality is constructed through innovation policy discourse. Following Carter (2015), peripheralisation is approached from a discursive perspective. Fischer-Tahir and Naumann (2013) define peripheralisation as ‘a spatially organised inequality of power relations and access to material and symbolic goods that constructs and perpetuates the precedence of the centres over areas that are marginalised’ (p. 18). As a relational process, peripheralisation is interlinked with the centralisation of a small number of other spaces, which e.g. attract population and have better economic productivity and infrastructural functions (Kühn, 2014). Combining a discursive analytical framework based on Richardson and Jensen (2003) with the foregoing definition, the article seeks to provide a better understanding of how peripheries are discursively created through policymaking. Specifically, the way in which particular discursive constructions of space relate to the ‘innovation’ agenda is discussed here.

Innovation policy in Estonia and other CEE countries have predominantly been researched by political scientists and public administration scholars, e.g. with a focus on the institutional capacity to adapt and learn from EU and other ‘Western’ policies, often from a systemic perspective. Furthermore, the focus has mostly been on structural and institutional elements of the innovation system. Discursive aspects pointing to the political nature of policy formulation have only scarcely been considered. Taking a systemic approach, Kattel and Primi (2010) analyse innovation policy in peripheral regions in terms of the dynamics of innovation policy and their relationship with structural change and economic development. From a more critical perspective, De Bruijn and Lagendijk (2005) suggest not to overemphasise the role of innovative capabilities in the development of regions. Rather, they stress the dependency on and constraints of the national context.

Niinikoski and Kuhlmann (2015) follow a novel approach in that they combine a social-constructivist perspective with Foucauldian thinking. They conceptualise innovation policy as a discourse and argue that changes in innovation policy are the outcome of highly politicised negotiations. The discursive dimension can shed light on the question whether innovation policy puts higher value on certain spaces and forms of development than others, which for instance is expressed in the concentration of resources in particular places to the disadvantage of others (Ehrlich *et al.*, 2012). Only to a certain extent, the definition of a policy problem and suitable policy solutions follows objective ‘facts’. Instead, this framing process is greatly political and contingent upon power relations between governance levels and actors in a particular time and space.

The article discusses how peripheralisation is manifested in the language, practices and power-rationalities in Estonian innovation policy. The narratives of ‘innovation’ *construct* a particular policy problem, e.g. how non-central regions lack essential features and capacities which are assumed to enable them to develop and potentially catch up with the central regions. Negatively connoted framings of spaces, e.g. as exhibiting deficiencies, can lead to biased attitudes and decisions regarding certain spaces, which can reinforce both discursive and structural peripherality (Carter, 2015). The demands an innovation-oriented regional development policy makes towards space shape the imaginations of that space, such as ascriptions which depict regions as ‘lagging behind’, lacking resources and certain features, or the need to tap into ‘unused potential’.

3. THE CHANGING FOCUS OF INNOVATION POLICY AT VARIOUS SCALES

3.1. EU Innovation Policy in the Context of the Lisbon Strategy

The Lisbon Strategy constituted a shift in the evolution of EU innovation policy, as it changed the policy context markedly. It put innovation into the centre of policy aspirations as the driver for growth and brought about fundamental changes in terms of policy integration. EU Cohesion Policy and its programmes such as INTERREG started to allocate larger budget shares to innovation (European Commission, 2007). Regional policies and industrial policies were increasingly merged by means of ‘place-based’ cluster approaches (Barca, 2009). Also, research policy was linked with ‘place-based’ innovation approaches. These changes further interconnected regional policy, industrial policy and research policy to pursue the Lisbon agenda’s main goal of fostering the EU’s competitiveness and cohesion. As a result, EU innovation policy has evolved from an initial co-existence of small, local projects in the 1980s and 1990s to a broad multi-level and multi-sector policy, which has become increasingly mainstreamed into EU Cohesion Policy. Also, the shift of innovation policies towards the regional level, and funded by Structural Funds, has brought spatial questions more into the focus. The share of EU Cohesion Policy assigned for innovation from the overall budget steadily increased from 11% in the 2000–2006 programming period to 25% in 2007–2013 (85 billion out of 345 billion EUR). Specifically, innovation support in terms of R&D infrastructure, entrepreneurship, ICT development and uptake, and human capital grew (European Commission, 2015). Overall, a gradual ‘paradigm change’ took place in EU Cohesion Policy which shifted the focus away from the support for investment and employment in less favoured regions towards human

capital and ‘soft’ production factors in order to improve the business environment and the capabilities of regions, e.g. by building their institutional infrastructure and the level and intensity of networking between actors (Bachtler *et al.*, 2005).

The eastward expansion of the EU then fundamentally changed the context of EU innovation policy, as spatial disparities in the EU started to soar up (Bachtler and McMaster, 2007). At the same time, pressures from globalisation processes and the economic and financial crisis starting around 2008 have contributed to a substantial change in the policy context, such as the erosion of the economic status of (mainly Western) Europe in the global economy (Brenner, 2009). This narrowed the perceived room for manoeuvre of policy responses. As a consequence, the European Commission began to put the focus of EU Cohesion Policy on providing the framework to promote growth and support innovation through the Lisbon Strategy and, more recently, the Europe 2020 strategy.² The implications were an increased emphasis on endogenous growth in all regions rather than redistribution to less developed areas, thereby pronouncing economic and governance issues (Vanolo, 2010; Hadjimichalis, 2011). Also, the view on space in EU policy has transformed from regions to cities and city-regions which are considered the main contributors of economic growth and productivity in the context of a globalising economy (Varró and Faragó, 2016). This extensive ‘rescaling’ (Brenner, 2009) of competences, resources and responsibilities manifests e.g. in the refocusing of regional policies.

3.2. Innovation Policy in Estonia

The integration of CEE countries into European and global markets was ‘led from the outside’ by influential economic, political and financial institutions such as the EU, the OECD, the World Bank and the IMF, which national political elites in CEE willingly accepted (Kattel and Primi, 2010). The required adherence to fiscal and monetary discipline limited the array of policy options and furthered a dependency of Estonia and other CEE countries to supranational actors (Varró and Faragó, 2016). A large share of investments came from foreign direct investment and foreign-owned banks. Transnational companies (TNCs) tend to import major technological and organisational innovations and know-how from abroad. Ženka *et al.* (2014) suggest that TNCs tend not to develop a close R&D cooperation with local suppliers and universities. Prior to Estonia’s accession to the EU, innovation policy at the national level barely existed. Policies inspired by the mentioned suprana-

² Hadjimichalis (2011) gives an account of the power relations behind the neoliberal turn in EU policy discourse, which is reflected in the Lisbon Strategy, and emphasises that particular elites and hegemonic blocs, mainly from European ‘core’ countries, took advantage of the economic and social-spatial restructuring in Europe during the last decades.

tional institutions and the political agenda of national independence linked to rapid marketisation marginalised the idea of formulating targeted innovation policies and instead aimed at a number of other priorities, which according to Kattel and Primi (2010: 24) were the privatisation programmes and other measures to attract foreign direct investments; emphasis on macro-economic stability; erosion and partial disintegration of the previous Soviet R&D system, and market demand as the key force of restructuring and reform of innovation system. Then in the 2000s, the focus slowly moved to policies promoting competitiveness and innovation-related goals.

Estonia has a politically and economically dominant capital region and is, administratively, a single NUTS 2 region in the EU context. Its innovation system is centralised and innovation policy does not have any regional priorities. Development policy has taken an approach which gives innovation a high profile, while support measures are mostly organised along sectors. Innovation policy is the sole competence of the national government and task of the Research and Development Council, which apart from ministers includes academicians and representatives of the private sector. There are six public universities in Estonia, all of which are located in either Tallinn or Tartu. Research policy is regarded as generally comprising university-led research, whereas innovation policy addresses research led by the private sector (Ruttas-Küttim and Stamenov, 2016). In the pre-EU accession period, many policies areas underwent ‘Europeanisation’, i.e. objectives and strategies were adopted from EU level and also innovation was put on the agenda more prominently. However, the focus on linear innovation in combination with a continuously weak administrative system which lacked networking and long-term planning skills led to specific problems (Suurna and Kattel, 2010). Kattel and Primi (2010) point to a strong mismatch between R&D and education system outcomes and industry needs. Innovation policy in Estonia, like in other CEE countries, focuses on high technology, e.g. the commercialisation of cutting-edge R&D results, incubators and technology parks. At the same time, the overall economic and industrial structure shows a low productivity growth and the majority of activities have a very low demand for R&D, i.e. there is a detachment between innovation and the industrial structure. Also, in the context of innovation policymaking actors such as universities, companies and governmental institutions are fragmented and weakly aligned (Kattel and Primi, 2010, p. 20).

4. RESEARCHED MATERIAL AND METHODOLOGY

The paper employs a discursive analytical framework, drawing on the work of Richardson and Jensen (2003). The analysis rests on the definition of discourse as ‘a specific ensemble of ideas, concepts and categorizations that is produced,

reproduced, and transformed in a particular set of practices and through which meaning is given to physical and social realities' (Hajer, 1995, p. 264).

This framework can reveal how discourses in EU policy challenge the discourses and practices that have been evolving in the member states. The changing discourse in Estonian innovation policy is shaped in a complex setting of contested ideas on different levels, in this case between the national and the European level. Policymaking is understood as a process embedded in a web of social meanings produced through discursive practices in a particular historical and institutional context (Fischer, 2003, p. 13). Following the discursive approach, policy discourses can be examined in terms of their reproduction in language and practice in order to reveal their underlying power-rationalities (Richardson and Jensen, 2003). This allows to analyse 'the ways in which spaces and places are represented in policy discourses in order to bring about certain changes of socio-spatial relations and prevent others' (Richardson and Jensen, 2003, p. 416). The analysis of discourse as representations is divided into three analytical categories: language, policy making practices and power-rationalities. This offers a link between textual analysis and materialities.

The following analysis, due to space limits, is based on the EU Cohesion Policy documents for Estonia in the programming periods 2000–2006, 2007–2013 and 2014–2020 at NUTS 2 level, and on the main national strategic innovation policy document, 'Knowledge-based Estonia', for the periods 2002–2006, 2007–2013 and 2014–2020. Furthermore, the analysis also rests on 9 semi-structured interviews conducted with policymakers and stakeholders³ were conducted to reveal policy making practices and underlying power rationalities.

5. THE MAKING OF CENTRES AND PERIPHERIES IN ESTONIAN INNOVATION POLICY

On EU level, and increasingly on national level as well, a plethora of documents accompanies the evolution and shifts in innovation policymaking and displays emerging and dissipating discourses. Key policy documents are 'fragments of different knowledge-framing processes' (Richardson and Jensen, 2003, p. 17). By framing problems and solutions in a particular way, and by ascribing qualities to some spaces while not to others, specific demands emerge for '(spatial) knowledge' to be gathered and analysed in a particular way. This framing is an inher-

³ The selected interview partners are active professionals in policy making, policy analysis, implementation of measures for innovation and business support, or work for agencies that deal with EU Structural Funds targeted at innovation support and regional development. For this reason, the respondents were able to provide knowledgeable assessments concerning the article's research focus.

ently political process, as various ideas and agendas are perpetually promoted and contested by involved actors.

Here, firstly, the language used in Estonian innovation policy discourse to construct the policy problem as well as the proposed solution will be analysed. In terms of language on space, special attention is on how particular regions are framed in the light of the ‘innovation’ agenda. Secondly, the analysis of policy making practices will look at the institutions and decision-making in different periods, and at the way in which these create centrality and peripherality through the process of preparing the policies. Lastly, the examination of power-rationalities will build upon the analysis of language and practices and explore the overall discursive frames used throughout the evolution of Estonian innovation policy. Richardson and Jensen (2003) state that these rationalities ‘are implicitly acts of power in that they are attempts to govern what sort of social actions are to be carried out and what are not’ (p. 19) – and we should add, in what spaces.

5.1. Language

The single Operational Programme for the 2004–2006 programming period put the focus on human resource development, the competitiveness of enterprises and upgrading the infrastructure. Innovation-related measures made up 8.4% of EU Structural Funds expenditure. During this time, EU Cohesion Policy was not explicitly the driving an innovation agenda in Estonia. In contrast to this, the first national innovation strategy ‘Knowledge-based Estonia 2002–2006’ (ERDS 1) pronounced building an ‘innovation-based economy’ as the main goal. Competitiveness was to be achieved through focusing on human capital, effective education and innovation systems that support research and development and through integration into international networks of cultural, research and economic cooperation. Key areas were identified to be information technology (ICT), biomedicine and materials’ technology. Repeatedly, the small size of Estonia was said to be both a weakness but also an opportunity which may prompt policy to focus on only those economic areas the country internationally has a comparative advantage⁴ in (ERDS 1, pp. 5, 6, 8, 9, 20, 29). Only then Estonia could avoid the risk of becoming ‘an insignificant borderland in Europe’ (ERDS 1, p. 5). Research and development are seen as one of the ‘preconditions for the functioning and development of all society’ (p. 6). The strategic objectives the strategy follows are updating the knowledge pool and increasing the competitiveness of enterprises. It is clearly marked that Estonia’s strategic approach somewhat anticipates the EU’s development priorities and policy

⁴ The vocabulary strongly reflects development theories rooted in neoclassical economics, which has been very much present in EU Cohesion Policy documents since the Lisbon Strategy was devised in 2000.

orientations concerning R&D and innovation. By doing so, it divides the Estonian territory (implicitly) on the one hand into innovative centres and on the other hand those regions which are ill-equipped for being innovative in the proclaimed key economic areas (ICT, biomedicine and materials' technology). As argued above, the sites of those key sectors are mainly Tallinn and Tartu, which in turn leads to the peripheralisation of other Estonian regions.

The trajectory set in 'Knowledge-based Estonia 2007–2013' (ERDIS 2) closely follows the initial strategy. By adding the term 'innovation' to its subtitle (making it the 'Estonian Research and Development and Innovation Strategy'), the strategy's innovation focus gets more explicit. Objectives are an increased intensity and quality of R&D, enhancing innovation capabilities of enterprises and cultivating an innovation-friendly society. The key areas of intervention remain ICT, biotechnologies and materials' technology. Also, the orientation towards the EU as a frame of reference is very visible. While in the previous period the logic of intervention was characterised by a linear understanding of innovation, the discourse shifts towards a systemic approach, advocating public-private partnerships and the cooperation between agents in the Estonian innovation system. However, according to this view the only places where the networks are dense enough to grow are the few well-connected urban regions of Tallinn and Tartu. Also, the focus on research and innovation as a means for building and retaining national competitiveness is framed to be the only available option to achieve this goal: '[t]here is no alternative to this path' (ERDIS 2, p. 4). The strategy applies the frame that innovation lies at the core of the knowledge-based model of society, which all 'developed' countries embody. So in order to consider itself to be part of the circle of those 'developed' countries, Estonia needs to project the same ambitions (ERDIS 2, p. 5). Furthermore, meeting the goals of the Lisbon Strategy takes a central position in the strategy's reasoning. In terms of the conception of spatial issues, polycentrism is argued to be inevitable due to Estonia's low population density (ERDIS 2, p. 26). The strategy identifies the role of county centres in strengthening regional innovation potential as being important, but weak. In terms of centrality and peripherality, the strategy's conceptualisation of a region is that of a site which has to be made attractive for investments and entrepreneurship. However, the priority lies clearly on improving the international competitiveness of R&D activities in Tallinn and Tartu, where the majority of R&D potential is seen. This is contrary to the idea of polycentricity.⁵

In the latest strategy 'Knowledge-based Estonia 2014–2020' (ERDIS 3), the general orientation has evolved once again. The 'smart specialisation' concept has assumed the role of the key policy approach towards supporting innovation, thereby merging 'Knowledge-based Estonia' with the EU's compulsory elaboration of a 'smart specialisation' strategy. In Estonia, this constitutes innovation policy's

⁵ 'Polycentricity' has become a key concept in spatial planning across the EU.

closer alignment with regional policy, while the innovation focus has already been mainstreamed into EU Cohesion Policy in the 2014–2020 programming period. One key linguistic element in the 2014–2020 Partnership Agreement is ‘potential’, which remains ‘untapped’ in many regions (Ministry of Finance, 2014). Throughout the document, structural indicators are put forward to assert an image of spatial order which conceives of Tallinn and Tartu as the only centres (along with a number of often unspecified regional centres). In terms of innovation, all ERDIS editions perceive the EU member states as the frame of reference which Estonia (as a whole) has to keep up with. By a way of seeing it, innovation policy accepts the peripheralisation of regions at sub-national scale in order to overcome Estonia’s peripherality at European scale. The regions outside the well-performing capital region constitute a problem due to their poor performance and lack of capacities. Overall, the notion of spatial cohesion is mostly absent in Estonian innovation policy. It accepts the fragmentation at regional level, since the ambition is to stay competitive on European and global level.

5.2. Policy Making Practices

On EU level, innovation policy mainly aims at the regional level. In the NUTS classification, the whole of Estonia is considered one NUTS 2 region. From the EU’s point of view, a further regionalisation of innovation policy at NUTS 3 level is not foreseen. Accordingly, the division of support from Structural Funds in Estonia was divided along the set priorities without any actual regional targeting below the national level. 45% of the Estonian population lives in rural or predominantly rural areas (OECD 2016). Moreover, being a very open small economy, foreign direct investment has a major impact on development in Estonia. These investments tend to concentrate on the capital region of Tallinn, where returns are likely to be higher (ERDIS 3), yet may have a negative effect on any attempts at fostering spatial cohesion. The trend of polarisation has been further exacerbated since the beginning of the financial and economic crisis in 2008 (European Commission, 2016). Structural Funds are the key factor for financing innovation and R&D support measures. In terms of funding concrete projects, all tenders are competition-based. At the regional level, implementation of measures is argued to have been most effective in Tallinn and Tartu (and its surrounding counties), due to having the highest absorption capacity for ERDF-supported measures (Applica, Ismeri and wiiw, 2006).

When looking at the actors involved in the preparation of the national strategies, the exclusion of interests from regions outside of Tallinn is visible. ‘Knowledge-based Estonia 2002–2006’ was prepared by a working group with the participation of the Ministry of Education⁶ (MoE), the Ministry of Economic Affairs

⁶ The ministries’ names changed during the analysed periods due to a re-scheduling of responsibilities.

(MoEA) and the Estonian Academy of Sciences. There was in fact a public debate on the strategy, comprising participants from universities, research and development institutions, private companies and topic-related associations, who had the opportunity to make proposals for amending the strategy (ERDS 1). However, most issues raised by stakeholders from non-central regions, i.e. Tallinn and Tartu, went unnoticed (Interview with Government Official 1). The policymaking procedure was highly centralised, e.g. in terms of prioritising goals, which were mainly focused on the national economy. The committee preparing ‘Knowledge-based Estonia 2007–2013’ was under the direction of the Ministry of Education and Research. Participants were representative of two other ministries (MoEA and MoF), universities from Tallinn and Tartu, business support agencies, and the Bank of Estonia. The draft was then sent to approx. 120 stakeholders involved in R&D and innovation support, followed by a one-day public debate (ERDIS 2). Again, the contribution of stakeholders, both public and private, had no tangible effect on the contents and the implementation of the policy (Interview with Government Official 2). The 2007–2013 strategy does not make any reference to spatial development issues. ‘Knowledge-based Estonia 2014–2020’ (ERDIS 3) has been prepared with the involvement of the same councils and committees on government level as the previous time. Notably, this time a special advisory group of academicians called the ‘Research and Innovation Policy Monitoring Programme (TIPS) was involved in providing reports and recommendations (ERDIS 3, p. 3; Interview with Government Official 2). The selection of ‘growth areas’, as the strategy puts it, has been conducted by using the smart specialisation methodology developed by the OECD and the European Commission. Overall, the participation of the local and regional level in advisory bodies and in the design, implementation and assessment of innovation policy is very limited. A few attempts have been made at involving the local and regional level in creating strategies for the regional level. The Tartu Regional Innovation Strategy aimed at increasing the competitiveness of enterprises in Tartu and Southern Estonia or the Development Strategy of Ida-Virumaa 2005–2013, which partly targeted research and innovation. Yet these attempts remained scarce and without much impact to inspire similar actions (Inzelt, 2006).

5.3. Power-rationalities

Concerning innovation-based regional development, EU Cohesion Policy provides the frame for what constitutes legitimate and effective policy-making in Estonia. It defines the policy problems and then provides the rationale for which policy solutions are deemed appropriate. Throughout the evolution of Estonian innovation policy, it becomes visible that the innovation agenda set by EU Cohesion Policy (European Commission 2007; 2015) was first anticipated and later

proactively adopted by Estonian policymakers. The EU's definition of the problem which innovation policy is supposed to address as well as the legitimate measures concerning how it is to be solved were embraced by Estonian innovation policy. Then again, the EU's co-financing share for Cohesion Policy programmes was above 80% in the 2007–2013 programming period, showing Estonia's strong dependency on EU funding (Interview with Government Official 1). The need to adopt policy ideas and conceptualisations from EU level is the consequence of ex-ante conditionalities, which make the array of legitimate policy responses rather narrow. Yet at the same time, signs of resistance to externally proposed (if not to say imposed) approaches to regional development strategies based on innovation, brought forward especially by the EU, the IMF and the OECD, are rather faint. If anything, Estonia's policy approach preceded the idea of innovation-based regional development. So by a way of seeing it, from the mid-2000s EU Cohesion Policy's growing focus on innovation pushed at open doors.⁷

Concerning the interplay between the central government and the sub-national levels, there is a distinct power imbalance in the competence to formulate policy. This applies to setting agendas and deciding on what strategies are deemed appropriate. The strategic documents also show that Estonia's logic of intervention in innovation policies stayed consistent, despite the frequently changing government coalitions in office during the analysed periods. In the preparation of Estonia's innovation strategies, only ministries, business support bodies and other actors from the national level were involved. Local and regional level organisations in Estonia are mostly weak and have thus been unable to markedly influence the prevailing innovation policy approach. Issues of scale are important here: instead of promoting a balanced regional development within its national space-economy, Estonian innovation policy's strategic approach – developed and practiced in a top-down manner by the central governmental bodies – is to position its only city-region of Tallinn within European and global circuits of capital accumulation (ERDIS 3, several interviews).

6. CONCLUSION

The article discussed how a discursive analytical framework can contribute to understanding recent debates on innovation policy and its spatial implications such as peripheralisation on European and sub-national level. In the Estonian case, the narratives of the 'knowledge-based economy' and 'innovation' *construct* the particular

⁷ After re-gaining independence in 1991, Estonia embraced this idea very strongly as a way to overcome its peripheral position in global capital flows.

policy problem, namely how regions outside of Tallinn lack features and capacities which are assumed to enable them to develop and potentially catch up with the capital region. The EU's neoliberal market logic and promoting endogenous growth within regions is highly visible in the Estonian discourse, which sees the highest innovation potential in the centres. The socio-economic inequalities between the capital Tallinn and the rest are rarely posed as a policy problem in the strategies.

Examining the language, practices and power-rationalities in Estonian innovation policy in terms of peripheralisation pointed to two main aspects. First, the imagination of central and peripheral regions is such that the latter are framed as lacking resources and capacities, having plenty of unused potential and are to a certain extent seen as redundant spaces in the light of the dominant narrative of the 'knowledge-based society'. This sets the expected contribution of regions outside the capital to the proclaimed goal quite low and further marginalises their position in the discourse and therefore on the policy agenda. Second, the involvement of actors representing the interests of regions outside Tallinn in policymaking is very limited. Innovation policy is highly centralised and barely considers issues raised by stakeholders outside the capital during the policymaking process.

Furthermore, while pursuing the integration into the European and global economic system, i.e. in order to move Estonia *as a whole* towards the economic 'core', processes of spatial de-coupling at the sub-national level do not receive policy attention. Rather, in order to overcome peripherality at European scale, Estonia's powerful agents involved in policymaking accepts peripheralisation at sub-national level. In addition, with regard to EU policy, Estonia counts as one NUTS 2 region and therefore addresses only the country in its entirety. This masks peripheralisation processes at lower levels. The orientation towards a small number of centres is visible in Estonian innovation policy, and has intensified over the examined time period. At the same time, there is a lack of strategies for less favoured regions, which do have their advantages, but tend not to be related to the dominant high-tech innovation narrative. As the causal processes of peripheralisation are multi-faceted, policy discourse and its performative character naturally have only a share in explaining them. Further research from a discursive analytical perspective can bring new insights by comparing discourses in CEE countries, looking at the strategies to legitimise (or contest) current innovation-based regional policy. Also, a closer examination of the key actors' practices and entrenched power relations are further avenues for research.

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REFERENCES

- APPLICA, ISMERI and WIIW (2006), 'Ex Post Evaluation of Cohesion Policy Programmes 2000–2006' financed by the European Regional Development Fund in Objective 1 and 2 Regions, Working package 1: *Coordination, analysis and synthesis*, Task 4: *Development and achievements in Member States: Estonia*, Applica, Ismeri Europa and wiiw Consortium.
- BACHTLER, J., YUILL, D. and DAVIES, S. (2005), 'Regional policy and innovation', *EoRPA Paper*, 5.
- BACHTLER, J. and McMASTER, I. (2007), 'EU cohesion policy and the role of the regions: investigating the influence of structural funds in the new member states', *Environment and Planning C: Government and Policy*, 26 (2), pp. 398–427.
- BARCA, F. (2009), 'An Agenda for a Reformed Cohesion Policy: A Place-Based Approach to Meeting European Union Challenges and Expectations', [in:] HÜBNER D., *Independent Report, Prepared at the Request of the European Commissioner for Regional Policy*, Brussels, European Commission.
- BEETZ, S. (2008), 'Peripherisierung als räumliche Organisation sozialer Ungleichheit', [in:] BARLÖSIUS, E. and NEU, C. (eds.), *Peripherisierung – eine neue Form sozialer Ungleichheit? Materialien Nr 21*, Berlin: Berlin-Brandenburgische Akademie der Wissenschaften.
- BOHLE, D. and GRESKOVITS, B. (2007), 'Neoliberalism, embedded neoliberalism and neo-corporatism: Towards transnational capitalism in Central-Eastern Europe', *West European Politics*, 30 (3), pp. 443–466.
- BRENNER, N. (2009), 'Open questions on state rescaling', *Cambridge Journal of Regions, Economy and Society*, 2, pp. 123–139.
- BRISTOW, G. (2010), *Critical reflections on regional competitiveness. Theory, policy, practice*, New York: Routledge.
- CARTER, H. (2015), 'Peripheralization through planning: The case of a golf resort proposal in Northern Ireland', [in:] LANG, T., HENN, S., EHRlich, K. and SGIBNEV, W. (eds.), *Understanding New Geographies of Central and Eastern Europe. Socio-Spatial Polarization and Peripheralization in a Rapidly Changing Region*, London: Palgrave, pp. 98–111.
- DE BRUIJN, P. and LAGENDIJK, A. (2005), 'Regional innovation systems in the Lisbon strategy', *European Planning Studies*, 13 (8), pp. 1153–1172.
- EHRlich, K., KRISZAN, A. and LANG, T. (2012), 'Urban Development in Central and Eastern Europe – Between Peripheralization and Centralization?', *disP – The Planning Review*, 48 (2), pp. 77–92.
- EUROPEAN COMMISSION (2007), *Cohesion Policy – 2007–2013 – Commentaries and official texts*. Luxembourg: Office for Official Publications of the European Communities.
- EUROPEAN COMMISSION (2015), *European Structural and Investments Funds 2014–2020: Official texts and commentaries*, Luxembourg: Office for Official Publications of the European Communities.
- EUROPEAN COMMISSION (2016), *WPI Synthesis report – Ex post evaluation of Cohesion Policy programmes 2007–2013, focusing on the European Regional Development Fund (ERDF) and the Cohesion Fund (CF)*, Task 3 Country Report Estonia, September 2016.
- FISCHER, F. (2003), *Reframing public policy: Discursive politics and deliberative practices*, Oxford: Oxford University Press.
- FISCHER-TAHIR, A. and NAUMANN, M. (eds.) (2013), *Peripheralization – The Making of Spatial Dependencies and Social Injustice*, Wiesbaden: Springer VS.
- HADJIMICHALIS, C. (2011), 'Uneven geographical development and socio-spatial justice and solidarity: Europeans regions after the 2009 financial crisis', *European Urban and Regional Studies*, 18 (3), pp. 254–274.

- HAJER, M. A. (1995), *The Politics of Environmental Discourse: Ecological Modernization and the Policy Process*, Oxford: Clarendon Press.
- HANSEN, T. and WINTHER, L. (2011), 'Innovation, regional development and relations between high- and low-tech industries', *European Urban and Regional Studies*, 18 (3), pp. 321–339.
- INZELT, A. (2006), 'Country Profile: Estonia', [in:] *Private Sector Interaction in the Decision Making Processes of Public Research Policies. Study for the European Commission Research Directorate General Directorate M – Investment in Research and links with other policies Open coordination of research policies*, Bad Camberg: Proneos.
- KATTEL, R. and PRIMI, A. (2010), 'The periphery paradox in innovation policy: Latin America and Eastern Europe compared. Some reflections on why it is not enough to say that innovation matters for development', *Working Papers in Technology Governance and Economic Dynamics*, 29.
- KÜHN, M. (2014), 'Peripheralization: Theoretical concepts explaining socio-spatial inequalities', *European Planning Studies*, 23 (2), pp. 367–378.
- LANG, T., HENN, S., EHRlich, K. and SGIBNEV, W. (eds.) (2015), *Understanding new Geographies of Central and Eastern Europe. Socio-Spatial Polarization and Peripheralization in a Rapidly Changing Region*, London: Palgrave.
- LEFEBVRE, H. (1991), *The production of space*, Oxford–Cambridge, MA: Blackwell.
- MINISTRY OF FINANCE OF THE REPUBLIC OF ESTONIA (2014), *Partnership Agreement for the Use of European Structural and Investment Funds 2014–2020*, Tallinn.
- NIINIKOSKI, M. L. and KUHLMANN, S. (2015), 'In discursive negotiation: Knowledge and the formation of Finnish innovation policy', *Science and Public Policy*, 42, pp. 86–106.
- OECD (2016), *OECD Regional Outlook 2016 – Productive Regions for Inclusive Societies. Country profile Estonia*.
- REPUBLIC OF ESTONIA (2007), *Estonian National Strategic Reference Framework 2007–2013*, Tallinn.
- RICHARDSON, T. and JENSEN, O. B. (2003), 'Linking discourse and space: towards a cultural sociology of space in analysing spatial policy discourses', *Urban Studies*, 40 (1), pp. 7–22.
- RUTTAS-KÜTTIM, R. and STAMENOV, B. (2016), *RIO Country Report 2015: Estonia*, Science for Policy Report by the Joint Research Centre of the European Commission.
- SECRETARIAT OF THE ESTONIAN RESEARCH AND DEVELOPMENT COUNCIL (2002), *Estonian Research and Development Strategy 'Knowledge-based Estonia 2002–2006'*, Riigi Teataja, Part 1, No. 97, December 18, 2001, Tallinn.
- SUURNA, M. and KATTEL, R. (2010), 'Europeanization of innovation policy in Central and Eastern Europe', *Science and Public Policy*, 37 (9), pp. 646–664.
- SWYNGEDOUW, E., MOULAERT, F. and RODRIGUEZ, A. (2002), 'Neoliberal Urbanization in Europe: Large Scale Urban Development Projects and the New Urban Policy', *Antipode*, 34 (3), pp. 542–577.
- VANOLO, A. (2010), 'European Spatial Planning between Competitiveness and Territorial Cohesion: Shadows of Neo-liberalism', *European Planning Studies*, 18 (8), pp. 1301–1315.
- VARRÓ, K. and FARAGÓ, L. (2016), 'The Politics of Spatial Policy and Governance in Post-1990 Hungary: The Interplay between European and National Discourses of Space', *European Planning Studies*, 24 (1), pp. 39–60.
- WEICHHART, P. (2008), 'Neoliberalism meets Political Economy – Politikversagen, Entdemokratisierung und die vergebliche Hoffnung auf Governance in der Zweiten Moderne', [in:] BRUCKMEIER, K. and SERBSER, J. (eds.), *Ethik und Umweltpolitik – Humanökologische Positionen und Perspektiven*, München: Pekom, pp. 213–236.
- ŽENKA, J., NOVOTNÝ, J. and CSANK, P. (2014), 'Regional Competitiveness in Central European Countries. Search of a Useful Conceptual Framework', *European Planning Studies*, 22 (1), pp. 163–184.