Oittinen, Janne; Mäntysalo, Raine

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Enabling Multiple Outcomes: Strategic Spatial Planning in a Shrinking City-Region

Janne Oittinen and Raine Mäntysalo

Department of Built Environment, Aalto University, Finland

Correspondence: Janne Oittinen (janne.oittinen@aalto.fi)

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Abstract

The population of Finland will start to decline in the near future, and most Finnish municipalities are already losing population. Can the tools used for land-use planning, which are historically designed to guide and control growth, be used to guide shrinking? The shrinking city-region of Kotka-Hamina has drafted a city-regional strategic master plan to manage the shrinking. The master plan and its documents are analyzed, and interviews are used to better understand how the plan is trying to achieve its objectives. The master plan is currently growth-oriented and used as a tool for place marketing. According to the interviews, growth is not essential to implement the plan. As a tool, it strives to show the potential of the city-region. The master plan guides future land use to denser areas and enables industry. Learning from this case study, strategic land-use planning can be seen as a feasible tool to manage shrinking, and the master plan hints at how that might be done, although it does need improvement. Since land-use planning has country-specific characteristics, the research findings may not be directly transferable to other planning systems. However, the findings may offer ideas on how planning tools can be adapted to similarly challenging conditions. The possibility of what strategic spatial planning has to offer in a shrinking context should be researched more to enable the development of planning tools that would be more usable in shrinking conditions.

Keywords

depopulation; Finland; municipal cooperation; Nordic states; scenario planning; shrinking cities

1. Introduction

Shrinking as a phenomenon has gained more interest in recent years. However, the subject has not gained much attention in Finland, where it is estimated that the national population will soon start to decline.

Internationally, a few studies have focused on how spatial planning tools work in a shrinking environment. The subject has not been studied as much as policy responses to (e.g., Heim LaFrombois et al., 2019; Özatağan & Eraydin, 2021) or causes and consequences of (e.g., Hartt, 2018; Wolff & Wiechmann, 2018) shrinking situations. However, it is often stated that planning is growth-oriented (Lehtinen, 2018; Rajaniemi, 2006) and that, in a shrinking situation, planning solutions are used to stop depopulation trends (Heim LaFrombois et al., 2019). This article aims to explore how strategic spatial planning (SSP) is used in a shrinking city-region in Finland within the statutory planning system and to discuss whether SSP might be better suited for shrinking areas than traditional land-use planning. Could SSP be more resilient and better suited to adapting to multiple outcomes if the first chosen vision turned out to be impossible to achieve?

We are interested in how statutory planning tools could work in the context of shrinking. These are the tools that are used to implement policies and strategies. If the national legal tools cannot support planning for shrinking, adapting to shrinking or degrowth is challenging. We see that the Kotka-Hamina city-regional strategic master plan (KHSMP) is interesting from at least three viewpoints. Firstly, the current Finnish planning system does not have a legal standing on SSP (Ekroos et al., 2018), but it was drafted to be legally binding. It is drafted according to the Finnish legal system, but it has, at the same time, strategic and non-strategic elements; it represents something that has been suggested in scientific literature. Second, KHSMP is a municipal-level land-use planning instrument that guides spatial development at the city-regional level. City-regional planning is not a planning level in the Finnish statutory planning system. Even though it was accepted by each of the municipalities of the city-region separately (through the municipalities' joint coordination of planning), it aims to solve problems at a city-regional level, which makes it an uncommon and rare planning solution in Finland. Lastly, we see it as a more open-ended tool, and it might be able to enable multiple outcomes, which is typically avoided in the Finnish planning system.

The setting for the drafting of the plan is uncommon, as the municipalities voluntarily work together, even though they are different in terms of size, population, and economic structure. Such differences might be reflected in their individual goals and cause political tensions. However, joint strategy work may create bonds between the municipalities and actors and, in a way, make them work together for a jointly beneficial future, with a shared understanding of mutual dependence, even if there are conflicting views and agendas (Albrechts & Balducci, 2013; Van den Broeck, 2013).

In the case of the Kotka-Hamina city-region, the municipalities are working together to adjust to the shrinking path they are facing. An analysis of the area is crucial to understand how the city-region is responding to shrinking. The analysis first examines how the city-region is experiencing spatial shrinking, and correlations are then made to how the strategic master plan responds to this phenomenon. Most studies (e.g., Haase et al., 2016; Hartt, 2018; Wolff & Wiechmann, 2018) on shrinking have focused on cities only, not on shrinking city-regions (e.g., Hoekveld, 2012; Hoekveld & Bontje, 2016).

This article has been divided into nine sections. After the introduction, the next three sections provide a theoretical overview of shrinking, SSP, and the Finnish planning system. The fifth section presents the methodology and data. This is then followed by an overview of the city-region. The study results are presented in the seventh section and followed by a discussion. Finally, an overview of the study and concluding thoughts are presented.

2. Shrinking and the Desire to Grow

The Nordic states are sparsely populated countries and thus differ from the larger shrinking cities discussion (Syssner, 2022). In addition to this, the topic is under-researched in the Nordic states (Syssner, 2016, 2022). For example, two-thirds of Finnish municipalities have fewer than 10,000 inhabitants, and most could be classified as rural towns, according to international research. Currently, Statistics Finland (2021b) predicts that Finland's population will start to decline in 2034. In more recent trends, comparing the population of Finland from 2015 to 2020, only 63 out of the 309 municipalities (LAU 2) grew (Statistics Finland, 2021a), and the national fertility rate in 2022 was 1.32, a level which has been decreasing yearly (Statistics Finland, 2023). Even though there has been some recent research on the shrinking topic in Finland, the amount conducted to date is insufficient for planners to know how to react. Shrinking has hardly been researched in the field of planning studies in Finland, except, for example, Kotilainen et al. (2015) and Rajaniemi (2006).

On the most general level, shrinking is usually discussed in Finland as an area losing population. However, research and reports on shrinking in Finland have identified variables such as population and demographic changes, employment, and housing or real-estate vacancy (Kahila et al., 2022; Kiviaho & Toivonen, 2022; Makkonen et al., 2022). Shrinking is a complex phenomenon that includes forces such as deindustrialization, out-migration, housing vacancy, lower population densities, lower birthrates, and brain drain, among numerous other things (Döringer et al., 2020; Hartt & Hackworth, 2020; Makkonen et al., 2022). The reasons, rate, and process behind shrinking are usually different in each location, even though shrinking as a phenomenon might appear similar (Großmann et al., 2013; Rink et al., 2010). Some studies show that economic difficulties and population losses are not always linked, even though these two are commonly thought to be (Hartt, 2019; Makkonen et al., 2022). As Meijer (2022) argues, shrinking is a collection of different changes and continues to question the need for the term shrinkage, as it is an umbrella term for these numerous changes.

Galster (2019) argues that shrinking is not the mirror image of growth, as processes differ in numerous ways. As a system, the process of shrinking has many variables and lags between these variables, which are connected in a feedback-driven way (Haase et al., 2016; Hartt, 2018; Hoekveld, 2012). The process can be influenced by outside factors, such as massive immigration or globalization (Hartt, 2018; Hoekveld, 2012; Martinez-Fernandez et al., 2012). As an example, Hoekveld and Bontje (2016) note that globalization usually affects the regional level, not the city level. Inside a region, individual cities have their own pattern of shrinking, which is connected to the regional shrinking pattern (Hoekveld, 2012, 2014). While sharing a larger regional problem, individual cities have local attributes that affect their shrinking patterns (Haase et al., 2016; Hoekveld, 2012).

Policy responses to shrinking vary; in many cases, the responses are growth-oriented (Hospers, 2014; Schatz, 2017), and often growth seems to be the only possible response to shrinking that cities see as viable (Knoop, 2014). As Syssner (2022) identifies, growth is a thing to be proud of, even after decades of shrinking. According to Makkonen et al. (2022), Finnish decision-makers tend to go for growth policies, and "relatively little is known about the acceptance of shrinkage in Finland" (Makkonen et al., 2022, p. 141). In general, two approaches to regaining growth can be identified: Cities either try to return to the previous growth pattern or find new growth patterns (Eraydin & Özatağan, 2021). Growth-oriented policies seem ineffective to combat shrinking (Knoop, 2014; Schatz, 2017). There is also the idea of degrowth, which Syssner (2022) identifies as being

linked to shrinking. Current planning practices are locked with growth (Lehtinen, 2018; Savini et al., 2022), and, in shrinking areas, this causes problems. The idea of a downscaled area, which could find new ways to live sustainably (Lehtinen, 2018; Xue, 2022), is, in our opinion, tied with the future of shrinking areas.

Then there is the problem of tools. Rajaniemi (2006) suggests that planning, as a system, can respond to population decline only by trying to gain growth. Growth is supported by trying to improve the economic conditions of the shrinking area. These growth-oriented responses might not be applicable because the root cause of shrinking might be hard to change. As Hoekveld and Bontje (2016, p. 283) theorize, "decline in recent years or decades can partly be explained by structural changes that took place many decades or even centuries ago."

3. Strategic Planning With Shrinkage

Galster (2019) argues that traditional planning tools, designed to leverage and guide growth, have a weaker power in a shrinking scenario. Accordingly, Rajaniemi (2006) observes that the Finnish planning system has been aimed at accommodating growth. SSP tools are often used in rapidly growing areas, but, in general, SSP is not used when faced with shrinking (Humer, 2018). In Novoshakhtinsk, Russia, strategic planning was used in a shrinking city that accepted shrinking (Batunova et al., 2020). However, other cases are difficult to find in the research literature, at least those reported in English.

Traditional institutional planning has a so-called project planning approach ("blueprint planning"), which assumes a predictable future outcome inscribed in the plan, and the implementation is then to be executed in detail based on this plan (Faludi, 2000; Van den Broeck, 2013). Because of shrinking's asymmetric nature, responses should be more open-ended. In terms of foresight, this could enable the ability to withstand unpredictability better (Minkkinen et al., 2019). In our view, SSP could be more suitable for this need. SSP might be better able to address contemporary challenges and future uncertainties. While in traditional land-use planning, the emphasis has been on comprehensiveness, SSP takes a selectively visionary approach to planning (Albrechts & Balducci, 2013; Van den Broeck, 2013). Traditional and formal planning is tailored for controlling or facilitating growth, whereas SSP could, because of its nature, be better accommodated to guide shrinkage (Humer, 2018).

Strategic planning focuses on change without trying to be comprehensive and solve everything (Albrechts & Balducci, 2013). Compared to traditional planning, strategic planning does not attempt to solve given environmental and land-use problems deterministically; rather, it aims to enable responsiveness to multiple futures while being visionary (Albrechts, 2004; Albrechts & Balducci, 2013; Faludi, 2000). This process often involves scenario planning, in which exploratory and normative scenarios are examined (Albrechts, 2005; Avin & Goodspeed, 2020). Strategic plans may maintain their responsiveness longer than traditional land-use plans, which need to be remade after a certain time if the plan's objective is not reached (Van den Broeck, 2013).

4. The Finnish Planning System

The Land Use and Building Act (LUBA) is the main legal entity that guides land-use planning in the Finnish planning system (Ministry of the Environment, 1999). The current planning system has four levels of planning:

The three lower levels are actual plans, and the highest level is the national land use guidelines. The highest level of plan, and in its detail, the most general of the plans, is the regional plan. It is drafted and accepted by the regional councils, which plan the regions (NUTS 3). Below the regional plan are the master plans. The final level is the detailed plans, which is the most elaborate level of the planning system. The master plans and detailed plans are drafted and accepted by the municipal councils and are legally binding. Municipal planning has a great deal of power in Finland, but this planning level must comply with regional and national goals. These municipal-level plans depict the desired future of the municipality within the borders of the municipality. According to LUBA, master plans can also be drafted and accepted so that they have no legal consequences. In this case, this would mean that a more detailed plan can deviate from the master plan (Ministry of the Environment, 1999).

The planning system works so that the more detailed plan supersedes the higher-level plans when ratified, but the higher-level plans guide the drafting of the more detailed plan. The higher-level plans convey their goals for the lower-level plans. All three plans consist of a plan map, with keys to the symbols and the written part of the plan's regulations (Ministry of the Environment, 1999). The map is accompanied by a plan report. LUBA does acknowledge a joint master plan drafted by multiple municipalities, which could be legally binding (Ministry of the Environment, 2014), but these are extremely rare. These joint master plans would operate as inter-municipal plans, making solutions in them more likely to be recognized by all of the municipalities within the area of the joint master plan.

Currently, LUBA has no legal standing in strategic planning, but some plans have strategic elements (Ekroos et al., 2018, p. 68). According to the Ministry of the Environment (2014), Finnish master plans are typically elaborate area reservation plans drafted with little room for interpretation and usually lose strategic elements during the planning process. At the same time, these plans aim to avoid confusion as guidelines for more detailed planning. Outside the formal legal planning system, some city-regions utilize informal city-regional plans, such as structural schemes, as strategic instruments (Mäntysalo et al., 2014). Mäntysalo et al. (2014) suggest that statutory land-use planning should use strategic elements together with the requirements of the legal system and non-strategic tools to make these plans work in the legal system while being strategic and non-strategic at the same time. Currently, we see that Finnish planning at the core is blueprint planning and is strategic when it is done outside the formal planning system, for example, structural schemes. Because these strategic plans are currently drafted outside the legal system, there are problems, for example, with participation, the legal position of the plan, and uncertainty for investors.

5. Methodology and Data

This case study examines KHSMP to understand how the master plan is used in the shrinking context. The master plan is studied, focusing on its main map, its accompanying report, and some of the report's annexes. To understand the historical background of the area, GIS data provided by the Finnish Environment Institute was used for analysis. The data is part of a spatial data system called the Monitoring System of Spatial Structure and Urban Form (Yhdyskuntarakenteen seurantajärjestelmä/YKR). The GIS data used is in a grid format (sized 250 × 250 m), composed of population and workplace data (Finnish Environmental Institute & Statistics Finland, 2019). The study covered time-sequenced GIS data with five-year intervals from 1990 to 2015. A five-year interval was chosen as it has been seen in other studies (e.g., Hoekveld, 2012; Wolff & Wiechmann, 2018) as a more reliable indicator of population change than a shorter time

sequence. Newer datasets were not used, as the master plan was assessed against the previous development leading to the master plan.

Furthermore, to understand the adaptability of the master plan, this study has utilized 19 semi-structured interviews with mayors, chairs of the municipal council or executive board, and planners involved in the drafting of the strategic master plan. In the Finnish legal planning system, reports and annexes do not detail the background and planning process. Because of this, it was necessary to conduct interviews. The 19 interviews were conducted and analyzed in teamwork during 2019. The interviews were audio only, conducted in Finnish, transcribed in Finnish, and later partly translated into English. From these interviews, a generalization was made for this study so that the interviewees' anonymity was guaranteed, as the number of people involved in the process was low. The generalization focused on the main ideas of the plan and its drafting.

The last stage of analysis was to evaluate the results against established knowledge in the research literature. This research aimed to evaluate new planning methods that might be viable in a shrinking situation. We will study the city-region's shrinking development in view of slow-burning structural change and theorize how SSP could work in a shrinking context.

6. The Case of Kotka-Hamina

The Kotka-Hamina city-region includes five municipalities: Pyhtää, Virolahti, Miehikkälä, Kotka, and Hamina, of which the two last are cities. This city-region, being part of the Kymenlaakso region, is situated in Southeastern Finland, facing the Gulf of Finland to the south. The European route E18 goes through the city-region, making it a part of a larger development corridor from St. Petersburg to Helsinki and Stockholm. The city-region has an urban structure spreading almost continuously from Siltakylä, Pyhtää, in the west, to Hamina, in the east. Outside this main, most populated area, there are the municipal centers of Pyhtää, Miehikkälä, and Virolahti, as well as rural villages. Virolahti has a special position with its border crossing to Russia at Vaalimaa.

The population of the entire Kymenlaakso region has been influenced by significant industrial change since the 1870s, linked to the wood and paper industry (Saarinen, 1992). From around 52,000 inhabitants in the 1870s, the population began to grow and reached its maximum around 100 years later at around 200,000 inhabitants (Saarinen, 1992, pp. 17–19). In 2010, the Kymenlaakso region had a birth rate of nearly 1.9, similar to Finland's average, but has since dropped to 1.23 in 2022, below Finland's average (Statistics Finland, 2023). The linkage between industry and population can be seen even in quite recent trends. The Kotka-Hamina city-region was declared as an abrupt structural change area from 2008 to 2011 by the Finnish government as a result of a paper mill closure and the risk of a pulp mill termination (Felin & Mella, 2013, pp. 10, 40–41). The city-region has long been experiencing change, which is in line with Hoekveld and Bontje's (2016) suggestion that its recent decline is being affected by structural changes that happened long ago.

The GIS data used in this study reveals that all five municipalities are experiencing population loss, and out of the five municipalities, three had fewer workplaces in 2015 than in 1990. The percentage and the rate of both differ from municipality to municipality (see Table 1). In general, the city-region has lost about the same amount of population as workplaces in absolute numbers, but the relative loss in percentage is different. More recent data does show that the area has continued to lose population and workplaces (Statistics Finland, 2021a).

Table 1. Change in population and jobs in the city-region.

		1990	1995	2000	2005	2010	2015	1990–2015	
Kotka	Population	55,914	55,057	54,392	54,389	54,290	53,708	−2,206	−4%
	Workplaces	23,462	19,966	19,877	21,631	21,706	19,941	−3,521	−15%
Hamina	Population	22,304	22,108	21,682	21,807	21,248	20,661	−1,643	−7%
	Workplaces	8,066	6,860	7,437	7,175	6,867	6,068	−1,998	−25%
Pyhtää	Population	5,612	5,565	5,384	5,284	5,286	5,249	−363	−6%
	Workplaces	834	573	955	915	938	873	+39	+5%
Virolahti	Population	4,118	3,963	3,893	3,629	3,490	3,297	−821	−20%
	Workplaces	1,136	1,142	1,370	1,273	1,111	1,209	+73	+6%
Miehikkälä	Population	2,733	2,626	2,526	2,428	2,198	2,045	−688	−25%
	Workplaces	736	666	621	455	502	477	−259	−35%
City-region	Population	90,681	89,319	87,877	87,537	86,512	84,960	−5,721	−6%
	Workplaces	34,234	29,207	30,260	31,449	31,124	28,568	−5,666	−17%

Sources: Authors' work based on data from Finnish Environmental Institute and Statistics Finland (2019); Statistics Finland (2021a).

The GIS data shows that the study area has experienced shrinking in terms of population and workplaces, and the area is experiencing a demographic shift toward older age cohorts. It seems that shrinking is more widespread than growth, but when growth does occur, it is more geographically concentrated than shrinking (see Figure 1). The growth is located nearer to the existing cores of the municipalities and route E18. The area of habitation is about the same in 1990 and 2015, but the main difference is that the density has been decreasing. The city-region is also facing a change in work structure. Agriculture, forestry, and industry have lost a large share of workplaces, while the healthcare sector has gained workplaces. The municipalities in the city-region have different paths of shrinkage, which might be caused by historical differences. We see Kotka-Hamina city-region's shrinking process as a series of events, which has had shocks but is mainly a slow-burning event.

7. KHSMP

KHSMP was planned jointly by the municipalities of the city-region, with Cursor, the regional development company, owned by the five municipalities of the city-region. Cursor was also responsible for controlling the project. The project had local municipal funding and funding from the European Regional Development Fund. The actual plan was drafted by a consultant company called Ramboll. By the end of 2018, the preparation of KHSMP had entered the final stage of being processed for decision-making by each municipality separately regarding their territory. KHSMP is a more detailed version of an earlier development scheme, and it is legally binding, except for the municipality of Pyhtää. Unlike the other municipalities, Pyhtää had accepted KHSMP as a land-use plan that has no legal consequences (Municipality of Pyhtää, 2018, pp. 124–126), which means that its legal status differs from the rest of the plan, as it is not legally binding. The drafting of the plan included three different development models and different possible paths for alternative futures. We identify these development models as scenarios. The development models had different emphases on different economic aspects and income sources, also in spatial aspects. Of these three development models, a single solution was formed that was assessed as enabling the best possible future. None of the development models explored different population development paths, such as shrinking, as habitation was very lightly assessed in these models.

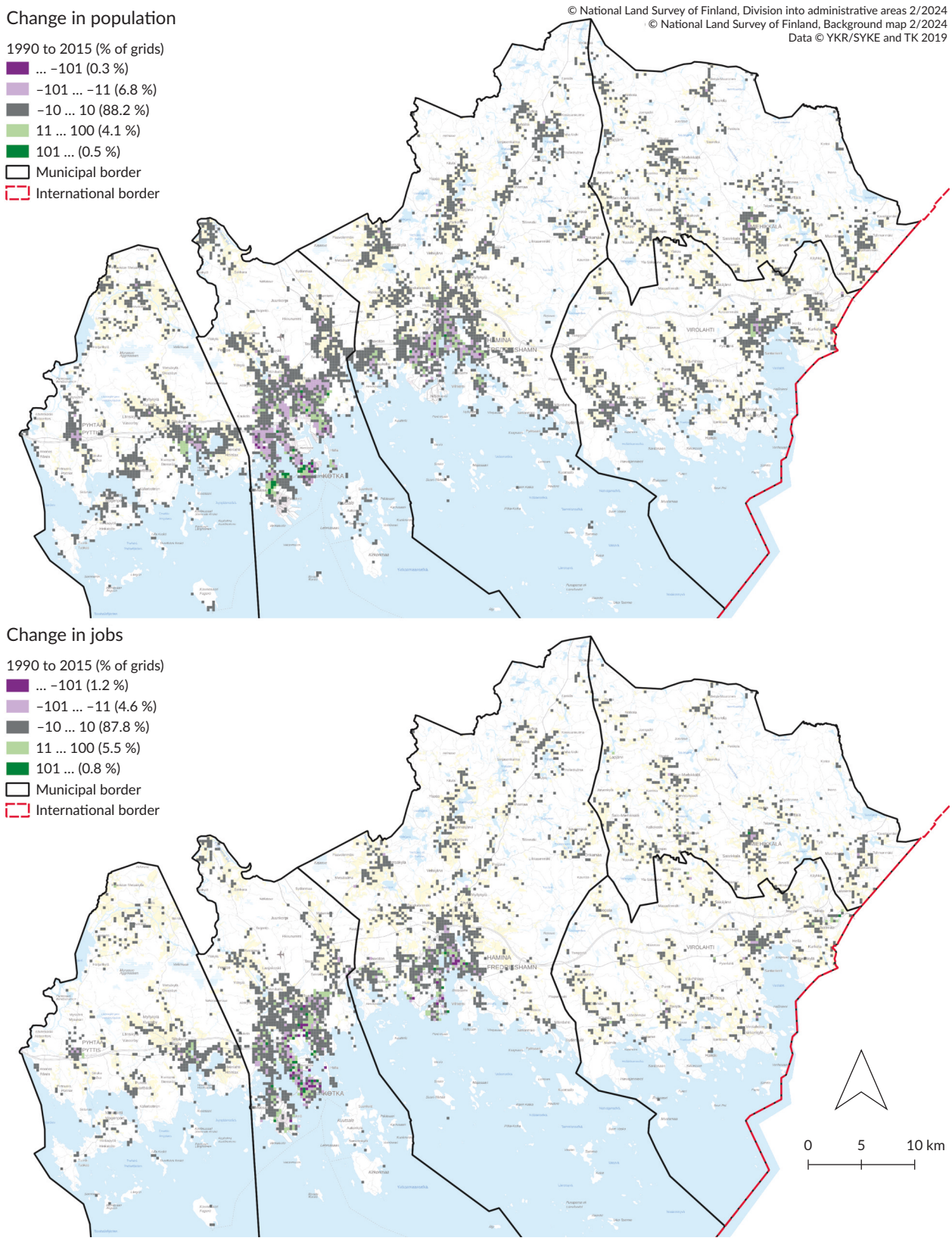

Figure 1. Change in population and jobs geographically.

The main goals of the plan are to convey the themes (integrated land use, housing, transport, services, and economic development), make the decisions of the earlier development scheme legally binding, answer the needs of industry (grey in Figure 2), prepare for population growth, develop habitation (different shades of brown in Figure 2), explore different options for the city structure, secure the ease of transportation, and to develop areas with a rural-like character. The drafting process also identified possible target groups of the city-region, regarding people and industry. The process produced an all-encompassing plan that was used as a basis for drafting the master plan. The resulting plan comprises two main documents: the master plan map (see Figure 2) and the report. There are eight annexes in the report, two of which are important regarding the role of the master plan as a tool for managing city-regional development: the implementation program and the overall plan. The implementation program sets the phasing and schedule for realizing the plan, and the overall plan elaborates the main plan map regarding both spatial specifications and overall thematic ideas. The implementation program can be updated if needed; its schedule is flexible, but the phasing of implementation is fixed. The overall plan also includes markings, which have informative and profiling functions without legal status.

7.1. Affecting the Trend

Because the city-region is suffering from population loss, as also acknowledged in the interviews, KHSMP is made to affect that trend. Tied to this, KHSMP is trying to affect the loss of workplaces in the area, which was identified to be caused by the downfall of the paper and wood industries. The plan aims to turn these trends towards growth to avoid, for example, service level deterioration.

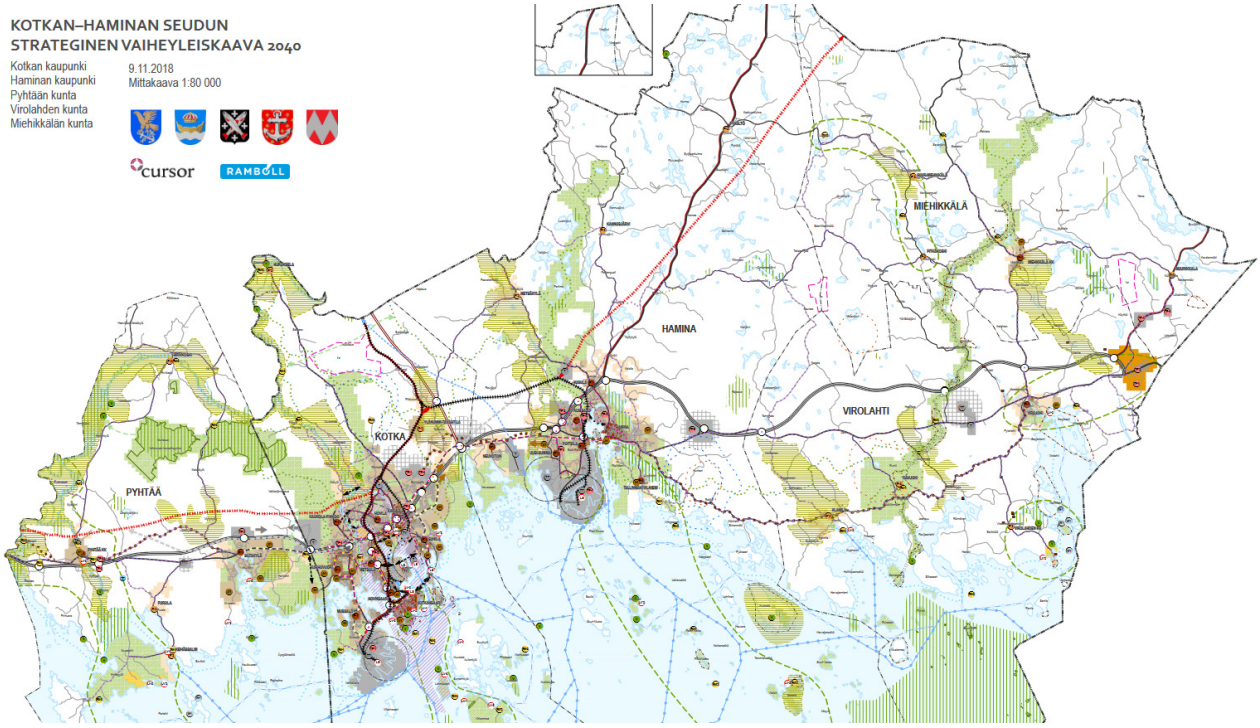

Figure 2. Caption of the master plan. Source: Cursor Oy (2018).

The growth orientation can be seen most easily in the goals of KHSMP: 25,000 new workplaces and around 35,000 new inhabitants by 2040. The number of workplaces should almost double, and the population should grow by almost 50%. Regarding industry development, the emphasis seems to be on the search for new options. It seems there has been no effort to regain workplaces lost in the paper and wood industry, agriculture, and forestry—This might be intentional. The goal seems to be to attract new sectors of the economy.

In the interviews, it became clear that KHSMP is a tool for marketing the city-region and that the plan is industry-oriented. The goal is to attract new businesses to the city-region. As a tool, it strives to show the potential of the city region as a well-connected location committed to inviting and incentivizing new operators into the area. KHSMP enables flexibility and quick adaptation to changed circumstances; the interviewees stated that KHSMP allows multiple locations to be offered to investors. KHSMP would also be used to create a specific profile for the entire city-region.

Historically, municipal mergers have not been possible, according to the interviewees, and because of this, there needed to be another way to promote and plan the city-region. Kouvola, located north of the city-region, has the size of a city-region because of a merger of six municipalities in 2009. The interviews revealed that Kouvola is seen to have shorter reaction times to development initiatives and to be able to guide its planning more easily than the Kotka-Hamina city-region. On the other hand, the interviewees also expressed that city-regional cooperation was good, with optimism for the future and pride in what has been done. KHSMP is seen as a solution to even the odds in challenging situations and a way to work together in unison to improve the city-region's future.

7.2. Relation With Other Levels of Planning and Cooperation

KHSMP is designed to work with and on top of current master plans. Legally, it is situated below the regional plan and is a municipal master plan, but it is designed to work more strategically on a city-regional scale. It will work in a municipality with other more detailed master plans to guide the municipal planning while connecting it to the city-regional vision.

KHSMP differs from a typical master plan, as it is drafted in cooperation with five municipalities. These municipalities have their own identities and roles in the city-region. The interviewees stated that the municipalities have become closer and each understands their strengths and weaknesses. Generally, a shared direction was seen as more beneficial than individual gains for each municipality. Together, the municipalities could enhance and affect the entire city-region better than individually. The cooperation enabled smaller municipalities to have a stronger voice in the city-region. The interviewees stated that it is important that each municipality accepts KHSMP separately, as this would be a statement of unity. It seems that the city-region understood that a gain for the city-region is a gain for all the municipalities and that municipal borders should not matter that much.

7.3. Solutions and Realization

The master plan, the overall plan, and the implementation program create an interesting combination, as these form the main body of the plan. The overall plan gives the planned areas certain profiles, while the

implementation program gives temporal programming and sequencing to the realization while aiming, at the same time, for flexibility. These documents are then linked to other strategies adopted by the city-region. KHSMP is depicted as a development platform in which the main structure is defined and, based on this outline, supports a variety of outcomes. According to the interviews, the city-region needs a new direction and initiative to generate change. As KHSMP is part of a larger set of actions, by itself, it is questionable whether KHSMP can affect the shrinking trend that the city-region is experiencing. The interviewees claimed that growth would result from other strategy measures and that the big picture had to be shared overall in the strategy work, and this caused KHSMP to be growth-oriented.

There is a strong connection between KHSMP and economic growth, which is seen as a response to the shrinking development. KHSMP is used to paint a picture of a possible future; the symbols used in the plan reflect certain visions and ideas for the area. This can be seen as a sort of marketing development opportunity or a vision of the future. As a tool, KHSMP makes it possible to react more quickly to potential initiatives by investors, as suitable locations can be offered based on the map. The enabling role of KHSMP is highlighted, which seems important for its realization, as it can support multiple outcomes.

As stated above, the implementation program is to be updated as needed, and it was made clear that KHSMP is designed to be monitored. Different municipal and city-regional initiatives and strategies will implement the plan, which will be reflected in the wider city-regional image of KHSMP. The implementation schedule is flexible; it has a predetermined phasing to be followed in more detailed planning. The phasing of implementation cannot be adapted to changed circumstances as easily as its scheduling; it needs to be separately updated. This is highlighted in the plan's report. The fixing of implementation phasing is stated to be necessary for the future that the city-region desires. It is argued to enable the development of the city-region to avoid fragmentation of urban structure and urban landscape, even if the development of population does not meet expectations. There is little room for readjustment, which might lock the path to the future to a single route.

KHSMP's report says that KHSMP will be implemented starting from the inner areas (red and dark brown in Figure 2), expanding outwards at a later stage. The interviews confirmed this and revealed that growth is not needed to implement the plan; rather, the plan shows the maximum positive vision of the future, which does not need to be achieved. Legally, KHSMP is subordinate to the regional plan and must take it into account. However, KHSMP is quite ambitious, as it tries to affect the regional plan. This can be seen, for example, in the delineation of the new eastern railway that differs in KHSMP from the one presented in the regional plan. This is a city-regional effort to influence regional and national decision-making in favor of the city-region. KHSMP, as an entity, tries to solve regional and city-regional problems on a higher level while guiding more detailed local planning toward a city-regional vision.

8. Discussion

KHSMP tries to move the planning of the area in a new direction. This is logical because of the historical context, and to move in a new direction, all the strategies should align with this view, including the land-use planning tool. KHSMP is currently directed towards growth, which we suspect is easier to accept politically in Finland than shrinking (see Makkonen et al., 2022). We see that the growth expectations come from other strategies, such as the development scheme, the economic development strategy, and local municipal

strategies. Furthermore, because these must be in line, this growth orientation is understandable, although possibly unrealistic. If these other strategies were changed, KHSMP could still work with these changed strategies and alternative futures. Currently, there is a mismatch between what is happening in the area and KHSMP. It seems that KHSMP is now oriented towards growth, countering shrinkage. However, according to the interviews, growth is not needed. If this is true, we would argue that a shrinking scenario within the drafting process might make the plan more adjustable to a future without growth.

KHSMP has the basic concept right in our view, but the plan should have included a shrinking scenario, which we see as crucial to enable multiple outcomes. With a wider view of possible futures, KHSMP could be adapted to different development situations, as suggested by Minkkinen et al. (2019). This kind of planning with a shrinking scenario might also be a step towards degrowth planning, as suggested by Xue (2022). We are left wondering whether the plan left out shrinking development as investors might have seen it as a lack of faith in the city-region's successful future.

Legally speaking, KHSMP is a master plan among other master plans, and LUBA does allow this sort of multilayered master planning. However, it is designed to work slightly above the normal municipal plans to convey the ideas of the city-region. The way that the plan links individual municipalities to a larger set of actions is what we see that planning in a shrinking environment could use. This aligns with Hoekveld's (2012, 2014) observations that the problems are individual to each municipality and shared on a larger city-regional level. The plan also works in Finland's statutory planning system. It is a legally binding plan that guides more detailed land use while still having strategic openness, as suggested by Mäntysalo et al. (2014). KHSMP is unfortunately not accepted as legally binding in Pyhtää, which might cause problems for the shared vision of the area. If it chooses to do so, Pyhtää can deviate from the shared vision without the rest of the municipalities having to adjust to it.

This sort of combinatory use of tools could work in a shrinking situation, which would argue against Rajaniemi's (2006) observation that the Finnish planning system can react only by trying to gain growth. The tools could also enable shrinking strategies as SSP is about enabling multiple futures (Albrechts, 2004; Albrechts & Balducci, 2013; Faludi, 2000). We see, as Humer (2018) suggests, that SSP has the potential for shrinking regions, especially when used with statutory planning. In the case of Finland, we do see a need for SSP to be conducted within the legal system of Finnish planning, not completely outside of it as an informal plan (Mäntysalo et al., 2014). The ideas and solutions of KHSMP seem to align with enabling multiple futures as KHSMP can adjust. It is, at the same time, both flexible and fixed. Certain solutions of KHSMP are partially locked. One of these is that the implementation program's current phasing is locked, but according to the interviews, it can be used to enable multiple different outcomes. The pace of realization is flexible, which is smart because it allows corrections in the speed of development, but the path is locked until the implementation program is updated. What hinders these outcomes most is the problem with the physical area reservations in the actual legally binding master plan map. These reservations cannot be changed after the plan is accepted, as LUBA directs toward clarity. The annexed overall plan is not legally binding, and it seems that it could be updated or completely ignored if needed. KHSMP seems to enable flexibility and rapid adaptation to situations while maintaining legal validity. In this light, it differs from what the Ministry of the Environment (2014) says about master plans losing their strategic elements during the planning process. We also see that it has more than just strategic elements (Ekroos et al., 2018) compared to typical Finnish plans.

Based on KHSMP, we suggest this sort of planning might work better in a shrinking environment than typical Finnish blueprint planning. If we then theorize that the city-region might be in a state that changes as time passes, we can theorize how SSP might work in these conditions. We see that the city-region's system is under constant change, which differs from growth patterns (Galster, 2019), and, because of this, a plan is needed to adapt to each of these situations. During the drafting, multiple possible futures are explored, which are then normalized into a single plan. These possible futures must also include typically unacceptable exploratory futures. There is the possibility that having a shrinking scenario with three growth-oriented scenarios could be politically more acceptable. This sort of plan then has the opportunity to support multiple outcomes as a starting point when the plan is accepted. Other related documents are also accepted during the plan's ratification, which act as bridges between the plan and broader strategic action. When there is a need to adapt to change, the broader strategic actions are changed, after which the plan's annexes are changed in response to these changes. The strategic plan's legally binding map does not have to be changed, which aligns with the Finnish planning system. The key is that the map can handle even large changes, but the annexes, which guide the plan's implementation, need to be flexible.

Regarding the idea of municipalities overly looking out for their own interests, KHSMP seems to differ from the view that Janssen-Jansen et al. (2012) give in the context of the Netherlands. It seems that, at least at some level, the municipalities have understood that the shrinking trajectory of the city-region is a joint challenge, and their solutions should not be inward-looking. Also, the observation that people commute within the city-region has fostered the municipalities' motivation to form a functional urban region together (Hoekveld, 2014).

9. Conclusions

The current study found that, as a tool, KHSMP allows and enables multiple outcomes. KHSMP also represents a new way to plan in the Finnish context. The plan is drafted jointly, and it is understood that working together will solve issues better. Because the municipalities in the city-region are different, the plan relies on the differences of the area to better attract parties with different needs. The municipalities work together for a shared future, which Albrechts and Balducci (2013) call for, and interestingly, this also has political backing. Because municipal mergers seem not to be an option in the city-region, this sort of planning is needed to reduce zero-sum competition for investment, workplaces, and residents between the municipalities. As a tool, KHSMP is suited for this kind of smaller-than-regional-size spatial planning.

We suggest that SSP might be more suitable as a planning tool than blueprint planning for shrinking areas facing a slow-burning change. SSP, by its nature, could be more suitable for reacting to an asymmetric shrinking process. It could allow for re-adjustment when the needs of the area change, and it could be more open to multiple futures. In this way, SSP could enable resilience and adjustments when needed. If used appropriately, it could make adapting to shrinking processes easier despite aiming for growth.

Further research is needed to investigate shrinking in the Nordic states, especially how they handle shrinking via spatial planning. We see that spatial planning tools suited for a shrinking context should be studied and developed. There is a need for spatial planning tools that can adapt as circumstances change and for plans with built-in resilience. This means that planning should explore multiple outcomes, including those that are plausible but do not correspond with the desired outcome. This case study has exemplified that, through SSP,

a city-region may accommodate multiple outcomes and thereby enable built-in resilience. However, in the case of the Kotka-Hamina city-region, we see that more diverse future scenarios should have been crafted. There ought to have been a scenario or scenarios addressing shrinking development to increase the plan's adaptability to a broader set of outcomes. The more recent Russian aggression in Ukraine and the resulting trade sanctions on Russia have brought dark clouds to growth expectations in the city-region, thus, in hindsight, underlining the relevance of this point.

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Conflict of Interests

The authors declare no conflict of interests.

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About the Authors

Janne Oittinen (MSc) is a doctoral researcher at the Department of Built Environment at Aalto University. His research interests include shrinking areas in the Nordic contexts, urban planning, planning laws, strategic urban and regional planning, data visualization, as well as futures studies and security and resilience in planning.

Raine Mäntysalo (DSc) is a full professor of strategic urban planning and head of the Department of Built Environment at Aalto University. He is also an adjunct professor at the University of Oulu. His research interests include planning theory and its connection to planning practices and institutions, strategic spatial planning, as well as democracy, learning, and power in spatial and land use planning.