



Alternative Approaches to Urban Regeneration and Infill Planning

Case Turku, Finland

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Abstract

In Finland, cities consider infill development as a means for urban regeneration in existing suburbs. However, the preconditions for development may vary: some areas are more attractive for infill development projects than others. Therefore, cities must align their urban regeneration approaches with the specifics of the context.

This paper builds on the notions that the prevailing growth-dependent urban planning paradigm is not functional in areas demarcated by low growth or stagnation. Planning that seeks to bring value for the localities by appreciating their strengths and non-monetary assets might provide grounds for alternative planning approaches. From these starting points, we explore how Finnish urban planners align their urban regeneration approaches with different contexts. We aim at identifying when the growth-dependent approach is used, whether alternative approaches are deployed, and what are their underlying logics. Our analytical framework originates from organizational learning theory of action inquiry. It explains how urban regeneration visions, strategies and actions are adjusted to low growth contexts. The empirical material consists of three urban regeneration cases in the Finnish City of Turku.

As a result, three approaches to urban regeneration with different emphases on infill development are depicted and discussed. The growth-dependent approach is used in areas with strategic importance for the City, and possibilities for urban growth. Alternative approaches seek to support local development initiatives or inspire development in areas where it does not yet exist. The contribution of this exploratory paper is to demonstrate that urban planners in Finland deploy alternatives to growth-dependent planning and provide conceptualizations of alternative planning approaches.

Keywords: infill development, urban regeneration, growth-dependency, organizational learning, four territories of experience, Turku

Introduction

There is a growing interest in how urban planning could cope with challenging economic situations (Janssen-Jansen et al., 2012; Rydin, 2013; Savini and Salet, 2017). Since urban planning has traditionally been based on an

assumption of continuous economic growth, there are concerns about its functionality in contexts where growth is discontinuous or absent (Janssen-Jansen et al., 2012; Rydin, 2013). Other researchers have discussed how resilient management of on-going urban development projects could help in responding to changes in market context (Majoor, 2015a; 2015b) and how flexibility of urban development plans might improve abilities to cope with economic fluctuations (Rauws, Cook and Van Dijk, 2014). Theoretical insights on how to combine the proactive and future-oriented nature of urban planning with flexibility and adaptiveness (Savini, Salet and Majoor, 2015; Boelens and De Roo, 2016), are also developed. This has created important insights into how urban planning could better cope with economic fluctuations.

However, the empirical research has often focused on the context of economic downturns, examining how on-going urban development projects are able to cope with challenging economic situations. At the same time, it is noted that in contexts demarcated by low growth or stagnation, alternative approaches to growth-dependent planning should be recognized already to begin with (Janssen-Jansen et al., 2012; Rydin, 2013). Therefore, we propose that there is a need to understand how cities align their planning approaches with low growth contexts already at the beginning of the planning process.

The purpose of this paper is to address this issue by exploring approaches to urban regeneration and infill development in selected Finnish suburbs, where the prospects of urban growth are more uncertain than in city centers and newer housing areas. We aim at identifying when the growth-dependent planning approach is used, whether alternative approaches are deployed, and what are their underlying logics. Our analytical framework originates from organizational learning theory of action inquiry (Torbert, 1972; Torbert et al., 2004; Torbert and Taylor, 2008) that we use to explain how urban regeneration visions, strategies and actions are adjusted to low growth contexts. We conclude that growth-dependent planning is not considered appropriate in all locations, and alternative approaches that seek to bring value to the localities by appreciating their strengths and non-monetary assets are considered as an alternative. Due to the exploratory motivation of our research, the results are formed based on grounded theory logic (Glaser and Strauss, 1967; Stebbins, 2011). The contribution of this exploratory paper is to demonstrate that urban planners in Finland already deploy alternatives to growth-dependent planning and provide conceptualizations of alternative planning approaches.

The paper is structured as follows. First, we discuss growth-dependent urban planning and its alternatives. After this, we present our analytical framework, research strategy and analysis of our empirical material, regarding urban regeneration and infill planning in three suburbs in the Finnish City of Turku. To conclude, we present the contextual alignment of urban regeneration approaches in the three suburbs and discuss the implications of our findings.

Planning in the absence of growth

Growth-dependent planning denotes planning that is dependent on the willingness of market-based actors to invest in an area to bring about sustainable urban development (Janssen-Jansen et al., 2012; Rydin, 2013). It is based on expectations of economic and demographic growth in specific urban areas, resulting in increased land values and demand for new urban development projects (Rydin, 2013, pp. 53–60; Savini, Salet and Majoor, 2015, p. 12). This logic is embedded in most contemporary spatial planning practices, based on public and private sector collaboration in achieving societally desirable urban development outcomes (Rajaniemi, 2006; Janssen-Jansen et al., 2012, p. 15; Rydin, 2013, pp. 28–34). In plan-led urban planning contexts, such as in Scandinavia and in the Netherlands, public urban planners set up objectives of sustainable urban development in land use plans, which are implemented through market-based urban development projects (Janssen-Jansen et al., 2012; Valtonen, Falkenbach and Viitanen, 2017a; 2017b). In

development-led urban planning contexts, such as in the United Kingdom, growth-dependent planning increases social and environmental benefits of urban development by negotiating planning gain with the private developers case by case (Rydin, 2013, pp. 62–64). The more regulatory powers public urban planning has, the better the prerequisites to negotiate for sustainable development (Rydin, 2013, pp. 62–64). This does not imply that growth-dependent planning only serves the interests of market actors, rather market-led urban development is utilized to bring about economic, environmental and social improvements (Janssen-Jansen et al., 2012, p. 15; Rydin, 2013, pp. 26–27).

The problem is that growth-dependent planning does not function in areas where there is no market demand for new development (Janssen-Jansen et al., 2012; Rydin, 2013). In plan-led urban planning contexts, the challenge is that plans may not be implemented if they do not provide viable development opportunities for market-based actors (van der Krabben and Jacobs, 2013; Valtonen, Falkenbach and Viitanen, 2017a; 2017b). In development-led urban planning contexts, the challenge is that public planners may negotiate environmental and social benefits only to a point where urban development projects stay economically viable; hence there is a risk that only a limited positive impact is gained (Rydin, 2013, pp. 99–101). These situations could occur in all urban areas in times of economic downturn but are a persistent problem in areas with low market position. One could argue that the problem disappears by waiting for the economic situation to improve. However, as economic growth does not spread evenly to all locations, there will always be areas that need sustainable urban development but have no market demand (Rydin, 2013, pp. 78–80). For instance, it is predicted that the economies in the developed countries of Europe and North America will grow very slowly in the future, if at all (Rydin, 2013, pp. 83–85). Therefore, while the absence of growth is becoming an increasingly common context for urban planning, there is no mechanism in the prevailing growth-dependent planning paradigm to address the situation (Janssen-Jansen et al., 2012; Rydin, 2013).

It is suggested that cities should recognize that the growth-dependent planning approach is not suitable in locations demarcated by stagnation or low growth (Janssen-Jansen et al., 2012; Rydin, 2013). Alternative urban development approaches could be formulated based on a logic that seeks to attend to local needs, not to market demand (Rydin, 2013; Janssen-Jansen et al., 2012, pp. 47–49; Boelens and Coppens, 2015; Savini, Salet and Majoor, 2012, p. 12). While the growth-dependent planning approach typically generates monetary value, which is partially re-invested to bring environmental and social benefits for urban areas, alternative urban development approaches could directly bring improvements for local communities, and support actions seeking to preserve local assets (Rydin, 2013). For example, in the United Kingdom, public policies that support community-led urban development schemes have been developed (Rydin, 2013, pp. 159–169). Other examples include do-it-yourself initiatives for urban development (Rydin, 2013, pp. 199–208; Savini, Salet and Majoor, 2015, pp. 11–14), experimental urban uses (Lehtovuori and Ruoppila, 2016) and planning that seeks to stimulate local actor networks that could generate yet unknown urban development trajectories (Boelens and Coppens, 2015). The challenge is that the alternative urban development approaches generate values that deviate from growth-dependent urban planning and may thus not be recognized as viable urban development logics (Rydin, 2013). At the same time, while urban planning alone is not able to generate local development activities, it could have an important role in supporting them (Rydin, 2013; Boelens and Coppens, 2015; Wallin, 2015). Planning practices that provide urban planners, politicians and citizens tools to bring about sustainable urban development in the absence of economic growth are thus needed (Rydin, 2013, pp. 243–250).

Growth-dependent urban planning and its alternatives in Finland

In general, Finnish cities have rather good prerequisites to proactively promote sustainable urban development. They have a land-use planning monopoly and the Finnish spatial planning system is plan-led, based on hierarchical levels of legally binding zoning plans. This allows cities to integrate sustainable urban development objectives in statutory land use plans (Valtonen, Falkenbach and Viitanen, 2017a). The cities in Finland can also deploy active land policy and public land-development as tools to integrate economic, environmental and social benefits in urban development projects (Hirvonen-Kantola et al., 2015; Valtonen, Falkenbach and Viitanen, 2017b). In addition, development-led urban planning practices are used in Finland, with the justification that they are more flexible in responding to the objectives of various actors involved in urban development projects (Valtonen, Falkenbach and Viitanen, 2017a). In principle, Finnish municipalities have the superior right to decide upon the contents of land use plans also when using development-led planning practices, which allows securing that the plans serve wider societal interests (Hakkola, 2009; Valtonen, Falkenbach and Viitanen, 2017b, pp. 249–250). However, there are concerns that utilizing development-led practices may undermine the proactive capacities of Finnish public urban planning, as planners are put on a more equal position with market actors (Hytönen, 2016; Puustinen et al., 2016).

In addition to these more traditional urban development approaches that often follow the logics of growth-dependent planning, urban planning that supports locally emerging urban development initiatives is discussed in the Finnish context (Leino, 2012; Horelli et al., 2015; Wallin, 2015; Partanen, 2018; Partanen and Wallin, 2018). Wallin (2015), as well as Horelli and colleagues (2015), have illustrated how local initiatives have created urban development activities in Finnish suburbs, which are not dependent on market-based development projects. However, as the statutory urban planning processes in Finland proceed in a linear fashion and opportunities for citizen participation are strictly predetermined, the ways to integrate local development initiatives in mainstream urban planning are still taking shape (Leino, 2012; Wallin, 2015; Partanen and Wallin, 2018; Rantanen and Faehnle, 2018). The challenge is to recognize local activities' contribution to urban development, together with cities' and private developers' aspirations (Wallin, 2015).

In Finland, some of the existing suburbs can be viewed as contexts, where it might be challenging to bring about sustainable urban development by relying on growth-dependent planning. The suburbs were built outside city centers from the 1940s to 1970s, along with the rapid urbanization of Finland (Hurme, 1991; Hankonen, 1994). While the existing suburbs today often have a central location in urban structure, they may not be as attractive locations for commercial urban development projects as city centers and newer housing areas. Yet, Finnish cities have a strategic aim of promoting infill development in suburbs. The motivation for development is to utilize the full capacity of the already built infrastructure and public services, provide pleasant environments for citizens, fight urban sprawl and prevent social segregation (Ministry of the Environment, 2014, pp. 135–138; Puustinen, 2016). In other words, infill development in suburbs contributes to urban regeneration, which can be defined as “comprehensive and integrated vision and action which seeks to resolve urban problems and bring about a lasting improvement in the economic, physical, social and environmental condition of an area that has been subject to change or offers opportunities for improvement” (Roberts, 2017, p. 19). However, since growth-dependent planning may not be functional in suburbs, selection of urban regeneration approaches requires special consideration by urban planners.

Analytical framework: Four territories of experience

In this research, we explore approaches to urban regeneration and infill development in selected Finnish suburbs, where the prospects for urban growth are more uncertain than in city centers and newer housing areas. To do this, we

utilize an analytical framework that originates from organizational learning theory. Organizational learning theories provide conceptualizations that explain how existing organizational frameworks are changed in response to environmental change (Tosey et al., 2012, p. 292). They commonly distinguish between two types of learning: first-order learning that changes organizational actions while leaving organization's existing frameworks and goals untouched, and second-order learning that changes also the underlying frameworks that are used to define the goals (Argyris and Schön, 1996, pp. 20–21; Torbert, 1972, p. 14; Tosey et al., 2012, p. 292). Second-order learning is needed in the face of profound environmental change (Tosey et al., 2012, p. 292): if the environment changes, the goals defined for the previous environment are likely to become outdated, too. In addition, a higher, third-order learning type is sometimes discussed (Tosey et al., 2012). While there are many conceptualizations of this third-order learning (Tosey et al., 2012), one is to view it as a change in the overall purpose and attention of the learning entity (Starr and Torbert, 2005; Torbert, 1972, pp. 10–16). Purpose differs from goals and frameworks in a sense that goals relate to certain times and spaces, whereas purpose relates to learning entity's existence as a whole (Torbert, 1972, p. 14). Goals are therefore pursued to fulfil the purpose (Torbert, 1972, p. 14). Attention, in turn, denotes the capacity to consciously consider alternative goals and frameworks (Torbert, 1972, pp. 14–15).

The theory of action inquiry (Torbert, 1972; Torbert et al., 2004; Torbert and Taylor, 2008) enables recognizing the different learning types through four 'territories' of human experience (Torbert et al., 2004, pp. 18–21; p. 39). The four territories of experience are: 1) the outside world, 2) behavior and sensation, 3) thinking and feeling, and 4) attention and intention (Torbert, 1972, p. 5; Torbert et al., 2004, p. 22). The first territory of outside world is experienced as events that occur outside oneself and consequences and effects of one's action in external reality (Torbert et al., 2004, p. 22). On organizational level, it corresponds with assessing the outcomes of organizational actions (Torbert et al., 2004, pp. 38–40). The second territory is experienced as deeds, patterns of activity, skills and behavior during the process of their enactment (Torbert et al., 2004, p. 22). On organizational level, it corresponds with organization's performance (Torbert et al., 2004, pp. 38–40). The third territory is experienced as the action logics, strategies, schemas, and other modes of reflecting experience (Torbert et al., 2004, p. 22). On organizational level, it corresponds with organization's strategies (Torbert et al., 2004, pp. 38–40). Finally, the fourth territory is experienced as attention, intention, and purpose (Torbert et al., 2004, pp. 22–23). On organizational level, the fourth territory corresponds with organization's vision (Torbert et al., 2004, pp. 38–40).

The theory of action inquiry suggests that accessing several territories of experience simultaneously allows detecting incongruities between organization's environment and its actions, strategies, and purpose (Torbert, 1972; Torbert et al., 2004; Torbert and Taylor, 2008). Corrective moves between the territories of outside world and performing correspond with first-order learning, whereas corrections between the territory of outside world, performing and strategizing correspond with second-order learning (Torbert et al., 2004, p. 19). Moreover, corrections between the territories of outside world, performing, strategizing and visioning, that is, all four territories of experience, correspond with third-order learning (Torbert et al., 2004, p. 19). The theory thereby views the learning types as nested: a higher type always contains the previous types (Torbert, 1972, pp. 47–49). What is more, the theory suggests that changing some territory of experience requires accessing one territory higher in hierarchy (Torbert, 1972, pp. 15–16; pp. 47–49). A first-order change between performance and outside world requires accessing the territory of strategizing, and a second-order change between outside world, performance and strategy requires accessing the territory of visioning (Torbert, 1972, pp. 15–16). Exceptionally, the highest territory of visioning is treated as an integrative level, implying that third-order changes on it can be made within the territory

itself (Torbert, 1972, pp. 49–52). However, this is considered rare and difficult to achieve (Torbert, 1972, pp. 230–231, Torbert and Taylor, 2008).

Viewed through this framework, alternative approaches to growth-dependent planning would require second- and perhaps even third-order learning, denoting changes in strategy or even in purpose. Other planning scholars, albeit deriving from different organizational learning theories, have applied similar understanding (Friedmann, 1987; Mäntysalo, 2000; Schmidt-Thomé and Mäntysalo, 2014; Mäntysalo et al., 2016; Rydin, 2010). Friedmann (1987, p. 185), refers to organizational learning concepts of single- and double-loop learning, where single-loop learning denotes change in strategy or tactics, and double-loop would change the actors' theories of reality, values and beliefs. Mäntysalo (2000, p. 310) and Schmidt-Thomé and Mäntysalo (2014, pp. 120–121) explain that the underlying assumptions determining the approach to a planning problem are formulated by second-order learning. As a concrete example, Mäntysalo et al. (2016, p. 6) describe how second-order learning resulted in a planning approach where urban planners acknowledged the local residents as urban development partners, instead of viewing them as objects of top-down participation. In this theoretical application of organizational learning to urban planning, originally developed by Mäntysalo (2000), the development of planning approaches through second-order learning is viewed as partially habitual, and transcending the established approaches requires third-order learning (Mäntysalo, 2000, pp. 309–315). Rydin (2010, p. 71), in turn, discusses that whereas second-order learning changes the definition of what is seen as a planning problem, third-order learning could change the entire purpose of planning.

Our framework of action inquiry suggests that accessing the highest territory of experience, visioning, is needed to change the frameworks and strategies through which (planning) problems are defined (Torbert, 1972, pp. 15–16). Further, this highest territory is experienced as the purpose of the learning entity, which could become a subject to change in itself (Torbert, 1972, pp. 49–52). Therefore, developing alternatives to growth dependent planning requires accessing the territory of visioning, which then enables accessing the other territories, too. Here, we suggest that different planning approaches could be identified by detecting how they manifest as four territories of experience, as presented in Table 1. In our framework, the territory of visioning manifests as the purpose and aim of urban planning in a particular context. Strategizing represents the frameworks and goals that are established to fulfill the purpose. Performing is about concrete urban development activities. Assessing is about observing the outcomes of urban development in the outside world.

Table 1. The territories of urban development

Territory of human experience	Territory of organizational experience	Territory of urban development
4) Attention, intention and purpose	Visioning	Urban development vision
3) Thought and feeling	Strategizing	Urban development strategy
2) Behavior	Performing	Urban development activities
1) Outside world	Assessing	Urban development outcomes

Empirical material and research strategy

Our research is exploratory in nature (Glaser and Strauss, 1967; Stebbins, 2011). Stebbins (2011, p. 3) defines exploratory research as “a broad-ranging, purposive, systematic, prearranged undertaking designed to maximize the discovery of generalizations leading to description and understanding of an

area of social or psychological life". It differs from confirmatory research in that it does not seek to verify a pre-defined hypothesis but generate new ideas that are grounded in the empirical data (Stebbins, 2011, p. 8). However, these ideas should be tested in further research, and not understood as complete theoretical models (Stebbins, 2011, pp. 10–14). It should also be noted that deductive prediction gradually increases also in exploratory research, depending on the emerging theoretical insights related to the phenomenon (Stebbins, 2011, p. 12). Here, we consider extant research as a guideline on what could be searched for from the empirical data, but not as a theoretical hypothesis (Stebbins, 2011, pp. 18–19).

Our research is a cross-sectional, qualitative case-study, which allows the generation of generalizable concepts across cases (Yin, 2014). Our case-study areas are three suburbs in Turku: Runosmäki, Härkämäki and Pansio-Perno. Runosmäki is a large suburb with a central location, where the City has examined possibilities for infill development by making an unofficial strategic development plan. In Härkämäki, residents and local organizations have initiated urban development. Pansio-Perno is a diverse housing area located near the prosperous Turku dockyards, but suffers from social segregation and its distant location from the city center. Due to these challenges, the City of Turku has chosen Pansio-Perno as a special target area for urban regeneration.

The empirical material consists of fifteen interviews of urban planners and other relevant actors in the case study areas (presented in Appendix 1). The interviews were semi-structured thematic interviews, where the themes of discussion are predefined, but the actual questions may vary (Hirsjärvi and Hurme, 2008). The interviewees were asked to identify different cases of urban regeneration in Turku suburbs, and explain why the urban regeneration measures were selected in each case. The role of infill development projects and local development initiatives was also discussed. Planning documents and research reports related to the cases were used as complementary material, to employ a case study method of source triangulation (Yin, 2014).

The validity of exploratory research can be enhanced by limiting the impacts of the research intervention on the researched phenomenon, avoiding personal bias when interpreting results, and acknowledging researchers' limited ability to witness all relevant aspects of the phenomenon (Stebbins, 2011, pp. 47–48). As urban regeneration processes in general last a long time, we estimate that our short research intervention has not had a major impact on the researched phenomenon. To avoid personal bias, we discussed our preliminary results with the research participants, namely with the representatives of the city organization of Turku, in a seminar organized in January 2018. There, our preliminary results were found plausible. We acknowledge that the validity of our research is limited due to the restrictions of our empirical material – deeper understanding on the issue under study could be developed in a longitudinal case study research project or comparing several cases in different cities. This highlights the need to consider the results of this study as preliminary concepts, to be validated in further research (Stebbins, 2011).

The reliability of exploratory research is improved by deploying a systematic and replicable process in the analysis (Glaser and Strauss, 1967, pp. 229–230). Here, we deployed thematic analysis and coding technique, where data are categorized and reconstructed to capture important concepts within the data set (Tuomi and Sarajärvi, 2009). The different approaches to urban regeneration were depicted using our theoretical framework, where the contextual alignment of urban regeneration measures is understood through the four territories of organizational experience: visioning, strategizing, performing and assessing. The theory of action inquiry suggests that the four territories of experience manifest on interpersonal level as four parts of speech (see Torbert and Taylor, 2008; Torbert et al., pp. 24–37; p. 39). These four parts of speech were used as units of coding and systematically recognized from the interviews. The parts

where the interviewees framed, identified and explained opportunities for urban development in different contexts were coded as visioning. The opinions, statements or action plans of what had been or should be done in this context were coded as strategizing. Illustrations of concrete actions that were or could be taken were coded as performing. Assessment of the selected actions and proposals for improvement were coded as assessing. The outcomes of the analysis were compared across cases, to identify whether urban planners deployed context-specific urban regeneration approaches in different situations, and what were their underlying logics.

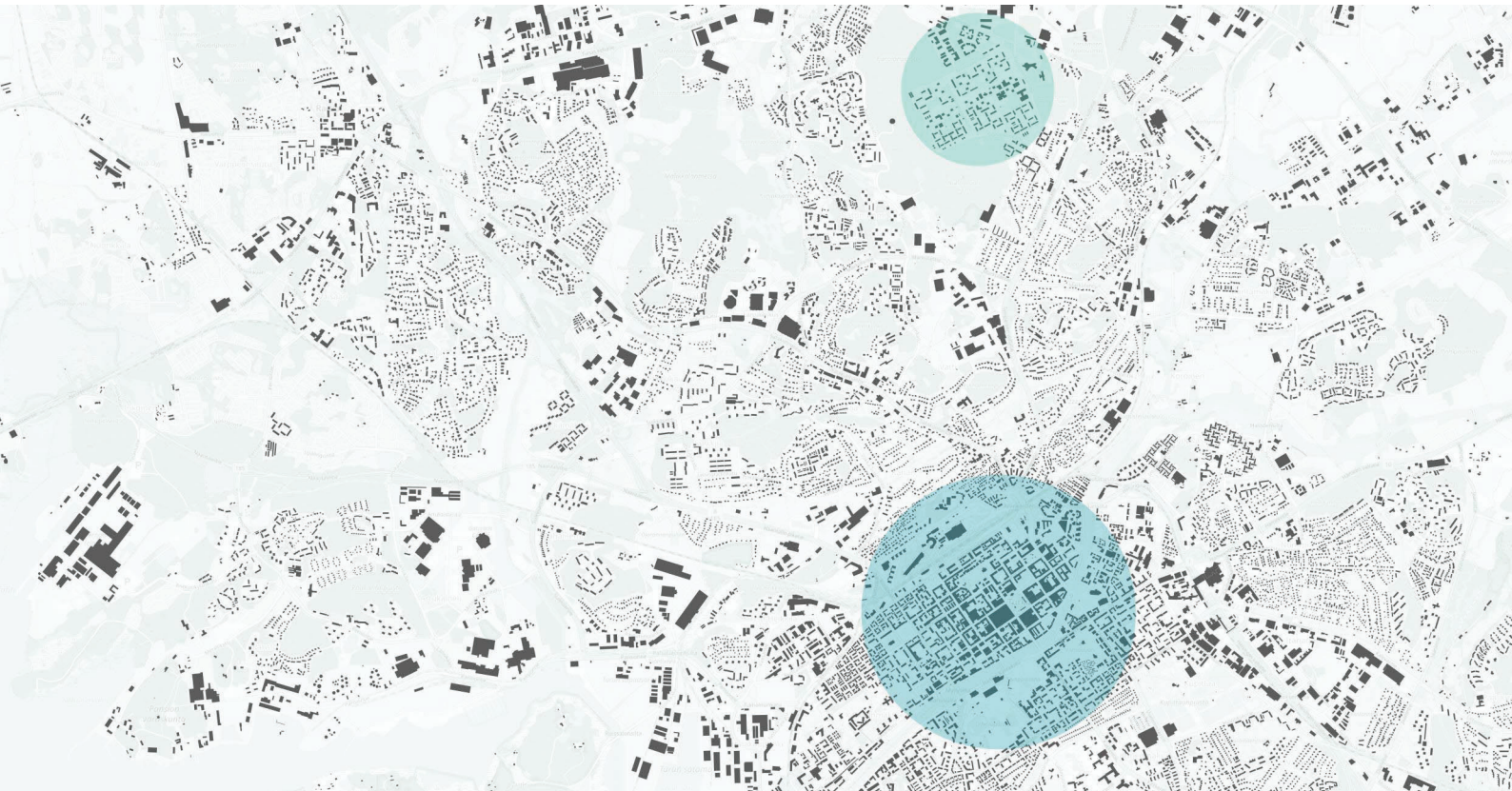
Analysis

The forthcoming Master Plan 2029 for the City of Turku defines a strategic development zone for urban intensification, which extends approximately three kilometers from the city center, and along main public transport routes (City of Turku, 2018a; 2018d, p. 7; pp. 62–63). In addition, the master plan draft categorizes housing areas as “completed housing areas”, “suitable areas for infill development” and “new or profoundly changing housing areas” (City of Turku, 2018b; 2018d, pp. 10–11). While some suburbs are located within the urban intensification zone and defined as suitable for infill development, others are situated outside of the intensification zone, or defined as completed housing areas. Our interviewees expected that most of the new infill development in Turku will be located nearby the city center, not in the suburbs. While the interviewees hoped that all suburbs could be developed as pleasant environments for citizens, they highlighted the need to select an appropriate approach to urban regeneration in each area.

Runosmäki

Runosmäki is the second largest suburb in Turku, with an advantageous location in the city structure along one of the main roads, about five kilometers north of the city center (Figure 1). It is located in the Runosmäki-Raunistula area, where the city expects a 9.6% population increase by 2029 (City of Turku, 2018d, p. 68). In the master plan draft, Runosmäki is appointed as a local center and as a suitable area for infill development located within the strategic

Figure 1. Location of Runosmäki (smaller circle) and Turku city center (larger circle) in the urban structure. Map data ©OpenStreetMap contributors and SPIN Unit.



urban intensification zone (City of Turku, 2018b; 2018d, pp. 10–12). The City of Turku also has plans for a new effective public transport connection from Runosmäki to the city center, which supports the infill development objectives (City of Turku, 2018c; 2018d, p. 10; p. 18). In the interviews, Runosmäki was framed as a large and lively housing area with good public and commercial services. The interviewees mentioned the advantageous location of the area often and envisioned that it could be an attractive housing area in the future.

The City's urban planning department has made an unofficial, strategic infill development plan for Runosmäki (City of Turku, 2015). The interviewees stated that the plan was needed because the development objectives mentioned in the forthcoming master plan had to be examined on a more detailed level. The development of Runosmäki is timely also because a new community center is planned in the area. Some of the existing public services in Runosmäki, such as a library, daycare services and youth services, are to be re-located in the new community center (City of Turku, 2016). The new community center has also been taken as a starting point of the strategic infill development plan. In the plan, infill development has been examined in the city-owned plots that will become vacant when public services are re-located in the community center. The City has also examined whether the community center project can be financed by selling the city-owned plots for infill development purposes (City of Turku, 2016). In addition, infill development has been examined in the plots of existing housing companies. However, the interviewees considered the realization of these projects uncertain and observed that such small projects would not have a remarkable impact in terms of population increase.

The interviewees assessed that making an infill development plan was meaningful in Runosmäki due to its advantageous location and master plan's growth expectations, and the community center project was expected to enable new infill development in the future. However, the practice of making an infill development plan was also considered very traditional because of its strong emphasis on physical urban development. It was assessed that such practice would only be meaningful in areas that would attract new inhabitants and therefore infill development projects. The original idea of the urban planning department had actually been to make similar plans for all other suburbs in Turku as well. This idea was later abandoned because the practice was not considered suitable in areas where market-demand for infill development was uncertain. In fact, the interviewees were not sure whether the planned development would actualize even in Runosmäki. They highlighted that the practices for urban regeneration would have to be chosen based on starting points of the area, and that strategic plans for new infill development were certainly not needed in all suburbs in Turku.

Table 2. Aligning urban regeneration approach with the Runosmäki context.

Territory of urban development	Urban regeneration approach in Runosmäki
Urban development vision	Support urban growth in an area with advantageous location and strategic importance for the City
Urban development strategy	Create prerequisites for infill development projects by making a strategic infill development plan
Urban development activities	Support actualization of infill development with a strategic project
Assessment of urban development outcomes	The approach is suitable only in areas that attract infill development, cannot be used in all suburbs

The alignment of urban regeneration approach with the Runosmäki context is summarized in Table 2. In visioning, the area was framed as a large housing area with a good location and possibilities for urban growth, necessitating strategic urban planning. In strategizing, possibilities for new infill development

were considered worth examining with an infill development plan. In performing, the community center was considered as a strategic project that would enable new infill development in the area. In assessing, the practice of making a general plan for urban infill was assessed as suitable only in areas that were attractive for new infill projects, but too laborious to be multiplied in all suburbs, as was originally planned.

Härkämäki

Härkämäki is located approximately five and a half kilometers northwest from the city center of Turku (Figure 2). It is in the Pansio-Jyrkkälä area, where the City expects a -1.4% population decrease by 2029 (City of Turku, 2018d, p. 68). In the master plan draft, Härkämäki is defined as a “completed housing area”, located outside the strategic development zone for urban intensification (City of Turku, 2018b). Indeed, the area could be characterized as complete: all buildings have been built at the same time, and all of them are housing companies managed by their resident owners. The area has its own area maintenance company, Härkämäen Huolto, that has property management responsibilities and provides janitorial services in all the housing companies. Härkämäki also has an active neighborhood association Härkämäkiseura, which seeks to develop social and economic conditions and environmental quality in the area, and to create connections among its residents and communities. While the City has not initiated urban regeneration in Härkämäki, the housing companies, area maintenance company and neighborhood association have together shown interest in developing the area. In the interviews, Härkämäki was envisioned as a suburb where urban regeneration originates from within the area.

Figure 2. Location of Härkämäki (smaller circle) and Turku city center (larger circle) in the urban structure. Map data ©OpenStreetMap contributors and SPIN Unit.

Locally initiated urban regeneration in Härkämäki originates from the need to repair the buildings in the area affordably. A common challenge in Finnish suburbs is that the building renovation costs are high compared to the value of the apartments. Therefore, the local actors in Härkämäki have examined possibilities for joint renovations with a help of a consulting firm. This also generated an idea of making an area development strategy, with an aim of improving public spaces in the area, and even examining possibilities for infill



development. The public urban planners have shown support for these ideas and encouraged the local actors to carry on with their plans. Guidance, support and agility in responding to the contacts of local actors were considered as practices that the City could develop to better support this kind of spontaneous urban regeneration. For example, some interviewees suggested that the City could prepare an area development plan in cooperation with the local actors. In Härkämäki, this has already happened to some extent: the neighborhood association has previously made a green area development plan, which the City has approved and even implemented to some extent.

The interviewees assessed that locally initiated urban regeneration is needed in Turku suburbs, since they are not in the main scope of market-led urban development—infill development projects rather locate nearby the city center. However, since sustainable urban development in all housing areas is important for the City, it is necessary to support also locally emerging urban regeneration. Supporting spontaneous development was also considered effective, compared to an approach where public authorities would establish an urban regeneration scheme for each housing area. However, the interviewees highlighted that the City cannot unilaterally choose to use the Härkämäki approach to urban regeneration in some particular area, as the initiative has to come from within the area. In areas where spontaneous activities do not exist, the City should consider other urban regeneration measures. However, it is important for the City to recognize the spontaneous urban development and join it, since the area-based actors often are small and have limited resources and experience running urban development projects.

The alignment of urban regeneration approach with the Härkämäki context is summarized in Table 3. Härkämäki was envisioned as an area with spontaneous urban regeneration activities. In strategizing, the City considered it important to support local development activities. In performing, a need for new practices for the City to support local development was identified. Urban planning that supports local development initiatives was assessed as meaningful in those suburbs where the local actors are interested in improving the quality of the environment and housing. While the City cannot select the areas where the approach is used, it is important to develop practices to attend to the development initiatives, since local actors often are small and inexperienced in running urban development projects.

Table 3. Aligning urban regeneration approach with the Härkämäki context.

Territory of urban development	Urban regeneration approach in Härkämäki
Urban development vision	Spontaneous urban development
Urban development strategy	The City does not initiate urban regeneration but supports the spontaneous activities
Urban development activities	Practices for the City to act as a partner for local development could be developed further
Assessment of urban development outcomes	The approach is not suitable in areas where spontaneous development activities do not exist

Pansio-Perno

Pansio and Perno are two housing areas located next to each other, approximately eight kilometers west from the city center (Figure 3). Like Härkämäki, they are located in the Pansio-Jyrkkälä area, where a -1.4% population decrease is expected (City of Turku, 2018d, p. 68). In the master plan draft, the land uses for Pansio-Perno are defined as “completed housing areas” and “areas for services and housing”, located outside of the strategic urban intensification zone (City of Turku, 2018b; 2018d; p. 14). Pansio-Perno is separated from the city center by industrial areas, and from the seashore by

dockyards and other marine industries. In the past, it has served as a housing area for marine industry workers and their families. Nowadays, there is a lot of city-owned social housing, but also private single-family housing and semi-detached housing. In the interviews, Pansio-Perno was envisioned as a housing area where the City has a social motive for urban regeneration. On the other hand, it was also characterized as an important area for industry and workplaces. The area was considered challenging for infill development because of its isolated location in between the industry area and dockyards, relatively far away from the city center. While there are plots available for infill development, private developers have shown no interest in them. Also, the safety requirements of the nearby industry limit possibilities for infill development. However, many interviewees mentioned the recent prosperity of the marine industry in Turku and were hoping that this could at some point start new urban development in the area.

The interviewees stated that planning for infill development was not a suitable urban regeneration measure in an area that did not attract any development initiatives. Although some pointed out that the urban structure in Pansio-Perno was scattered and thereby afforded opportunities for infill development, most of the interviewees hold that there was no reason to make a physical development plan for something that was not going to be implemented. If a plan for future development was needed, it should be more about telling a story and building a positive image for the area. This was considered to both empower the residents and attract positive attention to the area from the outside.

Figure 3. Location of Pansio-Perno (smaller circle) and Turku city center (larger circle) in the urban structure. Map data ©OpenStreetMap contributors and SPIN Unit.

Based on these observations, the objectives of urban regeneration in Pansio-Perno have been formulated together with the residents and local organizations (see also Mälkki, Norvasuo and Hirvonen, 2016; RAKLI ry, 2016). This has been done in regular meetings coordinated by a city worker, whose responsibility is to run the meetings, facilitate discussion, and coordinate the possible implementation of the development ideas. The idea is that local actors are empowered to work for the benefit of the area, which in turn will have more sustaining impacts than urban regeneration activities led solely by the City. Implemented development activities include environmental improvements



organized in cooperation between the City, residents and area-based organizations, such as environmental artwork made for an old lighthouse building, and a new pedestrian path connecting the area to the seashore. The interviewees explained that these ideas were realized because they were important for the residents and would give a sign of positive activities taking place in the area.

The interviewees assessed that the most successful feature of the urban regeneration in Pansio-Perno was the recognition that planning for infill development was not a suitable measure there, and new practices were needed. The approach using local needs as a starting point of urban regeneration was considered as more appropriate. However, others considered it important also to find ways to make the area more attractive for external development initiatives. For example, it was suggested that the City should anticipate opportunities for urban growth that the prosperity of the nearby marine industry could bring to Pansio-Perno.

The alignment of urban regeneration approach with the Pansio-Perno context is summarized in Table 4. In visioning, the area was considered as a distant and segregated area that needed socially-oriented urban regeneration. While there were hopes that the area could also attract external development initiatives in the future, relying on market-led infill projects to bring about urban development was not considered a suitable approach. In strategizing, the urban regeneration approach which answered the current needs was developed. There were hopes that this would also bring positive attention to the area and improve its image. In performing, small urban development activities were innovated and implemented in cooperation with the City, residents, and local organizations. The approach was assessed as successful in terms that it was aligned with the current needs. However, anticipation of possible future development opportunities was also considered important.

Table 4. Aligning urban regeneration approach with the Pansio-Perno context.

Territory of urban development	Urban regeneration approach in Pansio-Perno
Urban development vision	The current conditions are improved, and area image is developed for the future
Urban development strategy	The City takes an active role in initiating discussion among local actors regarding urban regeneration
Urban development activities	Urban development activities are formulated in regular meetings between the City, residents and local organizations. Small-scale projects are implemented.
Assessment of urban development outcomes	While addressing local needs is important, also future development opportunities should be anticipated

Results

We have analyzed three cases of urban regeneration in Turku suburbs, utilizing an analytical framework originating from organizational learning theory. Our objective has been to explore how the City aligns its urban regeneration approach with different low growth contexts to bring about sustainable urban development. We have aimed at identifying when the growth-dependent planning approach is used, whether alternative approaches are deployed, and what are their underlying logics. As a result, we present a set of three approaches to urban regeneration that are used in the City of Turku, based on the three analyzed cases, in Table 5.

The urban regeneration approach used in Runosmäki was envisioned to suit areas that attract market-led infill development. Strategizing was about making an urban development plan, which created prerequisites for infill development projects. The approach therefore followed the logics of growth-dependent

planning, which seeks to bring about sustainable urban development by utilizing market-led urban development projects (Rydin, 2013). Infill development served the strategic aims of the City, as it was expected to increase the number of inhabitants in the area and lead to more effective use of public transport, services and infrastructure. The development was also considered to benefit the locality because it would improve local amenities and quality of the environment. However, in performing and assessing, it was noted that this approach is not functional in areas that fail to attract external development initiatives. Therefore, the idea of using the approach in all suburbs was reconsidered.

Table 5. Urban regeneration approaches in Turku suburbs

	Visioning and strategizing the approach	Performing and assessing the approach
Growth-dependent approach	Runosmäki: Area with possibilities for urban growth and strategic importance for the City, where urban planning seeks to create prerequisites for market-led infill development projects.	Suitable only in areas that attract infill development projects, cannot be used in all suburbs.
Supportive approach	Härkämäki: Area with spontaneous urban development initiatives and moderate strategic importance for the City, where urban planning supports local development initiatives.	New practices for the City to answer the local development are needed. The approach is not suitable in areas where spontaneous development activities do not exist.
Generative approach	Pansio-Perno: Disadvantaged area with possible strategic importance in the future, where the City and the local actors initiate development activities that answer to local needs and build area image.	While answering to local needs is important, also future development opportunities should be anticipated.

The urban regeneration approach used in Härkämäki was envisioned to suit areas where local urban development activities already exist. In terms of strategizing, it was considered important for the City to recognize and promote this kind of development. The logic of the approach was therefore to support urban development that directly creates value for the locality, which has been proposed as an alternative to the growth-dependent planning logic (Janssen-Jansen et al., 2012; Rydin, 2013). The representatives of the City considered this approach as an appropriate way to further the aims of sustainable urban development in suburbs where the growth-dependent approach is not functional. However, it was assessed that this approach may not be used in suburbs where local development activities do not exist.

The urban regeneration approach used in Pansio-Perno was also envisioned to attend to local needs. As in Härkämäki, the underlying logic was to identify the local assets and take them as a starting point of urban development. The difference was that in Pansio-Perno the City took a more active role in initiating discussion among local actors and building their capacity to participate in regeneration activities. In addition, urban regeneration measures also had the aim of building a positive image for the area and communicating that something was happening there. The urban regeneration approach was therefore also about improving the image of the area for the long-term, in case new opportunities for urban development would emerge.

Discussion and conclusions

The contribution of this exploratory paper is to demonstrate that urban planners in Finland deploy alternative planning approaches in low growth contexts, and that the need to develop alternatives to growth-dependent planning is therefore being answered in planning practice. It seems that the City of Turku complements the growth-dependent planning approach with approaches that support urban development answering to local needs and seek to generate development initiatives in areas where they do not yet exist. However, other researchers have noted that the ways to integrate local development initiatives into mainstream urban planning are still evolving in Finland (Leino, 2012; Wallin, 2015; Partanen and Wallin, 2018; Rantanen and Faehnle, 2018). Our research shows that this was the case also in Turku, where the city organization was just now starting to develop such practices.

Our research provides alternative conceptual models to growth-dependent planning and confirms insights discussed in the extant literature, which suggest that planning seeking to address local needs could complement the growth-dependent planning approach (Janssen-Jansen et al., 2012; Rydin, 2013). In addition, we found that this alternative planning approach manifests as two distinct approaches: the supportive approach that engages with the pre-existing local activities, and the generative approach that seeks to create new future development possibilities, be they commercial infill development projects or local initiatives. Similar planning approaches have previously been discussed in the context of self-organizing urban development (see Boonstra and Boelens, 2011; Boelens and Coppens, 2015). However, in disadvantaged housing areas such approaches may prove challenging as the local actors may lack resources to organize in terms of urban development (Boelens and Coppens, 2015). Applying this planning approach to low growth contexts thus requires further research.

The findings also imply that urban planners may define the means to achieve sustainable urban development more flexibly in contexts that are not in the main scope of city's strategic urban development plans, such as Härkämäki. However, in areas considered as strategically important for the city, the urban regeneration objectives are established based at least partially on logics of growth-dependent planning. This was evident in Runosmäki, which is mentioned as a target area for urban development in the strategic plans for the city, but also to some extent in Pansio-Perno, which is located near the prosperous marine industry. There, urban regeneration measures were intended to support also the long-term image-building for the area, which might improve its attractiveness for external development projects in the future. This implies that urban planners not only align their urban regeneration measures with the preconditions of the real-world context, but also with the strategic long-term aims of the city. Especially in the plan-led urban development context in Finland urban planners are accustomed to proactively seeking opportunities for sustainable urban development (Valtonen, Falkenback and Viitanen, 2017a). While the strength of this approach is that urban planners have a determined attitude towards envisioning future urban development possibilities, a possible limitation is that local development initiatives are not recognized as a contribution to sustainable urban development in areas that provide opportunities to utilize the growth-dependent model (see also, Boelens and De Roo, 2016, p. 58; Boelens and Coppens, 2015).

A limitation of our research is that due to its exploratory nature, the results should not be understood as complete theoretical models. Rather, they are preliminary concepts to be confirmed, refined or challenged in further research (Stebbins, 2011). Further, the empirical data is derived only from one city organization, operating within the Finnish spatial planning system. While exploratory research often deals with small data sets, the validity of the findings increases by concatenating research on the same phenomenon (Stebbins,

2011). Therefore, the models found in this research should be complemented with further research in other cities and within other spatial planning systems.

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Appendices

Appendix 1. Semi-structured interviews

Organization	Date and Time	Cases discussed
City of Turku, Department of urban planning	November 17, 2016, 1h 15min	Runosmäki, Härkämäki, Pansio-Perno, suburbs in general
TVT Asunnot [Real estate company owned by the City of Turku]	November 17, 2016, 1h 30min	Pansio-Perno, suburbs in general
City of Turku, Department of urban planning	November 18, 2016, 1h 20min	Runosmäki, Härkämäki, Pansio-Perno, suburbs in general
City of Turku, Department of urban development	November 18, 2016, 2h	Runosmäki, Härkämäki, Pansio-Perno, suburbs in general
City of Turku, Department of urban development	November 18, 2016, 2h	Runosmäki, Härkämäki, Pansio-Perno, suburbs in general
City of Turku, Department of urban planning	January 30, 2017, 1h 15min	Härkämäki, Pansio-Perno, suburbs in general
City of Turku, Department of urban planning	February 1, 2017, 1h	Runosmäki, Pansio-Perno, suburbs in general
City of Turku, Department of urban development	February 1, 2017, 1h	Runosmäki, Härkämäki, Pansio-Perno, suburbs in general
City of Turku, Department of real estate	February 1, 2017, 1h	Runosmäki, Härkämäki, Pansio-Perno, suburbs in general
City of Turku, Department of urban development	March 7, 2017, 1h 10min	Runosmäki, Härkämäki, Pansio-Perno, suburbs in general
Härkämäkiseura (Härkämäki neighborhood association)	March 8, 2017, 1h	Härkämäki, suburbs in general
Vahanen Turku (Consultant for joint renovations in Härkämäki)	March 8, 2017, 50min	Härkämäki
Härkämäen Huolto (Härkämäki area maintenance company)	March 9, 2017, 35min	Härkämäki
City of Turku, Department of urban planning	June 20, 2017, 30min	Runosmäki, Pansio-Perno, suburbs in general
City of Turku, Department of urban planning	June 20, 2017, 30min	Runosmäki, suburbs in general