

/ CHAPTER 3
URBAN AND SOCIAL PLANNING

A TALE OF TWO HAAGAS

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“If there were a single turning point in Haaga’s history, it would be the 1950s. It is when the decisions for the majority of the current housing stock were made and also when the commercial structure changed for good, transforming the northern area’s urbanity forever. In addition, the blueprint for suburban development was created then.”

HISTORY

INTRODUCTION

Haaga is a district in north western Helsinki consisting of four sub-districts, North-Haaga, South-Haaga, Lassila and Kivihaka. North- and South-Haaga are the largest of these, with both having around 10 000 inhabitants. Haaga has a rich history, even though many of its residents might not realize that anymore. North-Haaga is a model 1950s suburb, South-Haaga is even older with its small, winding roads. Both include apartment buildings mainly built in the 1950s and 1960s. Their reputation is, however, quite different. The northern parts are considered somewhat less attractive, which seems unfair when looking at it.

What is it that makes the two Haagas different? Should not the neighbouring suburbs, that share similar buildings, nature, and even their name, be considered more equal? What do the Haaga residents think about the subject themselves? Could a deeper look into urban history provide an answer to these questions?

This article will introduce briefly the history of North- and South-Haaga and suggest four factors that either separate or connect the two areas. Finally, there is a look ahead to what the future holds for Haaga.

The most complete review of the early history of Haaga (present-day South-Haaga) is *Haagan kauppalan historia* by John E. Roos from 1950. Later, building inventories and reports conducted by the city planning office in the 1990s and 2000s provide the best information of the area. The North-Haaga residents' association has published two excellent books that delve into the community's history and present: *Pohjois-Haaga: Pohjantähti Helsingissä* [North-Haaga: The North Star in Helsinki] from 1989 and *Pohjois-Haaga: Luonnon keskellä kasvava moderni kaupunginosa* [North-Haaga: A modern neighbourhood growing in the middle of nature] from 2015. These, in addition to the general reviews of suburbs and shopping centres, have proven very useful in researching this article.

The sub-districts of Lassila and Kivihaka are left out of this article due to time constraints. They are smaller than North-

and South-Haaga (especially Kivihaka) and mirror the development of the two Haagas. Kivihaka is a uniform suburb (like North-Haaga) built in the 1960s and Lassila saw most of its old, wooden housing stock demolished during development in the 1980s.

THE INDEPENDENT DAYS OF SOUTH-HAAGA

The origins of Haaga are intertwined with the coastal railway between Helsinki and Turku. The railway was completed in 1901, boosting the development of the area. Commercial gardener Märten Gabriel Stenius had bought the land 15 years earlier, with the intention of creating an English-style garden city there and selling plots for people he deemed appropriate. In addition to following the garden city ideology, commercial gardens characterized Haaga's landscape for decades to come.

Famous architect Lars Sonck created the first plan for the villa community of Haaga in 1901. Today's street network is easily recognized from the plan, but many builders neglected it when building villas (Roos, 1950, pp. 28, 34). On the other hand, the famous Munkkiniemi-Haaga plan by Eliel Saarinen from 1915 tried to bring city block structure and orderly lines of villas to Haaga. While that plan was never realized, it did influence the plans made by the borough in the 1920s (Lindh, 1996, p. 11).

The first inhabitants to move into the area were well-to-do Swedish-speakers, who remain a minority in Haaga to this day. They were attracted to the clean nature and the pleasantly moderate borough tax (Roos, 1950, p. 193). Soon afterwards, Finnish-speakers began to move in as well. They were attracted by the cheaper living costs away from the city centre. After the Civil War in 1918, Haaga became more and more working-class and the quality of the villas varied greatly (Roos, 1950, pp. 137-140). The typical resident of that era rented a room in a villa and commuted daily from Haaga to Helsinki.

Haaga was recognized as a "dense settlement area" in 1906 and became an independent borough in 1923. Helsinki annexed the borough along with several other areas in 1946, but already before that, people seemed to consider the marriage inevitable. The population of the borough was around 3 000 at the time of the annexation and the number of the villas was 600 (Sarmaja, 2009, p. 135).

Haaga is built on hilly terrain, with rocks dotting the land-

scape. The buildings of the 1920s and 1930s were functionalist detached houses constructed of wood, most of which slowly disappeared during the 1950s, 1960s and 1970s (Lindh, 1996, p. 18).

Industry did not play a major role in the history of the independent borough. Local commercial services for the residents thrived in Haaga from the beginning, even though the large shops of the nearby capital attracted wealthier clients already then (Roos, 1950, p. 189).

NORTH-HAAGA: A FOREST SUBURB

The story of Haaga is a complicated one and rich in history. The southern part is older, but most of those older buildings have been demolished. The northern part is also historically relevant as a model suburb of its era. While both areas share a name, they have a separate identity as well.

Until the 1940s, the landscape of North-Haaga was mostly rock, swamp and pine forests. The hinterland of the borough used to be a popular skiing ground among Haaga residents (Oittinen and Tepponen, 1989, p. 9). During the war when there was a shortage of firewood, the city cleverly paid citizens to cut the forests in so-called "family loggings", clearing the land for future construction in the process (Oittinen and Tepponen, 1989, p. 14).

Helsinki planned North-Haaga in three phases, in 1949, 1952 and 1955. The terrain was ideal for a new suburb, with no previous settlement, an interesting landscape and solid rock to build on. The first two plans resulted in low, 3-4-storey apartment buildings, sparsely built and fitting the terrain. Planning the third phase was to be a taste of things to come. The city organized a competition, which architect Heikki Siren won with his proposal Käärmesolmu (Tarjanne, 2007, p. 9). Due to lack of funds, none of the entries materialized, but they influenced Finnish suburban development greatly. For example, from that point on it became increasingly more common to give whole areas of land to a firm to build them entirely. The construction firm SATO then realized the whole third phase, including five modern (and very profitable) high-rise apartment blocks, which came to characterize the whole area.

Both workers and academics moved to North-Haaga. These people were young and active in improving their suburbs' conditions, managing to lobby for a new school there (Oittinen and Tepponen, 1989, p. 16). They also actively defended their local

green areas from new construction projects. Due to their efforts, the suburb remains in human scale today.

In the years after the war, Helsinki exercised a suburban policy, in which it was important for each suburb to have a distinct identity. To reach this, the council suggested changing Pohjois-Haaga's name to Hakavuori (as was done with Munkkivuori and Roihuvuori, other suburbs of that era.) A referendum held in 1959, resulted in retaining the existing name, though (Kolbe, 2015, p. 33).

While North-Haaga is a remarkably uniformed 1950s area, it also has plenty of later developments. In place of a former shooting range, a box-type development was completed in 1970s. The process that was started in the 1950s was now perfected: the construction company HAKA only took two years to build all twenty houses in the area (Tarjanne, 2007, p. 14).

GARDEN CITIES

The two Haagas are separate as well as similar for the same reason - that is the garden city idea that they were planned upon. Their abundant greenery and difference in terrain gives them a similar, pleasant feel, as a garden city should have. The connection to nature is what wealthy people sought after when they moved to (South-) Haaga in the early 20th century, and what workers and the middle-class looked for in the 1950s in North-Haaga. An attractive landscape also plays a part in how both neighbourhoods are felt. Suburbs in later decades were constructed on fields, which do not offer the similar kind of variety in elevation found in natural environments.

From the start, these areas were planned to be separated by parks, or often in practice, forests. However, the locations for these were often not chosen for their natural values, but because the soil was unsuitable for construction. The construction companies left those areas untouched as unprofitable, which left large areas separating the suburban built environment (Karlsson et al., 2012, p. 6). For example, the first two phases of North-Haaga were separate until the infill development in the valley along the Jokeri line in early 2000s.

After the Second World War, the suburban ideology became mainstream in Finland. Suburbs were planned looking "towards the city", with fast routes to the city-centre but few connections between neighbourhoods; that decreased the unwanted traffic in the suburbs. The planners thought that there was little need to cross to a neighbouring suburb, when all of them offered sim-

ilar services. However, these post-war suburbs were planned all at once (or only during a few phases) and after that, they were considered ready. There were no plans at the time for further development. While the suburbs stayed the same, the society around them changed, as cars became more common, better roads enabled more efficient transport and large hypermarkets were built along the motorways. Suburbs were the answer to major changes in society, but the next change left suburbs somewhat lagging behind as quieter than before (Kolbe, 2015, pp. 36-37).

The first full decade after the war is somewhat underrated in historical research, compared to the politically tumultuous periods of the 1940s and 1960s. However, in urban planning history, it is hard to see any single era being more important than the 1950s. This is when the blueprint in suburban planning was created in Finland. Until then, new neighbourhoods were built as close to the city as possible, according to pre-war plans. But the new models preferred small, separate neighbourhoods, spread over a wide area, where only necessary services existed. The recipe for urban spread, in other words.

The influential urban planners of the time, such as Otto Iivari Meurman, emphasized the health problems of living in dense urban areas (Karlsson et al., 2012, p. 20). The residential buildings were to be distanced from roads, which meant that the new suburbs were extremely sparsely built. In contrast to modernism, these new suburbs were built in terms of existing nature and terrain profiles. Helsinki's comprehensive plan from 1953-1960 mentioned that "community spirit" was to be sought by building small "neighbourhood units", with all basic services that people needed. A suitable size for a unit would preferably be less than 5 000 - 10 000 residents (Saresto, 2004, p. 22).

AWAY WITH THE OLD: SOUTH-HAAGA TRANSFORMS

A predominant speaker for the garden city idea in Finland, Heikki von Hertzen claimed that cities should grow through predominantly planned suburbs and those suburbs' built environment should be uniform and organized (Saresto, 2004, pp. 24-25). His policies became hugely influential with Finnish planners, dealing a death sentence to the makeshift wooden villas of South-Haaga.

The plan for South-Haaga was approved in 1952. Nearly all of the 600 villas of the independent borough era were demolished during the post-war period, being replaced with modern

apartment blocks. Only the wooden Huopalahti station and a few villas remain from that period, along with an occasional stone building dotting the landscape. However, the road network and old plots of villas remained, which restrained the new buildings to a smaller scale. The result is a charming, low-rise neighbourhood where narrow roads snake through the hilly landscape and greenery, and where the look of a former garden town can still be found (Hirsimäki, 1999, p. 20).

FACTOR 1: COMMERCIAL SHOPS

Throughout its history, Haaga has been a residential neighbourhood. Those residents still have decent access to services, though. Small businesses thrived there, especially from the 1950s to 1980s, when the population was larger and there were fewer possibilities to shop elsewhere. Still today, South-Haaga can provide an almost city centre-like collection of commercial services, from grocery stores and cafes to specialty shops. It can be argued that the variety in services rivalling the urban core, combined with the calmness of a suburban atmosphere, could be one of the things people value in South-Haaga. In that sense, Haaga is a rarity among Helsinki suburbs which typically feature a narrower selection of services. Infill development in those suburbs may change that in the future.

Commercial spaces have defined the suburbs since their creation. Before the 1950s, residents made multiple visits to small shops to get what they needed. Both South- and North-Haaga (around Thalianaukio) still have a variety of shops remaining from that era of planning. In those small shops people were serviced across the counter. However, both suburban planning and commercial space planning went through a major change in the mid-1950s. Retail business, which was already then dominated by a few large companies, could not afford to staff small stores in the ever-expanding suburbs. At the same time, a new concept of self-service shops emerged, made possible by new packaging techniques. In the intense competition for customers, the retail business saw these futuristic stores as both a way to attract more customers and to turn larger profits.

The central chamber of commerce of Helsinki and the retail business collaborated with the city planning office to create a blueprint for a shopping centre as the hub of a neighbourhood (Saresto, 2004, p. 26-27). The shopping centres were designed to include all the services within them, but not outside, as they tellingly “turned their backs on the surrounding structure” (Saresto, 2004, pp. 18-21). This drastically changed the urban

fabric of suburbs.

While Thalianaukio reminds us of a small-town square, the North-Haaga shopping centre, built only a few years later, follows a completely different planning idea, where shops were separated from housing completely. These shopping centres were, by 1962 definition from Reino Castrén, “local centres, where services are separated from housing, traffic and public services” (Saresto, 2004, p. 12).

The two commercial hubs developed into the hearts of the young community. They were so close to each other that many locals referred to them as the “upper” and “lower” malls (Mäenpää, 2015, p. 1). There were still more changes to come, though. In the 1970s, when private-car use had increased heavily, a hypermarket was built along the ring road in Kannelmäki, drawing many customers from nearby North-Haaga. It may have separated North- and South-Haaga even further, since North-Haaga residents were now commonly travelling north instead of south for their daily trips. Recently, the largest grocery retailer in Finland developed the site further into a round-the-clock mall, further centralizing the area’s commercial activity. The former commercial hubs in Haaga are left as mere shadows of what they once were, relics of a time past. While Thalianaukio and the North-Haaga shopping centre might not be the hearts and souls of their community anymore, they are still important to the identities of the area nonetheless.

FACTOR 2: COMMUNITIES AND PUBLIC SPACES

Along with commercial spaces, Haaga has plenty of public spaces and a long history of community gathering. The residents’ organizations have a long history in both North- and South-Haaga and remain very active today. In many cases, the residents of North-Haaga have organized themselves separately from those of South-Haaga. This includes residents’ committees and workers’ organizations (Elo and Elo, 1977). The two districts have also common organizations under Pro Haaga ry, that gathers together more than 20 local organizations (Leskelä, 2008, p. 194). In a 2015 interview, Haaga residents concluded that a certain “Haaga spirit” does indeed exist (Jakonen, 2015). One feat of strength from the residents’ committee was the opening of the Haaga health station near the geographical centre of the region, which serves both North- and South-Haaga.

The enthusiastic locals also played their part in setting up the first schools in the area, first in the independent borough,

then in the newly built suburb. Currently, Haaga has quite many schools within its borders considering its size and population. Two of the most renowned educational institutions moved to South-Haaga from the city centre during the 1970s. The relocation was probably due to good connections from the suburb to the inner-city area, but the good reputation created by the Haaga residents' zeal of building their own schools possibly played a part (Bergman, 2007, pp. 81, 134-135).

Finally, the city of Helsinki has built vocational education facilities in Haaga, diversifying the range of educational facilities even more. Schools can characterize entire neighbourhoods and especially schools with wide student catchment areas can spread the area's reputation far. Haaga has a larger number of schools than possibly any other area outside of the city centre. The large number of students commuting daily from elsewhere could reasonably strengthen the reputation of Haaga outside its borders. On the other hand, that outside influence which students bring with them to Haaga might prevent the development of a truly indigenous identity. In any case, Haaga is a major part of many students' educational paths.

Public spaces connecting North- and South-Haaga are few, but one stands out. The locally famous Rhododendron Park brings the two Haagas closer together. Situated halfway between the two areas, people gather there every June to admire the blossoming flowers. Again, knowledge of the historical background offers an explanation on why the only rhododendron park in Helsinki is in Haaga. Gardens, where Stenius once grew his flowers, once characterized the independent borough of Haaga. The garden no longer serves a commercial purpose, but the flowers remind us of the local history of the area.

FACTOR 3: AGE OF THE AREA

The age of the neighbourhood is an important factor when considering its reputation and status. When a suburb is young, usually its residents are young as well. This is because of all the young families moving into their first family apartments, with this happening in North-Haaga as well (Kolbe, 2015, p. 34). As time goes by, the residents become older and wealthier and the population decreases.

Both North- and South-Haaga are relatively old neighbourhoods now. The settlement in South-Haaga is almost half a century longer compared to its northern counterpart. Therefore, it can be assumed that there was a contrast between the two areas from the beginning. Even though the current hous-

ing stock in South-Haaga are roughly from the same period as in North-Haaga, the inhabitants have been around longer. Its prestige played a part in attracting schools to relocate there and the status still remains somewhat higher today.

The residents of North-Haaga think that there is not historicity in their neighbourhood (Kahila, Tzoulas and Broberg, 2011). This is of course untrue and has probably to do with its exceptionally uniform housing stock. There are many ways of visualizing the neighbourhood's history. In North-Haaga, that could mean information boards about the commercial garden history in the present-day Rhododendron Park. Another possibility could be to create a community space in the North-Haaga shopping centre that draws inspiration from its golden age during the 1960s.

FACTOR 4: TRANSPORTATION

Haaga first grew around Huopalahti railway station. This meant that it acted as a central hub of the area, and not just in transportation: railway stations became popular meeting points of their respective neighbourhoods (Mustonen and Ryttilä, 2002, p. 19). In some cases, they were the shopping centres of their day.

Affordable public transport was essential in Haaga's development into a working-class neighbourhood. Electrically powered trams were very affordable. There were also discounted railway tickets for the workers during rush hours in the 1930s (Mustonen and Ryttilä, 2002, p. 34).

Another important turning point in Haaga's history is the arrival of the suburban train in the 1970s. The Martinlaakso railway was completed in 1975, bringing the second railway station to the area. Before that, North-Haaga relied solely on buses going directly to the city centre but passing through South-Haaga as well (Kolbe, 2015, pp. 29-30). This also meant that North-Haaga and South-Haaga (with its Huopalahti station) were separated by only a single railway stop.

A suburban ring railway line was planned to connect the sub-centres of Munkkivuori, Malmi and Vartiokylä in the general plan idea of 1953-1960; however, because these suburbs were too small, the cross-city public transport plans were not viable yet for another 50 years.

Generally, it was not possible to commute between suburbs crossing the capital region. The situation in North- and South-Haaga was better than average, because the lines going

to and from the city centre also served the traffic between the two suburbs.

CONCLUSIONS AND LOOKING FORWARD

Garden city ideas shaped much of 20th century urban planning and historically dominated the development of Haaga. So far, existing urban structure has been a definitive guideline in the recent development along the Jokeri light rail. However, the plans for a city boulevard around Vihdintie include buildings of the scale found in the city centre. In the city boulevard plans, attractive small businesses occupy the ground floors of those buildings. But those are not new to South-Haaga: despite its garden city heritage, the urban-like structure of ground floor commercial services has existed in South-Haaga for decades. Perhaps the city boulevards would not represent such a drastic change after all.

Until quite recently, due to a lack of roads, the hiking paths in the forests mainly connected the northern and southern parts of Haaga. The infill development built in the early 2000s has brought the two Haagas closer together. There is also a new sports field near the geographical centre of Haaga. It can be presumed that the light rail connection will bring the centre of the area even closer to the new “Middle Haaga”.

If there were a single turning point in Haaga’s history, it would be the 1950s. It was when the decisions for the majority of the current housing stock were made, and when the commercial structure changed for good, transforming the northern area’s urbanity forever. In addition, the blueprint for suburban development was created then.

If current residents are experiencing a lack of historicity in their neighbourhood, the 1950s could be an era from which to draw inspiration from. The shopping centre of North-Haaga probably will not become a commercial centre as it once was, but it could be revitalized as a place of gathering for its residents. In January 2019, the city of Helsinki did exactly that by creating Haagan Lämpiö, a space for youth and resident activity. However, the city could develop the idea even further by including historical photos of North-Haaga on the walls (they are currently painted white) and diversifying the range of events, inviting older residents to join. Encounters with them could create a sense of continuity among the more recent residents of Haaga.

Another possibility to bring local history to life is to create local hubs of historically important locations. Haaga already has several places with the potential of becoming such hubs, one being the Rhododendron Park. The commercial gardens are long gone, but their history could be visualized with information boards among the flora. A second hub could be in the historic Huopalahti station building, which is currently closed because of the neighbouring modern station’s renovation works. Lately, it housed cultural events organized by the non-profit Asematilaria and was available to rent for private events. With the Jokeri light rail line bringing more passengers to the station in the future, could the station return to its original use as a waiting room, perhaps with a chance to read books about Haaga’s rich history?

Despite being similar in many cases, North- and South-Haaga are distinctly separate in other areas. Perhaps the complementary development related to the new light rail project will bring the two districts even closer together.

REFERENCES

- Bergman, R., 2007. *Lärkan 125, 1882-2007: En festskrift utgiven av Sällskapet Smågossarna*. Helsingfors: Sällskapet Smågossarna.
- Elo, R. and Elo, T., 1977. *Haagaa ja haagalaisia*. Helsinki: Joukkoviestintä.
- Hirsimäki, J., 1999. *Haagan viheralueet – kaupunkirakenteen tiivistämisen reunaehdot*. Helsinki: Helsingin kaupunkisuunnitteluvirasto.
- Jakonen, J., 2015. Mikä Haagoja yhdistää? *Helsingin Uutiset* [online] 19 March. Available at: <<https://www.helsinginutiset.fi/artikkeli/273098-mika-haagoja-yhdistaa>> [Accessed 17.3.2019 at 13.36].
- Kahila, M., Tzoulas, T. and Broberg, A., 2011. *Urbaani onni – Lassila ja Pohjois-Haaga PehmoGIS-kyselyn tuloksia*. [pdf] Yhdyskuntasuunnittelun tutkimus- ja koulutuskeskus, Aalto-yliopisto, <maa.aalto.fi/fi/midcom-serveattachmentguid.../lassila_phaaga_pehmogis_uusi.pdf> [Accessed 17.3.2019 at 14.53].
- Karlsson, K., Schalin, M., Oittinen, M. and Soini, M. 2012. *Pohjois-Haagan rakennettu kulttuuriympäristö, arvot ja ominaispiirteet*. Helsinki: Helsingin kaupunkisuunnitteluvirasto.
- Kolbe, L., 2015. Minun Haagani – Adolf Lindforsin tie. In: T. Vuori, ed. 2015. *Pohjois-Haaga: Luonnon keskellä kasvava moderni kaupunginosa*. Helsinki: Pohjois-Haaga-seura. pp. 12-37.
- Lindh, T., 1996. Helsingin rakennuskulttuuri-inventointi - 29. Haaga. Helsinki: Helsingin kaupunginmuseo.
- Leskelä, I., 2008. *Oman tiensä tekijät – Haagan työväenyhdistyksen 100-vuotinen historia*. Pieksämäki: Haagan työväenyhdistys ry.
- Mustonen, P. and Ryttilä, P., 2002. *Kaupunkiratakirja 2002: Helsinki* -

Huopalahti - Leppävaara. Helsinki: Ratahallintokeskus.

- Mäenpää, P., 2015. *Tapaus Pohjois-Haagan ostari: Kaupungin palvelukeskus ja retro-ostari*. [pdf] University of Helsinki, Faculty of Social Sciences. Available at: <<https://blogs.helsinki.fi/lahioostarit/files/2015/05/Pohjois-Haaganraportti.pdf>> [Accessed at: 17.3.2019 at 15.30].
- Oittinen, R. and Tepponen, P., 1989. *Pohjois-Haaga: Pohjantähti Helsingissä*. Helsinki: Pohjois-Haaga-seura, Helsingin kaupunginosayhdistysten liitto, Helsingin kaupunki.
- Sarmaja, P., 2009. Haagat – vehreyttä, historiaa, palveluja. In: M. Piimies, ed. 2009. *SUB 26: Esikaupungeissa tapahtuu!* Helsinki: Helsingin kaupungin kaupunkisuunnitteluvirasto.
- Saresto, Sari, 2004. *Ostari: läbiön sydän; Rakennushistoriallinen selvitys*. Helsinki: Helsingin kaupunginmuseo.
- Roos, John E., 1950. *Haagan kauppalan historia*. Helsinki: SKS:n kirjapaino.
- Tarjanne, Hilla, 2007. *Helsingin rakennuskulttuuri - Pohjois-Haagan rakennusinventointi. Helsingin kaupunginmuseon tutkimuksia ja raportteja 1/2007*. Helsinki: Helsingin kaupunginmuseo.

TWO RAIL PROJECTS SHAPING HAAGA

COMPARING THE PLANNING PRINCIPLES BEHIND THE MODERN-DAY LIGHT RAILS AND THE MARTINLAAKSO RAIL LINE FROM THE 1970'S

Dan Ronimus

HISTORY OF RAIL-ROADS

“In the ribbon neighbourhood plans of the 70s, as well as in today’s planning, nature is not forgotten but the planners increasingly believe that nature and dense urban living can be combined. Does this, however, result in creating better living environments or is combining the dense quarters with cramped parks only a compromise in order to maximise the earnings?”

INTRODUCTION

This article studies the principles guiding the modern-day planning of Haaga around the Jokeri Light Rail, as well as the city boulevards, and compares them with the standards that defined the planning of Lassila, and other railway subcentres in the 1970s. The fundamental ideas behind these two very different plans can tell us a lot about the planning of Helsinki and how the mentality behind it has changed over time. This article gives an overview of the past, the present and the future planning of Haaga, telling simultaneously about the general planning trends in Helsinki. The sources of information mainly consist of Helsinki's official planning documents and the articles concerning the plans, published in newspapers over the years. These give a good overview of the planning principles when looking at how the different plans have been explained and justified when they were first presented.

BACKGROUND

After the wars involving Finland had ended in 1945 the city of Helsinki faced a rapid rise in urbanisation. The city was under enormous pressure to create housing for hundreds of thousands of evacuees fleeing from Karelia, as well as for the growing generation of baby boomers. The increase in population exposed urban planning to multiple challenges which resulted in a significant change in the way Helsinki was planned (Aalto, Pulma and Schulman 2000, p. 27-35).

Before wartime, the urban structure of Helsinki had been quite consistent. Helsinki was a compact city, sitting on a small cape where buildings were laid densely in close quarters, with only a couple of exceptions. From the 1950s, and increasingly from the 1960s onwards, several new suburbs were constructed further away from the existing city and apart from each other (Aalto, Pulma and Schulman 2000, p. 39). According to the Helsinki Planning Office (HKA 2.4:33, 1981), many of these suburbs were in their planning phase referred to as garden sub-

urbs, drawing from the ideas presented by Howard and Unwin at the turn of the 20th century.

Among one of the first constructed suburbs was Haaga, formerly a small borough only a few kilometres away from the city centre. After redeveloping the existing townships, such as Etelä-Haaga, Oulunkylä and Herttoniemi in the 1950s, the urban planners and construction companies began to look for new grounds further away from the existing urban areas. Reinforced concrete had revolutionised the construction industry by providing a new fast and cost-efficient way to build completely new suburbs from scratch (Aalto, Pulma and Schulman 2000, p.40).

As Aalto et al. (2000, pp. 48-50) explain, the Finnish cities, especially in the capital region, decided to tackle the housing shortage in cooperation with the banking sector and construction companies. Almost all the major cities provided the contractors with cheap land to build on, and in exchange, construction companies, funded by the large banks, agreed to take care of, not only, constructing the housing, but also building the infrastructure and sometimes even planning the new areas. This so-called project development can be seen in Pohjois-Haaga, where the tower blocks in the mid-1950s were actually one of the first residential areas where the buildings, roads and sewers were constructed by the same company, called SATO (*Sosiaalinen Asuntotuotanto, Social Housing Production*). SATO also actively took part in planning the area (Astikainen, HS, 1995).

After wartime, the construction of new residential areas was steered by the urgent need for new housing. The rush was, however, not the only reason behind the change in planning principles. Already in the 1940s, a new trend of rehabilitative functionalism had emerged. The dense quarters constructed in the early decades of the century were regarded to be too closed and cramped, creating social as well as health problems. The solution was to lower the building density, grow the sizes of individual flats and, most importantly, to provide people with more space, both inside and outside their apartments. Functionalistic architecture had begun to prosper in the 1930s and it affected urban planning widely in all major Finnish cities during these decades. (Aalto, Pulma and Schulman 2000, p.35).

The previous section offers a description of the planning principles that shaped the urban planning of Helsinki during the rapid expansion of the city during the decades following the war. Like Aalto et al. explain functional, modernist urban planning highlighting the desire to create environments where people want to live based on current trends. As shown later in

this text, functionality has emerged to shape the planning principles of Helsinki in the 1970s, when development clustered around rails, as well as in the 2000s, when Helsinki officially declared that it wants to become ‘the most functioning city in the world’. Often, the emerging planning principles are guided by previous planning actions that are regarded somehow faulty. The planning principles always reflect strongly the current values of the time when a plan is done. As values change over time, the planning has to adapt to that switch and correct the possible mistakes done in the past. Planning principles cannot be detached from the realities defined by the economic situation, nor the different levels of politics. In their studies, Aalto et al. talk about urban planning ideals which are then shaped by economics and politics and refined into planning principles (Aalto, Pulma and Schulman 2000, p.35).

This article studies the planning principles behind two different plans, The Martinlaakso Rail Line, planned in the 1970s, and the modern-day Jokeri Rail Line, both affecting the Haaga area. Why have the same neighbourhoods in Helsinki been planned so differently at different times? What were the driving forces behind the planning objectives? The Martinlaakso Line, constructed in the 1970s, was revolutionary, as it was the first project in Finland where urban planning, transportation planning and land use were organised as a whole. The Martinlaakso Line was closely connected to solving some problematic issues that had occurred in the elementary suburbs of the 1950s and 1960s. The railway is one of the major turning points in the history of Haaga, as it connected the suburb closer to the city centre and boosted the construction of Pohjois-Haaga, and especially Lassila, with new kinds of planning principles implemented (Herranen, 1988, p. 299).

After examining the planning principles and the driving forces behind the completion of the Martinlaakso Rail Line, the Haaga area remained relatively unchanged all the way up until the 2010s, when the plans to construct another pair of rails in the area was introduced. Currently, the planning of Haaga is strongly connected to the Jokeri Light Rail. Financially profitable infill development along the 25 km transverse light rail connection is one of the main focus points of planning Helsinki in the near future. In Haaga, the goal is to create new homes for 3600 inhabitants and jobs for 2000 workers by 2030 (Raide-Jokeri, 2018). Similar kinds of light rails are one of the key elements when planning the city boulevards, which are also due to change Haaga remarkably over the forthcoming decades.

Helsinki has a strategic goal of creating a light rail network that would connect the heavy linear railroad, and metro tracks, better to each other, and to the areas in between (Helsingin yleiskaava, 2013).

MARTINLAAKSO RAIL LINE

At the beginning of the 1970s, the urban planners expressed dissatisfaction with how Helsinki's suburbs were built during the decades following the war. The suburbs, once called garden cities, were then nicknamed as forest cities, describing the scarcity and scattering of the suburbs (Herranen, Hoffman and Turpeinen 2000, p.251). In 1981, the urban planning department of Helsinki published a report about the main characteristics and development needs of Helsinki's suburbs (Helsingin kaupunkisuunnitteluvirasto, 1981). In the report, the urban planners announced that the scarcity, small size and housing-oriented structure in many of the existing neighbourhoods in Helsinki, had resulted in them becoming dormitory suburbs in which the residents had limited labour and leisure possibilities. This forced the citizens to commute to the city centre for both work and

recreation, leaving the suburbs empty of jobs and services.

Additionally, the city of Helsinki was worried, because property use in its centre was changing. An excessive amount of residential buildings were turned into offices, which, together with the increase of services, caused growth in (mainly car) traffic between the centre and the sleeping suburbs (Herranen, Hoffman and Turpeinen 2000, pp.251). The urban planners' answer to the previous problems was to invest in public transportation and create multiple sub-centres along the new rail lines. During the 1970s, metro planning sped up, while the existing railways were electrified and better utilised in everyday transport. The first entirely new project to break ground was the Martinlaakso Rail Line, which was some sort of a combination of metro and local train. Branching off from Huopalahti station in Etelä-Haaga, the rail line took advantage of existing railway technologies, though the stations were located within a relatively short distance from each other, which is more typical for metro-like networks (Herranen, 1988, pp.298-299). Along the seven-kilometre railway, the trains would call at six different stations, out of which, three were located inside Helsinki and three in Vantaa.



Figure1. Lassila under construction around the Pohjois-Haaga railway station at 1983. The Pohjois-Haaga tower blocks from the 50s can be seen in the back. (Scan-Foto, 1983.)

According to Herranen (1988), the Martinlaakso Rail Line was the very first proper effort in Finnish community planning to combine urban and transportation planning. In public, the new urban rail line was referred to as a ribbon development, where the different sub-centres would be well linked to each other and to the city centre. When planning the new ribbon neighbourhoods in Lassila, Kannelmäki and Martinlaakso, special attention was paid in making sure that the residents would not have to live in isolated sleeping suburbs. Instead, the goal was to create “self-sufficient, functioning neighbourhoods and to avoid building grey suburbs” (Aulio and Saari, HS, 1973).

In an interview given to Helsingin Sanomat (Aulio and Saari, HS, 1973), lead architect of the Haaga-Vantaa project, Heikki Kaitera, described the planning objectives on behalf of Helsinki. Referring to the forest suburbs, he states that “the new neighbourhood centres will stand out in the grey suburban mass of the capital area”. This was to be achieved by improving the job self-sufficiency from what was less than ten percent in certain “forest suburbs”, to anywhere between 30% and 50%. In a ribbon city, the building efficiency would be highest around the railway stations, with most of the housing and workplaces located within walking distance from the rail line. The city also wanted to learn from previous mistakes by building public services, such as schools, health care and shopping centres, simultaneously, along with housing and transportation. A large park stretching from Lassila all the way to Malminkartano, following the Mätäjoki River, would fulfil the recreational needs of the whole area. Kaitera was also excited about the shopping facilities being from ‘the greater world’, with a massive department store being built in between Lassila and Kannelmäki.

The areas of Kannelmäki and Martinlaakso were almost completely unbuilt before the rail line plans were established. In Haaga, however, things were different, since the earlier mentioned Pohjois-Haaga towers, had been sitting in the woods already for a couple of decades before the station, located only a kilometre away from them, was opened in 1977. For people living there, the rail line obviously marked a major improvement in their connections, also there was the building of an entirely new type of residential area on the other side of the track. Before constructing the Martinlaakso Rail Line, Lassila was a forest-dominated area, with only a couple of hundred people living in detached houses constructed during the war in a rapid manner to provide homes for evacuees (Oittinen and Tepponen, 1989, p.12).

Helsingin Sanomat took a closer look at the plans concerning Lassila a few days after publishing the interview with the

project management (HS, 1973). The minor residential housing in the area was demolished, since it would be replaced with the new ribbon development consisting of 27,000 square metres of housing for over 9,000 new residents. The cornerstone of the Lassila plan was constructing a housing block consisting of several 15-story high towers in the middle of the area, surrounded with numerous other buildings of more modest size. Pedestrians and cars were meant to move on different levels, allowing the pedestrian space in between buildings to also provide the necessary green inside the area. The planners stated that their main idea was to aim for functionality and optimum efficiency in land use by locating small parks along the ‘green streets’ where people would walk during their daily errands. The actual recreation, exercise and sports was meant to take place in the large Mätäjoki-park, serving all three areas.

LIGHT RAIL PROJECTS

Constructing the Lassila neighbourhood around Pohjois-Haaga railway station was completed by the end of the 1980s. The actual scale of Lassila is slightly smaller than what was proposed in the original plans described above. Completing the railway took longer than expected, population projections were overly optimistic and there was not enough demand for ribbon housing. The area currently has approx. 4,500 inhabitants and 5,000 jobs. Thus, the target amounts of inhabitants, or housing square meters, were not achieved, with Lassila having a job self-sufficiency of over 100%. After Lassila was completed, the housing production in the Haaga area has decreased significantly, with only less than two thousand apartments built over the last two decades, whereas there were over three times more flats constructed during the 1970s and 1980s (Tikkanen, 2018).

Distant suburbs with good transportation and decent services were regarded to be practical in Helsinki until the first decade of this century. After planning the ribbon neighbourhoods, living in blocks of flats actually decreased and the population of Helsinki fell, when families moved farther from the city to one-family houses in car-dependent areas. In an attempt to answer to these needs, Helsinki even captured large parts of the neighbouring Sipoo with the intention of lengthening the metro eastwards and to build residential areas for 100,000 new inhabitants almost 20 kilometres away from the city centre (Pukkila, Yle, 2017). This change of direction is probably, also, one of the reasons why inhabitant objectives were not realised in the ribbon city.

The construction of Haaga began in the 1950s, with the construction of Lassila being seen as the final stage of completing the area as it is nowadays. Some minor infill development has taken place in Etelä-Haaga during this century, but the overall picture has remained mostly unchanged for almost three decades. However, this is about to change, as Helsinki's planning principles have undergone a shift from building radial neighbourhoods, like the ones along the Martinlaakso Rail Line, into creating a multicentric web of sub-centres and densifying the existing urban areas. To strengthen the sub-centres along the existing railway and metro tracks, Helsinki has introduced the concept of "Centre Network", in which the city would provide multiple urban concentrations all around Helsinki. This is due to the planners' belief that living in central, dense urban areas is more popular than ever (Helsingin yleiskaava, 2013).

The new city plan features yet another new kind of rail transportation system which is due to change Haaga, possibly even more than the Martinlaakso Rail Line. According to Helsinki's Vision 2050 (Helsingin yleiskaava, 2013), the radial city structure will become interconnected by a light rail network, which features both transverse routes from east to west and new radial lines following the city boulevards. The city boulevards are Helsinki's effort to increase the effectiveness of land use along the motorways close to the central urban area. Nowadays, the motorways separate different parts of the city from one another as they are hard to cross, with reclaim large noise and pollution impacting areas around them, while only permitting car traffic. In the future, Helsinki has a strategic target of converting the motorways into urban boulevards, where light rails, cyclists and pedestrians are well accommodated. The boulevards would allow large amounts of housing to be built along them, providing citizens with the kind of urban environments planners believe they currently want.

After decades of debate and hesitation, the first light rail project is finally underway as the cities of Helsinki and Espoo, along with the public transportation service, are soon beginning to construct Raide-Jokeri. According to the planners, Jokeri will be a major modification to transverse connections between the neighbourhoods outside of the city centre. It will connect the metro, all three railway lines, and the suburbs in between, closer to each other. The cities of Helsinki and Espoo see the pair of rails as an opportunity to enable large infill development by the side of it. Making the areas along Raide-Jokeri denser could provide new homes for 24,000 people in Helsinki and almost as many in Espoo. Nearly 16,000 new jobs are also anticipated to locate along the light rail line (Häkkinen and Malmberg, HS,

2017). Infill is usually justified by the increase of density, which is supposed to provide the residents with better services and connections. Still, it is important to remember that Helsinki is by far the largest landowners inside its borders, and thus densification produces high returns for the city itself.

In Haaga, some planning has already been done with the Raide-Jokeri in mind. In Etelä-Haaga, there are two construction projects pending, to be completed before the rails reach the area (Uutta Helsinkiä, 2018). Helsinki's eventual goal in Haaga is to have at least 3,600 people moving into new apartments near the light rail stops, while also connecting the Huopalahiti station to a larger surrounding area than before. Where the Martinlaakso Rail Line featured several neighbourhoods constructed from scratch, this time all the residents will be located within the existing urban areas. Housing is most wanted in the city centre and, by densifying the areas closest to it, it should answer to these needs of urban lifestyle. Infill development will take place in former industrial sites, wastelands, and in some cases, also by demolishing old buildings in order to squeeze in more efficient housing (Raide-Jokeri, 2018).

The City Boulevard plans have suffered some setbacks in the courts of law, as the state is worried that converting motorways into lively streets will hinder car traffic to and from the capital city's core. A lot of the discussion is centred on the Hämeenlinna motorway, which borders Haaga in the east, where the boulevardisation would, in addition to the car traffic, also endanger some parts of Central Park, which powered a mass movement to oppose the plans (Moilanen, HS, 2018). However, as public discussion has been focused around the rejected plans, many may not have noticed that the plans to convert Itäväylä, Tuusulantie and Vihdintie into city boulevards were actually ruled legal by the Administrative Court. As the number of city boulevard projects to move forward in the forthcoming decades was diminished, attention will probably sooner or later be directed even more than before towards renewing the three remaining roads.

Even though the Hämeenlinna boulevard was turned down for now, the Haaga area will nevertheless be affected by boulevardisation plans. Vihdintie is technically not a motorway, but it still forms a four-lane border between Haaga and its neighbours in the west. The city of Helsinki has presented a preliminary plan of Vihdintie boulevardisation (Paastela, HU, 2018) in which the lead planner, Suvi Tyynilä, aptly explains the difference between planning in the past and in the future. She states, that "when planning the boulevard city, the goal is not to create another set of ribbon suburbs but instead to bring a new urban

stratum to the existing neighbourhoods". Practically speaking, this means that the ribbon structure, revolutionary only three decades ago, is now proclaimed to be outdated and that the city wants to enclose the ribbon suburbs into its urban core. The Vihdintie Boulevard would enable the building of new homes for up to 15,000 new inhabitants and urbanise the Haaga area drastically. According to the planners (Uutta Helsinkiä, 2018), Vihdintie boulevard would establish another rail connection between the southern and northern parts of Haaga and bring the different parts of the neighbourhood closer.

CONCLUSION

Many similarities can be found in the principles guiding the planning of the ribbon city along the Martinlaakso rail line and the modern-day plans around the light rail lines. In Haaga-Vantaa, and in the boulevard city, the new plans arose from the emerging need of housing and the dissatisfaction with earlier urban development. Both plans were introduced at a time when Helsinki was growing rapidly and where there was a shortage of housing. In both cases the solution was to build neighbourhoods denser than before along rail tracks. A pair of rails in an area often assures good transportation for the residents, which reflects on the demand of housing, office premises and, subsequently, both in the price. This guarantees higher capital gains for the landowner, which, in Finland, is often the city that is also paying for the rail investment. Therefore, it is most profitable for Helsinki to build densely on the land closest to the public transportation where it receives the highest return (Kostiainen, Laakso and Metsäranta 2016, p.32-33). Simultaneously, the same benefits of dense housing around rail tracks can be highlighted in the official communication of the 1970s and today - better services, easier commutes and a revolutionary urban lifestyle.

In the 1970s, the car-dependent 'forest suburbs' were not drawing people, like they used to, in the preceding decades. People's and planners' displeasure with these areas led into developing public transportation on rails and constructing denser suburbs along them. Use of time became increasingly important for families living in the city and people were willing to pay for living in an area where less time had to be spent commuting between the home and the city centre. Constructing neighbourhoods, such as Lassila, together with the new transportation systems, was relatively easy in the 1970s, when there was plenty of unbuilt land available, quite close to the city centre. The problem of long commutes and poor services was tackled not only

with speeding up the transportation, but also by creating jobs and amenities in the railway sub-centres.

The time spent developing the forest suburbs, ribbon neighbourhoods and small housing areas can, in a wider picture, be seen as a period of constructing similar sorts of semi-urban environments for multiple decades. However, when entering the 2010s, a shift in planning principles occurred as the demand for living in actual downtown-like urban areas began to ascend once again. In an interview for Yle (Pukkila, 2017), Anni Sinnemäki, the deputy mayor of Helsinki responsible for urban development, stated that young families in Helsinki want to live in high rises situated in dense urban areas rather than in distant small housing. This recent change in trends has presented Helsinki with the opportunity to densify the areas in between existing neighbourhoods, develop the sub-centres, and to invest in new transportation methods. This improves the living standards of both the current, and future, residents which also results in higher land returns for Helsinki. The most noteworthy change in discourses around the planning from the 1970s to this century is the emergence of economic features in public discussion. In the 1970s, the planners and newspapers primarily discussed the social and environmental values on living quality, but in the modern-day argumentation, land returns and how infill-densification within Helsinki's borders benefits the city, is more and more emphasised.

As Helsinki holds a planning monopoly inside its borders, it is in the city's best interest to profit from the plans. Still, it is important to keep in mind that all profits cannot be measured by the amount of money a plan can yield. Like the turn in the 1950s, from what was regarded as cramped downtown living, towards more functional and spacious dwelling in an environment close to nature, proves social factors, such as recreation and welfare, are important factors to be considered too. In the ribbon neighbourhood plans of the 1970s, as well as in today's planning, nature is not forgotten, but the planners increasingly believe that nature and dense urban living can be combined. Does this, however, result in creating better living environments or is combining the dense quarters with cramped parks only a compromise in order to maximise earnings? Economics determine politics and planning at a quickening pace. The fierce transnational economic competition between cities forces Helsinki to focus more and more on the monetary aspects also in planning. One could argue that today, the architectural functionality of the 1940s has been replaced by economic functionality, which undermines the social and environmental features of urban living in the name of cost-efficiency. The change in the

values defining the planning principles can not necessarily be explained by a change in individuals' desires, but in the economic-politic sphere emphasising profits.

REFERENCES:

- Aalto, S., Pulma, P., Schulman, H., 2000. *Helsingin historia vuodesta 1945. 2, Suunnittelu ja Rakentuminen, Sosiaaliset ongelmat, Urbeilu*. Helsinki: Edita.
- Astikainen, R., 1995. Pohjois-Haagasta tuli virkamieslähiö. *Helsingin Sanomat*, 17 Jun. pB1.
- Aulio, E., Saari M., 1973. Sähköjunalla nauhakaupunkiin. *Helsingin Sanomat*, 1 Mar. p15.
- Helsingin kaupungin kaupunkisuunnitteluvirasto, 1981, *Helsingin esikaupunkien kerrostalalueiden keskeiset piirteet ja kehittämistarpeet* [report]. Lars Hedmanin kokoelma, 2.4:33, Helsinki, Kaupunginarkisto.
- Helsingin yleiskaava, 2013. City plan. [online] Available at: <<http://www.yleiskaava.fi/en/city-plan/>> [Accessed 9 December 2019]
- Herranen, T., 1988. *Hevosomnibussista metroom. Sata vuotta Helsingin joukkoliikennettä*. Helsinki: Helsingin kaupungin julkaisuja 39.
- Herranen, T., Hoffman K., Turpeinen, O., 2000. *Helsingin historia vuodesta 1945. 1, Väestö, Kaupunkisuunnittelu ja asuminen, Elinkeinot*. Helsinki: Edita.
- HS, 1973. Haaga-Vantaan asuntoalueet: Rakentaminen alkaa Kaupintien ja Näyttelijäntien risteyksestä. *Helsingin Sanomat*, 6 Mar. p11.
- Häkkinen, A., Malmberg, L., 2017. Uudet raiteet, uusia koteja. *Helsingin Sanomat*, 15 Dec. pA22.
- Kostiainen, E., Laakso, S., Metsäranta, H., 2016. *Liikennebankkeiden laajemmat taloudelliset vaikutukset – Esiselvitys*. Helsinki: Liikennevirasto, Hankesuunnitteluosasto.
- Moilanen, K., 2018. Oikeus tyrmäsi kaupunkibulevardit. *Helsingin Sanomat*, 8 Nov. pA16-A17.
- Oittinen, R., Tepponen, P. eds., 1989. *Pohjois-Haaga: Pohjantähti Helsingissä*. Helsinki: Pohjois-Haaga Seura, Helsingin kaupunginosayhdistys ja Helsingin kaupunki.
- Paastela, K., 2018. Ensimmäiset kaupunkibulevardien suunnitelmat julki – Vastustus nousi heti: ”Kartasta näkyy hyvin, mistä on kyse”. *Helsingin Uutiset*, [online], 12 April. Available at: <<https://www.helsingin uutiset.fi/artikkeli/627610-ensimmäiset-kaupunkibulevardien-suunnitelmat-julki-vastustus-nousi-heti-kartasta>> [Accessed 9 December 2018]
- Pukkila, O., 2017. Östersundomista piti tulla Helsingin kukoistava 100 000 asukkaan tytärkaupunki – mutta kuinka sitten kävikään? *Yle*, [online] 9 November. Available at: <<https://yle.fi/uutiset/3-9922541>> [Accessed 9 December 2018]
- Raide-Jokeri, 2018. *Jokeri Light Rail – From Itäkeskus to Keilaniemi*. [online] Available at: <<http://raidejokeri.info/in-english/>> [Accessed 9 December 2019]
- Scan-Foto, 1983. *Haaga, Lassila, Kaupintie 18,16,14,12,10*. [electronic print] Available at: <helsinkikuvia.fi> [Accessed 9 December 2018]
- Tikkanen, T. ed., 2018. *Helsinki by District*. [online] City of Helsinki, Executive Office, Urban Research and Statistics, 2018. Available at: <https://www.hel.fi/hel2/tietokeskus/julkaisut/pdf/18_11_05_Hki_Alueittain_2017_Tikkanen.pdf>
- Uutta Helsingiä, 2018. *Haaga*. [online] Available at: <<https://www.uuttahelsinki.fi/fi/esikaupungit/rakentaminen/haaga>> [Accessed 9 December 2018]

CLASS STRUCTURES OF CONTEMPORARY URBAN PLANNING ECONOMY AND URBAN IDEOLOGY IN THE CONTEXT OF THE VIHDIINTIE BOULEVARD

Arttu Antilla

CLASS ANALYSIS

“To summarize, according to literature and the data presented here new urbanist planning practices may be seen as associated with the mechanics and the logics of the new economy. Therefore, it is elementary that if the paradigm is harnessed to fuel economic activity, it is important to understand the implications it has in terms of justice, democracy, and equality.”

INTRODUCTION

Urbanization is a global challenge of such magnitude that the United Nations have stated in their *2018 Revision of World Urbanization Prospects* (2018) that “sustainable urbanization is key to sustainable development”. The rapidly increasing quantity of urban dwellers is without doubt one of the reasons that the quality of the urban fabric should be considered very carefully as cities grow in population and size. Through the analysis of existing scholarship this article reminds that the questions related to the urbanization movement are increasingly about *who* and *where*. I will discuss the qualities of future Helsinki at a time when a new general plan has been accepted and validated.

In this article my aim is two-fold: on the one hand I discuss the relations the paradigm of new urbanism has with economy and social class, and on the other hand, using these relations as a theoretical frame, I describe developments taking place currently in Helsinki. On the way, I identify “the creative class” or “the bourgeois bohemians” within the local context, and exam-

ine the vision of the City of Helsinki and the example of the Vihdintie-Huopalahdentie boulevardization plan. My primary data consists of the boulevardization planning outline (City of Helsinki, 2018c), and the comments people wrote on an online participation platform (City of Helsinki, 2018). Secondary data consists of the document “*The Vision 2050: Urban plan*” which is the new plan by the City of Helsinki (2013), and the boulevardization planning document (City of Helsinki, 2015). My analysis of the primary and secondary data addresses my main research questions. What does international literature reveal about the relations between new urbanism and economy? How does the public of Haaga receive the boulevardization plans of Vihdintie and Huopalahdentie? By answering these questions I aim at providing a counter-discourse to the one of growth regardless of social justice, and in the discussion, seek to problematize the trends in urban planning as examined in their local contexts through the prism of international literature.

URBANISM AND THE ECONOMY IN LITERATURE AND IN HELSINKI

Urban areas have for a long period of time been places of economic activity and growth, producing higher economic outputs than rural areas (Buckley et. al, 2009, pp. 42-44). There is a wealth of literature in economics on the different mechanisms behind this (e.g. O’Flaherty, 2005; Lemelin et. al. 2014), but in the context of this article, it is one approach above all which is especially relevant in the contemporary context.

This is the “knowledge-based economization”, discussed in detail by Sami Moisio in his book *Geopolitics of the knowledge-based economy* (2018), and more specifically the arguably neoliberalism-driven, increasingly competitive environment, contemporary cities find themselves in. As Moisio explains it, the knowledge-based economization, has put forth a view of the world as a collection of places, which in order to prosper, must attract the resources needed for the maximum creation of value. These resources are the knowledge workers, understood also as human capital (Moisio, 2018, pp. 124-125).

Influential scholar Richard Florida (2017, p.193) argues, also, that urban economies thrive in places which the knowledge-workers, named by Florida as the creative class, settle into. This builds on the idea that economic success is driven by the clustering of this human capital, which happens, in turn, in places which are perceived as attractive to them. The importance of the creative class in terms of economic prosperity is based on the reality that the knowledge-work, which this class performs, adds most relative value and, therefore, generates most of the relative growth (Moisio, 2018, p.125). The shift in significance, or arising of this certain type of work, has also been called a shift towards the “new economy” from the “old economy”, where value is created mostly through technology and innovation as opposed to the manufacturing of commodities, where natural resources were seen more central than “human resources” (Moisio, 2018, p.67).

From this standpoint, the obvious question from the cities’ point of view is: how can we attract this human potential to our location? According to Florida, mixed-use neighbourhoods that serve as a platform for human encounters are what most of the creative class are looking for, and therefore they are the places where economic growth has been happening the most (Florida, 2017, p.193).

Startup companies, a section that could be interpreted as a major phenomenon in the new economy, are especially drawn

to cities that can provide culture services, diversity, creativeness, vibrancy and an overall innovative atmosphere (Florida, 2017, p. 45). Therefore, it is perhaps no surprise that, for example in the United States, over a quarter of venture capital investment was invested in companies which are located in areas where walking, biking and public transit was the most popular mode of commuting (Florida, 2017, p.43).

According to the literature briefly reviewed here, urban economies do well in relatively dense and diverse, mixed use environments that offer good walkability, public transit and services. As it so happens, an urbanist paradigm aiming for almost exactly this has been rising in popularity in the urban discussion for almost forty years (Kim & Larsen, 2017, p.3844).

Named new urbanism, it takes its inspiration from the more traditional ideas of a city and it is an approach that, according to some, seems almost opposing suburban sprawl. The views associated with it value vibrant, mixed-use districts that are relatively walkable, self-sufficient in services and less car dependant than their modernist suburban counterparts. (Grant, 2006, pp. 3-6).

New urbanist visions of city development are also often associated with the promotion of social equality and diversity. The projects labelled as new urbanist are often marketed as socially sensible, the reality of this is, however, contested (Grant, 2006, pp. 188-189, 192-193). The paradigm has also been interpreted as emphasizing categorical clarity in certain matters seen as contradictory, such as urban versus nature and urban versus suburban (Grant, 2006, p. 46).

Many cities have put forth processes which aim to create an environment suitable for producing economic growth by following this logic (Moisio, 2018, p.125), with Helsinki being no exception.

Suburban centres have become urban centres. These compact, urban conglomerations of services, jobs and housing feature a variety of functions. Everyday services are close to residents, and a broader network of services can be reached quickly by public transport, especially the rail network.

[...]

The urban living environment creates opportunities while also providing stimuli with indisputable value to the appeal and thus the competitiveness of the city. It is characterised by density, a mix of services and functions, public urban space, things are scaled to suit pedestrians, interesting street space,

top-quality recreational environments, easy access to services, historical layers, efficient public transportation, etc. [...] A more urban Helsinki is a city with increased social and regional equality and substantially easier access to services and workplaces, especially in the suburban areas currently occupying an unequal position.

(City of Helsinki, 2013, pp. 7, 16)

The excerpts shown above is from the 84 pages long Helsinki city plan document (2013) explaining the vision of what Helsinki would look like in 2050, labelled *Vision 2050: Urban plan – the new Helsinki city plan*. The document could be considered as a textbook example of new urbanist ideas. According to the document, a rise in demand for urban living has increased in Finland (City of Helsinki, 2013, p.10). Helsinki is now trying to meet this demand, as the sustainable city it longs to be, by densifying old car dependant suburban centres, and by developing public transport, especially in these newly urbanized locations, to support more ecological modes of transport (City of Helsinki, 2013, p.12).

In many parts of the Vision 2050 (2013) document, and of a brochure presenting the plans for the boulevardization of Helsinki (City of Helsinki, 2015), we see that the main argument used to justify the plans is the promotion of the economy. The new urbanist ideals bear many similarities with qualities that are also associated with economic growth. One of these qualities is diversity (Florida, 2005, pp. 39-42), which is also often (as is in the boulevardization plans (City of Helsinki, 2015)) in the core of the outspoken aims of new urbanist movements. Nevertheless, the actualization of such qualities remains a subject of debate (Grant, 2006, pp. 192-193).

It seems that Helsinki is pursuing a certain kind of urban development that could be interpreted as being new urbanist, to promote economic growth. The new urbanist values regarding a city do indeed seem to share some commonalities with the values Florida claims the creative class seek in a city. In the next section I will examine in more detail the content of the plan and discuss the way in which it has been received in the local context.

CASE HAAGA AND THE LOCAL RECEPTION

The new general plan was accepted in Helsinki by the city council in late 2016 and was validated on 5th December 2018

(City of Helsinki, 2018b) after some commotion about certain parts of the plan that were not accepted by the state. The plan was taken into court and, after a long litigation, some of its parts were overruled by the supreme administrative court (Helsingin Sanomat 2018).

Some of the parts of the plan that were deemed unacceptable included four of the seven so called “boulevardization” plans regarding highways or highway-like roads serving as entry lanes to the city (Helsingin Sanomat 2018). The case I present here is about one of the three boulevardization plans, which remained in effect as the city plan became valid and is - at the time of writing this article - under detailed planning.

Boulevardization is essentially the transformation of highways or highway-like roads into urban boulevards in order to develop the surrounding areas in a denser, more urban way. By doing so, the city of Helsinki aims at expanding the so-called downtown area into its current fringes. From the point of view of this article, and the debate discussed here, the most prominent negative effects of this process concerns the traffic capacity of the road, and in many cases the diminishing amount of green areas. These adverse effects of boulevardization are tackled according to the city of Helsinki by reducing policies of private car traffic, by developing public traffic, and by investing in the quality rather than quantity of green areas (City of Helsinki, 2013, pp.11, 71 & City of Helsinki, 2015).

The particular context here is a single planning outline in and around the neighbourhood of Haaga. The plan in question is the boulevardization of the Vihdintie and Huopalahdentie roads and the data used for analysis are the planning documents and comments (n=279) left regarding the planning outlines by 23rd November 2018 as a part of an online civic participation service called Kerrokantasi (translated freely as: Express-your-view) (City of Helsinki, 2018).

I analysed the data by using content analysis. My article aims at answering the question: what are the outspoken aims of the plan and planning outlines, and how are the plans, as such, received by the public, based on the comments left on the planning outlines. Moreover, how do these findings situate in discussions regarding new urbanism and developments in the economy?

The primary data consists of: 1) 19 planning principles for the boulevardization of Vihdintie-Huopalahdentie (City of Helsinki, 2018c) and 2) the 279 comments which were left on it (City of Helsinki, 2018). The following is a summary of the

planning principles, where the emphasis has been put on the parts most relevant to this study. The principles were originally in Finnish and I translated them as rigorously as I possibly could.

“The Vihdintie and Huopalahdentie boulevard-city will unite the surrounding urban structure as a part of the existing neighbourhoods of Munkkiniemi, Pitäjänmäki and Haaga. The overall appearance will be urban, with a vibrant setting for work and other activities in the ground floors, squares and local parks.

The main roads will be transformed into a verdant and cozy city boulevard by reserving enough space for pedestrians, street trees and activities located in the base of buildings. It will be the most climate smart part of town, with extra attention put into developing the various technologies designed to tackle climate change in the building of the area. Green roofs will be applied to most of the buildings.

The most important nature elements will be kept intact, with attention put also into developing further the existing green structures. Attention will be put into ensuring a healthy environment and the negative effects of traffic will be controlled.

Public transit will be organized to be of such a high quality that it makes possible a car free everyday life. Adequate flow is ensured also to other traffic, while ensuring the best possible walkability to local services and transit stops. The conditions for biking are addressed adequately.

Good accessibility is ensured to all transport modes as the street network is structured in a way that delivers good connections, but does not support the “driving through” of car traffic. Some of the areas are developed as particularly mixed areas and overall new locales for commercial and cultural services are being developed in adequate numbers to address the growing demand the new residents bring along.”

(City of Helsinki, 2018c)

The plan had a controversial reception among local residents; some were happy to hear about the urban elements to be brought to Haaga, while others were extremely worried about the change to the environment. I discuss the actualization of the plan through the preferential divide within the area in terms of social structure and the economy.

One might presume that the commenters would be divided into two main groups: the ones in favour of the plan and the

ones against it. The divide was however not always clear: some of the respondents supported some aspects of the plan, while others opposed them. The most typical case of divided opinion was where commenters welcomed the urbanity, as such, with all the amenities it comes with – investments in public transport, services, and walkability – but stood opposed to the diminishing of green areas, which were often seen as “characteristic” of the neighbourhood.

A total of 122 comments were identified as having a negative or divided opinion on the plans, as contrasted to only 62 commenters having mainly a positive or divided opinion. The rest were uncategorizable as either negative or positive. Most of the commenters who had an opposing view on the plans were protecting the green areas, but quite a few argued that limiting the use of private cars was unacceptable. Some of the most extremely negative commenters felt as though the whole way of life that the plans promoted was not welcome in the area, and that the very reasons they had moved into the area was being threatened by the plans.

Haaga and Pitäjänmäki are being lived in because there is lots of nature in the area. [Names of green areas] are essential values to the residents of the area. We don't want your boulevards nor any “urban structure”! We want forestry suburbs that are not housing too many people. Make your centres as crowded as you like, but leave our beautiful neighbourhoods alone!

(A commenter) [translated by author]

Many were concerned about traffic congestion, and most of them implied that they were using a private car and wanted to keep on doing so with no added difficulties. The biggest common issue that was shared among the opposition and support, however, was without doubt the green areas. Many were distrustful of the actualization of the new and improved green spaces that were advertised in the plans, and a few pointed out that, in any case, managed green spaces are not the same as forests.

The concern for green spaces was often shared with respondents who welcomed the plans, but many seemed to accept the replacement of old forest areas by managed urban parks. Some of the defenders of the plan were in fact in favour of the replacement of some of the “non-urban” elements, such as unmanaged thickets with more urban elements like housing or street trees. This resonates with the categorical clarity associated with new urbanist views where new urbanism is sometimes known to be

intolerant of contradictory elements in the urban fabric.

The commenters with a positive stance were quite excited about the “urbanization” of the area and what it would bring with it. The emphasis varied within respondents, but the aspects most emphasized consisted of the increase of services, the “urban feel”, public transport, or even the increase (or not decrease) of property value. Some were even making remarks that the planners should really push the density up as much as they “dare”.

As has been stated many times already, this is longed for. [...] Or do the residents want to stay in their floors alone and in a deserted area. Wait for it to run down and the value of it totally degrade? No, indeed we want instead the modern, green and functional city with all its traffic solutions [...] If we want to get rid of even the last services in the area or give them to areas elsewhere we can say no to this all [...]

(A commenter) [translated by author]

Regarding the ideal lifestyle for people, I could see a clear divide in Haaga. The City reasons that the new urbanist visions, which the boulevard entail, are the best option for development. The amount of rhetoric the City is building up, based on economy and sustainability, while presenting and marketing its views, is noteworthy. The City uses descriptions of urban life in the general as well, but it seems to me as if the City expects its residents to quite readily buy into arguments based on economy and sustainability.

Perhaps the City is correct, since the amount of positive attitudes the people in Haaga had expressed for the plans was high, albeit lower than the amount of negative attitudes. In the data, Haaga divides roughly in the pro-urban and pro-suburban groups. The pro-urban group would like to see the betterment of services, walkability, public transport, and “the urban feel” in Haaga, while the pro-suburban group wants to keep Haaga mostly as it is, with its forests and private car-supporting infrastructure remaining intact. The pro-suburban group was in this data roughly double in size in relation to the pro-urban group.

It has been shown in previous studies (e.g. Tuominen 2014) that the levels of living satisfaction in Helsinki are greater in sparsely built and detached housing areas (Tuominen, 2014, p. 72), but the City of Helsinki promotes boulevardization also, based on the growing demand of down-town urban living. The growing demand for housing which does not provide the best living satisfaction sounds counter-intuitive. Matti Kortteinen has offered a possible explanation, building on an econom-

ic rationalistic presumption of individuals. While he reminds that the hypothesis cannot be verified until the next economic upswing, he suggests that the relative rise in the demand of urban dwellings, in accordance with incongruent trends in living preferences, might be caused by the cautiousness of households during an uncertain economic period, seeing the denser urban dwellings as less risky investments (Kortteinen, 2018).

Be that as it may, a size difference so massive between the local preference groups in Haaga, along with the reality that the city is moving forward to realize the plan, does raise the question of democracy. Are the plans being put forward, despite local resistance, to pursue economic growth by accommodating the needs of the creative class?

Similar developments have also been identified elsewhere, as it is argued (Saint-Paul, 2018, p.2) that a certain, identifiable and politically powerful group has “taken over” some of the cities where they have settled, achieving urban policies identifiable as new. These include the promotion of sustainable modes of transport such as biking and public transit, increasing diversity through public policies, restricting private car traffic, and impacting on the attractiveness of urban neighbourhoods by increasing the quantity or quality of urban amenities.

This group is called the bourgeois bohemians, referred to by the abbreviation bobo. It is arguably the same group Florida has named as the creative class. The term bobo was first used by David Brooks (2000) to refer to the artistic hippies of the 1960s who clashed with the conservative bourgeoisie of the 1980s to form a new class, of sorts, that situated in the very top of society as a new “young elite, only dimly aware of themselves as an elite and unaware as yet of their capacities” (Brooks, 2010, originally 2000, p. 497¹).

Mark Lorenzen and Kristina Vaarst Andersen have commented (Lorenzen & Vaarst Andersen, 2009, p.369) that as far as tastes for consumption go, this is in fact the same group which Florida is referring to as the creative class. Florida himself also commented on the works of Brooks in his 2002 article *Bohemia and economic geography* and elaborated on the distinction of their approaches, while implicitly stating that the group in question is one and the same.

Saint-Paul (2017), an economist, addresses the divide of the bourgeois in France, a divide that bears indisputable similarities with our Finnish one. He has identified the skilled work-

¹ The page numbering refers to an e-book read on a mobile device and might not be consistent with the printed version

ers of the old economy, which he calls *cadres*, as distinct from the skilled workers of the new economy, the *bobos*. He studied their differences of opinion in urban policy and argues that the systematic differences can be derived from an economic analysis of rational behaviour. According to his research, the *cadres* and *bobos*, due to their reality and lifestyle, are set against each other in the pursuit of the most economically efficient way of organizing their lives. Saint-Paul identified the *bobos* as being supportive of policies which, to a great extent, resemble the boulevardization plans, for example in terms of limiting private car use and investing in walkability and public transit.

Could Saint-Paul's economic study offer any insight into the question regarding the contradictions in living satisfaction and demand in housing? Saint-Paul concludes in his article that "[T]his paper has shown that one can explain some recent trends in urban sociology and policies without referring to an evolution of the preferences of the decisive voters in the city [...] rather, these trends can be explained by productivity growth in the new economy goods relative to other sectors, along with the specificity of the production process for those goods" (Saint-Paul, 2017, p. 27).

Moreover, could a similar class divide be happening also in Haaga? For example, some of the residents welcome the developments in public transit, densification and overall urbanization of the neighbourhood structure and appearance with open arms. Some others are alarmed by the changes, which, according to them, represent a risk to the whole existence of Haaga as they know it, and the lifestyle it currently facilitates for them. Based on the data used here, the residents of Haaga are, indeed divided in this way; however, is this division based on, or even correlating with, their role in the economy?

DISCUSSION

The values of the plans would definitely be something that would impress the *bobos* and *creatives* identified in the literature elsewhere, so it could be said that there is a considerable group among the commenters that share these "creative class" or "bobo" values regarding the urban structure. On the other hand, dire opposition was the overwhelming majority in the dataset of this case.

Reading the comments of the locals in Haaga, they are predominantly about the physical structure and quality of Haaga and, above all, about the lifestyle that it makes possible. For example, the reduced efficiency of private car use and reduced op-

portunities to be in nature, as opposed to the increased efficiency of public transit and increased opportunities to access urban amenities and services, are examples of changes that will affect the area's feasibility in facilitating residents' preferred lifestyle.

Could it be that urban development, even in a democratic context, reflects less the local preferences and more of the logics of economy? Can the qualities of the urban be separated from the economy or are we shackled to working within the frames of "the possible" which the economy imposes on us? Are the transformations in the urban fabric derived from the preferences of a decisive political group or are the preferences of a certain group derived from the needs of the economy within which they work?

Shifts in urban planning paradigms in relation to developments in the economy are not unheard of. The remaking of Paris in the mid-1800s, and more lately the sub-urbanization of post-WWII United States, have, according to David Harvey (2013, pp. 7-10), much more to do with the economy than any intrinsic lifestyle preferences. Therefore, it is possible to promote a complete shift of lifestyle in order to grease the capitalist machine. One may wonder: could we be witnessing the urban implications of transitioning from the old to the new economy in Haaga? Or is it just a matter of a simple shift in the power balance of two preference groups?

The underlying mechanics of the urban transformation in Haaga are beyond the extent of this article, but we have so far been able to identify some relationships between the paradigm of new urbanism, the actual plans embracing it, and the economy. In its own material, the City of Helsinki promotes the plan as being helpful in creating an urban environment that will compliment economic growth by attracting "competent and creative" individuals (City of Helsinki 2015). This statement is in the same vein as the concept of the creative class by Richard Florida (2017).

I could argue that the boulevardization plans are part of the grand scheme of the new general plan of Helsinki that fit *bobos* or the creative class like a glove. Earlier on, I identified the values of the plan as new urbanist, and I suggested that, as such, they are similar to the preferences of the creative class. Grant has pointed out that new urbanism might be, indeed, used by an urban elite as a tool to satisfy their need to distinguish themselves as such a class, with all the attributes a cosmopolitan urban elite might hold (Grant, 2006, p.192-193). This again is of remarkable resemblance to what Florida argues as one of the defining factors regarding the locale that the creative class

decides to call home: the ability to “validate their identities as creative people” (Florida, 2005, p. 33).

Based on what has been discussed in this article, I believe there is reason to assume that the developments in Haaga have similarities with the processes Florida and Saint-Paul describe. Therefore, it would be advisable to look into their work for suggestions on how to evaluate it here. There are at least a couple of examples in the literature on planning solutions in order to avoid the possible inequalities caused by the “overly successful” pull of the creatives.

By overly successful, I mean here a pull in such quantity which would steeply raise the price of land and housing. This would have obvious implications on the socio-economic composition of Haaga and would raise questions about social justice. One of Florida’s (2017) messages that seems to resonate in the Finnish context is the construction of sufficient amounts of affordable rental housing. This will enable the service class to stay in town, which could possibly be beneficial for the bobos; even according to the “cold” economical view of Saint-Paul (2017, pp.3) and momentarily putting aside the implications for equality, as such.

In the context of Haaga, and using Saint-Paul’s framework, the cadres would probably choose to relocate if sufficient access to, and from, Haaga could not be arranged for the private car. In a time of grave environmental challenges, the use of a private car is not easily defended. Perhaps the answer in this context would be to ensure a proper network of public transit, and not only between the center(s), but also to the “periphery”.

In fact, another example, according to Florida (2017), is the investments in infrastructures that support sustainable densification. He argues (Florida 2017, 195 – 198), that varying modes of public transportation can ideally prevent some of the problems that Saint-Paul calls “bunkerization” (Saint-Paul, 2017), by enabling commuting from the fringes despite increasing congestion. Transportation is key, also according to the Centre for Economic Development, Transport and the Environment (Rakennuslehti, 2018). They filed one of the complaints regarding the boulevardization plans that might have been instrumental in the falling through of the majority of the boulevards. The same Centre later commented that, had Helsinki elaborated on the plans concerning traffic adjustments, the complaint would not have been filed (Rakennuslehti, 2018).

To summarize, according to the literature and the data presented here, new urbanist planning practices may be seen as as-

sociated with the mechanics and the logics of the new economy. Therefore, it is elementary that if the paradigm is harnessed to fuel economic activity, it is important to understand the implications it has in terms of justice, democracy, and equality. These issues should be adequately considered in the planning process in order to ensure the division of benefits according to the principles of the common good, rather than that of the capitalist economy, which should be seen as a means rather than an end in urban planning.

REFERENCES

- Brooks, David 2000 (ed.) 2010, *Bobos in paradise: The New Upperclass and How They Got There*. Accessed: 14 December 2018. Storytel.
- City of Helsinki 2018b, *Voimaan tullut yleiskaava* Available: <http://www.yleiskaava.fi/yleiskaava/voimaan-tullut-yleiskaava/> Read: 14 December 2018
- City of Helsinki, City planning department 2013, *Vision 2050: Urban plan – the new Helsinki city plan*. Available: https://www.hel.fi/hel2/ksv/julkaisut/yos_2013-23_en.pdf Viewed 14 December 2018
- City of Helsinki: City planning office 2015, *Kaupunkibulevardit Helsingissä*, Available: https://www.hel.fi/hel2/ksv/julkaisut/esitteet/esite_2015-4_fi.pdf Read: 14 December 2018
- City of Helsinki: Kaupunkiympäristölautakunta 2018c, *Vihdintien ja Huopalahdentien bulevardikaupungin suunnitteluperiaatteet*. Available: https://www.hel.fi/static/public/hela/Kaupunkiymparistolautakunta/Suomi/Paatos/2018/Kymp_2018-06-05_Kylk_16_Pk/1E5DA6B8-D412-C9C9-9473-63DF36E00000/Liite.pdf Read: 14 December 2018.
- City of Helsinki: Kerrokantasi 2018, *Bulevardikaupunkia suunnitellaan Vihdintien ja Huopalahdentien varsille*, Available: <https://kerrokantasi.hel.fi/bulevardikaupunki/rCfAlSsfyQ8OrJQLeL8wQ3wUNZ-fih9fn?headless=false&dlang=fi#start> Read: 14 December 2018
- Clarke, Annez, and Michael Spence. *Urbanization and Growth*, edited by Robert M. Buckley, World Bank Publications, 2008. ISBN: 978-0-8213-7573-0 ProQuest Ebook Central, <http://ebookcentral.proquest.com/lib/helsinki-ebooks/detail.action?docID=459360>. Created from helsinki-ebooks on 2019-02-01 06:09:00.
- Florida, Richard 2002, “Bobos and economic geography”, *Journal of Economic Geography* 2 (2002) pp. 55-71
- Florida, Richard 2005, *Cities and the Creative Class*, Routledge, New York, viewed 14 December 2018, <<http://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=136213&site=ehost-live&scope=site>>.
- Florida, Richard 2017, *The new urban crisis: How our cities are increasing inequality, deepening segregation, and failing the middle class – and what we can do about it*, Basic books, New York.
- Grant, Jill 2006, *Planning the Good Community : New Urbanism in*

- Theory and Practice, The RTPI Library Series, Routledge, London, viewed 14 December 2018, <<http://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=144314&site=ehost-live&scope=site>>.
- Harvey, David 2012, *Rebel Cities: From the right to the city to the urban revolution*, Verso, London
- Helsingin Sanomat 8.11.2018, Täystyrmäys Helsingin kaupungille: Korkein hallinto-oikeus hylkäsi kaupunkibulevardit ja Keskuspuiستoon rakentamisen – Malmin lentokentälle ei armoa. Available: <https://www.hs.fi/kaupunki/art-2000005892274.html> Read: 14 December 2018
- Kim, Jeongseob & Larsen, Kristin 2017, “Can new urbanism infill development contribute to social sustainability? The case of Orlando, Florida” *Urban Studies* 2017, Vol. 54(16) 3843–3862
- Kortteinen, Matti 2018, “A New Turn? - On the Development of the Region after 2008.” Lecture slides on the course Urban Sociology in spring 2018, University of Helsinki
- Lemelin, Andre, Rubiera-Morollón, Fernando & Gómez-Loscos, Ana, 2014, *Measuring Urban Agglomeration: A Refoundation of the Mean City-Population Size Index*, Soc Indic Res (2016) 125:589–612
- Lorenzen, Mark & Vaarst Andersen, Kristina 2009, “Centrality and Creativity: Does Richard Florida’s Creative Class Offer New Insights into Urban Hierarchy?” *Economic Geography*, Vol. 85, No. 4 (Oct., 2009), pp. 363-390
- Moisio, Sami, 2018, *Geopolitics of the knowledge-based economy*, Routledge 2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN and by Routledge 711 Third Avenue, New York, NY 10017, ISBN: 978-1-315-74298-4 (ebk)
- O’Flaherty, Brendan 2005, *City Economics*, Harvard University Press, Cambridge, Massachusetts
- Rakennuslehti 28.2.2018, Kaatoiko Helsinki itse kaupunkibulevardit nurin? Valtio ei olisi vienyt asiaa oikeuteen, jos Helsinki olisi kuunnellut toistuvia varoituksia. available: <https://www.rakennuslehti.fi/2018/02/kaatoiko-helsinki-itse-kaupunkibulevardit-nurin-valtio-ei-olisi-vienyt-asiaa-oikeuteen-jos-helsinki-olisi-kuunnellut-toistuvia-varoituksia/> read: 14 December 2018
- Saint-Paul, Gilles 2017, “Bobos in paradise: urban politics and the new economy” *Economics: The open-access, open-assessment E-journal* Vol. 12, 2018-56 | September 05, 2018
- Tuominen, Jukka 2014, *Asumistyytyväisyys Helsingin seudulla*, Masters thesis, University of Helsinki.
- United Nations 2018, 2018 Revision of World Urbanization Prospects, available: <https://www.un.org/development/desa/publications/2018-revision-of-world-urbanization-prospects.html> read: 14 December 2018

METROPOLITAN ACCESSIBILITY OF HAAGA

Joonas Salmijärvi

ACCESSIBILITY,
TRANSPORT

“From a transportational point of view, Haaga has quite many options. Haaga’s areal divisions follow the main transport infrastructures: the area is majorly bordered by three main roads of Helsinki (Helsinki- Tampere highway, Helsinki-Vihti regional road and the Ring Road I). The smaller areas, except Kivihaka, are separated from each other by two railway lines (Helsinki-Espoo-Turku main rail and the Ring Rail from city centre to airport).”

INTRODUCTION

In the contemporary world, mobility – one’s ability to move and travel – is often taken for granted (Cahill, 2010, p.2). We all make shorter or longer journeys every day to different locations for different activities: work, school, day care, public services, shopping, hobbies, holidays, etc. People move frequently over regional, national and continental borders for various reasons. An increasing number of “travels” are also made without moving any physical bodies or objects: the emergence of information and communication technologies has remarkably transformed our ways of living and working (Meyer, 2016, p.2).

Our global societies and economies are heavily reliant on different mobility and transportation systems which keep our flows of goods, money, information, communication, knowledge, thoughts, and people running non-stop (Cahill, 2010, pp.1-2; Meyer, 2016, p.1). Even though ICT covers an increasing portion of our logistics, a great amount of physical journeys are still needed. When looking back in history, a “revolution” similar to the one brought about by the Internet, happened some time ear-

lier: the automobile lifted our personal possibilities of physical mobility to a completely new level. (Sheller and Urry. 2006, p. 209; Cahill, 2010, p.1.)

The social sciences, however, did not recognise the significance of this transformation for people. The only form of mobility research done by the social sciences was mostly about ‘social mobility’ between socioeconomic classes (Urry, 2000, p.2). Sheller and Urry (2006, p.208) have argued that many theories in sociology, anthropology and geography were ‘sedentarist’ by nature and the impact of car travelling for modern societies was just a ‘black box’ for them.

Luckily, the number of social researchers interested in other types of mobility has increased during recent years. As Cahill (2010, pp.4-5) has argued, mobility has clear interconnections to the more traditional topics of social sciences, like welfare, citizenship, community, equal opportunities and social justice. ‘The New Mobility Paradigm’ has emerged and its representatives are showing us, for example, how the sociotechnical system of auto-mobility “is interconnected with other mobile systems that or-

ganize flows of information, population, petroleum oil, risks and disasters, images and dreams” (Sheller and Urry, 2006, p.209).

In this article, I, as a social scientist, report on a small study which uses ideas from different disciplines (urban studies, geography, transportation studies and the social sciences). My aim is to analyse existing *opportunities for physical mobility* in the day-to-day life within a local urban community. I try to find out how the residents of the Haaga suburb in Helsinki have transportation opportunities to access different areas around the Helsinki Capital Region. My interest is in two transportation modes: the private car and public transport.

With the help of geographic information system (GIS), I analyse, spatially, how accessible the whole capital area is by both of those modes in time and what kind of similarities, or differences, there are between them. Even though I analyse these questions from the perspectives of urban transportation systems and spatial distribution, my aim is to reveal the existing opportunities for physical moving and travelling that these structures offer for the inhabitants of Haaga.

In the next sections I present the concept of *accessibility* and how it has been operationalized and measured in urban, regional and transportation studies. Moreover, I present my data and methods for the analyses and look more deeply at the site of Haaga. At the end, I report my results and have a small reflecting discussion around them.

ACCESSIBILITY

Accessibility is a concept which has been researched in multiple ways in different sciences. It is closely related to the concept of mobility: whereas mobility defines the realized behaviour of people to move, accessibility refers to the potential of moving (Hodge, 1997, p.33; Tenkanen, 2017, p.6). In urban and regional studies, it has mostly been connected to land-use and transportation planning. Gould (1969, p.72) has referred to it as ‘one of those common terms that everyone uses until faced with the problem of defining and measuring it’. Still, accessibility has been studied quite largely in spatial relations within different environments.

Many scholars mention (e.g. Fuglsang, Hansen and Münster, 2011; Condeço-Melhorado, Reggiani and Gutiérrez, 2014; Tenkanen, 2017) that the pioneering definition of accessibility comes from Hansen (1959). He saw it as the potential for *interaction opportunities* in a spatially organized world. From an

operationalization point of view, he defined it as ‘a measurement of the spatial distribution of activities about a point, adjusted for the ability and the desire of people or firms to overcome spatial separation’ (ibid., p.73). This kind of approach was also used in other studies of accessibility, for instance, the noted article by Dalvi and Martin (1976).

Ingram (1971), too, wrote a very influential article about accessibility. He acknowledged the problem mentioned by Gould and therefore tried to find some clear definitions which could be operationalized. He arrived at a distinction between two types of accessibility: *relative* and *integral*. The former is about how two points or places on the same surface are *connected* together, and the latter, how all other points on the same surface are *interconnected* with one given point. The integral accessibility is then derived from the relative accessibilities of that one particular point (ibid., pp.101-102.).

In recent accessibility research, there has been attempts to make more comprehensive understandings of the concept. Geurs and van Wee (2004, p.128) have stated in their widely cited article that accessibility ‘should relate to the role of the land-use and transport systems in society, which, in our opinion, will give individuals or groups of individuals the *opportunity to participate in activities* in different locations’ [my emphasis]. In this sense, the measurements of accessibility are indicators for how transportation and land-use development impacts on the general functioning of the society (ibid.). In this paper, I try to identify some guidelines from their ideas, and in doing so, I also present more details of their perspectives.

COMPONENTS OF ACCESSIBILITY

Geurs and van Wee (2004, pp.128-130) see accessibility consisting of different features which they call *components*. They divide them into four categories:

- The *land-use component* covers the quantity, quality and spatial distribution of different opportunities to participate in different activities in urban areas. It is also about supply and demand and possible confrontation, which can generate competition for some activities which have limited capacities to take participants.
- The *transportation component* is about transportation systems and infrastructures and their quality. The writers refer to it as the ‘disutility’ when travelling from A to B by a specific mode of transport. It includes the time spent, the costs and efforts to use the system, and the discrepancy

between the supply of transport infrastructure and the demand of people and goods.

- The *temporal component* refers to the time cycle. It covers the differences in accessibility at different moments during the day and the time people spend in different activities.
- The *individual component* includes all the features and factors connected to each citizen's personal needs, abilities and opportunities. Hence, the individual level of access can largely depend on the socioeconomic factors and personal skills to use different modes of transportation and then to participate in different activities. The writers mention several studies which have found a strong effect of the individual component to the overall level of accessibility, for instance, in accessing different job opportunities.

MEASURING ACCESSIBILITY

Different scholars have operationalized accessibility in different ways and, logically, different measures have their own advantages and limitations. Geurs and van Wee (2004, pp.128-130) have recommended that an ideal measure of accessibility should take into account all of the components, their different features, the possible changes, and the individual characteristics in them. The more realistic way, however, is to concentrate on just one or a few components or their factors. Like the components of accessibility, the different types of measures can also be defined and the writers have divided these into four categories:

- The *infrastructure-based* measures are literally analyse the relation between infrastructure and accessibility - for instance, the level of performance or service they produce. It can be either observed or simulated. In figures, it can be, for instance, the average travel speed by a specific mode of transport.
- *Location-based* measures analyse accessibility on a more general level, such as the distribution of different activities within a given travel time. There are also different levels of location-based measures from simpler to complex ones. The more complex ones can include the limited capacities in activities which may generate some competition effects.
- *Person-based* measures look at the individual level. They analyse the opportunities and limitations of an individual to participate in different activities, for instance, from an economic point of view (e.g. costs and benefits of using a particular transport mode). It is connected to the possibilities and opportunities that transportation systems and

environmental structures give to the individuals.

- The *utility-based* measures are rooted in economic studies. They analyse the larger (economic) benefits which people receive from accessing different activities which have different spatial distributions.

These categories of measurements are interlinked to the components of accessibility, and hence they can be analysed on the level of each component. In this paper, my focus is on the location-based approach towards the transportation component. I am looking at the *time* spent when travelling within the Capital Region. Geurs and van Wee (2004, p.133) see it as type of *contour measure*, which is easy to interpret and communicate, but often quite simplistic and narrow. The choice comes straight from the characteristics of my data, which will be presented next.

METHODS AND DATA

I conducted a spatial analysis of metropolitan accessibility to find the current possibilities for Haaga residents to reach different parts of the Helsinki Capital Region when using two different transportation modes. The accurate research object is the total travel time from point to point when using either a private car or public transport. To conduct the actual analyses, and create map visualizations of the results, I'm using the open access GIS software Quantum GIS (QGIS).

THE DATA

My primary research data is an open access data set collected by the Accessibility Research Group in the University of Helsinki (Tenkanen, et al., 2018). It is a travel time and distance matrix from the Helsinki Capital Region by different transport modes. It was collected on three separate occasions: April 2013, September 2015 and January 2018. The first two sets include data from walking, driving and using public transport, while the third one includes these, plus cycling data. In my analysis I use the latter data set.

The data is structured on the basis of a general geostatistical grid over the region. Each grid cell covers a 250m x 250m area and has its own identification code. The journey times were calculated from each grid cell to another cell in two different times of the day – rush hour and midday – and also with and without waiting time. The calculations were based on three main base data: MetropAccess-Digiroad for cars, MetropAccess-Cycling-

Network for bicycles, and MetropAccess-Reititin for walking and public transport. The matrix is available for anyone and more detailed information about it can be found from an article written by Toivonen and her colleagues (2014). The data set itself, and detailed information, can be found from the research group's website (Tenkanen et al., 2018).

TIME PERSPECTIVE

Tenkanen (2017, p.2) has stated that *time* has a fundamental role both in the nature and in the function of societies. He sees that it has as a remarkable impact on the levels of mobility and accessibility in the spatial sense. According to Meyer (2016, p.1), time is also an important factor of the total costs of transportation, especially, when having congested conditions. Obviously, the dynamics between time, accessibility, and transportation can be studied from different perspectives, for instance, from the seasonal dynamics point of view (Tenkanen, 2017, p.2). Nevertheless, on the more practical level, the daily travel time seems to be a good indicator of day-to-day accessibility experience according to the Accessibility Research Group (Toivonen, et al. 2014, p.127).

I conducted the accessibility analysis by looking at travel time zones per every 15 minutes from my research points in Haaga. I chose the most densely inhabited spots from each small area of Haaga (see Map 1.). From the many options provided by the data matrix, I chose to use the *total travel time* along the journey (including waiting times) at the *rush hour* conditions to see the accessibility level when the 'total costs' of transportation are at their highest. In my view, this reflects the most common situations in everyday life.

I have also added some possible destination spots to my maps to demonstrate more concretely the possible travel times when commuting. I chose the main public transport hubs for long-distance travelling, main working areas and largest commercial centres of the Capital Region. The transport hubs have been collected from the draft of the forthcoming cooperation agreement for land-use, housing and transportation on the area (HSL, 2018e, p.13). The working areas have been taken from a job accessibility report by the City Planning Department of Helsinki (2011). For the commercial hubs I have chosen the region's ten largest shopping centres in 2017 (Finnish Council of Shopping Centres, 2018). These spots often overlap with each other, and for this reason I have coded the spots by colour according to their functions (commercial, transport, working or multiple).

RESEARCH SITE

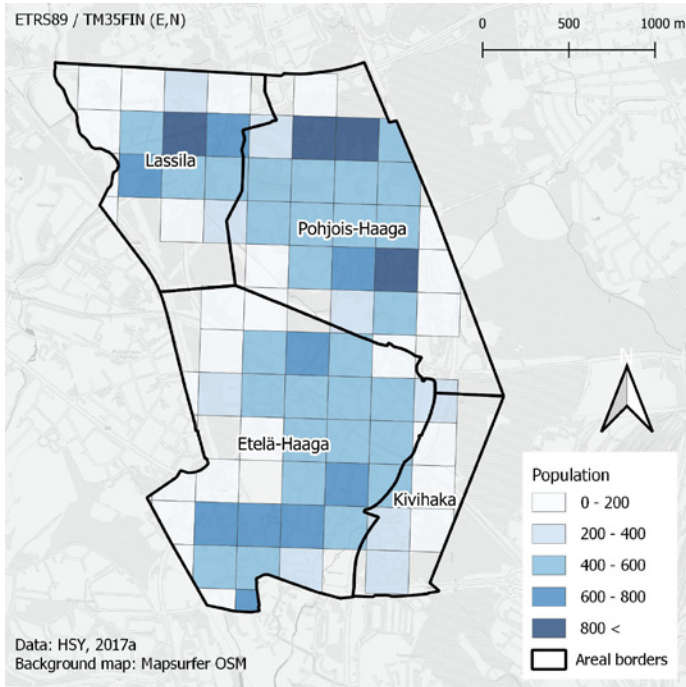
The suburb of Haaga is located in the north-west of Helsinki and consists of four smaller areas: Pohjois-Haaga (Northern Haaga), Etelä-Haaga (Southern Haaga), Lassila and Kivihaka. According to statistics from City of Helsinki (2017, pp. 64-67), these are mostly residential areas, and in the beginning of 2017, over 27 000 residents lived there. The total land area is 5.32 square kilometres. The biggest areas are Etelä-Haaga (45% of pop., 39% of area) and Pohjois-Haaga (35% and 32%). The northernmost area of Lassila is an important employment area: it covers 45% of all jobs (ca. 12 000) in the suburb. The population is dispersed around the small areas according to the following map:

TRANSPORTATION FACILITIES

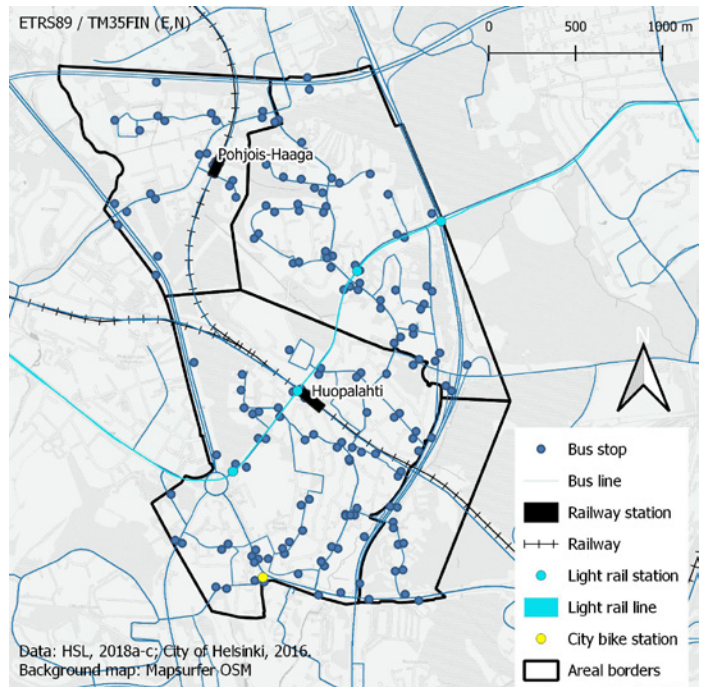
From a transportational point of view, Haaga has quite many options. Haaga's areal divisions follow the main transport infrastructures: the area is majorly bordered by three main roads of Helsinki (Helsinki-Tampere highway, Helsinki-Vihti regional road and the Ring Road I). The smaller areas, except Kivihaka, are separated from each other by two railway lines (Helsinki-Espoo-Turku main rail and the Ring Rail from city centre to airport). Inside Haaga, a bunch of bigger and smaller streets direct the inner traffic (HSY, 2017b.). According to the City of Helsinki, the most heavily used streets by motor vehicles are Ilkantie, Haagan Urheilutie, Kaupintie, Kauppalantie, Metsäläntie, Näyttelijäntie, Pirkkolantie, and the southernmost part of Eliel Saarisen tie (City of Helsinki, 2018a).

Along the railways, there are two stations in Haaga: Huopalahti station in Etelä-Haaga (in the middle of the whole suburb), and despite its name, Pohjois-Haaga's station in Lassila. Both are served by the commuter train network of Helsinki Regional Transport (HSL): seven different train lines stop at Huopalahti and two of them in Pohjois-Haaga (HSL, 2018d). In official journey calculations in November 2016, approximately 9500 single journeys were started from Huopalahti station per weekday and around 3000 from Pohjois-Haaga station (HSL, 2016).

When looking at bus connections, 56 different bus lines currently drive through Haaga and they use 171 different stops within it. Additionally, 51 stops are out of use at the moment (HSL, 2018a; 2018b). In total, almost 35 000 single journeys started from Haaga's bus stops per weekday in November 2016, and the two most used stops were at the Huopalahti station



Map 1. Population of Haaga in 250 m x 250 m grid.



Map 2. Road and street network in Haaga area.



Map 3. Public transport facilities in Haaga area.

(HSL, 2016). The station is an important interchange between trains and buses. Also the rapid “trunk bus” route (in Finnish: *runkolinja*) 550 from Eastern Espoo to Eastern Helsinki drives diagonally through Haaga and has a main interchange at Huopalahti (HSL, 2018c).

Haaga currently does not have any tram or metro services, but the cities of Helsinki and Espoo have decided to transform the bus 550 into a rapid light rail system. There will be four different stops within the suburb: two in Pohjois-Haaga and two in Etelä-Haaga. The construction starts in 2019 and the service is planned to commence in the early 2020’s. The Huopalahti station will continue as the main interchange for the new system also (Raide-Jokeri, 2018).

Cycling is also a very relevant and popular transportation mode. According to the Helsinki Metropolitan Cycling and Outdoors Map (2018), the official bicycle network is quite well distributed around Haaga’s main area. The main lanes go along the railway lines and the main roads, but, especially in

Lassila and Pohjois-Haaga, dense networks of smaller inner lanes also exist. Kivihaka is again an exception: it has just a few lanes bordering it and a couple of them go through its part of the Helsinki Central Park. In terms of the HSL city bike service, Haaga is almost completely excluded: the only city bike station on the area is located at the very south corner of Etelä-Haaga (see Map 2; HSL, 2018c).

The City of Helsinki is also making a huge effort to improve facilities for walking, but mainly they are focusing on the downtown area (City of Helsinki, 2018b). I found just a few reports concerning some suburban areas, but not Haaga (Helsinki City Planning Department, 2016). For this study, this fortunately does not pose a problem as I concentrate on cars and public transport.

RESULTS

POHJOIS-HAAGA

When looking at the results of Pohjois-Haaga, there is a very clear

difference in accessibilities between the transport modes: the whole Capital Region is radically more accessible by car than by public transport. Almost the whole Northern and Central Helsinki, Southern and Central Vantaa, Eastern Espoo and Kauniainen are accessible by driving within 30 minutes. Along the Helsinki-Tampere and Helsinki-Tuusula highways and Helsinki-Vihti road, the 30-minute zone stretches quite far towards the north and north-west. Even the northern borders of Vantaa can be reached in 30 minutes. The location of Pohjois-Haaga, just nearby the big roads, becomes here a great accessibility advantage.

By public transport, the situation is totally different. Within the 30-minute access zone, there are just the north-west areas of Helsinki, Pasila, Leppävaara in Espoo and Myyrmäki in Vantaa. The difference is significant. The area accessed by public transport within 30 minutes is almost the same as by car within 15 minutes. From the whole region's point of view, a major part of it is accessible from Pohjois-Haaga by car in 45 minutes or less, but more than half of it is unreachable within 60 minutes by public transport. Thus, there is a clear gap (inequality) of mobility opportunities between motorists and public transport commuters.

ETELÄ-HAAGA

The situation is quite similar in Etelä-Haaga. By driving, almost the whole Northern, Western and Central Helsinki are accessible within 30 minutes. The same area is accessible by public transport a bit more slowly, but some hub points can be reached within the same time limits by both modes: Helsinki city centre, Pasila, Leppävaara and Myyrmäki. Tikkurila is in the same 30-to-45-minute zone. The most probable reason for travel times may be the commuter train services from Huopalahti station. The airport, though, can be reached within 45 minutes by car and within 60 minutes by public transport, even if the Ring Rail trains run from Huopalahti to the airport.

When comparing Etelä-Haaga to Pohjois-Haaga, accessibility by car looks better for Pohjois-Haaga. For example, the 30-minute zone from Pohjois-Haaga is much larger than from Etelä-Haaga. By public transportation, their difference is not that large, but Etelä-Haaga has a bit bigger access zones within the shorter time limits. The 30-minute-zone stretches diagonally towards north-west and south-east (towards city centre), whereas the zones of Pohjois-Haaga are more round and stretches only narrowly towards the city centre. The main reason is probably, once again, the good railway connections in Etelä-Haaga from Huopalahti station.

KIVIHAKA

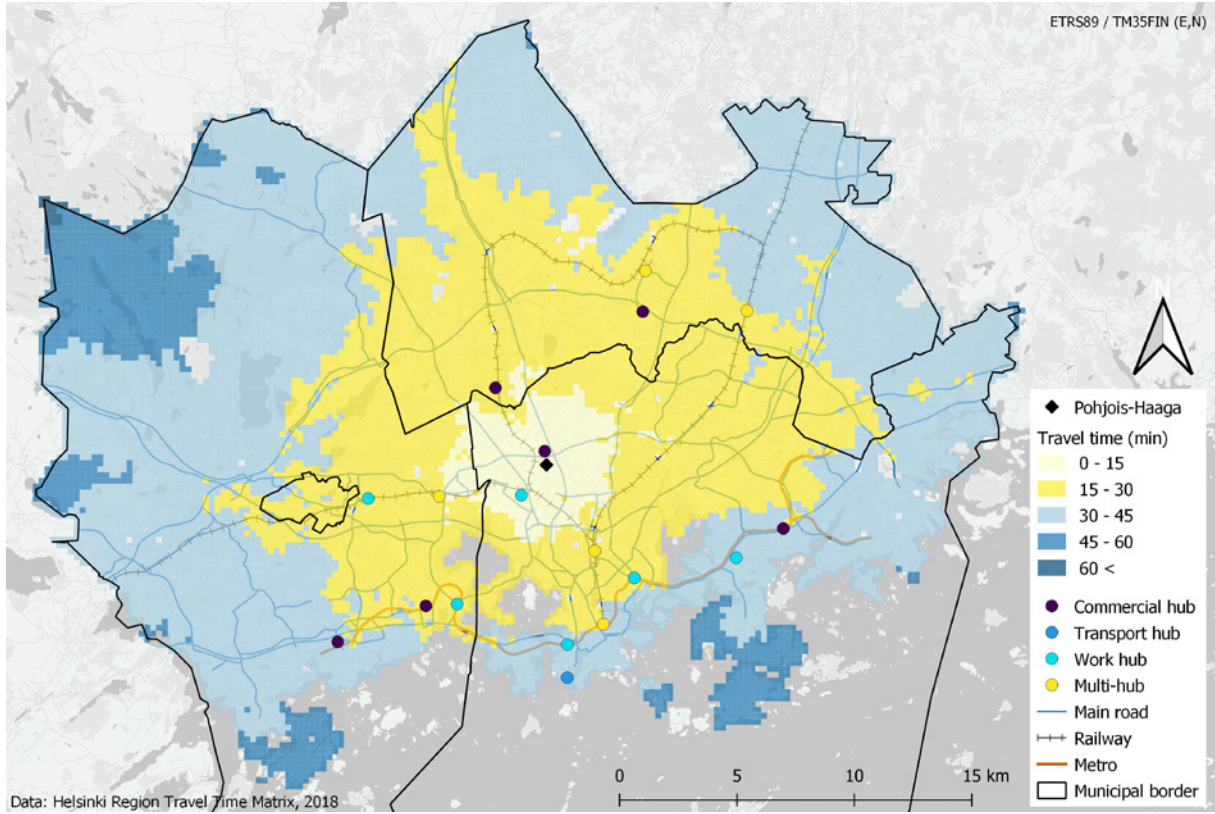
The main difference between cars and public transport also exists in Kivihaka. When driving, the accessibility zones are quite the same as from Etelä-Haaga, but they are located more towards the north and east. The main difference is probably in accessibility to Western and Central Vantaa (e.g. Helsinki Vantaa Airport), where the journey time there is within 30 minutes, and from Etelä-Haaga within 45 minutes. With public transport, the difference is smaller and some parts are more quickly accessed from Etelä-Haaga and some others from Kivihaka. The 30-minute-zone is more vertically-shaped from Kivihaka, and more round-shaped from Etelä-Haaga.

Kivihaka and Pohjois-Haaga have a longer distance between them, but the accessibility looks quite similar from them by both modes. Pohjois-Haaga stretches its zones a bit further than Kivihaka, but the difference is smaller than one would predict from the locations. The reason might be that both of them are located next to the bigger roads (Helsinki-Tampere highway and Hakamäentie in Kivihaka; Ring Road I in Pohjois-Haaga), which distribute well both private cars and buses. Neither of them have any train stations, so the main mode of public transportation there is most likely bus.

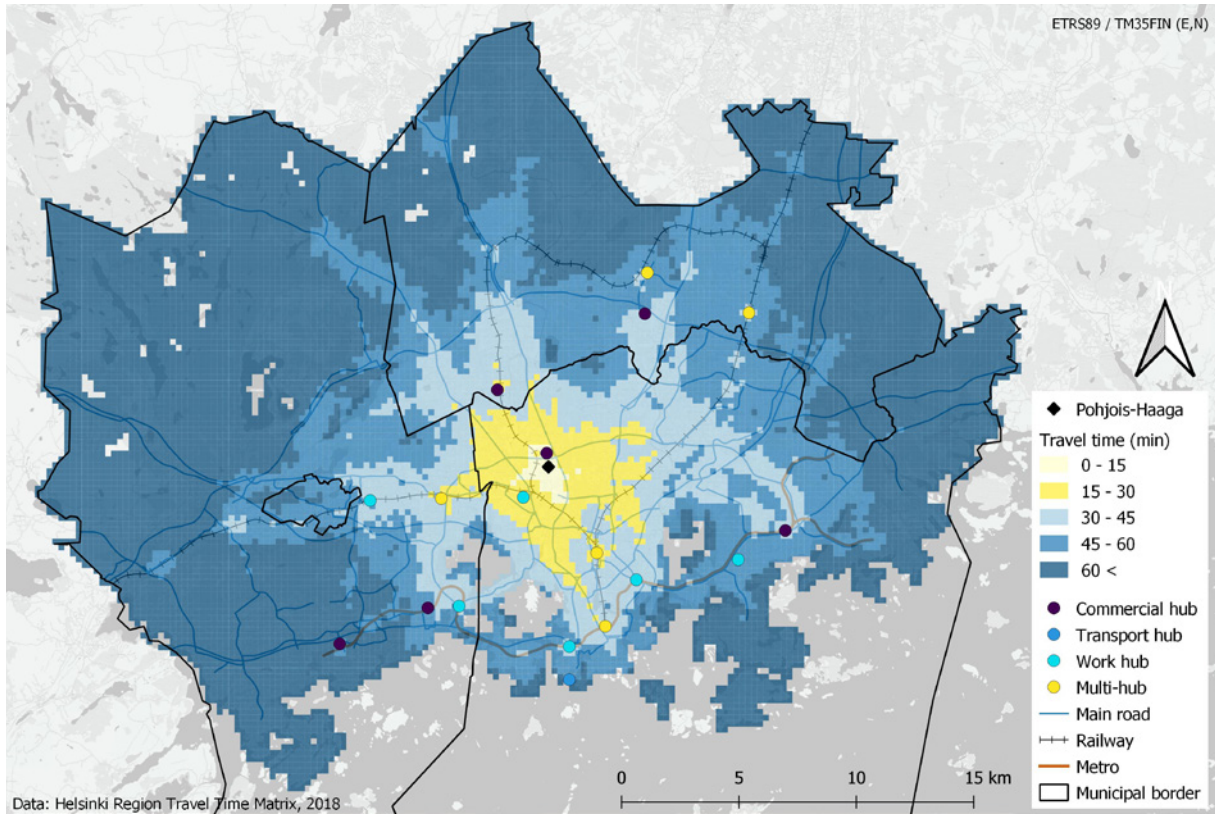
LASSILA

The fourth area of Lassila makes no difference to the general results. The public car is still faster than public transport. Almost half of the Capital Region is accessible by car in 30 minute, and just some edges of it are outside the 60-minute limit. Major parts of Helsinki, Vantaa and Kauniainen are within the 30-minute-zone and also the most of Eastern Espoo. By public transport, the yellow zone is smaller, but the train services (from Pohjois-Haaga station in Lassila) probably stretch it to the hubs of Pasila, city centre, Myyrmäki and Leppävaara.

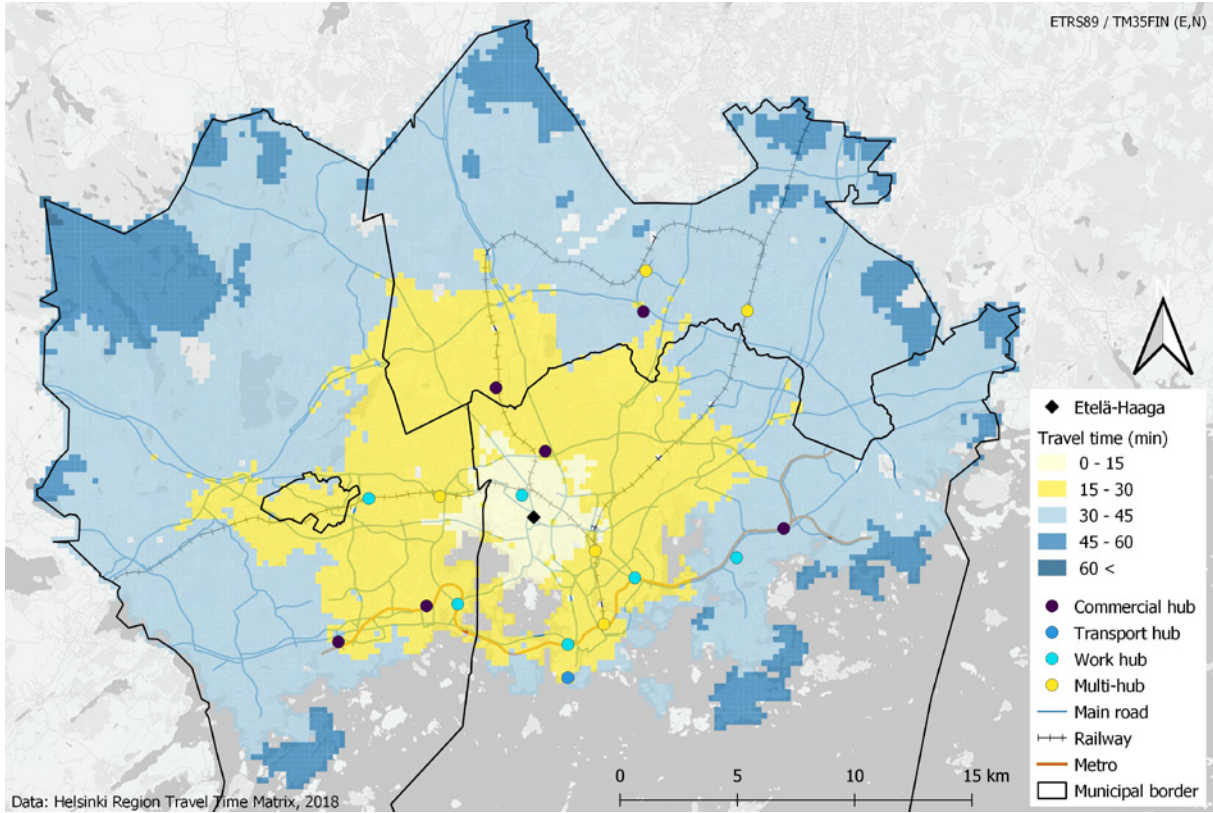
When comparing to the other small areas, Lassila has the most similar situation with Pohjois-Haaga. It is very logical, when the areas are located next to each other. Lassila's accessibility zones in public transport stretch just a bit further, most probably because of the train station. Although, the yellow zone is a bit longer from Pohjois-Haaga towards the south, which might result from the bus services driving along the Helsinki-Tampere highway to the city. Also, the 30-minute and 15-minute zones by car are a bit larger from Pohjois-Haaga, but the overall difference in car accessibility is not remarkable.



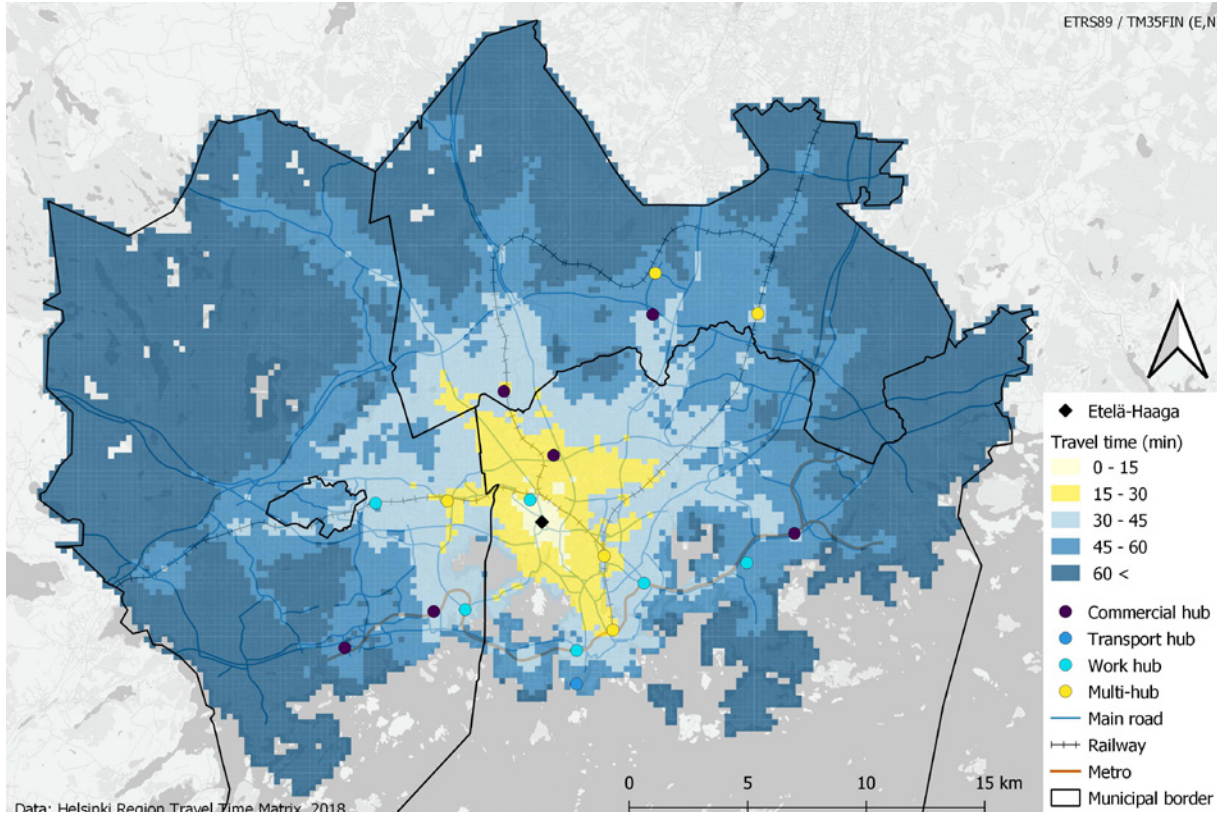
Map 4a. Metropolitan accessibility from Pohjois-Haaga by car during rush hour.



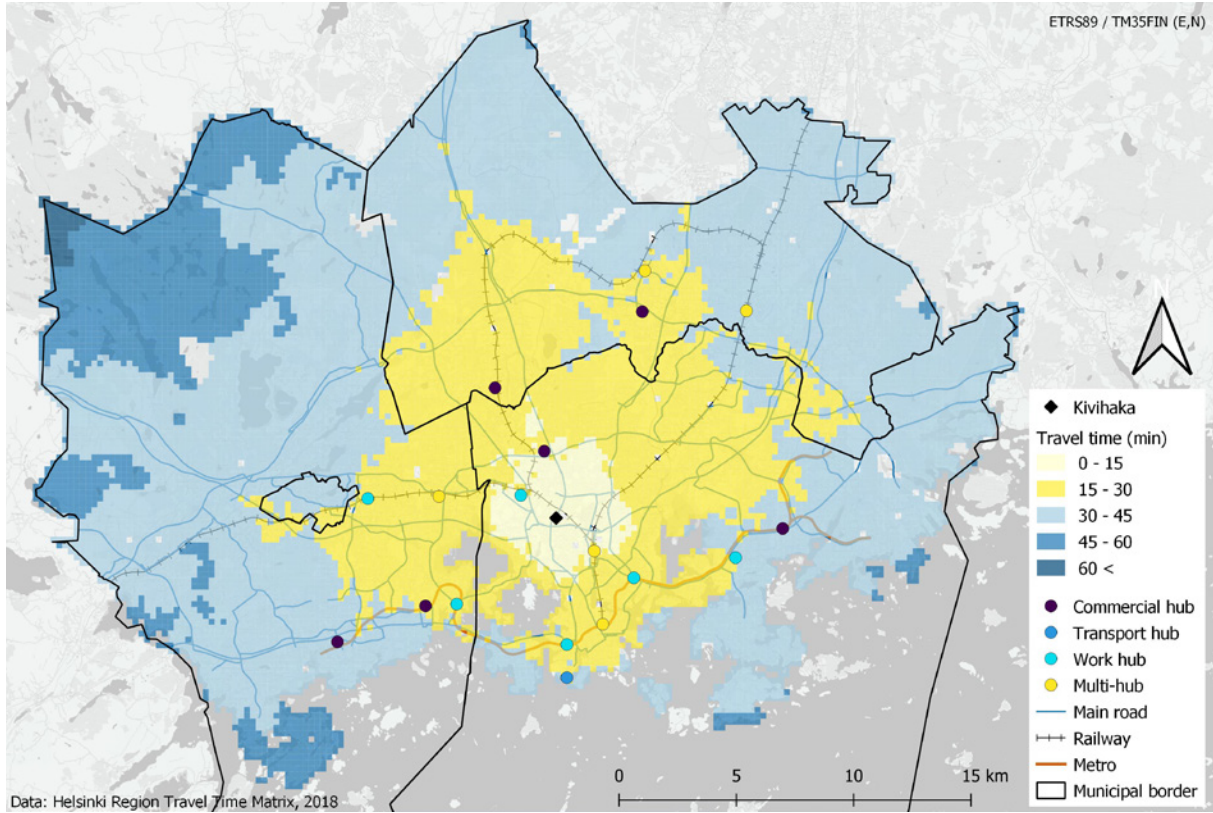
Map 4b. Metropolitan accessibility from Pohjois-Haaga by public transport during rush hour.



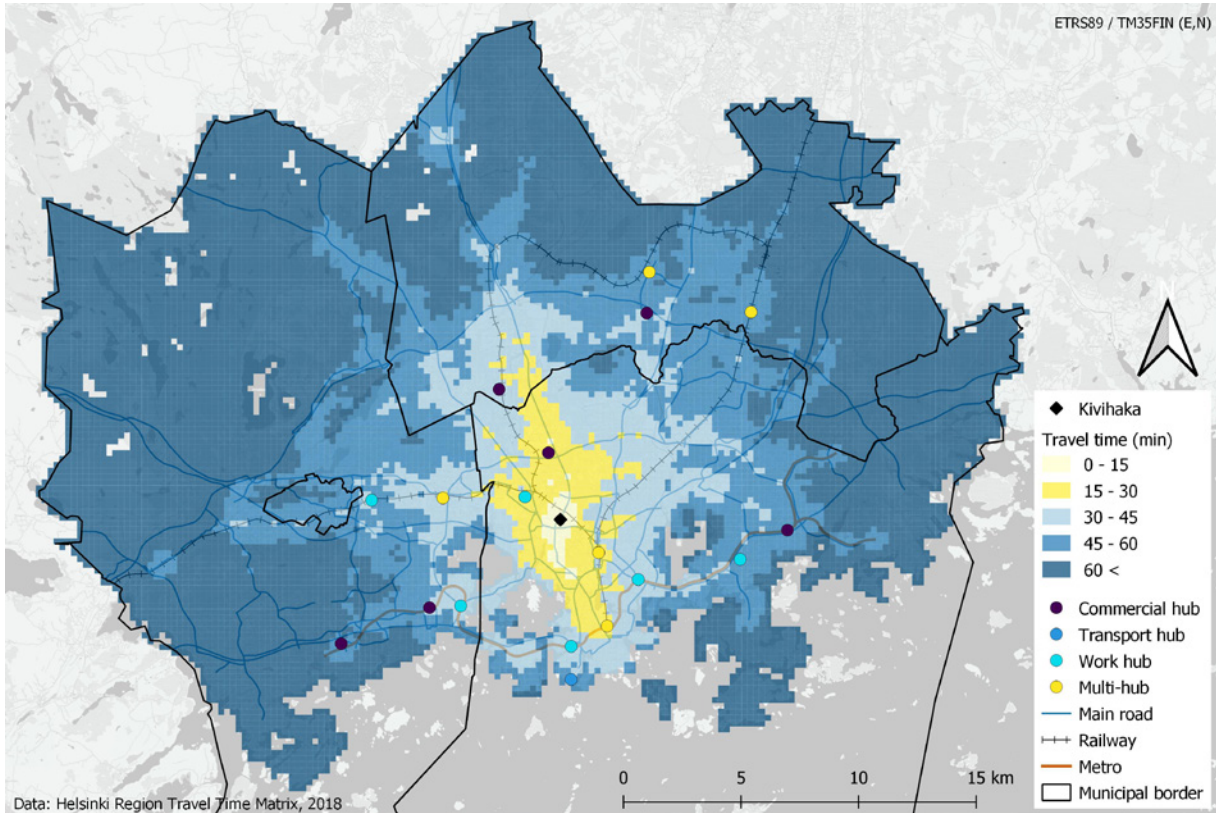
Map 5a. Metropolitan accessibility from Etelä-Haaga by car during rush hour.



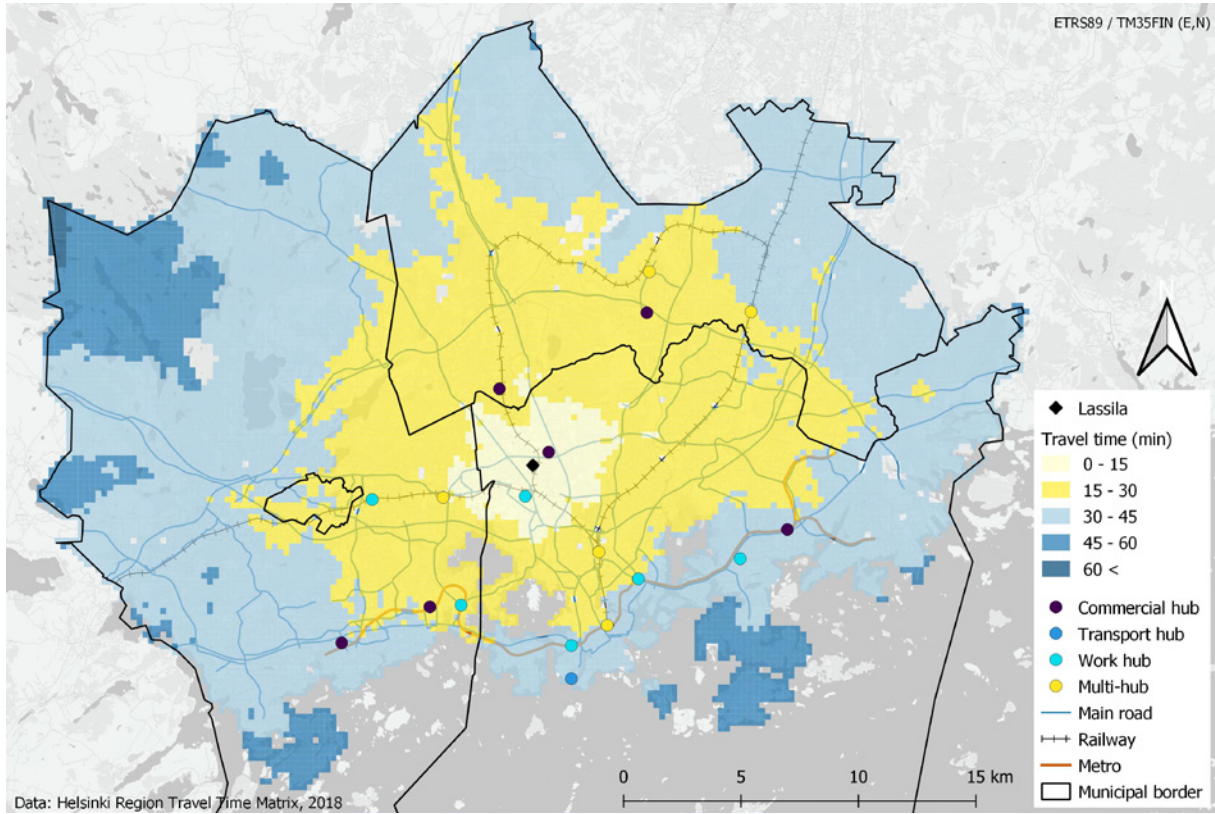
Map 5b. Metropolitan accessibility from Etelä-Haaga by public transport during rush hour.



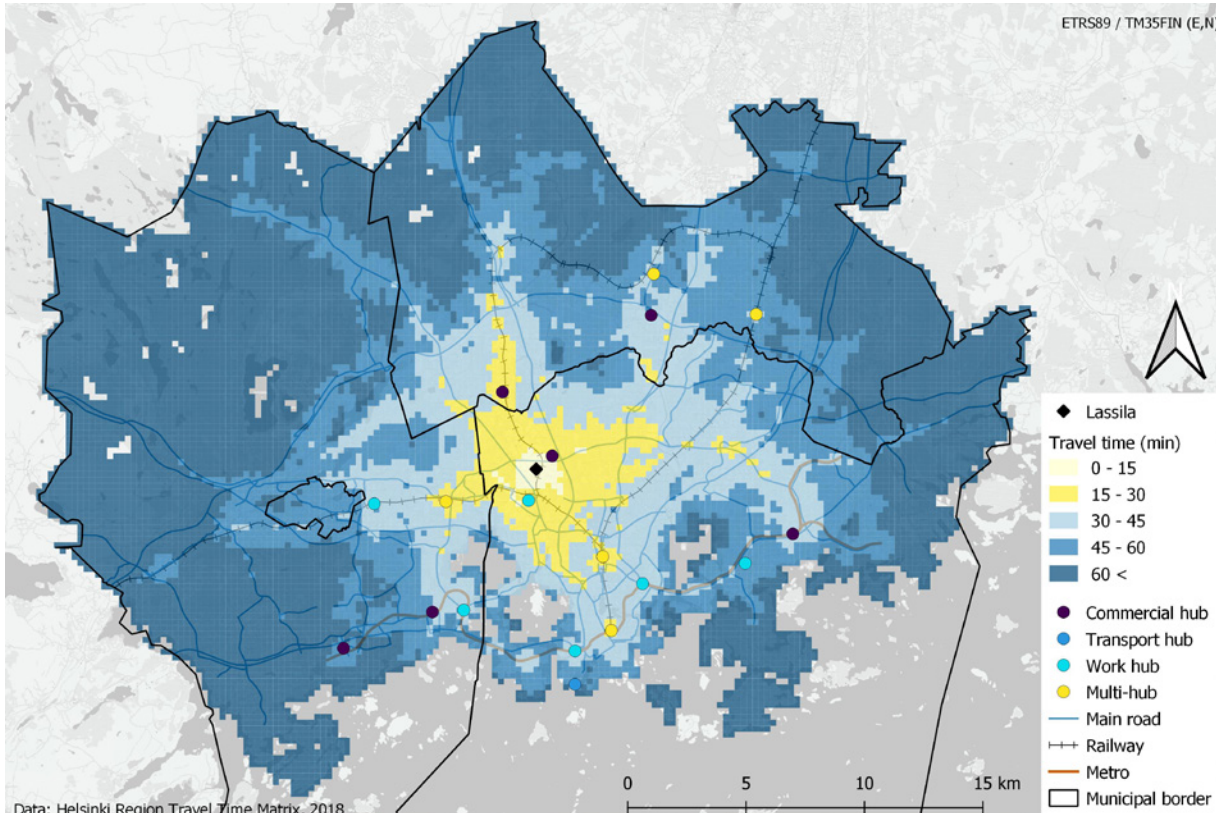
Map 6a. Metropolitan accessibility from Kivihaka by car during rush hour.



Map 6b. Metropolitan accessibility from Kivihaka by public transport during rush hour.



Map 7a. Metropolitan accessibility from Lassila by car during rush hour.



Map 7b. Metropolitan accessibility from Lassila by public transport during rush hour.

CONCLUSIONS

GENERAL OVERVIEW

My analysis includes comparisons of two kinds: between the two transportation modes and between the four areas. From this perspective, the main results were also split in two parts. Between the modes, there was a very clear main difference: the metropolitan accessibility in travel times was much better by private car than by public transport. The rough rule was that public transport took at least 15 minutes more time along the same journey than the car, but there were also some exceptions. The few cases, where the times were almost the same by both modes, were towards the main centres and multi-hubs on the southern half of the region (i.e. Helsinki City Centre, Pasila, Leppävaara and Myyrmäki). The most likely reason is the good commuter (train) services. But in the great majority of all cases, car travel beat the public transportation easily.

When comparing the four areas of Haaga, there were more similarities than differences. The main differences were that if the area was next to the main roads or the railway, then some more distant places could be reached more quickly than from other areas. The main transport and multi-hubs in the south had better public transport access from Etelä-Haaga and Lassila, which have the only train stations in Haaga. On the car side, the best accesses were mostly from the areas next to the highways: Pohjois-Haaga and Lassila.

DISCUSSION

I think the results are telling about the Finnish transportation systems and planning. If you want to have the best access to places in time measures, even inside our only metropolitan area - and even during the rush hour - a car is the best choice. The Capital Region has the largest public transportation system in the country, but still it is not able to serve the same kind of accessibility as cars. What is the reason? Have our developing and planning put more emphasis on highways and roads than on rail tracks? Of course, public transport is not only about trains, and the highways and roads are not only for private traffic. For some areas of Haaga, the only available mode of public transport was actually the bus services driving along the same main roads as private cars.

These results also reflect the social and socio-economic impacts that were discussed at the beginning of this paper. The *car is king*, and if you do not have one, your personal ability to move and travel, and the amount of opportunities you can have, will

be much worse than those motorists. A car, though, is not an option for everyone, for various reasons (e.g. personal economy, health, abilities and skills). There might also be other significant differences between motorists and their counterparts, but that needs its own study. Regarding Haaga, I can say that the car is a remarkable factor in location-based accessibility when measuring it with the journey time.

The problematic future projection of our environments and communities means it is essential to re-think our transportation systems, without delay. To cut CO₂ and other emissions, we have to make the more eco-friendly options of moving more tempting, and cut down massively on the use of vehicles using fossil fuels. At the same time, urbanization is increasing, so the need for good metropolitan transportation systems is also important from this perspective. The 'transurban' transportation systems require innovations in the modes, more eco-friendly facilities, and a more community-oriented attitude towards it among the citizens, cities, and planners.

For Haaga, the first step is the new light rail system, Raide-Jokeri. Once the first line has been built, new branches can be planned, for instance, towards Vantaa. To popularize more sustainable car options, Haaga should provide well planned recharge and gas/hydrogen stations nearby its main roads. In addition, the owners of fossil fuelled cars should be fined with a congestion charge. Alternatively, such cars could be banned from circulating within certain city zones. To realize such measures, the city and the government must cooperate intensively and continuously with local citizens, companies and research organizations.

REFERENCES

- Cahill, M. 2010. Transport, Environment and Society. Maidenhead, U.K.: McGraw-Hill Education
- Condeço-Melhorado, A., Reggiani, A. and Gutiérrez J. 2014. Accessibility and Spatial Interaction: Introduction. In: J. Gutiérrez, A. Reggiani and A. Condeço-Melhorado, ed. 2014. Accessibility and Spatial Interaction. Cheltenham: Edward Elgar Publishing.
- Dalvi, M. and Martin, K. 1976. The measurement of accessibility: Some preliminary results. *Transportation*, 5(1), pp. 17-42.
- Fuglsang M., Hansen H.S. and Münier B. 2011. Accessibility Analysis and Modelling in Public Transport Networks – A Raster Based Approach. In: B. Murgante, O. Gervasi, A. Iglesias, D. Taniar and B.O. Apduhan, ed. 2011. Computational Science and Its Applications – ICCSA 2011. ICCSA 2011. Lecture Notes in Computer Science, vol 6782. Springer, Berlin, Heidelberg

- Geurs, K.T. and van Wee, B. 2004. Accessibility evaluation of land-use and transport strategies: review and research directions. *Journal of Transport Geography*, 12, pp. 127-140.
- Gould, P. 1969. *Spatial Diffusion*. Resource Paper No. 4. Association of American Geographers, Commission on College Geography. Washington, D.C.
- Hansen, W.G. 1959. How Accessibility Shapes Land Use. *Journal of the American Institute of Planners*, 25(2), pp. 73-76.
- Hodge, D.C. 1997. Accessibility-related issues. *Journal of Transport Geography*, 5(1), pp. 33-34.
- Meyer, M.D. 2016. *Transportation planning handbook*. 4th edition. Hoboken, New Jersey: John Wiley & Sons, Inc.
- Sheller, M. and Urry, J. 2006. The new mobilities paradigm. *Environment and Planning A*, 38, pp. 207-226.
- Toivonen, T., Salonen, M., Tenkanen, H., Saarsalmi, P., Jaakkola, T. and Järvi, J. 2014. Joukkoliikenteellä, autolla ja kävellen: Avoin saavutettavuusaineisto pääkaupunkiseudulla. *Terra*, 126(3), pp. 127-136.
- Tenkanen, H. 2017. Capturing time in space: Dynamic analysis of accessibility and mobility to support spatial planning with open data and tools. Helsinki: University of Helsinki.
- Urry, J. 2000. *Sociology beyond societies: Mobilities for the twenty-first century*. London: Routledge.

PRIMARY SOURCES

- Tenkanen, H., Espinosa, J.L., Willberg, E., Heikinheimo, V., Tarnanen, A., Jaakkola, T., Järvi, J., Salonen, M. and Toivonen, T. 2018. Helsinki Region Travel Time Matrix 2018. [online] Available at: <<https://blogs.helsinki.fi/accessibility/helsinki-region-travel-time-matrix-2018/>> [Accessed 10 Dec 2018]. DOI: 10.13140/RG.2.2.20858.39362

SECONDARY SOURCES

- City of Helsinki. 2016. Jokeri Light Rail Line. Lines and Stations. [online] Available at: <<https://hri.fi/data/fi/dataset/helsingin-raide-jokerin-linjaus-ja-pysakit>> [Accessed 10 Dec 2018].
- HSL – Helsinki Regional Transport Authority. 2018a. Public Transport Stops. October 2018. [online] Available at: <http://data-hslhrt.opendata.arcgis.com/datasets/b2aa879ce93c4068ac63b64d71f24947_0> [Accessed 10 Dec 2018].
- HSL – Helsinki Regional Transport Authority. 2018b. Public Transport Routes. October 2018. [online] Available at: <http://data-hslhrt.opendata.arcgis.com/datasets/015369a569e340cd-953222dd441f4bb6_0> [Accessed 11 Dec 2018].
- HSL – Helsinki Regional Transport Authority. 2018c. City bike services. Available at: <http://data-hslhrt.opendata.arcgis.com/datasets/1b492e1a580e4563907a6c7214698720_0/> [Accessed 12 Dec 2018].

- HSL – Helsinki Regional Transport Authority. 2016. Public Transport Stops by Started Journeys. November 2016. [online] Available at: <http://data-hslhrt.opendata.arcgis.com/datasets/c26bd38e37eb41eab20941cbe5dc6bd5_0> [Accessed 10 Dec 2018].
- HSY – Helsinki Region Environment Services Authority. 2017a. Population grid 2017. [online] Available at: <<https://www.hsy.fi/fi/asiantuntijalle/avoindata/Sivut/Avoindata.aspx?dataID=7>> [Accessed 10 Dec 2018].
- HSY – Helsinki Region Environment Services Authority. 2017b. SeutuCD. [online] Available at: <<https://www.hsy.fi/fi/asiantuntijalle/seututieto/paikkatiedot/Sivut/SeutuCD.aspx>> [Accessed 10 Dec 2018].

OTHER SOURCES

- City of Helsinki. 2017. Helsinki by District. Helsinki: City of Helsinki. Available at: <https://www.hel.fi/hel2/tietokeskus/julkaisut/pdf/18_11_05_Hki_Alueittain_2017_Tikkanen.pdf> [Accessed 10 Dec 2018].
- City of Helsinki. 2018a. Traffic volume map of motor vehicles. Available at: <<https://www.hel.fi/static/liitteet/kaupunkiymparisto/liikenne-ja-kartat/kadut/liikennetilastot/autoliikenne/webmap/index.html#14/60.2203/24.8867>> [Accessed 11 Dec 2018].
- City of Helsinki. 2018b. Walking. Available at: <<https://www.hel.fi/helsinki/fi/kartat-ja-liikenne/pyoraaily-ja-kavely/kavely/>> [Accessed 12 Dec 2018].
- Finnish Council of Shopping Centres. 2018. The Finnish Shopping Centres 2018. Available at: <<https://www.kauppakeskusyhdistys.fi/media/kauppakeskusjulkaisu/2018-kauppakeskusjulkaisu.pdf>> [Accessed 12 Dec 2018].
- HSL – Helsinki Region Transport Authority. 2018d. Timetables and routes. Available at: <<https://www.hsl.fi/en/timetables-and-routes>> [Accessed 10 Dec 2018].
- HSL – Helsinki Region Transport Authority. 2018e. MAL 2019. Draft for the Agreement. Available at: <https://www.hsl.fi/sites/default/files/uploads/mal2019_suunnitelmaluonnos_30102018_0.pdf> [Accessed 12 Dec 2018].
- Helsinki City Planning Department. 2011. The job accessibility in the Capital Region by Public Transport. Available at: <https://www.hel.fi/hel2/ksv/julkaisut/yos_2011-19.pdf> [Accessed 12 Dec 2018].
- Helsinki City Planning Department. 2016. The walking environments in Helsinki. Available at: <https://www.hel.fi/hel2/ksv/julkaisut/los_2016-8.pdf> [Accessed 12 Dec 2018].
- Helsinki Metropolitan Cycling and Outdoor Map. 2016. Available at: <<https://www.ulkoilukartta.fi>> [Accessed 12 Dec 2018].

INFLUENCING TRANSPORT PLANNING THROUGH LOCAL FACEBOOK GROUPS: A CASE STUDY IN HAAGA

Johannes Mesimäki

TRANSPORT, CIVIC
ENGAGEMENT

“This study has observed how locality-based Facebook groups can influence transport planning by using discussion in Haaga-based group as a case study. Two narratives were focused on and analysed based on Warren, Sulaiman & Jaafar’s theory of social capital and Facebook-led civic engagement and Bennett & Segerberg’s concept of connective action. Overall, the findings are largely compatible with the existing theories, supporting their validity for assessing and understanding digitally networked action on a collective scale.”

INTRODUCTION

Large-scale use of social media has provided us with novel, effective and low-cost ways to communicate (Bennett & Segerberg, 2012). Although social media is often used for entertainment and maintaining relationships, it also provides robust functionality for sharing information regarding current affairs. Among the most widely used platforms is Facebook, which allows sharing text and media-based posts, and features a group function allowing membership within smaller social spheres pertaining to hobbies, localities and other issues connecting user interests (Gordon & Stephens, 2007). Issues related to the city are no exception to the broad range of topics discussed on Facebook as seen by the emergence of locality- or district-based Facebook groups, generally geared to function as discussion zones for locally relevant matters.

Drawing on previous research and theoretical concepts such as connective action, this article seeks to find out how locality-based Facebook groups can influence transport planning

by analysing discussions on a Haaga-oriented group formed of just over 8000 members. I focus on two discussions within the group, the first surrounding a planned change to bus services connecting Haaga to Helsinki's city centre and the second surrounding a tunnel restricted from private-vehicle access in Haaga. I discuss the findings in relation to theory and draw implications for the future of transport planning in Haaga and elsewhere.

BACKGROUND LITERATURE

SOCIAL MEDIA, FACEBOOK AND CIVIC ENGAGEMENT

Literature on the influence of social media and transport planning is limited, with studies primarily discussing the value of social media from a transport authority perspective. For instance, Mandarano, Meenar & Steins, (2010) discuss tools for planning authorities to facilitate online public participation, Gal-Tzur, et.

al., (2014) evaluate possibilities for transport stakeholder organisations to provide customers with useful information via top-down communication approaches and Gal-Tzur (2014b) and Grant-Muller, et. al., (2014) evaluate the possibility of using text-mining techniques to gather useful information for transport authorities to improve service quality. Approaches assessing the influence of publicly initiated efforts to participate in transport policy remain largely unstudied. This literature review thus focuses on the relationship between general social media use and civic engagement.

Facebook's support for low-effort social interaction allows the platform to serve as an effective communication channel and networking opportunity for communities. Social network sites are known to produce social capital, as they allow users to maintain weak social ties and diffuse networks cost-effectively, and they facilitate bridging and bonding measures of social capital (Manadrano, Meenar & Steins, 2010). Warren, Sulaiman & Jaafar, (2015) studied Facebook-led civic engagement from a social capital perspective (see figure 1 for framework) and discovered that the level of social interaction ties between Facebook users associates positively with relational trust. This refers to confidence that members of a network may be willing to act and assist each other simply because they share a vision or goal and are part of the same collective (Leana & Van Buren, 1999).

Relational trust is positively related with a greater use of the cost-effective, low-effort and direct possibilities provided by Facebook to engage with and disseminate material pertaining to civic issues, which in turn increases opportunities for users to extract resources and take part in civic activities, such as complaining to authorities or signing a petition (Donath & Boyd, 2004; Warren, Sulaiman & Jaafar., 2015).

Relational trust was the most significant factor predicting civic action found by Warren, Sulaiman & Jaafar, as network members who did not feel like the time and effort required to participate was worth it for the civic activity in question were less likely contribute. Warren, Sulaiman & Jaafar's finding is complemented by Park, Kee & Valenzuela, (2009), who discovered in a study of Facebook's group-function among US university students that social trust is significantly and positively associated with greater engagement in civic events in their communities. Valenzuela, Park & Kee, (2008) also found through regression analysis that use of Facebook groups had a statistically significant positive effect for self-reported offline civic and political participation. In addition, sharing a vision, collective goal and language among network members positively influences the level of content sharing (Chiu, Hsu & Wang, 2006), relational trust and online behaviour required to gain the resources needed for civic action (Warren, Sulaiman & Jaafar,

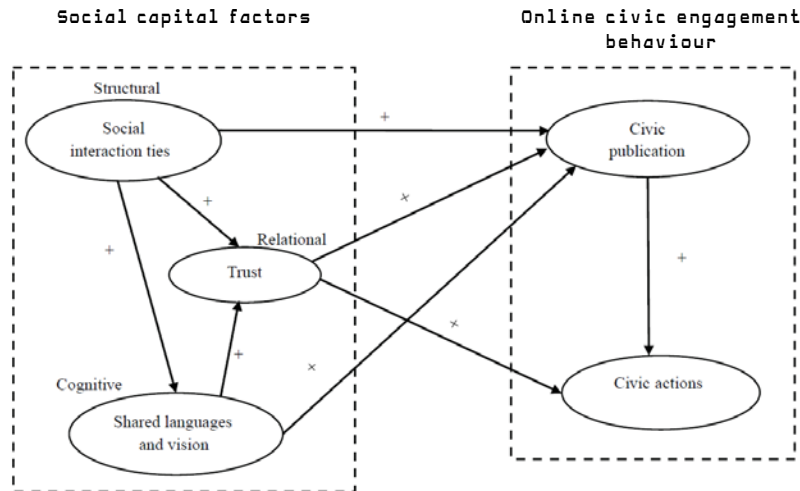


Figure 1. Warren, et. al., (2015, p. 165)'s theoretical model.

2015). Factors such as these strengthen Facebook’s ability to produce network capital, which positively influences the creation of influential online communities and the necessary capacity to act on issues (Warren, Sulaiman & Jaafar, 2015).

CONNECTIVE ACTION

The concept of connective action can further help understand how Facebook groups stimulate civil engagement. Unlike the more conventional concept of *collective* action, which refers to collective efforts by individuals to address issues through a subscription to a collective identity and shared action frames articulated by formal organisations, the concept of connective action is characterised by the role of digital social networks as central organisational elements acting as core organisations on their own without need for its members to substantially alter their personal identity or views. These online organisations allow networks to form and for action to be coordinated (Bennett & Segerberg, 2012).

In connective action networks, networking revolves around sharing content via personal expressions and co-producing content with others. Action is primarily stimulated through the self-motivated sharing of personalised action frames (i.e. individually identifying a problem and suggesting a solution), which are communicated within trusted social networks, such

as a Facebook group. Continued participation and development of action within the network is fuelled through its self-motivating and self-validating nature as personalised expressions and action frames are recognised, adopted and repeated by others (Bennett & Segerberg, 2012). Bennett & Segerberg (2012, p. 744) specifically highlight that these action frames and personal expressions must be: “inclusive of different personal reasons for contesting a situation that needs to be changed”, to allow for meaningful action on a sufficient scale.

Connective action is categorised by Bennett & Segerberg in two types (see figure 2): The first, “self-organising connective networks”, usually organise without a central formal organisation but instead through digital technologies acting as critical organisational mediators. “Organisationally enabled networks” include some formal organisations which stimulate action formation, but generally take a position in the background and favour techniques which enable public networks to form around its member’s personalised action frames.

There are several compatibilities between Warren, Sulaiman & Jaafar’s and Bennett & Segerberg’s theoretical concepts surrounding digitally networked and Facebook-led action and civic engagement. A shared vision or goal identified as significant by Warren, Sulaiman & Jaafar and Chiu, Hsu & Wang could



Figure 2. Connective Action Network Types. Adapted from Bennett & Segerberg, (2012, p. 756).

arguably be derived from the process of network members adopting and co-producing ideas based on inclusive personal expressions of thoughts and action frames as illustrated by Bennett & Segerberg. Both concepts also underline the value of trust within the network as a factor reducing the threshold to act. Bennett & Segerberg discuss the causal relationship between underlying processes for action from a qualitative perspective, whereas Warren, Sulaiman & Jaafar frame their work around social capital and evaluate the value of trust, social ties and shared vision and language as influencers of action with a quantitative approach.

METHODOLOGY

This study aims to discover how locality-based Facebook groups can influence transport planning through the examination of a Haaga-based resident's group as a case study. Data were collected by searching for posts with Finnish transport related keywords to identify cases of civil engagement regarding transportation in Haaga. Posts emerging from the searches were considered, and material of relevance was organised into a spreadsheet. Use of the spreadsheet allowed the data to be coded, sorted and reduced according to themes and narratives (see figure 3 for process). Examples of codes include "community" "changes to routes" and "safety".

A total of 30 posts were categorised along with a summary of the discussion from hundreds of related comments. Through inductive qualitative content analysis (Graneheim, Lindgren & Lundman, 2017), I sought to find narratives and themes in the data. Two narratives relating to transport-related civil engage-

ment were chosen, one in which attempts to act were successful, and one in which attempts were not. I justify the group's role as a self-organising network (SON) and examine the narratives and discussion in relation to theory through deductive content analysis. Use of both inductive and deductive methods of content analysis can be considered an abductive approach, as I utilise theory to discuss and evaluate the processes occurring within the narratives I found (Graneheim, Lindgren & Lundman, 2017).

Graneheim, Lindgren & Lundman highlight challenges associated with content analysis, such as how the researcher's personal subjective interpretation of the data can influence the trustworthiness of the results. To mitigate this, quotes are given where appropriate to support claims made. Facebook was chosen as a data source due to its role as a low-cost, accessible, inclusive and widely-used platform for discussion. Indeed, Facebook is arguably a highly effective platform to reach a significant number of people for almost no cost. However, this does not mean that Facebook captures the concerns and voice of all stakeholders. Those who for instance lack access to internet, do not have the necessary skills to use Facebook or are averse to such platforms for any reason are naturally excluded from the discussions which occur there.

Regarding ethical considerations of the research, Kosinski, et. al., (2015, p. 553) argue that use of publicly available Facebook data can be used without consent assuming that the following criteria are met:

- It is reasonable to assume that the content used for research has knowingly been made public by the user

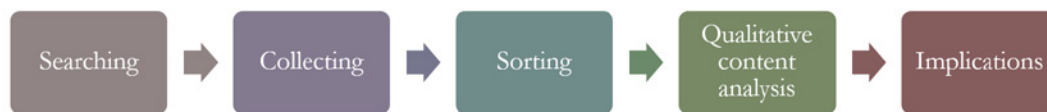


Figure 3. Research process.

- data are anonymised in the research
- there is no communication between the researcher and the sample
- information that can be traced to a single individual should not be included.

My approach is informed by a modification of Kosinski, et. al.'s criteria, as although quotes are used to exemplify results, they have been translated from Finnish to English, paraphrased and anonymised to remove identifiability. The Economic and Social Research Council further state in their framework for research ethics that material in the public domain, such as in forums or other such spaces, do not require ethical review as long as research participants remain anonymised (ESRC, 2012).

RESULTS AND ANALYSIS

THE GROUP AS A SELF-ORGANISING NETWORK

According to Bennett & Segerberg's connective action network types (see figure 2), the group for Haaga residents matches best with the criteria for the self-organising network. There is no formal organisation coordinating the group or its actions. Order is maintained by a few administrator members who enforce a limited set of rules mostly geared to keep discussion civil. As such, this lack of a formal organisation alone disqualifies it from the second connective action network type.

Large-scale personal access is arguably present. Although one's request to join must be verified, the mechanism is most likely a way to filter spam, as no strict criteria for group membership exists. The social media functions within the group are multi-layered, as it is possible to post text messages, links to news sources, websites and other social media platforms, comment on discussion and connect privately with other members.

CASE 1 - A TALE OF TWO BUSES

Changes to certain bus services in the capital city region were planned to follow the opening of the West Metro (Länsimetron). Buses using the Kamppi transit hub were to be terminated, freeing up capacity in the warm indoor terminal. Planners decided that certain bus lines using the nearby congested outdoor Elielinaukio bus terminal should be rerouted to Kamppi instead, a move which would also alter which arterial roads bus services relied on by Haaga residents would use (Mannerheimintie to Runeberginkatu). This change ignited a strong online community backlash by members of the Haaga Facebook

group, who were concerned about the reduction in quality of public transport in the district (Tervo, 2015).

Once news of the plans appeared in a local newspaper, the first post regarding the change was submitted to the Facebook group:

"I noticed on the news that buses will be rerouted from Elielinaukio to Kamppi once the west metro opens. Not shocking, but not great either."

The post's comment thread soon became populated with opinions and speculations on how network members might be affected by the change, such as longer commute times, fear that congestion on Runeberginkatu will hinder bus reliability and worries of reduced accessibility to services on Mannerheimintie. The level of agreement among group members that the changes would be negative is substantial, as only the occasional comment is in favour of the changes. Several comments exist calling on others to send the transit operator HSL (Helsingin Seudun Liikenne) feedback, with links posted to the appropriate form.

Already we see evidence of information dissemination leading to the early stages of a shared vision forming among group members: retaining some bus lines on the old route. The vision is articulated through personalised expressions of both opinions of the planned changes, descriptions of how the change could lead to negative outcomes and personalised action frames suggesting how to act such as use of the HSL feedback form. Majority consensus among those involved in the discussion can also be viewed to strengthen relational trust between members, as it is possible to see other's willingness to act and complementary opinions.

Two days after the initial post, another group member posts a question:

"Would it be worthwhile to make an online petition so that e.g. bus 43 would depart and arrive to Elielinaukio? Having to transfer is not the same as getting to your destination with one bus"

Many commenters are in support of the petition, with the post itself receiving just under 100 likes, which arguably validates the idea within the network and feeds the motivation to create it. Here we see evidence of growing relational trust between group members. By getting

a sense that a considerable number of network members feel comfortable with creating and sending a petition as an action frame to address the issue, the group can feel more confident that creating the petition is worthwhile and that it would be signed by a meaningful number of people. We see from the discussion how the shared vision continues to form from identifying the issue and its implications to finding a potential shared action frame.

“The services on Mannerheimintie are used by senior citizens. Good luck running to Runeberginkatu at night time to catch a bus. The planners tell you to transfer, but that increases waiting times at bus stops”.

“I’d sign it straight away, should a petition be created!”

On the same day, a post containing an official response to a personal query about the change by HSL is shared by a group member, along with justifications by transport planners for the changes. It is evident that the justifications, such as it allegedly being more user friendly that buses leave from a single centralised place, are not received well. A user sarcastically comments: *“Yeah it sure would be unfathomable to offer alternative destination options”*. The HSL response provided a framework upon which to base the rest of the discussion on and led to the sharing of varied but accessible personal expressions of how group members considered the planner’s justifications to be misguided. This process allowed the shared vision between users to develop further and was perhaps enhanced by the high level of consensus among group members that the justifications were poor. Based on Warren, Sulaiman & Jaafar’s theory, it is possible that as the shared vision continued to form, and as the level of relational trust increased among group members, further engagement with the topic and potential energy for action more broadly within the network increased.

The following day, the earlier suggested petition was created and shared to the group. It is arguable that the arguments in the text are co-produced, as points raised by members of the group in their personalised expressions of worry from previous comment threads are incorporated into a single coherent response-text demanding that one bus line remains on the Mannerheimintie-Elielinaukio route. At this point the shared vision has reached its most concrete and coherent form, and its co-produced nature makes it inclusive and easy to engage with. The petition received over 1000 signatures (Adressit.com, 2015).

“Transferring and waiting, congestion on Runeberginkatu

as well as the lack of bus lanes increase commute times. This is known by anyone who currently uses the Kamppi-bound bus service 41...The bus stops on Mannerheimintie have serviced transit users, who in addition to commuters, include 0-100-year-old citizens. We argue that HSL’s advertised model of customer-friendly transport planning is not achieved in this reform and it is unreasonable to force children, the elderly and disabled customers to transfer when the trip could be completed with one bus.”

(Excerpt from petition text, Adressit.com, 2015)

Several months later, the petition creator posted an update on the issue. The post contains a message from HSL detailing that not only has the demand in the petition has been met, but an additional bus service is to remain on the old route. The post received almost 200 likes. The collective appreciation and acknowledgement of the group’s success at contributing to the resistance in the post’s comment thread perhaps further built the relational trust and network capital of the group, and increased member’s confidence that similar issues requiring a collective effort can be achieved in the future, raising the potential energy of the group as a considerable participatory force.

“Yes! Wonderful! (bus emoji)”

“Thank you for sharing, this is a great achievement!”

CASE 2 - ELIEL-SAARISENTIE CONTROVERSY

Haaga’s road network consists of small low-capacity routes running throughout the district except for “Eliel-Saarisen tie”, a straight road cutting through the centre of Haaga connecting the west and east borders. A significant part of this road is only permitted for public transit and taxi vehicles to prevent high volumes of through-traffic across the neighbourhood, meaning that private motorists cannot make use of it (see figure 4). Perhaps unsurprisingly, the arrangement has prompted some group members to demand the opening of the road to the public in hopes that this might ease driving through Haaga and improve traffic flow in the district. Despite this, no meaningful action has developed surrounding the issue within the group, and as such, the structure of discussion is markedly different from the previous case.

Prompts to stimulate discussion regarding allowing access to all vehicles have occurred a few times as personalised expressions in the form of either independent posts or comments as part of other discussions.

“City planners will discuss building in North-Haaga today.

Hopefully they will consider zoning as part of the whole; all traffic should be permitted on Eliel-Saarisen Tie!

“There has been discussion that South-Haaga experiences a lot of through-traffic because Eliel-Saarisen Tie is restricted. Is this the reason and how could one influence this?”

Despite the topic being frequently mentioned both internally and externally to the group (some mentions exist of the Pro-Haaga institution having engaged with the issue in the past), the primary reason for lack of meaningful action can be at least partially explained with the theories discussed earlier in the article. Specifically, the issue appears to lack a sufficient shared vision and relational trust among members (Warren,

Sulaiman & Jaafar, 2015), and the related discussion is ripe with disagreeable personal expressions of thoughts and action frames, reducing their inclusive nature required to drive connective action (Bennett & Segerberg, 2012).

The lack of shared vision is perhaps best illustrated in the results of a group poll posted in October 2017. A user asks responses to a question about “*The classic Haaga traffic topic*”, i.e. should the road be open to all traffic. Out of 284 responses, 141 (50%) are in favour of keeping the restrictions, and 106 (37%) are against, showing that the engaged members of the group are fairly divided on the issue. 35 respondents responded that opening the road would increase congestion in Haaga, and 2 responded that they violate the restriction anyway.

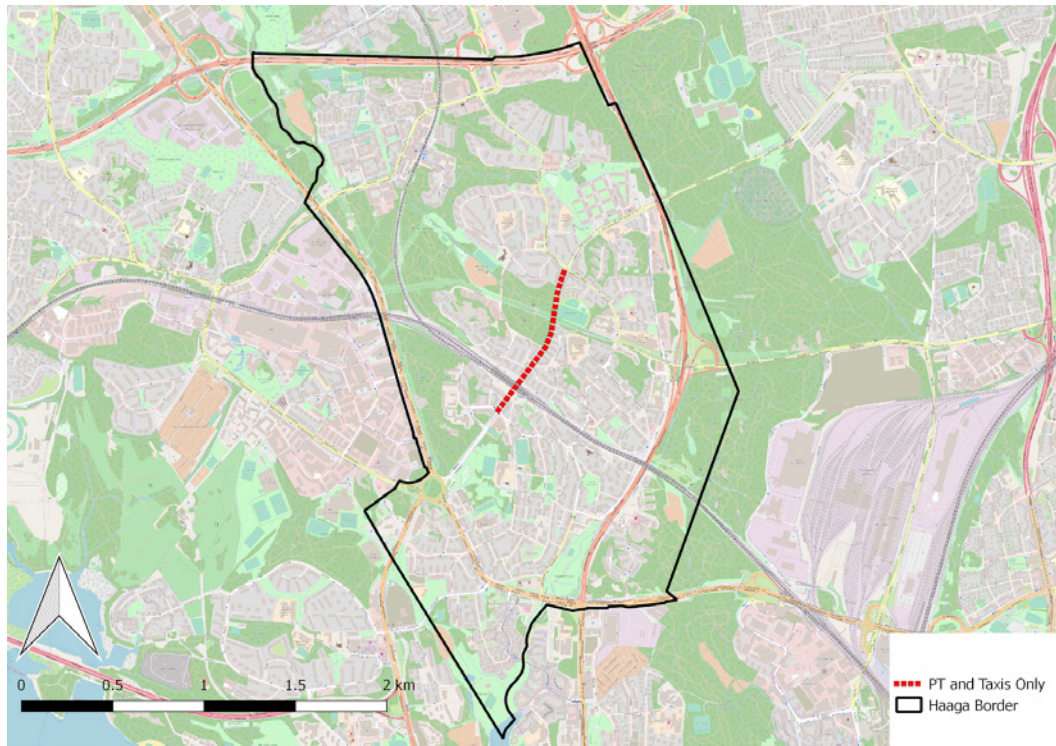


Figure 4. Map of the private-vehicle restriction zone on Eliel-Saarisen Tie.

Arguments in favour of the change are primarily speculative and assumption-based. Unlike in the previous case, where it was directly possible to infer changes to one's commute by observing the new routes buses would take, it is comparatively harder to assess the implications for the district's traffic flows and driver behaviour if the road were opened. Some users have posted arguments such as "*Opening the road would free up road capacity and even out traffic volumes*" and "*Having to drive around the district is not environmentally friendly*", while others present reasonable counter-arguments, for instance that overall traffic may increase due to driving becoming more attractive, and that private vehicles would reduce the reliability and usage of the rapid transit service using the tunnel, perhaps even leading to increased car use compounding the original problem. Regardless of whose argument is better, the point is that the group's views remained divided, and a consensus was never achieved.

"Having kept my eye on this issue for some time, I argue that through-traffic in South-Haaga would reduce by half if Eliel-Saarisen Tie would be open to all. Currently this expensive road has unbelievably low use!" (2017)

"Traffic isn't that simple. New road connections always increase traffic and their removal reduces it. Opening the road would not alleviate through-traffic in Haaga." (2017)

The related discussion is much more debate-like than in the previous case, and the group fails to meet the requirements for connective action. Despite a substantial number of members in the group wishing that the road would be opened, there is an equally if not more substantial portion of members who wish for the opposite. Considering that the route in question is currently planned to be used by the upcoming Jokeri Light Rail, it is perhaps less likely that the issue will be meaningfully discussed in the future, unless strong opposition to the rail project itself emerges in the group. This case illustrates the no-guarantees nature of connective action networks. As Bennett & Segerberg (2012, p. 754) themselves state: "...there is nothing preordained about the results of digitally mediated networking processes. More often than not, they fail badly".

DISCUSSION AND CONCLUSION

This study has observed how locality-based Facebook groups can influence transport planning by using discussion in Haaga-based group as a case study. Two narratives were focused on and analysed based on Warren, Sulaiman & Jaafar's theory of social capital and Facebook-led civic engagement and

Bennett & Segerberg's concept of connective action. Overall, the findings are largely compatible with the existing theories, supporting their validity for assessing and understanding digitally networked action on a collective scale. Evidence of shunning formal organisations as mediators of action, a component of self-organising networks (Bennett & Segerberg, 2012) was however not found in either case, but this may be due to their irrelevance regarding the issues.

The findings further evidence that a novel form of digitally initiated participation emerges from social media networks, one which exists independently from the wills of formal organisations, or in the case of this study, transport authorities. This study adds a qualitative bottom-up perspective to the social media and transport policy literature to go alongside work such as Gal-Tzur, et. al., (2014, 2014b) and Grant-Muller, et. al. More detailed analyses on a larger scale could perhaps be feasible with text mining techniques recommended by the above three studies, alongside the content analysis methodology used in the present study.

The findings suggest that social capital and participatory power found in the Facebook group for Haaga residents is capable of contributing to transport planning, if a sufficient shared vision and relational trust (Warren, Sulaiman & Jaafar, 2015) are achieved through the inclusive personal expressions of thoughts, emotions and action frames (Bennett & Segerberg, 2012) by group members. It is perhaps reasonable to argue that this digitally networked participatory power is not limited to transport issues, but any issue garnering the sufficient emotional loading required to stimulate discussion leading to action. Conroy, Feezell & Guerrero, (2012) further confirm in a study of political engagement among social media users that online groups can produce similar engagement results as traditional offline organisations have done for years in the past. We may see how this plays out soon, as HSL has begun planning new bus routes which will again potentially substantially change the current bus services in Haaga (HSL, 2018). A brief look at the discussion surrounding the issue in the group today appears to generate similar emotions as in case 1, and one group member even comments on the issue with "*Oh no not again*". Other locality-based groups with sufficient numbers and ability to achieve necessary momentum to achieve connective action are in a position to achieve similar outcomes as seen in this study, but it is worthwhile to remember that success is unlikely to be up to the group members alone, no matter how strong-willed they may be, as they seldom have the authority to make changes themselves.

The value of analysing the cases from a social capital perspective using the theoretical framework by Warren, Sulaiman & Jaafar was found to be useful. The level of social capital within a social network, offline or online, is known to strongly affect the rate at which knowledge and information is shared between actors (Nahapiet & Ghoshal, 1998; Chiu, Hsu & Wang, 2006). Use of both the above theory and the theory of connective action allowed for a deeper analysis of the processes and components relevant to stimulating and actualising connective action.

Further bottom-up research is recommended on the ability of social media groups to influence not only transport planning, but other policies and issues of relevance to social groups independently of formal organisations. The findings presented perhaps offer hope to those who consider themselves to be without a voice and ignored in decision-making, as the low-cost and effective communication offered by Facebook and other social media services offer opportunities for meaningful co-operative efforts to influence the world around them.

REFERENCES

- Adressit.com. 2015. Haagalaiset haluavat pitää suoran yhteyden ytimeen! (Online). Accessed: 30.11.2015. Available from: https://www.adressit.com/haagalaiset_haluavat_pitaa_suoran_yhteyden_ytimeen?fbclid=IwAR1oN67mEKWwknKq4KqIDQyQKA-zCiSVFixEptY_B5vZcjW_RQ6iYkzHuwns
- Bennett, W.L. & Segerberg, A. 2012. The Logic of Connective Action: The Personalisation of Contentious Politics. *Information, Communication & Society*. 15(5). Pp. 739-768
- Conroy, M., Feezell, J.T. & Guerrero, M. 2012. Facebook and political engagement: A study of online political group membership and offline political engagement. *Computers in Human Behaviour*. Vol. 28. Pp. 1535-1546.
- Chiu, C-M., Hsu, M-H. & Wang, E.T.G. 2006. Understanding knowledge sharing in virtual communities: An integration of social capital and social cognitive theories. *Decision Support Systems*. Vol. 42. Pp. 1872-1888
- Donath, J. & Boyd, D. 2004. Public displays of connection. *BT Technology Journal*. Vol. 22(4). Pp. 71-82
- Gal-Tzur, A., Grant-Muller, S.M., Minkov, E., Nocera, S. & Shoor, I. 2014. The Impact of Social Media Usage on Transport Policy: Issues, Challenges and Recommendations. *Procedia -Social and Behavioural Sciences*. Vol. 111. Pp. 937-946
- Economic and Social Research Council (ESRC). 2012. ESRC Framework for Research Ethics (FRE) 2010 Updated September 2012. (Online). Accessed: 12.12.2018. Available from: <https://esrc.ukri.org/files/funding/guidance-for-applicants/esrc-framework-for-research-ethics-2010/>
- Gal-Tzur, A., Grant-Muller, S.M., Kuflik, T., Minkov, E., Nocera, S. & Shoor, I. 2014b. The potential of social media in delivering transport policy goals. *Transport Policy*. Vol. 32. Pp. 115-123
- Gordon, R.S. & Stephens, M. 2007. Building a Community: Create your own social network. *Computers in Library 2007*; November/December
- Graneheim, U.H., Lindgren, B. & Lundman, B. 2017. Methodological challenges in qualitative content analysis: A discussion paper. *Nurse Education Today*. Vol. 56. Pp. 29-34
- Grant-Muller, S.M., Gal-Tzur, A., Minkov, E., Nocera, S., Tsvi, K. & Itay, S. 2014. The efficacy of mining social media data for transport policy and practice. *Transportation Research Board 93rd Annual Meeting Conference Paper*.
- HSL. 2018. Helsingin poikittaisyhteyksien kehittäminen. (Online). Accessed: 28.1.2019. Available from: <https://www.hsl.fi/poikittaisyhteydet>
- Kosinski, M., Matz, S.C., Gosling, S.D., Popov, V. & Stillwell, D. 2015. Facebook as a research tool for the social sciences: Opportunities, challenges, ethical considerations and practical guidelines. *American Psychologist*. Vol. 70(6). Pp. 543-556.
- Leana, C.R. & Van Buren, H.J. 1999. Organizational social capital and employment practices. *Academy of Management Review*. 24(3). Pp. 538-555
- Mandarano, L., Meenar, M. & Steins, C. 2010. Building Social Capital in the Digital Age of Civic Engagement. *Journal of Planning Literature*. Vol. 25(2). Pp. 123-135.
- Nahapiet, J. & Ghoshal, S. 1998. Social capital, intellectual capital, and the organizational advantage. *The Academy of Management Review*. Vol 23(2). Pp. 242-266.
- Park, N., Kee, K.F. & Valenzuela, S. 2009. Being immersed in social networking environment: Facebook groups, uses and gratifications, and social outcomes. *CyberPsychology & Behaviour*. Vol. 12(6). Pp. 729-733
- Tervo, T. 2015. Haagalaiset haluavat pitää suoran yhteyden ytimeen. *Helsingin Uutiset*. 20.11.2015 (Online). Accessed: 25.11.2018. Available from: https://www.helsingin uutiset.fi/artikkelit/339402-asukkaat-raivostuivat-hsln-bussisuunnitelmasta-adressi-kerannyt-jo-satoja-nimia?fbclid=IwAR1ydn8hkOIA4f-UnrfyFxBv9XU_Sz98bzKj12ZwuQ0GcTRA4aV3Atnyds
- Valenzuela, S., Park, N., & Kee, K.F. 2008. Lessons from Facebook: The Effect of Social Network Sites on College Students' Social Capital. Paper presented at the 9th International Symposium on Online Journalism, Austin, Texas, USA.
- Warren, A.M., Sulaiman, A. & Jaafar, N.I. 2015. Understanding civic engagement behaviour on Facebook from a social capital theory perspective. *Behaviour & Information Technology*. Vol. 34(2). Pp. 163-175.

PLACES OF MEMORY IN PLANNING

A CASE STUDY OF DEMENTIA FRIENDLINESS IN POHJOIS-HAAGA

Tuomas Tavi

PLANNING FOR PPL
WITH DEMENTIA

“Considering the question of dementia friendliness and how to improve it, distinctiveness of a given environment can also be developed without changing the environment completely. For instance, this could be done by the usage of street art. Here it is important to also understand that when creating distinctiveness this way, it simultaneously creates a change. For people with dementia any change is most likely to be confusing and should be avoided. Therefore, any change implemented must be incremental and express the meaning or function of the place, as already mentioned by Mitchell and Burton (2006).”

INTRODUCTION

People are greatly affected by the surrounding built environment they live in. Especially in urban areas, everyday activities quite often happen in the proximity of the home, and the older a person gets the smaller the range for everyday activities becomes (Ruonakoski, 2004, pp. 11). It can be argued, that the localness related to these places and their social realms, often creates meaning in people's lives. It is also often stated that, people who have lived their lives in a certain environment, would also like to grow old in a familiar place (Neven, 2015, pp. 32). How the process of individual aging eventually turns out, is always a unique case. Strong currents of demographic changes and policy actions influence the pool of possibilities that people eventually receive within their old age. In the context of city planning, the quest is usually to design a city suitable for the average individual. When planning takes the average individual as the starting point, many groups with special needs are easily abandoned in the process, often unintentionally.

This article touches on the theme of urban and planning geography of aging, especially in the context of the assumedly increasing prevalence of dementia (Prince et al. 2016, pp. 11), which is a possible development direction in Haaga. How do people living with the early stages of dementia possibly position themselves in their local environment? Eventually, we move onto how this theme relates to the greater question of social sustainability. In Haaga, multiple historical layers of larger urban developments are present in a relative small area, well depicting the late Finnish urbanization developments that took off after the 1950s. This is a qualitative and multidisciplinary article that looks at how this development has affected the dementia friendliness of these living environments in Haaga.

RESEARCH QUESTION

This article studies the dementia friendliness of two different environments in the northern part of Haaga: Pohjois-Haaga II and the Teuvo Pakkalan tie -area. The scope is on the perspec-

tive of elderly people whose lives are affected by the early stages of dementia. The objective is to spot elements in the built structures that are important for the question of dementia friendliness. Simultaneously, the aim is to try and understand how different principles that different eras in the history of city planning have affected developments, and how planning for people with dementia has been considered generally in the context of research in city planning.

CONCEPTS AND LITERATURE REVIEW

DEMENTIA AND AGING POPULATION

The World Health Organization has defined dementia as “a syndrome in which there is deterioration in memory, thinking, behavior and the ability to perform everyday activities.” The syndrome is common, especially among elderly people. Dementia includes several symptoms which result from various diseases (WHO 2017). Dementia has an impact on the person’s ability to be independently active in daily life, both at home and in the surrounding environment. In the context of the built environment, accessibility, legibility and distinctiveness of the environment are key elements that should be considered when thinking about how people with dementia live in their lives in these developments (Brorsson et al., 2011 & Mitchell et al., 2006, pp. 29-32). It is essential, since so far there is no cure for the condition, to also consider the problem through other perspectives than a strict medical approach.

The global prevalence of dementia is increasing, and the prevalence of dementia is strongly connected to the size of elderly cohorts (ADI, 2015, pp. 68-69). On the Finnish scale, the latest population projections depict that the demographic development of the nation is moving towards a diminishing younger population and an increasing elderly population (Official Statistics of Finland, 2018). One reason behind the growing elderly cohorts is the decreased mortality rate, which can also be seen in the steadily increased life expectancy figures (Official Statistics of Finland, 2010). This current trend reveals that extensive aging of the population is expected to continue to happen.

There are approximately over 190 000 people with dementia in Finland, but accurate statistical figures do not exist. Therefore, there are no exact figures on the amount of people with dementia living independently at home either. Estimation from the year 2007 reveals that 60 % of people with dementia in Finland were living at home, and two-thirds of those people were

living alone (Sievänen et al., 2007, pp. 9). Studies from abroad give similar results about the proportion of people with dementia living independently (Biglieri, 2017, pp. 265). These figures indicate the growing importance of exploring and examining the everyday built environment of these people.

It is estimated that by 2050 the amount of people with dementia will continue to grow across Europe, with Finland being no exception. Concerning the case of Haaga, according to the latest regional projections, it is expected that the population of over 75-year-old people will increase by 25 000 persons by 2030 (City of Helsinki, 2018, pp. 25). From this we can assume the same pattern to be found in Haaga.

IMPORTANCE OF PLACE AS A CONCEPT WITH DE- MENTIA

Much of the research done in the field of dementia has focused on the individual; how the condition of dementia progresses and how it is experienced by the person affected by it, as well as those close to them (McGovern, 2017, pp. 665, 677). McGovern has studied the concept of place in relation to dementia. She believes that place, the supposedly familiar everyday environment, should be examined more fully within research than what has been so far. According to McGovern, usage of the everyday environment, as well as outside its formal forms, such as public transport and senior centers, can support the quality of life in old age. McGovern explores the importance of the social and geographic landscapes that exist in the everyday surroundings of people living with dementia. Her study involved couples, where only one was affected by the condition, while the other one was the carer, though the same logic can also be applied to people with dementia living on their own.

The built environment also has meanings outside its visible and obvious functions. It contains memories on several levels, from collective memory to personal memory, where specific places have meaning and history of their own for the subject (Kervanto Nevanlinna, 2013, pp. 275). What happens when recent memories start to vanish? Does the importance of still familiar places become even stronger? Philips et al. (2011) have looked at how elderly people feel about unfamiliar places (pp. 95). According to them, unfamiliarity and placelessness are becoming more and more present in the contemporary world, with parallel copy-like environments all around the globe. For the elderly with cognitive impairments, the case is even more evident, when suddenly even familiar places may become unfamiliar. According to Philips, meaning attached to place could be “conveyed by the aesthetics and facilitated through accessibili-

ty”. Place specific meaning can also be conveyed by memories, common or private, but enhanced. According to Philips et al. the key for this task is to avoid falling into placelessness.

PLANNING FOR PEOPLE WITH DEMENTIA

Why is dementia and planning a question to consider together? Trying to understand the stance of people with different conditions or disabilities is a thematic part of social sustainability. Even though increasing attention has been given to city planning in relation to aging, the requirements within the built environment for people with dementia has not been discussed enough (Biglieri, 2017, pp. 268). Here, again, it must be emphasized that the scope of this article is limited to people with early stage dementia.

People with dementia can normally live their daily life in their home neighborhood, carrying out everyday activities, such as grocery shopping for instance (Duggan et al., 2008, pp. 194). To be able to go around and meet people in the local context are considered as important values for both people with, or without, dementia. Simultaneously, it has been noted that, as people get older, their physical “home range” gets gradually smaller (Duggan et al., 2008, pp. 199). Therefore, the qualities of the very nearby environment of their home becomes more important as people age and their abilities to move around decline.

Research has commonly shown that people living with dementia get more easily lost in their daily environments (Sheehan et al., 2006, pp. 276-277). A study by Sheehan, concluded that people with dementia use similar wayfinding methods than people without the condition. In other words, when planning common surroundings for people living with dementia, this can be done in the same fashion as for people without the syndrome. It is mutually beneficial for both categories of people.

The concept of aging-in-place has become more and more present in environmental gerontology and public policies (Bernard & Rowles, 2013 pp. 8). As a pursued general agenda, aging-in-place means that, as people get older, they should be able to stay within their home setting as long as possible. Philips (2013, pp. 219-220) has considered the question of creating meaningful places and spaces in old age, and the role that urban planning can have in the task. According to her, place and meaning are created in a temporal setting; memories of places and spaces are important for locals as they are simultaneously “aging-in-place”, temporally. How to achieve this through planning can be a demanding task. It has been studied that navigating in public spaces is different, and can be more demanding, for people with

cognitively disabling disorders (Brorsson et al., 2011, pp. 296-297). According to Brorsson et al., in this framework, accessibility is a constantly changing experience of the relationship between the person and public space. The benefits that come along from being active outdoors, in the mild to moderate stages of dementia, have also been discussed. Expectations are that active living is a positive factor in the lives of people with dementia (Blackman et al., 2007). Accessibility and readability of the environment, in general, are elements which support this endeavor. For instance, the usage of clear guidance signs, instead of maps, has been noted as an important element in creating dementia friendly environments (Blackman et al., 2007). Also, any changes to normality within the environment are considered as negative impacts for people with dementia.

Possibly the most thorough study that has been carried out in the field of planning for people with dementia, at the neighborhood level, has been conducted by Mitchell and Burton (2010). In their study, they came up with six main design principles for dementia-friendly neighborhoods: *familiarity*, *legibility*, *distinctiveness*, *accessibility*, *comfort* and *safety*.

According to Mitchell and Burton:

- *Familiarity* refers to how well people with dementia know their home neighborhood.
- *Legibility* means how well people with dementia can understand their position and orientate themselves within the setting.
- *Distinctiveness* of the environment is used to capture people’s attention (landmarks for instance) to help them orientate themselves.
- *Accessibility* refers, especially, to areas without obstacles and entrances without physical or cognitive barriers.
- *Comfort* relates to the absence of physical and psychological discomfort in the surroundings.
- *Safety* refers to the general feeling of safety in the environment.

In the following parts of this article these principles are used to compare two differently built environments in North Haaga, *Pohjois-Haaga II* and the *Teuvo Pakkalan tie-* area, in terms of their dementia friendliness.

METHOD

This article is a case study comparing Pohjois-Haaga II and the

Teuvo Pakkalan tie -area according to dementia-friendliness checklist criteria created by Mitchell and Burton.

The criteria for evaluating Haaga in this article has been developed from three different documents (Mitchell & Burton, 2004, 2006 & 2010) that were produced from a three-year research project conducted by the WISE (Wellbeing in Sustainable Environments) research unit at the Oxford Institute for Sustainable Development at Oxford Brookes University. The criteria suggested by Mitchell and Burton have been evaluated by Biglieri (2017) and proven to be valid in their context. The Finnish context of planning and built environment differs from the Anglo-Saxon, but for the scope of this article, the applied form of the criteria is considered applicable.

From these three documents, 6 principles, including altogether 64 different checklist conditions, have been chosen for describing dementia-friendliness in the neighborhoods used within the comparison. If the neighborhood fits a given checklist criteria, it is scored 1 point. The observations of the study were done during two visits to the setting in November 2018. One of the visits was done in daylight, and another after dark to gain an understanding of the lightning conditions a well. The method of this study is limited and therefore any results cannot be broadly generalized.

The Case of Haaga (Describing the Setting of the Study)
Both areas, Pohjois-Haaga II and the Teuvo Pakkalan tie -area, are examples of planning and building an entire residential area from the scratch. When compared with each other, the areas differ a lot in their visual appearance, but they have also several similar elements, like walkability and semi-private yards. The main differences come in the form of building layout and style, both elements given by the ideals and conditions of the times they were designed. Also, the geographic elements, like flatness and elevation changes, have had an impact on how the area is experienced, and seen, by residents. The entire neighborhood of northern Haaga has several nursing homes and other daytime services for elderly people. Local primary services are set within a 500-meter radius all around both neighborhoods, which fits the *accessibility* principle given in the criteria.

A general element for the entirety of Pohjois-Haaga is proximity to nearby nature areas. The setting of Haaga has been previously studied by daily walks with residents of the area by Kirsi Mäkinen. These “walking interviews” revealed that going around a neighborhood by foot is strongly connected to bodily remembering, knowing and creating personal meaning to the area (Asikainen & Mäkinen, 2013, pp. 129-162).

POHJOIS-HAAGA II

Pohjois-Haaga II (Figure 1) is a classic example of 1950s suburban planning in Helsinki, where a lot of elements were applied from Otto-Iivari Meurmann’s 1940s planning principles in *Asemakaavaoppi* (Karlsson et al., 2012, pp. 20). The principles meant that efficient urban planning principles were turned upside-down. Instead of building parks in cities, the ideal was to inhabit people in a more parklike environment, where growth was controlled, and the general environment considered healthier.

Pohjois-Haaga II is the result of a planning process started in 1949 (Karlsson et al., 2012, pp. 6). A great demand for housing had resulted in Helsinki, with the city acquiring land from Haaga in order to release these pressures. Pohjois-Haaga II was one of the three local detailed plans (Pohjois-Haaga I, II & III) created for north Haaga between 1949 and 1955. Each of these plans were a part of a larger series of developments in Helsinki. For instance, the same principles were broadly applied in the new suburban areas of Herttoniemi and Roihuvuori (Herranen et al., 1997, pp. 136). Therefore, similar built environments can nowadays be found in several locations in Helsinki. It has been mentioned, that from these three plans for Haaga, Pohjois-Haaga II represents best the principles of the 1950s planning and, generally, the mindset towards urban and suburban living that existed after the Second World War (Karlsson et al., 2012, pp. 26). The main planning principle of the time was to build neighborhood units or cells, separated from each other and from the main artery roads by forest isles or parks (Tarjanne, 2007, pp. 9). The layout of the streets were designed to follow the topography of the area. This is a distinctive element for the 1950s planning and aligns with the principles of planning for people with dementia.

TEUVO PAKKALAN TIE -AREA

Like Pohjois-Haaga II, the Teuvo Pakkalan tie -area (Fig 1) was also created relatively fast. The local detailed plan for the area was finished in 1970 and the whole area was ready by 1973 (Tarjanne, 2007, pp. 14). Again, Pohjois-Haaga was developing in the larger framework of the entire of Helsinki. In the 1960s, the population was still increasing, and Helsinki city officials had initiated housing programs that required more efficient high-rises and land use. The new establishments were to be built in the proximity of already existing housing areas, so that new residents could use their existing services and the building process was able to be started fast (Herranen et al., 1997, pp. 172). The development was directed to stop the unwanted

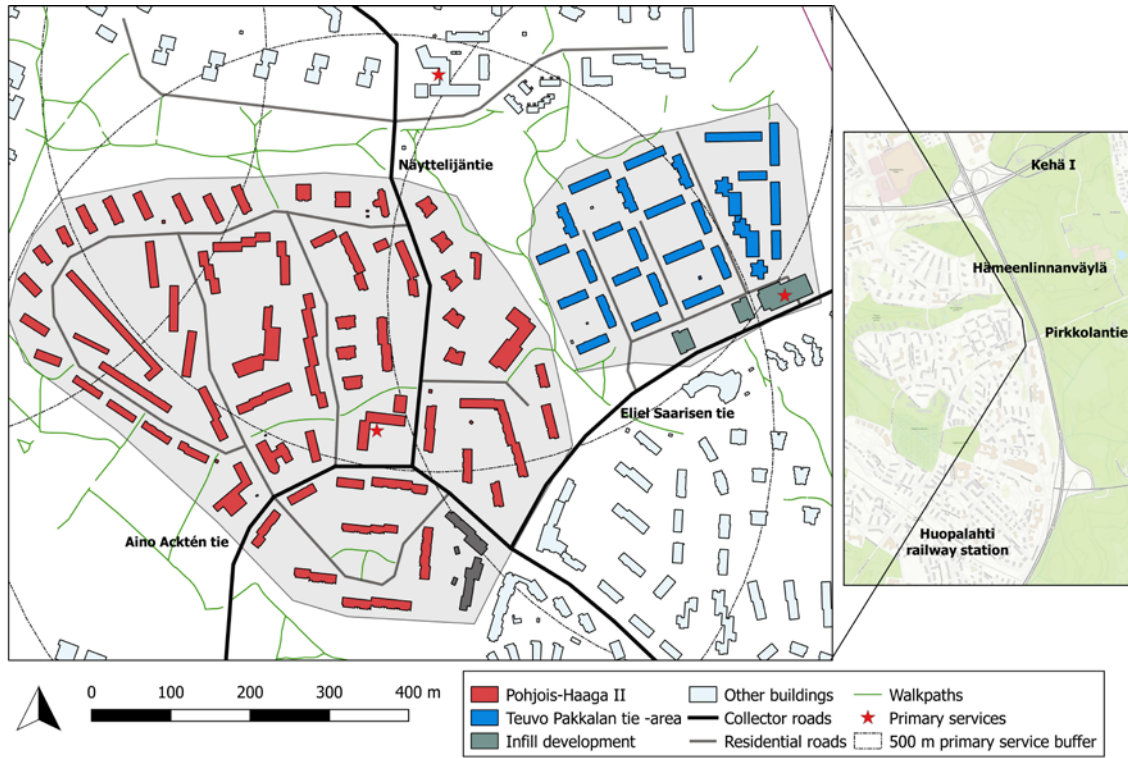


Figure 1. Study area and different features presented on map.

scattering of city structure (Herranen et al., 1997, pp. 185). Because of these shifts in the general city development discursion, Pohjois-Haaga II and the Teuvo Pakkalan tie -area differed greatly from each other, despite the proximity of the areas. A concrete way to compare the developments is to have a look at the coarse area efficiencies which are 0,45 (Pohjois-Haaga II) and 0,79 (Teuvo Pakkalan tie -area).

The outcome of the Teuvo Pakkalan tie -area was a unanimously built set of box-like high-rises, arranged in squares that resemble windmills in their formation. The prefabricated building technique used in the houses represent well the constructions principles of that era. Originally, carparking in the area was supposed to be located on the sides of the area, so as not to disturb the body of the “windmill blocks” (Helsinki City Planning Bureau, 2006, pp. 4). Later, carparking was pointed to small pockets in street areas and this is still evident today, making car parking a dominant issue in the area.

The “planning machine” of that time has been criticized for not being able to produce an environment which would have been better accepted by the public (Kervanto Nevanlinna, 2015, pp. 37 & Herranen et al., 1997, pp. 174). The building of the Teuvo Pakkalan tie -area had been a major change in the area, according to older residents who can remember the area before the development. The area and its planning principles have also been architecturally criticized for not creating interesting street views, an element contradictory to the principles of dementia-friendliness (Helsingin kaupungin rakennusvirasto, 2007, pp. 232-233).

OBSERVATIONS IN THE TEUVO PAKKALANTIE -AREA

FAMILIARITY OF THE ENVIRONMENT

The area has remained relatively untouched since the 1970s. The three closest buildings to Eliel Saarisen tie were built in the 2010s, with a new entrance road. This has not affected the inner parts of the area, only entering the area from Eliel Saarisen tie is different. Local distinctiveness is well maintained in the area.

LEGIBILITY OF THE ENVIRONMENT

The area has only 3 streets for cars, all dead-ended. In the inner parts of the area, a hierarchy of pathways, and separation of pavement from parking areas, is not always clear.

The majority of the buildings are arranged so that they cre-

ate a clear form and rectangular yards between them. The yards can be accessed from narrow slots between the buildings which emphasize the semi-public nature of them. Streets are straight and relatively short. If the area had been larger, the orthogonal layout of the buildings could have resulted in longer street views and a less pleasing environment. Orthogonality in the layout and proximity of the buildings have had an impact on the continuity of views inside the area. At several spots in the area continuity is missing. The functions of the residential buildings can be easily understood in the Finnish context. However, entrances to buildings may not always be visible or understandable from a distance when looked at from a tight angle.

DISTINCTIVENESS OF THE ENVIRONMENT

The area is very homogenous in its form and style. Pathways besides the yards areas are narrow and often well defined by bush fences. Inner yards in the area provide some distinctive garden features, like gazebos and playgrounds. Distinctiveness and variety of form in the area are created only by different heights and colors of the buildings.

ACCESSIBILITY OF THE ENVIRONMENT

Only some housing blocks in the area have been separated by fences. Most of the green areas in the inner, semi-private yards are accessible without difficulty and their function are easily readable. The green spaces clearly belong to the dwellings next to them, though accessibility is often not restricted by fences or signs. In general, walkability is good in the area.

COMFORTABILITY OF THE ENVIRONMENT

The area is peaceful. During the two visits, no social disturbances were noticed. Within the area it is possible to choose different paths since the housing blocks are compact, though often providing possibilities for passing through them. Proximity of nearby nature is evident.

SAFETY OF THE ENVIRONMENT

Pedestrian paths within the area are separated from car lanes and bikes on the streets. Traffic is not a major issue. Great pedestrian crossings do not exist within the area. Since a great part of the inner yard areas are dedicated to car parking, the general open space of the area is not entirely free from motorized traffic.

Lighting in the evening time is good in street areas and parking lots, but for the inner yards this was not the case. Also, relatively densely built, high-rise apartments create large shad-



Figure 3. Broad junction and street view in Pohjois-Haaga II.

ows in the environment, which is undesired by the criteria.

OBSERVATIONS IN POHJOIS-HAAGA II

FAMILIARITY OF THE ENVIRONMENT

Changes in the Haaga II -area since the 1950s have been minimal and have involved only some aesthetic elements in the buildings. Infill development of two residential buildings has occurred in the southern corner of the area. This has not affected the area in general. As the volume of cars has increased since the 1950s, some of the yard areas have been transformed into parking lots. The local distinctiveness of the place has persevered well. The area has some clear landmarks of its own: Thalianaukio, the elementary-school, the church, the old electricity transformers and the famous glacial erratic next to Näyttelijäntie.

LEGIBILITY OF THE ENVIRONMENT

The street network is a loose irregular grid with long, gently bending streets coming together at the end. Interesting continuities in the street views exist. Some of the long street sections, with similar looking housing and relatively few junctions, can be challenging for orientation.

Street hierarchy is visible. Local collector streets and residential streets are distinguished from each other by their width. The next level in the hierarchy are the walk paths. The area provides alternative routes for walking, which makes it possible to avoid the busier collector street of Näyttelijäntie, for instance.

DISTINCTIVENESS OF THE ENVIRONMENT

The architectural style of the area is homogenous and follows a clear theme of 3-4 story residential buildings with red gable roofs and plastered facades. The functions of the buildings are easy to recognize, for instance entrances to places and buildings. The sizes and shapes of the buildings vary, and irregularity in the layout and their positioning in the existing topography creates variance in the scenery. The openness and park-like feeling that is achieved in-between buildings is a result of the lack of fences or low walls between the houses and lots. The distinctiveness of the place is also created by the variety of different trees and bushes in the yards and along the streets.

ACCESSIBILITY OF THE ENVIRONMENT

All the buildings and entrances are not freely accessible, when judged against contemporary standards. In addition to these semi-private yards, public pathways also exist in the area, creat-



Figure 2. Narrow street in Teuvo Pakkalan tie -area.

ing alternative and walkable routes with benches which connect the grid better. The pavements in the residential streets are relatively narrow. Pohjois-Haaga II was built following the topography and this can be noticed in the area with clear reliefs in the yards and streets. The area is not flat.

COMFORTABILITY OF THE ENVIRONMENT

The general feeling within the place is peaceful and welcoming. Pohjois-Haaga II can be described as an idyllic and well reserved 1950s environment. Since the area is not mixed-use, the street clutter is minimal and confined to Thalianaukio. The area is park-like in its appearance, housing blocks are not always separated by fences, but by continuous green yards areas between them.

SAFETY OF THE ENVIRONMENT

The area is well lit in the evening time, and the same goes for walk paths in the surrounding forest area. The dominance of parked cars on the streets can also be considered as a factor increasing safety on the pavement by blocking it from the street. Some gravel walkways between the lots are missing lighting. Näyttelijäntie is a dominant and wide collector road, which can be challenging to cross by foot. Lights and sound cues are put in place at some points.

RESULTS

When the dementia friendliness of both developments were evaluated with the 64 different checklist criteria elements, the results were that Pohjois-Haaga II performed better (Table 1.) As the evaluation was based only on one personal interpretation, the results cannot be considered as statistically significant, though the analysis provides insight for a discussion about dementia friendliness of the different building principles that these two areas represent.

As a summary of the results, a few notions can be made. The main differences between the housing areas are related to distinctiveness and legibility of the environment. Arguably one of these fundamental differences occurs because of the layouts of the street systems. The gently bending streets of Pohjois-Haaga II are a more desired element when planning an easily legible environment, when compared to the orthogonal, somewhat fixed and narrow, grid in the Teuvo Pakkalan tie -area. Distinctiveness in architectural forms and styles are also more varied in Pohjois-Haaga II. Many T-junctions are used in the area, as a dementia friendly element. Prefabricated building blocks used in the Teuvo Pakkalan tie -area create a dense monotonous environment, but walkability is good.

The Teuvo Pakkalan tie -area is a more compact environment which can help orientation compared to some distant

Principle	Dementia Friendliness Score*		
	Teuvo Pakkalan tie -area	Pohjois-Haaga II	Maximum score
Familiar environment	6	7	7
Legible environment	12	16	20
Distinctive environment	2	6	8
Accessible environment	5	5	7
Comfortable environment	6	5	10
Safe environment	8	10	12
Total	39	49	64
%	0,61	0,76	1,00

* The score and criteria are applied from dementia friendliness checklist criteria created by WISE research unit at the Oxford Institute for Sustainable Development at Oxford Brookes University (Mitchell & Burton 2004, 2006 & 2010)

Table 1. Score for dementia friendliness of the studied developments.

parts of Pohjois-Haaga II, where it can be more difficult to orientate oneself in relation to the whole of the area. People in neither of the areas are likely to be distracted by sudden heavy noises. Since there are no great roads in the Teuvo Pakkalan tie -area, traffic is a minor issue, except for the dominance of parked cars. Due to the cultural-historically recognized status of Pohjois-Haaga II, it can be assumed that any greater changes of physical structures in Haaga are more likely to happen in the Teuvo Pakkalan tie -area. Safety and comfortability are good in both settings.

DISCUSSION

What can eventually be said in terms of this small study? The focus was on discerning how the current built environment in Haaga is seen from the perspective of people with early stage dementia, and how different planning principles of different eras have affected that development. Even though Pohjois-Haaga II received a better score in the comparison, it would be too strong to claim that people within the early stages of dementia are clearly better off there. The development of the Teuvo Pakkalan tie -area is also almost already 50 years old, and therefore it is relevant to say that it must hold meaning and place attachment to a significant amount of people. Feelings of attachment, and knowing a place, are subjective experiences. People who have lived a long time in the area, and consider it as suitable for aging-in-place, are completely correct in this matter. Therefore, instead of addressing the fact that the Teuvo Pakkalan tie -area is worse for a people with dementia than the more picturesque setting of Pohjois-Haaga II, this article has instead tried to address some of the planning principles or techniques that have affected the outcome, in both positive and negative ways. In the end, planning has the greatest impact on the built structures where people live their daily lives, and therefore the underlying principles of planning (current or past) should be made visible. This idea is also in line with the ideologies of participatory planning.

Considering the question of dementia friendliness and how to improve it, distinctiveness of a given environment can also be developed without changing the environment completely. For instance, this could be done by the usage of street art. Here, it is important to also understand that when creating distinctiveness this way, it simultaneously creates change. For people with dementia, any change is more than likely to be confusing and should be avoided. Therefore, any change implemented must be incremental and express the meaning or function of the

place, as already mentioned by Mitchell and Burton (2006).

Following these notions, it can be concluded that the principles and guidelines created for dementia friendly environment work best when applied to new developments yet to come. Especially when considering the expected trends of an aging population and the simultaneously occurring urbanization development, city planning professionals should consider all the different groups with differences and how they are affected by planning. Once a development has been built, and people have started to create place-based meanings to the surrounding environment, it is difficult to redirect these personal meanings, especially in old age. Therefore, for further study, an interesting question to ask could be, how can planning be done so that it helps people to better create attachment and meaning to place?

REFERENCES

- ADI. 2015. *World Alzheimer Report 2015 - The Global Impact of Dementia: An analysis of prevalence, incidence, cost and trends*. Alzheimer's Disease International (ADI). London.
- Asikainen, E. & Mäkinen, K. 2013. Jalat muistavat ja askeleet kertovat. *Muistin kaupunki - Tulkintoja kaupungista muistin ja muistamisen paikkana*. Edited by Lento, K. & Olsson P. Suomalaisen kirjallisuuden seura. Hansaprint Oy. Vantaa.
- Bernard, M. & Rowles, G. D. 2013. *Environmental gerontology: Making meaningful places in old age*. New York, NY: Springer.
- Blackman, T., Schaik, P. & Martyr, A. 2007. *Outdoor environments for people with dementia: An exploratory study using virtual reality*. Ageing and Society. 27. 811-825. 10.1017/S0144686X07006253.
- Biglieri, S. 2017. *Implementing Dementia-Friendly Land Use Planning: An Evaluation of Current Literature and Financial Implications for Greenfield Development in Suburban Canada*. Planning Practice & Research, 33:3, 264-290, DOI: 10.1080/02697459.2017.1379336
- Brorsson, A., Öhman, A., Lundberg S. & Nygård, L. 2011. *Accessibility in public space as perceived by people with Alzheimer's disease*. Dementia 10(4) 587-602. sagepub.co.uk/journalsPermissions.nav DOI: 10.1177/1471301211415314. dem.sagepub.com
- City of Helsinki. 2018. *Helsingin ja Helsingin seudun väestöennuste 2018-2050 - Ennuste alueittain 2018-2030*. Tilastoja 2018:18. Helsingin kaupunki, kaupunginkanslia, kaupunkitutkimus ja -tilastot.
- Duggan, S., Blackman, T., Martyr, A., & Schaik, P. V. 2008. *The impact of early dementia on outdoor life: A 'shrinking world'?*. Dementia, 7(2), 191-204. <https://doi.org/10.1177/1471301208091158>
- Helsingin kaupungin rakennusvirasto. 2007. Haagan aluesuunnitelma 2007-2016. Aspiala, A. et al. *Helsingin kaupungin rakennusviraston julkaisuja 2007:1 / Katu- ja puisto-osasto*. Yliopistopaino.
- Helsinki City Planning Bureau. 2006. *Teuvo Pakkalan tien Länsipuoli-*

- nen Alue - 29. *Kaupunginosa Haaga, Pohjois-Haaga - Asemakaavanmuutoksen selostus*. Helsingin kaupunkisuunnitteluvirasto. Asemakaavaosasto 2006-11590. Dated 26.10.2006.
- Herranen, T., Hoffman, K. & Turpeinen, O. 1997. *Helsingin historia vuodesta 1945: 1, Väestö, Kaupunkisuunnittelu ja asuminen, Elinkeinot*. Helsinki: Helsingin kaupunki.
- Karlsson, K., Schalin, M., Oittinen, M. & Soini M. 2012. Pohjois-Haaga rakennettu kulttuuriympäristö – arvot ja ominaispiirteet. *Helsingin kaupunkisuunnitteluviraston asemakaavaosaston selvityksiä 2012:2*. Helsingin kaupunkisuunnitteluvirasto.
- Kervanto Nevanlinna, A. 2013. Rakennettu kaupunki muistin ja merkityksen kiinneohtana. *Muistin kaupunki – Tulkintoja kaupungista muistin ja muistamisen paikkana*. Edited by Lento, K. & Olsson P. Suomalaisen kirjallisuuden seura. Hansaprint Oy. Vantaa.
- Kervanto Nevanlinna, A. 2015. Raikas pohjoismainen asuntoalue. *Pohjois-Haaga: luonnon keskellä kasvava moderni kaupunginosa*. Pohjois-Haaga Seura. ISBN: 9789529359103
- McGovern, J. 2017. *Capturing the significance of place in the lived experience of dementia*. *Qualitative Social Work*, 16(5). pp. 664–679. doi: 10.1177/1473325016638424.
- Mitchell, L., Burton, E. & Raman, S. 2004. *Neighbourhoods for Life: a checklist of recommendations for designing dementia-friendly outdoor environments*. Housing Corporation and Oxford Brookes University.
- Mitchell, L. & Burton, E. 2006. *Neighbourhoods for life: Designing dementia-friendly outdoor environments*. *Quality in Ageing and Older Adults*, Vol. 7 Issue: 1, pp.26-33, <https://doi.org/10.1108/14717794200600005>
- Mitchell, L. & Burton, E. 2010. *Designing Dementia-Friendly Neighbourhoods: Helping People with Dementia to Get Out and About*. *Journal of Integrated Care*. 18. 12-19. 10.5042/jic.2010.0647.
- Neven, L. 2015. By any means? Questioning the link between gerontechnological innovation and older people's wish to live at home. *Technological Forecasting and Social Change*. Volume 93. 2015. Pages 32-43. ISSN 0040-1625. <https://doi.org/10.1016/j.techfore.2014.04.016>.
- Official Statistics of Finland (OSF). 2018. *Population projection 2018–2070*. [online]. Available at: http://www.stat.fi/til/vaenn/2018/vaenn_2018_2018-11-16_tie_001_en.html. ISSN=1798-5153. 2018. Helsinki: Statistics Finland [Accessed 7 Dec. 2018].
- Official Statistics of Finland. 2010. *Elämme toistakymmentä vuotta elinajanodotetta pidempään*. [online]. Available at: https://www.tilastokeskus.fi/artikkelit/2010/art_2010-02-18_001.html?s=7&tulosta. [Accessed 7 de. 2018]
- Philips, J., Walford, N. & Hockey, A. 2011. *How do unfamiliar environments convey meaning to older people? Urban dimensions of placelessness and attachment*. *International Journal of Ageing and Later Life*, 2011 6(2): 73-102.
- Philips, J. 2013. *Older People's Use of Unfamiliar Space*. *Environmental Gerontology: Making Meaningful Places in Old Age*. Edited by Rowles, G. D. & Bernard, M. Springer Publishing Company. 2013.
- Prince, M. et al. 2016. Recent global trends in the prevalence and incidence of dementia, and survival with dementia. *Alzheimer's Research & Therapy*. 8:23. 10.1186/s13195-016-0188-8.
- Ruonakoski, A. 2004. *Sujuvampi arki ikääntyville – Yhdyskuntien suunnittelu, rakentaminen ja ylläpito väestön ikääntyessä*. Suomen Kuntaliitto. ISBN 978-952-293-221-1 (pdf 2014). ISBN 951-755-843-1 (printed 2004).
- Sheehan, B., Burton, E. and Mitchell, L. 2006. *Outdoor way-finding in dementia*. *Dementia*. 5(2). pp. 271–281. doi: 10.1177/1471301206062254.
- Sievänen, L., Sievänen, M., Välikangas K. & Eloniemi-Sulkava, U. 2007. *Opas ikääntyneen muistioireisen kodin muutostöihin*. Ministry of the environment.
- Tarjanne, H. 2007. *Helsingin rakennuskulttuuri – Pohjois-Haaga rakennusinventointi*. Helsingin kaupunginmuseon tutkiuksia ja raportteja 1/2007. Edita Prima Oy. Helsingin kaupunginmuseo.
- WHO. 2017. *Dementia*. [online] Available at: <https://www.who.int/en/news-room/fact-sheets/detail/dementia> [Accessed 7 Dec. 2018].

CHALLENGES IN AN AGING CITY: THE CASE OF AGE-FRIENDLY HAAGA

Antti Virolainen

THE AGEING CITY

“Finland has mostly had a rather institution oriented strategy in confronting population aging (e.g. Välikangas 2009, p. 59). But for both from human and economic viewpoint it would be recommendable to entertain possibilities of increasing living at home in the late stage of the lifespan (e.g. Sixsmith & Sixsmith 2008). In this deliberation learning from experiences in different neighbourhoods is important.”

INTRODUCTION

Urbanization and population aging are among the most powerful megatrends of the 21st century. The global population aged 60 years or over was 962 million in 2017. The amount has more than doubled since 1980, where there were 382 million senior citizens globally. The number of older people is estimated to reach nearly 2.1 billion by 2050. According to projections, by the year 2050, virtually every country in the world will experience a significant increase in the size of their population aged 60 years or over. And by that time, the number of people aged 80 years or over is expected to increase more than threefold (United Nations Department of Economic and Social Affairs 2017, pp. 1-5). Simultaneously, the world is becoming increasingly urbanized. Europe is one of the most urbanized regions of the world, with 74% of populations living in cities in 2018 (United Nations 2018). These trajectories are shaping governmental policy agendas in a dramatic, and multifaceted way, with them presenting a considerable challenge for many urban areas as well. The concept of an “age-friendly city” has come to the

fore in public discussions during recent years.

According to the City of Helsinki Urban Facts Center (Helsingin kaupungin Tietokeskus), Haaga has one of the largest shares of the population over 64 years olds among all districts of Helsinki, with 19% of inhabitants. The percentage is above the average level in Helsinki, which is 15,8%. (City of Helsinki Urban Facts 2014, p. 15.) Families with children were the primary focus group of urban planning during the post-war decades (Saarikangas 2002, p. 448). But how well are city districts, such as Haaga, prepared for a rapidly aging population? Does the city of Helsinki provide adequate requisites for the elderly population in response to their well-being in Haaga? How do the built environments and local services sustain senior residents in their daily routines? What kind of expectations do senior citizens in Haaga have towards their environment, and what do they value in it? In order to shed some light on these questions, I have conducted a series of interviews in Haaga. My research question is, can Haaga be regarded as an age-friendly environment? I am going to commence by explaining the concepts of

an age-friendly city and age-friendly designing. Then I will go on to present the interview data that I have gathered. In conclusion, I will compare my findings to the theoretical literature and analyze whether Haaga can be regarded as an age-friendly neighborhood.

THE CONCEPT OF AN AGE-FRIENDLY CITY

Aging populations present some considerable policy challenges, but also a wide range of opportunities. Senior citizens can be a tremendous resource for their communities, as well as national economies. But in order to utilize the full potential of older people, it is essential to recognize and tackle some of the physical and social consequences posed by aging. Individuals with restricted competences are especially vulnerable to environmental constraints (Park & Lee 2017, p. 694). Studies indicate that older adults – even those who are living alone and without means – can experience higher satisfaction in their late-life, provided that they get adequate support from their physical and social environment. For example, empirical research among elderly people in South Korea has shown that environmental characteristics were clearly connected with life satisfaction (Park & Lee 2017, p. 698).

In 2007, The World Health Organization (WHO) published a report called *Global Age-Friendly Cities: A Guide*. The purpose of the project was to help cities and communities on their path for a major demographic transformation, and to encourage cities to become more supportive towards senior citizens in their daily lives. In its recommendations, the guide leans on comprehensive qualitative research data that was collected from 33 cities across the globe. Senior citizens, their caregivers and service providers in different sectors (public, third, and private), were asked to describe the characteristics of an age-friendly environment, as well as some of the hindrances that older people have to face in their everyday lives. The report included not only suggestions for improvement, but also some concrete metrics, a checklist for the cities to evaluate whether an environment can be regarded as age-friendly or not. A growing body of empirical research has also examined different characteristics of age-friendly environments in order to supplement the WHO's guide (e.g. Park & Lee 2017).

Age-Friendly city, or age-friendly environment, is a multidimensional concept, but in essence it is a physical, social and service infrastructure, that supports daily activities of older adults,

through such things as transportation, local services, safety, and accessible housing and neighborhoods. An age-friendly environment provides access to social support and the possibilities of senior citizens taking part in meaningful activities (Park & Lee 2017, p. 694). Promoting different kinds of activities can be regarded as a key feature of age-friendliness. An age-friendly city is meant to encourage active ageing by enhancing opportunities for health, participation and security, in order to increase quality of life as people grow older (WHO 2007, p. 1). Attention has also been paid towards functional qualities, such as, residential density, walkability, street connectivity, access to destinations, land use mix, pedestrian-friendly features and cleanliness (Kano et al 2017, p. 1207). It is important to take into account that aging occurs in a community. In an age-friendly environment, senior citizens get to define what the suitable amount of social contacts are. Older adults should also be able to determine themselves whether they would prefer being a part of a community of older adults or people of all ages (Välikangas 2009, p. 75).

A coordinate concept for an age-friendly city is Aging-in-Place. Aging-in-Place is a process that focuses on creating possibilities for older people to reside at their home, in a familiar environment, for as long as possible. The objective is to support older people's independent living at home with special services so that relocation to a new apartment or neighbourhood would not be necessary, even in the case of a moderately deteriorating condition (Välikangas 2009, p. 8). The key issue is to design an environment that enables active and independent living. The basic philosophy of Aging in Place is that helping older people to prolong their living at home, undeniably, has positive effects on well-being, independence, social participation and healthy aging (Sixsmith & Sixsmith 2008, pp. 219–220).

DATA

The research data consists of interviews with retired people in Haaga, all of them non-institutionalized individuals. The interviews were conducted as unstructured informal interviews. In order to address the research question, it was important to find out how the interviewees think, and how do they view their environment. Therefore, it was essential to keep the respondents, and their own interpretations, in the foreground. The interviews were carried out in late November and early December 2018, and the total amount of participants were six. Four people shared their insights in a single, non-directive group discussion, moderated by the author of this article. The

remaining two interviews were one-on-one conversations. The sample is not representative, but it does illuminate whether features of an age-friendly environment could be detected in Haaga. In the following section, I will go through some of the most commonly occurring themes that are relevant in judging whether Haaga can be considered an age-friendly environment – in other words, whether it has the physical, social, and service infrastructure that enables activity. All quotations are translated from Finnish by the author.

TRANSPORTATION

Mobility can be considered a self-evident factor in an active old age. Without an adequately supporting environment, home can virtually become a prison, leading to an inevitable decline in health and functional capacity (e.g. Sixsmith & Sixsmith 2008, p. 222). Transportation systems are a vital part of that supportive infrastructure.

In the course of the interviews, the ability to move swiftly and smoothly from one place to another was named repeatedly as one of Haaga's greatest assets. Public transportation is important for a number of reasons. It provides easy access to services, both within Haaga, as well as in downtown Helsinki. All the interviewees visited central Helsinki at least once a week. With several local bus and rail lines at their disposal, it is possible to reach the center of Helsinki within ten or fifteen minutes.

"It's just like dropping in at your neighbour!"

Female, 66 years

In the group discussion, it turned out that four participants (all female, from 76 to 84 years old) have several potential destinations in Helsinki's southern and central major districts. A user-friendly public transport system provides effortless access to downtown Helsinki and with it a welcomed change in their everyday life. A direct bus route to Hakaniemi enables easy visits to Hakaniemi market square, and one of the interviewees goes on a weekly basis to Kamppi for some hydrobics, while at the same time paying a visit to a specific grocery store that does not exist in Haaga. During the group discussion, one of the participants (female, 79 years old) mentioned that she regularly takes the train to Central Station and then walks to a club in downtown Helsinki to enjoy some live jazz music.

Public transport not only enables participation within Helsinki's cultural scene, but it is also an easy way to get around within Haaga and its neighbouring subdivisions. There arose some criticisms, particularly in the group discussion, about the

concentration of services to the shopping centre Kaari. But on the other hand, smooth public transport manages to compensate for this deficiency by securing accessibility to these services. Four interviewees out of six mentioned, also, neighbourhood routes as a helpful supplement to different modes of transport. Low-floor minibuses provide easy access to destinations like the health center, libraries, and the local retirement home, which serves as an important arena for social interaction.

For two interviewees, private motoring was a regularly used transport alternative. Both of them (male aged 73 and female aged 66) owned a summer home in the countryside, and they considered a private car as a practical arrangement. But within Haaga, they usually get around by walking, since grocery shops and other crucial daily services are conveniently located nearby. For them, owning a private car is a matter of ease more than an actual necessity.

"Since anyway I have to get both car and bike from the same garage I might as well take the car."

Male, 73 years

OUTDOOR ACTIVITIES AND PHYSICAL EXERCISE

The park-like surroundings were mentioned repeatedly as one of the best features of Haaga. The subject was brought up during every interview. However, it is not merely a matter of aesthetics. An appealing environment is important for psychological wellbeing, but it also invites the residents to step outside and take strolls, so there are concrete effects on the health of local people. Physical exercise can slow down the progress of several age-related illnesses, for example, by preventing obesity and cardiovascular diseases. Regular exercise has also been shown to improve muscle strength, coordination, and balance, which helps to reduce the risk of falls. Exercise also improves oxygen uptake and even enhances psychological wellbeing (Heikkinen 2008, pp. 340-341). Thus, encouraging the elderly to exercise has several positive effects on both psychological as well as somatic wellness. The following extract provides an example on how the environment can be intertwined with physical activity.

"Near the dog park there is an allotment garden, where you previously could lease a patch of land from the city, but nowadays the Allotment Cultivator Association has leased it and there are patches of land sized are and half an are. (...) I myself have a lot of half an are. The lots have been organized in a way, that there are footpaths, sand roads in between, where you can go either with a walker, or some are being

pushed in a wheelchair, people nordic walk or jog there, and look around, and just pass by the area, for example to the Rhododendron Park.”

Female, 79 years

Haaga is characterized by its close proximity to Central Park. Central Park, and other park-like surroundings, serve not only recreational purposes, but some of the interviewees felt that the park also provided convenient connections to other parts of the city.

“I go to Pirkkola quite a lot, since I happen live nearby, a path leads there directly from my home yard. There is a nice walking trail of about 4km to 5km that I tend to go round. And from there you can also cut through to Kaari.”

Female, 80 years

AV: “How about the bike routes?”

Interviewee: “Along the streets we most often ride towards Munkkiniemi, and to Seurasaari one might go, and to Hietaniemi cemetery as well. And when heading northwards there are gravel roads and cycle paths quite a bit. (...) You could take all sorts of routes, if only you were into biking. As well as by heading to Central Park you can get all the way to Laakso and towards downtown.”

Male, 73 years

Besides nature-like surroundings and outdoor activities, the Haaga region provides facilities for indoor exercise as well. Some of the interviewees use Pirkkola swimming hall on a regular basis for aquajogging sessions. In the Riistavuori service center there is also a gym, which is free of charge for pensioners. Riistavuori is accessible through neighbourhood routes, so the gym presents an example of a truly low-threshold a service.

SOCIAL ACTIVITY

The question of age-friendly environments is not only limited to the physical environment - the social aspect is equally important. There is research evidence indicating that frequent social contacts are related to positive mental health, while the lack of social networks is associated with a decline in mental health in later life (Forsman 2012, p. 17). Association activity in Haaga appears to be relatively lively. Several local charity organizations were mentioned during the interviews, and most of the interviewees have been involved with them in one way or another. Many of the associations organize different activities, such as

lectures and trips. Some philanthropic organizations, like the local Red Cross and Lions Club, are also represented in the area. For example, the local Lions Club has built a grill gazebo and even a small henhouse to please the seniors spending time in Riistavuori service center. All the people that were interviewed have been long-term inhabitants of Haaga and they seem to have gained an abundance of social contacts among locals.

“When you have already lived here for so long, you get to know all kinds of people from your home street. Just last Friday it took me half an hour to get home from a nearby bus stop simply because I happened to encounter so many casual acquaintances.”

Female, 79 years

PROBLEMS

In general, the interviewees were satisfied with their residential area. The only actual problems that emerged in the discussions were the occasional lack of snowplowing during wintertime. This applies, in particular, to the side streets of Haaga. The absence of specialized shops awoke some minor dissatisfaction. Daily services were considered adequate, but most of the specialized services have been relocated to either the shopping centre Kaari or to downtown Helsinki.

The question of insecurity was usually not brought up spontaneously, but when asked about, one first-hand experience was mentioned:

“Once I had my handbag stolen, snatched right behind my back. I got rattled and yelled at the thief ‘there’s no point in taking an empty bag’ and he threw the purse to the ground – with my wallet inside it!”

Female, 84 years

In the group discussion, participants had a consensus that the local atmosphere feels safe. Some observations of youth gangs hanging about used to occur earlier, but all the interviewees felt that the area had, if possible, quietened down even more since then.

“I’m mainly concerned about the slippery streets. The amount of immigrants has increased quite a lot, but usually they are spending time among themselves without causing any trouble.”

Female, 79 years

“By no means does it [insecurity] characterize the area, al-

most certainly this is a lot safer than many similar districts in Helsinki. The fuss has always been so big if somebody has felt intimidated by something. And the stories tend to circulate a long time. I recall for instance an incident from the 80s or 90s, when some girl was raped in the forest between Vihdintie and South Haaga, and people have been talking about it for twenty or thirty years.”

Female, 66 years

One of the interviewees suspected that the stories may have been so long-lived due to the fact that residents of Haaga are so accustomed to feeling secure, that they lack tolerance when confronted by something unusual and bad.

One considerable shortcoming, from the senior perspective, is the lack of elevators in residential buildings. Elevators are a necessity for those unable to take the stairs, but a considerable portion of the low-rise housing stock in Haaga was built without an elevator. However, installment projects would be rather expensive, and the cost-benefit ratio for building an elevator, especially into a low-rise building, is not particularly good (Rönkä 2003, pp. 582-584). According to the interviewees, most of the stairways in Haaga are so narrow, that there simply is not enough space for an elevator.

AV: “Have you heard any widespread discussion about people considering moving out of the neighborhood?”

Interviewee: “To my amazement no. Apparently people are so attached here, like, this is my home! I for one bought my second apartment in Haaga according to the criteria that it should have an elevator. I wasn’t even fifty back then, but I thought that I should be able to live there for the rest of my life.”

Female, 66 years

Paradoxically, one of the interviewees regarded problems with family living as more significant. The person has been living in South-Haaga since 1969 and has experience on family living as well.

“There are too few large apartments. (...) Young couples move to the area, they start considering some addition to the family and wonder where to next. I had to move only about 100 meters [in Haaga], but many search for a bigger apartment, but in vain, and they end up moving out. The remaining seniors are fine with the one- and two-room flats.”

Male, 73 years

SUMMARY

Haaga contains many of the core features of an age-friendly environment, almost in a prototypical manner. According to the data acquired, the transportation system, housing, neighborhood safety, and access to social services, are of commendable quality. On one hand, Haaga has a unique location concerning almost every conceivable mode of transportation, and is not far from the center of Helsinki. But on the other hand, Haaga is covered by green spaces that seem to be a fundamental component in the daily lives of Haaga residents. The urban parks and other green places not only enhance psychological well-being, but they also provide routes for walking and other physical activities.

One notable, and unique, feature in Haaga is the presence of a wide range of different institutions in the area, particularly nursing-homes. Although none of the interviewees were in a need of institutional care, institutions in the area can provide a forum for social interaction, as well as concrete support in daily activities. For example, Hopeatie service house offers education and access to computers for senior citizens. It is also possible to buy inexpensive take-away meals from the canteen, which can occasionally spare people from the effort of cooking. This provides excellent backing for Aging-in-Place in Haaga.

The only significant problems that emerged in the conversations had to do with winter maintenance. However, occasional troubles with lack of snow plowing are somewhat unavoidable, because the busiest streets in central areas are always plowed first. The other considerable problem was concerned with the lack of elevators. On the other hand, even a most ambitious national campaign would not necessarily be an easy, nor affordable, solution in cases where the actual problem lies within the constructional features of the buildings, such as narrow stairways.

Finland has mostly had a rather institution oriented strategy in confronting population aging (see Välikangas 2009, p. 59). But from both a human and economic viewpoint, it is recommendable to entertain the possibility of increasing living at home in the later stages of the lifespan (see Sixsmith & Sixsmith 2008). When considering this, it is important to learn from experiences in different neighbourhoods. Naturally, in Haaga’s case, the question of generalizability arises, since from a socioeconomic point of view, it is a relatively well-off, and homogeneous, area. In other words, when residents share similar enough lifestyles, they do not feel compelled to move away from each other, as some research regarding the so called white flight or social flight has showed (Vilkama, Vaattovaara,

& Dhalmann 2103, p. 486). Even the presence of social and philanthropic institutions, does not provide sufficient help if social cohesion is lacking. However, it is important to retain an open-minded approach. Obviously, we cannot do anything about the aging population. But through planning that supports active aging, we can do a lot to make the aging process better for both individuals as well as communities.

REFERENCES

- City of Helsinki Urban Facts (2014). Helsinki by District 2013. https://www.hel.fi/hel2/tietokeskus/julkaisut/pdf/14_04_22_helsinki_alueittain_2013_tikkanen.pdf [Accessed on 27 November 2018]
- Forsman, A.K. (2012). The Importance of Social Capital in Later Life: Mental Health Promotion and Mental Disorder Prevention among Older Adults. Doctoral thesis at the Nordic School of Public Health NHV. Gothenburg, Sweden. <http://norden.diva-portal.org/smash/get/diva2:787130/FULLTEXT01.pdf> [Accessed on 25 January 2019]
- Heikkinen E. (2008). Sosiaalis-taloudellisten tekijöiden ja elintapojen yhteys vanhenemiseen. In Heikkinen E. & Rantanen T. (ed.) *Gerontologia*. Duodecim, Helsinki.
- Kano, M., Rosenberg, P.E. & Dalton, S.D. (2017). A Global Pilot Study of Age-Friendly City Indicators. *Soc Indic Res* (2018) 138: 1205. <https://doi.org/10.1007/s11205-017-1680-7> [Accessed on 27 November 2018]
- Park Sojung & Lee Sangchul (2017). Age-friendly environments and life satisfaction among South Korean elders: person-environment fit perspective, *Aging & Mental Health*, 21:7, 693-702, DOI: 10.1080/13607863.2016.1154011
- Rönkä K. (2003) Hissin rakentaminen vanhaan kerrostaloon. In *Rakentajan kalenteri 2003*, pp. 576-585. Rakennustieto Oy. <https://www.rakennustieto.fi/Downloads/RK/RK030602.pdf> [Accessed on 31 January 2019]
- Sixsmith A. & Sixsmith J. (2008). Ageing in Place in the United Kingdom. 219-235 s. *Ageing International* 32:3.
- United Nations Department of Economic and Social Affairs (2017). World Population Ageing 2017 Highlights. http://www.un.org/en/development/desa/population/publications/pdf/ageing/WPA2017_Highlights.pdf [Accessed on 28 November 2018]
- United Nations (2018). World Urbanization Prospects: The 2018 Revision. <https://esa.un.org/unpd/wup/Publications/Files/WUP2018-KeyFacts.pdf> [Accessed on 28 November 2018]
- Vilkama K., Vaattovaara M. & Dhalmann H. (2013). Kantaväestön pakkoa? Miksi maahanmuuttajakesittymistä muutetaan pois? *Yhteiskuntapolitiikka* 78 (2013):5, 485-497.
- Välakangas Katariina (2009). Yhteisöllisyyttä, laatua ja vaihtoehtoja: Ikääntyneiden välimuotoisen asumisen ratkaisuja Ruotsissa, Norjassa, Tanskassa ja Hollannissa. Suomen ympäristö 13/2009. Ympäristöministeriö.
- World Health Organization (2007). *Global age-friendly cities: a guide*. https://www.who.int/ageing/publications/Global_age_friendly_cities_Guide_English.pdf [Accessed on 27 November 2018]

URBAN PLANNING VISUALISATIONS OF FUTURE HELSINKI – DISCOURSES ON BOULEVARDISATION VISIONS

Anna Ahlgren

THE AGEING CITY

“There is a multitude of participatory methods, surveys and mappings available in Helsinki. However, not many of them have citizen data production as the starting point. Open data development trends might enable for planning visions to be considered from altering perspectives. New tools, which enable people to create interactive plan-related visions and visions boards might be the next step that allows actors to also understand the nature of visions through hands-on experience.”

INTRODUCTION

Architectural and urban planning visualisation has gone through an immense evolution in the past decades as *computer aided design* (CAD) has taken over. It has an abundance of opportunities, but as it is continuously evolving, pitfalls of the past, present and future have become visible. The strong orientation towards an unknown future in planning holds many uncertainties within. Visualisations can act as mediators of plans, vision representers and small windows to future landscapes. However, their representational power and illustrative nature is not evident to all viewing them. Quite the contrary, especially CAD vision renderings requires a certain amount of visual literacy to translate the content, multiple visual effects used and the actual relationship between written and visual “plans” and “designs”.

New plans and boulevardisation visions suggest new Haaga emerging. Transurban in-betweenness is not only present in the physical surroundings of the neighbourhood, nor our capital region in the larger context, but also in their planned visual

futurescapes (see Lovett 2005, pp. 249–250). In visions, that describe what (planning of) Helsinki aims, wants and aspires to be. But how are the visual narratives interpreted by viewers? Do planners meet citizens with the visuals? Or do the visuals begin to tell a story of their own, further dividing those who are creating them, planning, making decisions on/over planning, participating and those spectating from a distance?

In this article, I examine master planning visions visualisations and the media debate they foster in a critical light. Questioning, whether the visuals are indeed tools of “dimensioning” as the city of Helsinki suggests (e.g. Lapintie 2017), or whether research and media debate would propose alternative modes for their use. My research takes part in the visual planning discourses related to technological developments, visual culture shifts and participatory planning paradigms. Planning visualisations, focusing on vision renderings, and the related (traditional and new) media debates are the main data source. The more defined research question I’m contemplating in this paper is *what discussions follow Haaga-related master planning visions in the media?*

In the following chapters I will describe the wider background of my research, describe the data and methods briefly and analyse my findings. As a conclusion I will discuss possible next steps for planning visualisations and suggest possible desired scenarios based on my research. My work is a part of new visual geography, but within the USP program it attempts to take steps towards new visual urban planning.

BACKGROUND

The starting point and academic framework for this article is the previous research I conducted for my Planning Geography Bachelor's thesis, where I analysed 187 planning visualisations (mostly CAD perspective renderings and photo adaptations, n=187, see *Picture 3.*) presented in Helsinki Planning Reviews during years 2005–2017 (Ahlgren 2018). I found there to be certain common narratives used in visions, discovered the peak years of such images used and touched briefly on the background of media debates in relation to the topic. As media debates raised my original interests, I explore those here, although not going too deeply into the context and role of media as a platform, medium, facilitator, engager and debater of planning communication. Terminology and definitions used in this article can be found elaborated in the thesis. My Master's thesis,

currently under way, carries on working with the same subject matter, expanding the timeframe. The intent for this paper, in particular, is to continue researching visual representations in planning communication context, focusing on the Haaga area.

FUTURES RENDERED?

Helsinki's new Master Plan (Helsingin kaupunkisuunnitteluvirasto 2016/2018) and boulevardisation visions have very much to do with Haaga. And, as The City of Helsinki Head of Strategic Planning Unit Richard Manninen (2018) expressed as part of our lecture series, visualisations for Hämeenlinnanväylä (see *Picture 1 and 2.*) (and Tuusulanväylä) have received a strong critique that has been covered in the media widely. The debate and critique have focused especially on the images produced (as well as modes of plan representation), not primarily on the more extensive content of the actual plans. Questions of whether to execute the boulevards or not seems to have culminated in many discussions linked to a few single illustrations. This has resulted in the debate of regional large-scale urban planning decisions becoming “debates over balconies”, as they are commonly referred to. Meaning that the focal point of (master) planning moves from macro to micro, from urban systems to irrelevant details portrayed in images. This shift in discourse is what the



Image 1. Hämeenlinnanväylä boulevardisation vision visualisation 2050. Not to be found in Planning Reviews, but in the city of Helsinki Master plan discussed and various other contexts. (3D Render/KSV).



Image 2. Hämeenlinnanväylä boulevardisation vision, as presented in the 2014 Planning Review, as well as various other contexts, such as the city of Helsinki Master plan (3D Render/KSV).

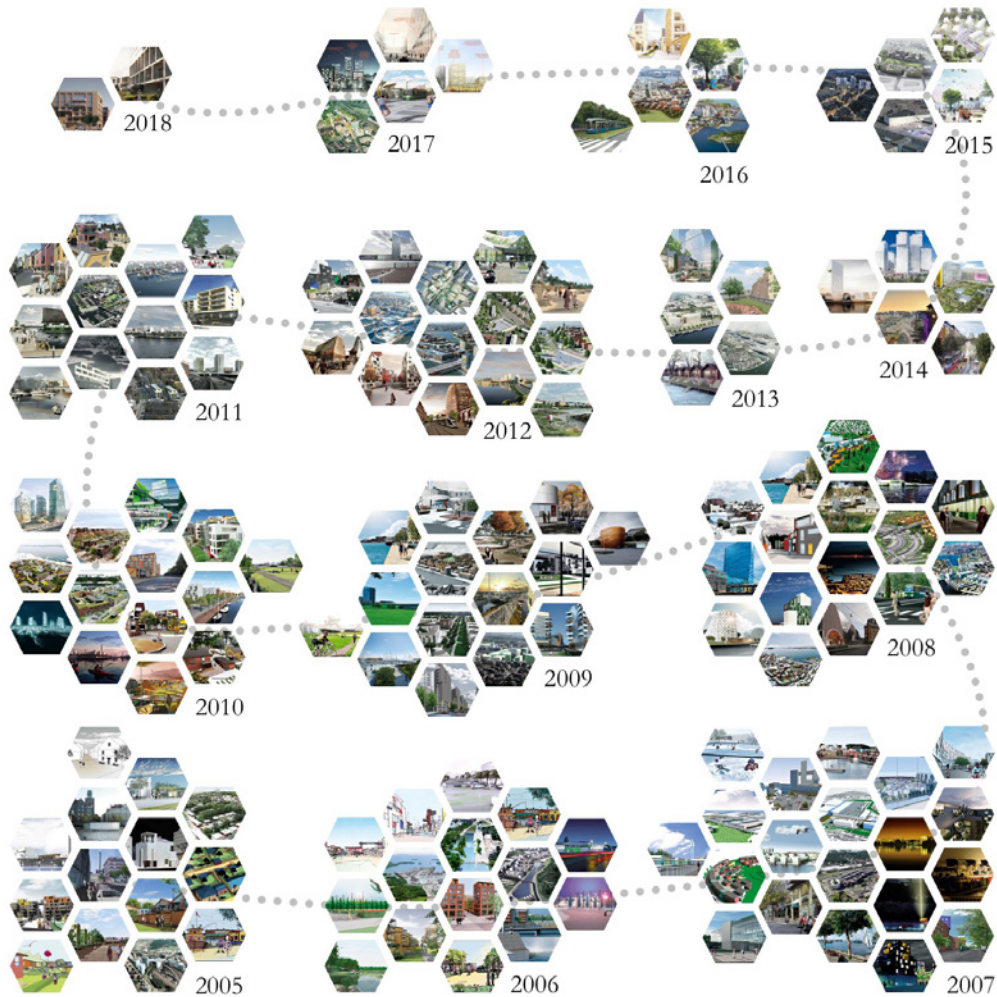


Image 3. Proportional image expressing the dataset (visualisations, n=187) of previous research and discovery of declining use of specific visualisation typology studied (Ahlgren 2018). Annual examination with ratio of representation 0.75 (three out of four of all visualisations used in re-search/to be found in Planning Reviews is presented).

dataset used in this article aims to examine.

On one hand these cases are perhaps merely a matter of failed planning communication. On the other hand, they uncover deeper issues concerning conflicts between the future city and its current citizens, larger thematics related to visuals of planning, questions concerning visual planning literacy and of municipal decision-making processes relying on visualisations as the basis of their knowledge. The quality of visualisations/modellings/vision illustrations, their perceived “realism” and relation to concepts of participatory planning have appeared to have been in the focus of media coverage and discourses concerning planning visualities (Ahlgren 2018). For Helsinki, Haaga and the city boulevards, this is a very current topic as the Supreme Administrative Court (2018) rejected four (out of seven) of the main boulevards planned, including the Hämeenlinnanväylä.

The larger context of this research focuses on three (3) significant and contemporary phenomena affecting urban planning, design and zoning for the past two to three decades: The intensification of *visual culture*, emergence of legislative based *participatory planning* and the *technical (r)evolution* making computer aided design (CAD), simulations and various types of visualisation modes possible (e.g. Kwartler & Longo 2008).

The field of research on these matters is emerging. In the turn of the 21st century, many of the academic and professional revelations focused purely on the technological hype rejecting any possible drawbacks (see Hall 1993, Uddin 1999). Since then, various contributions have surfaced. Today, consensus on the (design) visualisation field suggests that visual models and illustrations ease and enable planning processes. It is more effortless for people to get a grasp of the unknown, unfinished, abstract and future concepts with the help of visualisations. One important aspect of current urban planning visualisation is to facilitate the understanding of city visions between all participants (planners, officials, habitants, elected representatives, organisations, companies etc.). Visual computer simulation/computer aided design incorporated with GIS, (environmental) impact analysis and prediction tools has been argued to have emerged as one of the most important tools in ensuring public participation (Kwartler & Longo 2008, p. 7).

However, as many researchers and professionals (see Al-Kodmany 1999 & 2002, Downes & Lange 2015, Lange 2011, Sheppard 2005, Whyte 2002, Whyte & Nikolić 2018) present, using design visualisations in planning processes (to enable participation) is complex and hardly objective. Peter

Bosselman (1991, p. 101) states, that everyone who intends to use visualizations as a part of decision-making processes, must ensure the accessibility of visual contents and open materials for unbiased reviews. It is also crucial *when* and *how* planning documents are available to the public (Jauhiainen & Niemennmaa 2006). *Visual perceptual skills* (visual literacy) from viewers are needed, as Oksman, Ylikauppila & Vääänen (2014, pp. 30–32) emphasize. The researchers describe how an unpractised reader can be completely overwhelmed when faced with visions. They argue, how visualizations can result in confusion when regarding the entire planning process, hinder visual understanding and disconnect city-wide projects from each other.

Kimmo Lapintie (2017) explains these kinds of results with the epistemology of Finnish design: Strong design-orientation means, that plans are “drawn up” early on in the planning process creating urban design mindscapes. Zoning documents and vision illustrations might not always even meet, meaning that the content of the plan is not visible in the visuals. Or plans might change while visualisations remain the same (Lapintie 2017). This might be due to the diversification of planning related professions and the emergence of a strong visual culture, where separate visual experts (not trained as planners) produce the imageries. There appears to be a certain degree of oxymoron in The concept of “planning visualisation” when regarding master planning can, to a certain degree, be seen as an oxymoron. How is one to portray something evolving, strategic and not yet planned nor actualized – especially in detail as it is attempted to do?

There is also controversy regarding participatory planning. Illustrations are requested by participants of planning, as they are seen as facilitating the imagination of future plans. And yet, they can become part of normative top-down planning processes, which give very little room for genuine interaction between actors involved, nor imagination for that matter. In this stage of communication, illustrations revert to mere manipulation, “therapy” or informing at best, as presented in the Sherry Arnstein’s (1969) Ladder of Citizen participation. Oksman, Ylikauppila and Vääänen (2014, pp. 29–30) emphasize that elected representatives, municipal decision-makers and inhabitants especially prefer alternative plans, presented early in the planning process. Alternatives give room for what *could* be. Visually elaborate designs and illustrations on the other hand give the impression that the plan is already set in stone on a detailed level – even when presented on a strategic and master plan level. Hence, planning visualisations can cause counter-reactions as the researchers describe, as they are witnessed in the media

platforms.

Researchers, such as Stephen Sheppard (2000, pp. 184–186), have raised the need to create some kind of ethical guidelines concerning land use visualisation professionals, or crystal ball gazers, as Sheppard calls. He has taken an earlier stance on computer aided design (CAD) and defined six (6) principles, that can facilitate communication between image producers and recipients (participants/viewers) (Sheppard 2005, p. 85, p. 87). Those are interestingness (without extra effort to dazzle the recipient), visual clarity, precision (according to the dataset with an attempt to have a close resemblance with the target), representativeness, accessibility (to the public by official channels) and conformity to the law. Sheppard's principles and more detailed codes of conduct are rather fitting for evaluating illustrative visual data in planning, although hesitance and consideration is needed.

ON VISUAL RESEARCH IN PLANNING CONTEXT

Visuality is a key concept in the western postmodern context, as Gillian Rose (2016) argues. The complex oculocentric visual culture creates representations – given and formed meanings. Visuality concerning planning can be seen as a part of how visions are being built: what we see, what we are allowed to see, what we want to focused on, how we interpret and act upon what is seen, and at the same time what is left in the dark (Foster 1988, p. ix). Sometimes the things we cannot see are more important, than the ones we do. The sense of sight has naturally been central in interpreting the world. However, the shift in visual culture during the 21st century has brought up strong needs for critical views regarding the visualities of western societies (Kymäläinen 2007, Pohjola 2003, Rose 2016). In geography, this has meant extensive revisitings in the core visualities of the broad discipline.

One aspect in need of critical examination, is the emphasis on marketing-oriented content and public-private interface of planning imageries. This is an apparent concern in media debates regarding renderings created partly for marketing purposes (as for planning competitions, sales catalogues and portfolios) and later distributed as “official” city imageries (like in the annual Planning Reviews informing citizens of current major urban developments). From early on in the tradition of planning visualisations, seeking citizen approval and using visions as marketing-tools for large-scale audiences was discovered (Le-

htonen 1994, pp. 52–53, Bosselman 1999, p. 63). For the current Helsinki region, transnationalism, idea migration and neoliberal marketing seems to touch planning issues. Helsinki metropolitan municipalities present themselves within set roles, as they aim to improve their urban attractiveness (Vanolo 2008). Software and methods used for architectural visualisations might be in part creating *new global aesthetics* (Manovich 2013, p. 179), or kitsch-like realism (Kingery-Page & Hahn 2012) found in landscape architecture's visual evolution.

There are opposing arguments as well, focusing mainly on the opportunities of new digital tools, that enable new ways of creating imageries without producing significant change in content (see Howells & Negreiros 2012). However, my work is based on the premises, that technological advances have irrevocably changed the nature, content and aesthetics of planning visualisations. At the same time, my work *does not aim to value* 3D to 2D planning illustrations or CAD-visuals as a method, compared to alternatives. Nor to value planning decisions themselves. It *does aim* to research discourses evoked and the weight given to visions in media debates.

The emerged emphasis on visual culture sets pressures on both image producers and interpreters. Kymäläinen (2007) presents how there is a growing need for *critical visual literacy*. According to her, adopting a critical stance towards imageries is necessary as images can seldomly claim to represent realities or factials. As manipulation is mundane, images should be regarded as multi-faceted texts or stories instead of representations of reality. Gunther Kress and Theo van Leeuwen (2006) present a *model of visual literacy* comparable to map literacy (see Wood 1992, p. 710). Their model divides the old and new understandings of visuals. In the new paradigm, visuals are themselves seen as entities – also modifying and creating reality.

A new gaze has been introduced, familiar to post-Gränö *new visual geography* (see e.g. Tani 1997, Crang 2003 and Kymäläinen 2007). My premise is this critical and seeking perspective, which I find crucial in the planning context. This is important to note, as media debate concerning planning visualisations has not seemed to move beyond old gazes. It is rather focused on the juxtaposition of professionals and citizens, describing the feud on realism. Critical visual methodology challenges this set-up, describing how important understanding of visual weights, power relations, self-reflexiveness and social image production contexts are (Rose 2016, p. 22–23). Images are not mere imageries, visualisations not counterparts of physical environments. As planning visualisations never correspond to physical “realities”, my research also touches upon the impossible ideals of eutopic

cities (see Kallio & Bäcklund 2008). Photos and renderings are in this frame ontologically different, and visualisations can never be in that sense “realistic”. Future landscapes are not perceived in reality, merely in created and constructed representations. Visualisations can have close resemblance to physical environments, but they can also contain many disconnected elements, effects and atmospheres (Ahlgren 2018, p. 61–67).

As early as at the turn of the century Kheir Al-Kodmany (1999 & 2002) showed in his research that there needs to be comprehension on the multiplicity of visualisation modes, and effective ways of targeting suitable methods to particular processes. According to him, GIS and sketch-like visualisations are most usable for brainstorming and identification of problems. However, computer imaging with photo-manipulation appeared to be most useful for refining solutions for previously-defined “ready-made” designs. This is important to understand, as I have not (yet) found there to be apparent formulas on how planning visualisations are chosen for Planning Reviews. Strategic and detailed planning levels might appear parallel to an unprofessional reader and viewer. Visions are in this sense highly important, when figuring out what it is that we aspire to accomplish with planning. And, if there actually are ways to move to other directions from superficial participation processes. These directions might include reinforcing open data production and participation, or perhaps finding new ways to conceive planning professionalism, visual communication and the entire planning process as a system.

In the next sections I will connect frameworks discussed to the dataset(s), media analysis and results found.

DATA AND METHODS

The datasets used in this research include traditional and new media sources. The social media content used in media analysis is gathered from three sources: City of Helsinki Urban Environment Division’s (Kaupunkiympäristö) Twitter-account (@HelsinkiKymp), Haagan ilmoitustaulu (Haaga noticeboard) Facebook-group and Keskuspuiston puolesta (Supporting Central Park) Facebook-group. They were arrived at following the new media paths of focus visuals (*Picture 1 & 2*) and keyword searches.

Traditional media sources include articles from 7 different newspapers (online versions). In the light of this research I am focusing on the 20 most relevant articles, which include either one of the two (2) visualisations (see *Picture 1 and 2*.) or both, and some comments and/or discussion around them. These two

visualisations are used as the starting point for exploring visual discourses related to the Haaga area master planning and boulevardisation, as they are the ones noted by the city of Helsinki as causing active conversation and were the one’s that mostly surfaced during the search, as well as the most relevant in relation to Haaga visualisation of the new master plan. They are also present in the social media contents analysed. As a background I am using the 15 (traditional online) media sources used in my thesis (see Ahlgren 2018, pp. 24–30). Articles and contents are gathered within a timeframe of 2014–2018, relevant to the master planning process. All data sources used in these works are available by request from the author.

The method used for processing media subject matters was content analysis described by Jouni Tuomi and Anneli Sarajärvi (2018). Method qualifications have also been presented by Rose (2016, pp. 85, 89–96). Discourses explored in the research are defined according to The Helsinki Term Bank for the Arts and Sciences (Tieteen termipankki 2018) and Rose (2016).

MEDIA ANALYSIS

Looking at the traditional media content, several threads of discussion emerge. First and foremost, headlining seems to rise as something guiding the discourse tones. The most aggressive ones ask whether visualisations (and hence planners) aim to *delude*, *influence* and *scam* viewers. *Helsingin Sanomat* and *Yleisradio* appear to follow and lead these kinds of rhetorics in many news articles leading to social media confrontations. Visualisations are described as *weird*, *magical*, *idealistic*, *unrealistic*, and *caramelized utopias*. Sunny weather as a visualisation default is mentioned often, and words are used to paint similar art pieces as the visualisations are seen to portray. In *Helsingin Sanomat* descriptions of this regarding *Picture 2*. are used:

“The setting sun evokes trees covered by sheer snow veils into a magical glory” (Malmberg 2017).

“Reality” is pinned against illustrations, and in the past few years switch-images have been used quite extensively to overlay “reality” with “utopia” or “utopia” with “end result”. Marketing is often raised as one of the key issues why visualisations are seen problematic. Images are referred to as *selling* the plans to citizens. Visualisations are referred to as *marketing tools* and visions are described as *beauty competitions* (where restrictions and budgets are not yet considered). Usually when this rhetoric occurs, another discourse emerges. It focuses on educating the viewers how visualisations should be understood (see Arnstein’s 1969 ladder: “therapy”). For these argumentations’ architects,

planners and professors of the field are quoted by journalists.

Professionals attempt to argue why visualisations are usually illustrated in the *best possible light*. They urge viewers to separate different categories of visualisations and planning processes from each other. Sometimes the journalists also join this effort and create tables to indicate how planning information should be understood. Rebuttals from architects' question whether anyone would actually think that visualisations and outcomes of plans would identically meet. On the other hand, one article points how ATL (Union of Architectural Offices) has urged its members to avoid advertorial-like image production. Visualisations are also presented as democratic, enabling participation for those not able to read zoning maps and other official documents. For elected representatives they are described as the starting point of planning decision making, as there are "thousands of pages of materials to go through weekly". The city planning board chairman pondered whether these visuals have *more importance than considered*.

Content of the written (and other ways elaborated) plans is seldomly discussed in relation to the visualisations in the articles used for this analysis. In traditional and social media debates concerning the Hämeenlinnanväylä boulevardisation, the most often raised questions of visuals in comparison to the master plan were: (1) the inconsistency seen in traffic amounts portrayed, (2) the physical environment aspects of noise and pollution not present in the *robotic* future visions and (3) the preservation of Central Park. For the latter the water feature presented in *Picture 1*. was mentioned. There were ponderings if the Haaganpuro and its trout stock were going to be transformed into an urban canal.

In the Central Park support group (Keskuspuiston puolesta) strong emphasis was given to the new mode of visualising and providing information in the master plan. The 100 x 100 meter pixelgrid was debated profusely. Altering pixel visualisations were made by participants themselves, with multiple (mis-) understandings of the plan being discussed. These visuals were then countered by others resulting in rather confusing and massive information exchange. Outside agencies and professionals seemed to gain media coverage by joining the visual debates with their own versions of the plan. The pixel discourse is one that could be explored separately later, but it will not be discussed here.

In some traditional media sources one can see how rendering visualisations attempt to portray themselves as explorative by describing the image in caption as *visions, imaginings* and

outlines/sketches. However, in general, illustrations are seen as something very plausible in nature. Some of the headlines ask directly *Is this Helsinki 2050?* One can also interpret the need and quest for more "realistic" visions to express a want of planning visualisations moving away from the "artistic" viewpoint. City of Helsinki planning appears to struggle to find a frame for visualisations, as it at the same time insists they are only for *dimensioning purposes*, and yet some of the images have had text added stating that "*visualisation is the vision of an artist, end result may differ*". Communication related to visuals seems overall scattered and weakly argued.

The Urban Environment Division has recently taken a somewhat lighter viewpoint to its own communication in Twitter by attempting to joke on summery visualisations. It raises complaints and asks *Is this good then?* with an unrelated greyish vision. However, as seen in official participatory reports, communication does not appear to host argumentation or constructive and continuous dialogue.

As minor – yet important – points both traditional and new media raise the questions for whom are the visualisations made for. In news articles and social media discussions they are discussed by commentators to be marketed towards upper- and middle-class *young, healthy, non-disabled, stylish* citizens, who enjoy their life by drinking *superexpensive supercoffees* in summary Helsinki. The semiotic and symbolic contents of visions are rather striking. They are also one of the main critiques raised by both professionals and those (of the public) who are engaged. Details, that might have been added rather casually by the ones visualising, raise complex questions among viewers. They are seen to create urbanity, that does not include, but rather excludes. However, it must be said, that the relationship of media, planning and the public is hardly as simple as this. For the context of Haaga, these questions are also important as discussed in other articles in this publication.

For the media conversationalists (of various backgrounds), visuals discussed seemed to portray rather few resemblance/connections between the actual (perceived) history, people, urban form and nature of the neighbourhoods. Meaning, that those viewing would not have known how to situate the visions geographically, nor separate them from other boulevardisation visions. In this regard, visions could be seen as portraying certain types of global urban ideals, as discussed previously. However, one can also argue, that it can be the nature of visions to be transformative, obscure and future-oriented. And, since research indicates master planning visions should not be highly detailed (as they are though in this research context), perhaps

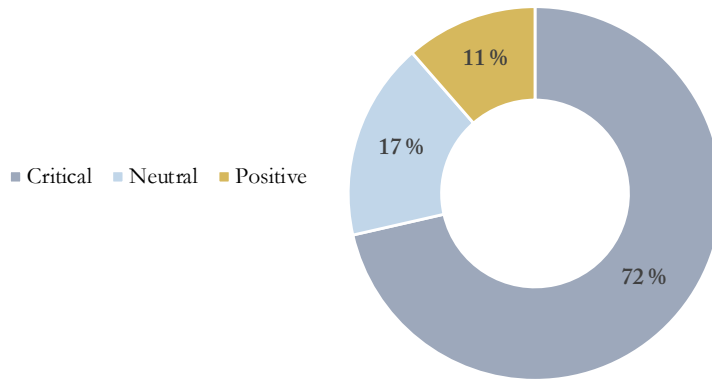


Image 4. Distribution of main attitudes of argumentation found in the dataset's media sources.

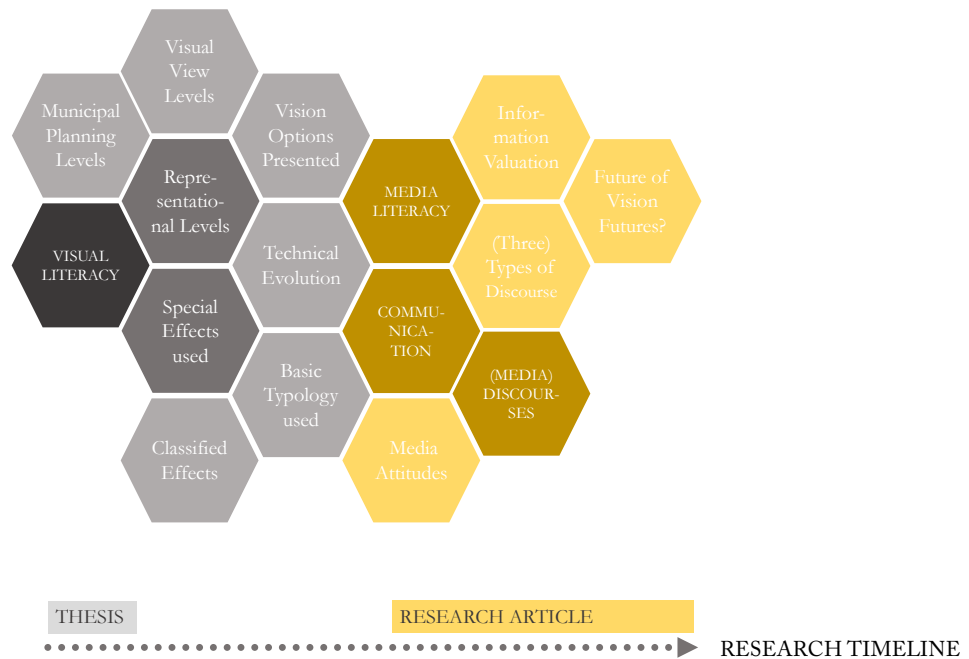


Image 5. Thematic findings of the progressing research relating to challenges, as well as opportunities, of vision visualisations in Helsinki city master planning.

content also should not be relatable to physical and emotional environments. However, this is where the visualisations stumble in front of a seemingly impossible task. Dimensioning, relatability, accuracy, clarity and representativeness, as Sheppard (2000, 2005) argues, do not seem to meet the output of visualisations in the master planning context. So, what to do with them? What is the future for futurescapes?

RESULTS AND CONCLUSIONS

I found three major lines in the multitude of discourses, which presented themselves as battles over

- (1) actors and interests: who's information and expertise is valued and whose city is Helsinki?
- (2) visual information: pixelation and vision visualisations
- (3) politics or ideologies: inner conflicts between parties, urbanity and trans-urbanism: where is Helsinki going?

72% of media sources had a mostly critical stance in their content production, 17% showed some neutrality presenting varying viewpoints and 11% seemed to have a positive attitude towards the vision visualisations as part of their argumentation (see *Picture 4*). Vision visualisations were criticized extensively and in a sarcastic manner for their absurdness and advertorial nature. As Lapintie (2017) states, visualisations are used to present a certain type of urban life, culture and atmosphere. Single futuristic vehicles portrayed on a currently high traffic access road (*Picture 1*.) do not argue the transportation shift and premises of master plan by any means. Lapintie (2017) also regards the reasoning of visions as primarily dimensioning tools unconvincing, as visualisations in question entail highly intricate details.

I also found that the most controversial visualisations were actively used in the traditional media articles disputing the city boulevards and discussing judicial matters. On one hand visuals were used to accentuate the point of overall boulevardisation and master plan critique. On another, visualisations were not discussed or explained, nor connected to the text, but they in a way were used to emphasize the perceived impossibility and irrationality of the master plan. In many other ways, connections between master plan text and visual content were not made. One can question, whether this was because visualisations were seen ultimately detached from “reality”, or whether it indicates the “balcony discussion”-effect presented earlier.

Case studies and research discussed in this article indicates, that on the master planning level detailed rendering visualiza-

tions do not create constructive communication, and interaction between actors can thus be hindered. This was found to be sound for the media analysis conducted. In light of my research this comes down to questions dealing with visual literacy and information valuation in participation. Planning process levels, as well as the visual content levels, are unclear for viewers. The 1363 content categorisation findings in my thesis concerning perspective (view levels), visibility (“special effects”), colour schemes, as well as semiotic objects and elements support this view. *Picture 5* combines my overall findings with the media analysis conducted here to connect both researches.

In my thesis I also found that Helsinki had already begun to restrict the amount of vision visualisations (see *Picture 3*.) included in the annual Planning Reviews. A clear shift happened after the year 2012. The hype of new technology and visual future narratives seemed to be highest for the year 2007, when twenty-six (26) vision visualisations were presented. In comparison, in 2018, there were only three (3). However, my media analysis showed, that in the era of new media, this decline might not carry much weight. Traditional and social media are intertwined as they distribute and debate visualisations with intense and rapid reactions. In this media cultural shift, Planning Reviews, though legally mandated, might come to a crossroads in future years. As Manninen (2018) stated, it was merely one of these images studied that spread throughout media causing an overload of criticism towards city planning office (communication).

FUTURESCAPES FOR FUTURESCAPES?

Planning needs communication. Especially communication as a dialogical process that takes into consideration differences and experiences. One that – in the proliferation of media and information – sees, hears and listens actively, as Penny Gurnstein (2010, pp. 209–211) argues.

This raises important questions: what is the use value and purpose of visualisations (vision renderings) in municipal master planning context? If the visualisations do not serve their more ethical and comprehensive goals, what steps should be taken to ensure it? Or, should certain types of visualisations perhaps be reserved for the detailed planning level and specific pre-determined purposes?

There is a need for a new frame for new urban planning visuals, which might also inspire urban planning to regard its normative processes in a more explorative light. In my frame,

professional knowledge is however not compromised. On the contrary, handling the vast amounts of information in participatory planning processes concerning visuals requires firm expertise. It also requires more scientific information on what and how should we visualise. Perhaps establishing more guidelines on best practises though cultures of experimentation, more sampling when it comes to information valuation in participation, and more education on visual ethics for students, practitioners and planners. Connections of communication between actors (planners, communication specialist managing information flows and participants) in the new media era need re-enforcement and establishing.

Future paths for planning visualisations (focused on vision renderings) are various. I present four (4) possible directions here. The first (1) is to actually take the route the City of Helsinki is claiming to do already, which is use visualisations as dimensioning tools. If this path is taken, research suggests that the visuals need to change. They need more abstract visions clearly separated from hyper-reality with less detailed masses or forms presented, and especially explorations into alternative possibilities showcasing the viewers' various interpretations of possible paths. This might even result in taking a step back into the "sketch past". It might also alleviate or lighten the planning process, as resources would not be spent in finalised visuals. In this scenario Helsinki also needs to articulate its aspirations in the public-private interface. Planning competitions might have ethical guidelines or directories available and more extensive content requirements.

The second (2) path is connected to the first one, while creating wider separation between master and detailed city planning levels. In this path, master planning could move even closer to abstract strategic levels. It could also have no visual visions presented in the early stages of processes. Or the visuals could be clearly detached from "reality" with the use of multimedia, virtual reality, alternative system scale city-modellings etc. Participants and actors would also be informed of the process levels more clearly – something that does not happen at the moment.

The third (3) path is diving into the technological advances even more, taking the use of VR, AR and 360° possibilities. This is already happening, but not in the large scale. These steps also face similar issues concerning problematic topics with visualisations as discussed in this paper. However, progress in technology is solving parts of them as we speak. As for participation, there is still an enormous gap for this path to become a mainstream part of planning.

There is a multitude of participatory methods, surveys and mappings available in Helsinki. However, not many of them have citizen data production as the starting point. Open data development trends might enable for planning visions to be considered from altering perspectives. New tools, which enable people to create interactive plan-related visions and visions boards might be the next step (4) that allows actors to also understand the nature of visions through hands-on experience. For the media debates this could mean, that a rush of visions presented by individuals, networks of people and media agents would enter the planning field. Added value might be thus measured more on the basis of broadening the concept of visions themselves, not so much on their content value.

Apart from the vision production rethinking itself, the city of Helsinki requires a direction in planning communication, which takes into consideration the visual culture and new media shifts emphasizing single images and headline-cultures.

REFERENCES

- Ahlgren, A. 2018. *Visualisoinnin tehokeinot Helsingin kaupunkisuunnittelussa. Kaavoituskatsausten havainnekuvioiden analyysi vuosilta 2005–2017*. Bachelor's Thesis. University of Helsinki. Available at: <<https://urbanacademy.fi/ahlgrea/2019/03/11/thesis/>>
- Al-Kodmany, K. 1999. Using visualization techniques for enhancing public participation in planning and design: process, implementation, and evaluation. *Landscape and Urban Planning*, 45(1), pp. 37–45. Available at: <[https://doi.org/10.1016/S0169-2046\(99\)00024-9](https://doi.org/10.1016/S0169-2046(99)00024-9)>
- Al-Kodmany, K. 2002. Visualization tools and methods in community planning: From freehand sketches to virtual reality. *Journal of Planning Literature*, 17(2), pp.189–211. Available at: <<https://journals.sagepub.com/doi/abs/10.1177/088541202762475946>>
- Andersson, H. 1997. Kulttuuri ja paikan politiikka kaupunkisuudistuksessa. In T. Haarni, M. Karvinen, H. Koskela & S. Tani eds. *Tila, paikka ja maisema, Tutkimusretkiä uuteen maantieteeseen*. Tampere: Vastapaino. pp. 107–128.
- Arnstein, S 1969. A ladder of citizen participation. *Journal of the American Planning Association*, 35(4), pp. 216–224.
- Bosselmann, P. 1999. *Representation of places: reality and realism in city design*. London: University of California Press
- Crang, M. 2003. Qualitative methods: touchy, feely, look-see? *Progress in Human Geography*, 27(4), pp. 494–504.
- Downes, M. & Lange, E. 2015. What you see is not always what you get: A qualitative, comparative analysis of ex ante visualizations with ex post photography of landscape and architectural projects. *Landscape and Urban Planning*, 142, pp. 136–146. Available at: <<https://>>

- doi.org/10.1016/j.landurbplan.2014.06.002>
- Foster, H. 1998. Preface. In H. Foster ed. *Vision and Visuality*. Seattle: Bay Press. pp. ix-xiv.
- Gurnstein, P. 2010. Seeing and being seen: The potential of multimedia as a reflexive planning methodology. In L. Sandercock, G. Attali eds. *Multimedia Explorations in Urban Policy and Planning*. Urban and Landscape Perspectives 7. Dordrecht: Springer. Ch 11. DOI 10.1007/978-90-481-3209-6_11
- Hall, A. 1993. Computer visualisation for planning control: objectivity, realism and negotiated outcomes. In M. R. Beheshti & K. Zreik, eds. *Advanced Technologies - architecture, planning, civil engineering*. New York: Elsevier Science Ltd. pp. 303-308.
- Harvey, D. 1987. Flexible accumulation through urbanization: Reflections on "post-modernism" in the American city. *Antipode*, 19(3), pp. 260-286.
- Helsingin kaupunkisuunnitteluvirasto 2016/2018. *Helsingin yleiskaava*. Available at: <https://www.hel.fi/hel2/ksv/liitteet/2018_kaava/YK_2016_Selostus_20160614_LISALEHDELLA.pdf>
- Howells, R. & Negreiros, J. 2012. *Visual Culture*. 2nd edition. Cambridge: Polity Press.
- Jauhainen, Jussi S. & Niemenmaa, Vivi 2006. *Alueellinen suunnittelu*. Tampere: Vastapaino.
- Kallio, K. & Bäcklund, P. 2008. Kaupunkiutopiat – NYT! *Alue ja ympäristö*, 37(2), pp. 1-2. Available at: <https://aluejaymparisto.journal.fi/article/view/64343>
- Kingery-Page, K. & Hahn, H. 2012. The aesthetics of digital representation: realism, abstraction and kitsch. *Journal of Landscape Architecture*, 7(2), pp. 68-75. Available at: <https://doi.org/10.1080/18626033.2012.746091>
- Kress, G. & van Leeuwen, T. 2006. *Reading images. The Grammar of Visual Design*. 2nd edition. 291p. New York: Routledge.
- Kwartler, Michael & Gianni Longo 2008. *Visioning and Visualization. People, Pixels and Plans*. Cambridge (MA): Lincoln Institute of Land Policy.
- Kymäläinen, P. 2007. Visuaalisuuden uudet aallot. *Alue ja ympäristö*, 36(2), pp. 1-2. Available at: <<https://aluejaymparisto.journal.fi/article/view/64321>>
- Land Use and Building Act (Maankäyttö- ja rakennuslaki) 1999. 5.2.1999/132. Helsinki: Finnish Ministry of Justice. Available at: <<http://finlex.fi/fi/laki/ajantasa/1999/19990132>>
- Lange, E. 2011. 99 volumes later: We can visualise. Now what? *Landscape and Urban Planning*, 100(4), pp.403-406. Available at: <https://doi.org/10.1016/j.landurbplan.2011.02.016>
- Lapintie, K. 2017. Tarinoita takapihalta 2.0: Vuorovaikutus digitaalisen median aikakaudella. *Yhdyskuntasuunnittelu*, 55(4). Available at: <<http://www.yss.fi/journal/tarinoita-takapihalta-2-0-vuorovaikutus-digitaalisen-median-aikakaudella/>>
- Lehtonen, H. 1994. Perspektiivejä arkkitehtuurisuunnitelmien esityskäytäntöihin. Ph.D. *Yhdyskuntasuunnittelun täydennyskoulutuskeskuksen julkaisuja*, A 22. Espoo: Teknillinen korkeakoulu.
- Lovett, A. 2005. Futurescapes. *Computers, Environment and Urban Systems*, 29, pp. 249-253.
- Manninen, Richard 2018. Helsinki City Planning. *USP-301 Introduction to Urban Studies and Planning*, 1.10.2018. University of Helsinki.
- Manovich, L. 2013. *Software takes command*. London: Bloomsbury
- Malmberg, L. 2017. Oudoilla havainnekuvilla yritetään vaikuttaa – Helsingin ilmiö turhautui ja kokeili, miltä Pasilan tornitalot näyttäisivät todellisuudessa. *Helsingin Sanomat*, 28.2.2017. Available at: <<https://www.hs.fi/kaupunki/art-2000005106574.html>>
- Oksman, V., Ylikauppila, M. & Väätänen, A. (2014). Tulevaisuuden havainnollistava ja osallistava kaupunkisuunnittelu. Näkökulmia uusiin digitaalisiin palveluihin. *VTT Technology*, 171. Available at: <<http://www.vtt.fi/inf/pdf/technology/2014/T171.pdf>>
- Pohjola, J. 2003. *Ilme: visuaalisen identiteetin johtaminen*. Helsinki: Infoviestintä.
- Rose, G. 2016. *Visual Methodologies. An introduction to researching with visual materials*. 4th edition. London: SAGE Publications Ltd.
- Sheppard, S. 2000. Guidance for crystal ball gazers: developing a code on ethics for landscape visualization. *Landscape and Urban Planning*, 54, pp. 183-199.
- Sheppard, S. 2005. Validity, reliability and ethics in visualization. In I. Bishop & E. Lange eds. *Visualization in landscape and environmental planning*. London: Taylor & Francis Group. pp. 79-97.
- Supreme Administrative Court (Korkein hallinto-oikeus) 2018. KHO:2018:151. Available at: <<https://www.kho.fi/fi/index/paatoksia/vuosikirjapaatokset/vuosikirjapaatos/1541580128040.html>>
- Tani, S. 1996. Maantiede ja kuvien todellisuudet. In T. Haarni, M. Karvinen, H. Koskela & S. Tani eds. *Tila, paikka ja maisema. Tutkimusretkiä uuteen maantieteeseen*. Tampere: Vastapaino. pp. 211-226.
- Tarasti, E. 1996. *Johdatus semiotikkaan: esseitä taiteen ja kulttuurin merkijärjestelmästä*. Helsinki: Gaudeamus.
- Tieteen termipankki (2018). Kielitiede: diskurssi. Available at: <<http://www.tieteentermipankki.fi/wiki/Kielitiede:diskurssi.>>
- Tuomi, J. & Sarajärvi, A. 2018. *Laadullinen tutkimus ja sisällönanalyysi*. Renewed edition. Helsinki: Kustannusosakeyhtiö Tammi.
- Uddin, S. M. 1999. *Digital Architecture. Turn vision into virtual reality with 3D graphics. Hardware, software, tips, and techniques from 50 top designers*. New York: McGraw-Hill
- Vanolo, A. 2008. Internationalization in the Helsinki Metropolitan Area: Images, Discourses and Metaphors. *European Planning Studies*, 2008, 16, (2), pp. 229-252.
- Whyte, J. 2002. *Virtual Environment and the Built Environment*. Oxford: Architectural Press.
- Whyte, J. & Nikolić, D. 2018. *Virtual reality and the built environment*. New York: Routledge, Taylor & Francis Group.
- Wood, D. 1992. *The power of maps*. London: The Guilford Press.

URBAN DENSIFICATION AND GREEN AREAS

Paula Piirainen

GREEN AREAS, LANDSCAPE

“My concept aims to preserve important habitat patches and connections between green areas as well as to offer possibilities for recreational activities and connect the area better to other recreational green areas with new pathways. I have identified three main green areas which I find to be most crucial for the area.”

INTRODUCTION

The United Nations (2018) estimates that in 2050, 68% of world's population will be living in cities. The movement from rural areas to urban areas is increasing steadily and it is most evident in developing countries. The level of urbanization is higher in developed countries and, in Europe, it is roughly 74 % (United Nations, 2018).

At the same time, the world's biodiversity is decreasing. According to Global Biodiversity Outlook 4 (2014), the status of biodiversity will continue to decline, and the pressure on biodiversity will continue to increase until at least 2020. Although society has taken action in the forms of national plans and commitments, this has not been enough to stop the loss of biodiversity. There might be time lags between taking positive actions, and the positive outcomes, or the responses have been insufficient relative to pressure (Secretariat of the Convention on Biological Diversity, 2014). Although urbanization is not the biggest cause of biodiversity loss, it still is a threat (Benide et

al. 2015). National and regional planning, as well as national commitments and legislation, play a crucial role in conserving ecological connectivity and ecosystems in urban and rural areas (Secretariat of the Convention on Biological Diversity, 2014).

The city of Helsinki (2016) predicts that the number of inhabitants in the Helsinki Regional Area will grow by 600 000 by the year 2050. This will require densifying the city structure within the whole area and, especially, in the central regions of Helsinki (Helsingin kaupunki 2016). The city of Helsinki is aiming for a denser city structure and to increase housing stock by 6000 new apartments annually. In addition, Helsinki has been developing city boulevards – a concept with the new regional plan that affects a number of areas in the Helsinki region, including Haaga. The new regional plan aims to densify the city structure, creating more centers and promoting public transport, walking and cycling (City of Helsinki 2016). This development affects, especially, the green areas of Haaga, since one of the city boulevards is being constructed alongside Vihdintie. These areas are currently described as being part of the “green

fingers” of Helsinki’s green network.

Finland is following the trend of urbanization and even if we have a rather good state of biodiversity in Helsinki area measured by the City Biodiversity Index (CBI) that does not mean that there is no room for improvement (Helsingin kaupunki, 2018). Urbanization creates pressure towards urban green areas that should be dealt with carefully through planning, as well as, management of the green areas. Municipalities should take into account green networks as a whole and put effort into keeping it viable for the future. I will be examining biodiversity and green areas in the urban context of Haaga. Especially, with the increasing building pressure produced by the growing number of inhabitants in Helsinki, and improvements to city’s infrastructure after the realization of the new regional plan.

PLACE OF URBAN NATURE IN CITY STRUCTURE

The Land Use and Building Act, and the Nature Conservation Act, sets the framework for the conservation of biodiversity and healthy environments in the cities of Finland (The Land Use and Building Act 1999/132 § 5). The Land Use and Building Act aims to create a safe, comfortable and healthy living environment, taking into account social functionality and the needs of various demographic groups, as well as ecological and economic aspects (The Ministry of the Environment 2013/2016). Along with the legislation and regional plans, municipalities and cities can set their own goals regarding ecological, social and economic sustainability.

The City of Helsinki has stated that when valuing and creating new green and recreational areas, the functionality, accessibility, appearance, cultural landscapes and the diversity of landscapes, as well as ecological, economic and social sustainability, are taken into account. Currently 40% of the area of Helsinki is green or recreational spaces, and of this area, 20% is forest (City of Helsinki 2013). Helsinki has also stated, that one of the goals of the new regional plan is to create a so called “green network city” (*viherverkostokaupunki*), where green areas, sea and recreational areas are easily accessible and linked together (City of Helsinki, 2013).

Helsinki has created a green network which is based on large green areas that run through the city (City of Helsinki 2013). These areas are called green fingers, and there are five of them in Helsinki. These green fingers are the backbone of the green infrastructure of Helsinki, providing large green areas and connections between them. These areas also have significant ecological value, in addition to recreational values.

SURVIVAL OF URBAN NATURE AND BIODIVERSITY IN CITIES

Biodiversity in cities cannot be restricted only to urban parks. It is a collection of built green areas, wastelands, urban forests, gardens, private yards and, so on (Niemelä et al., 2011). Biodiversity and the well-being of ecosystems are tightly connected. The richness of species, large number of ecosystems, healthy populations and genetic diversity, usually improve the chances of survival of species and ecosystems (*ibid*).

One of the major factors in urban species richness, and the positive effect on biodiversity on cities, is patch size (Benide et al., 2015, 589; Niemelä et al., 2011; Raunio et al., 2013, 96). Larger areas are usually more resistant to edge effect and can sustain larger numbers of species and larger populations (Raunio et al., 2013, pp. 96-97). Smaller patches have smaller populations in general, and this increases the risk of that population disappearing (Raunio et al., 2013, pp. 96-97). On the other hand, smaller patches can support biodiversity when looking at the amount of species and habitats patches in larger scale (Wheater, 1999).

Another major factor is connectivity. Habitat patches that are connected by green corridors are more likely to survive and thrive than patches that are not connected (Benide et al., 2015; Raunio et al., 2013, 96). These corridors help the dispersal of plants and animals and can provide a link between different populations, which prevents isolation. A study by Benide, Veith and Hochkirch (2015) suggests, that corridors can have much more effect on urban species richness than stepping-stone habitats. They note that stepping-stone habitats usually decrease the distance between patches, but do not provide an actual corridor (Benide et al. 2015, p. 588).

Benide, Veith and Hochkirch (2015) found that, apart from water cover and management intensity, biotic factors caused all the other significant effects of species richness. These biotic factors in the study include, “herbaceous, shrub, tree or total vegetation density, cover or structure, as well as the proportion of green spaces in the surrounding area” (Benide et al. 2015, p. 589). This suggests that vegetation factors could be utilized in areas where extending green spaces is not an option, when conserving species richness. (Benide et al., 2015, p. 589) Especially, birds and insects benefit from heterogenic vegetation structure.

DESIGN AND TARGET AREA

I have chosen my design area to be a forest that borders Vihdintie, the railway and Kaupintie. This area was chosen because

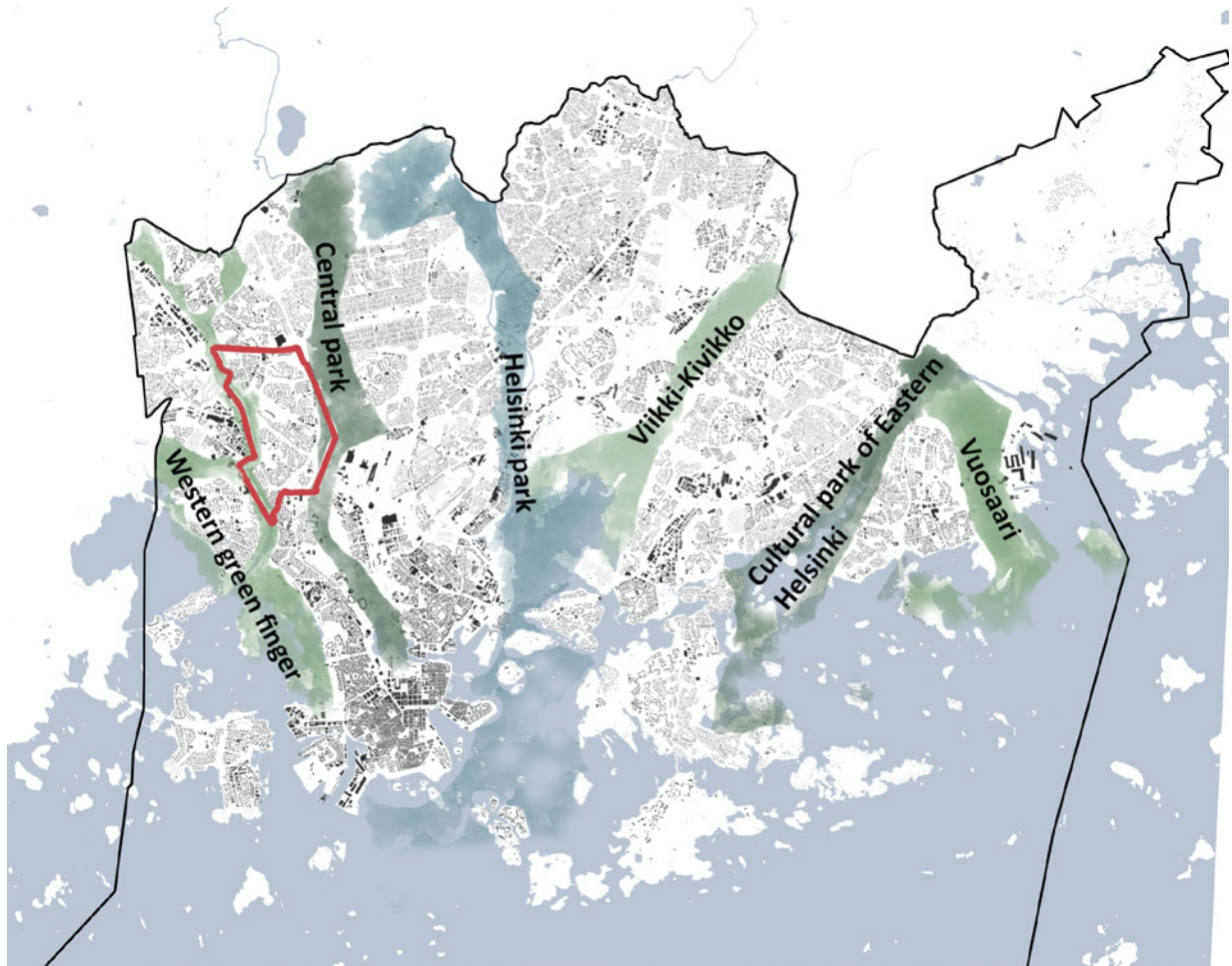


Figure 1. Green fingers of Helsinki. Green fingers form a basis for the green network in Helsinki.

it is part of the western green finger and it is also affected by the new regional plan. This area is designated for dense building, but the regional plan demands that there must be a green corridor running through the area, that connects the other existing green areas: Mätäjoki valley and a forest on the other side of the railway (City of Helsinki, 2016). Currently, the area is underused and is not designated a proper function. It is considered a leftover part of land that is used for recreational purposes and the area is not named. My design solution focuses on creating a functional green corridor between existing green areas, with mapping and preserving existing nature values. I will be also taking into account social sustainability and the changing dynamics in the area after the vast amount of new housing and changes in public transport.

OVERVIEW OF THE TARGET AREA

The vegetation types of the area mainly consist of different types of forest, open areas with dry meadow features and juniper trees (*Juniperus communis*), areas that consist of exposed bedrock or are considered wasteland or scrub land. The main tree species in the area depends on the nutrient levels of the soil and management intensity. The forest areas are dominated by spruces (*Picea abies*), pines (*Pinus sylvestris*) or birches (*Betula pendula* or *Betula pubescens*) (City of Helsinki, 2009). Areas under the power lines are kept open which has enabled suitable vegetation, such as juniper trees (*Juniperus communis*) and different types of grasses (*Poaceae*), to flourish. There is a 2 hectare area of spruce dominated forest that has some old-growth forest features, such as layered vegetation structure, decomposing wood and old trees (City of Helsinki, 2009). There are no areas that are considered to have significant nature or landscape values in the target area. However, Mätäjoki that runs through Haaga, is considered to be ecologically valuable. In the target area, there are defense structures, such as trenches. These structures are from World War I and they are located near the North-Haaga station (City of Helsinki, 2009).

CONCEPT

My concept aims to preserve important habitat patches and connections between green areas, as well as to offer possibilities for recreational activities, and connect the area better to other recreational green areas with new pathways. I have identified three main green areas which I find to be most crucial for the area. These areas have diverse habitats and vegetation, and support biodiversity in the area. They also have a diverse landscape and will add aesthetic value, in addition to ecological values. These three areas form a basis for the green corridor that runs

through the target area connecting nature as well as humans.

First, is an open area under the power lines in the northwest corner of the target area. This area is kept open due to power lines and this creates opportunities for species to thrive that would not be able to in a forest environment. The area has some features and species typical to dry meadows (City of Helsinki 2009). In addition, the area links the Mätäjoki area with the Aino Achtés Park, since both have patches of open habitats and scrub land. Meadows and dry meadows require management and suffer from eutrophication and natural succession (Raunio et al. 2013, p. 72). This area could be improved by introducing more species specialized for dry meadows, such as heartsease (*Viola tricolor*) or harebell (*Campanula rotundifolia*) (Soini 2009, p. 230).

The second area is a spruce dominated forest in the northeast part of the target area which has old-growth forest features. I have also included into the design a smaller forest patch with exposed bedrock in the southern parts of the target area. Since forests are sensitive to wear, pathways should be designed carefully, as well as managing the creation of spontaneous paths (Hamberg 2009, p. 23). In order to preserve unaffected understory vegetation between paths, effects of trampling should be managed. For example, the distances between paths should be more than 20 meters and the users should be directed to use main pathways and not to use shortcuts or unofficial routes (Hamberg et al., 2010; Hamberg, 2009, p. 23). As well as trampling, edge effects affect the urban forest. It is suggested that the forests should be kept in a compact circular shape and the size of the patch should be at least 3 hectares to leave some unaffected vegetation in the forest (Hamberg et al., 2010; Hamberg, 2009, p. 23). This relies on an assumption that the edge effect penetrates 50 m into the patch, as suggested by Hamberg (2009).

The third part is a built urban park. This ties together the preserved green areas and completes the corridor. Part of the built green area could function as an extension of the older forest, mentioned previously, in order to prevent edge effect. The urban park part also offers possibilities for leisure and recreational activities by providing inhabitants with different functionalities, such as playgrounds, fields and other possibilities for activities. I suggest placing these within the more built area of the green corridor, since these functions can increase the wear and pressure on natural green areas. In the middle parts of the green corridor, I suggest a hub of functions, which includes commercial services and some recreational functions, such as a playground. This brings the locals together, creates a livelier

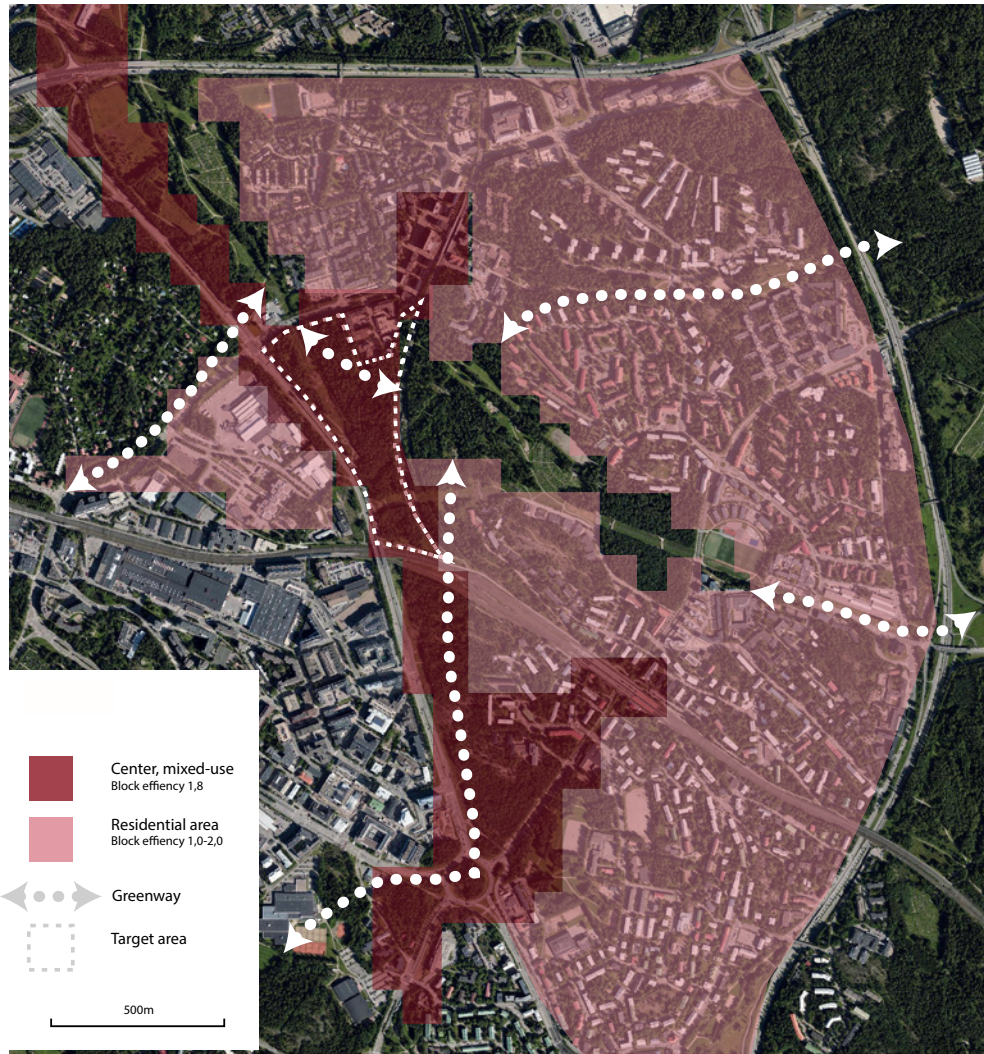


Figure 2. Target area and boulevardization. Vihdintie will be densely built. The new regional plan also points places for green corridors.

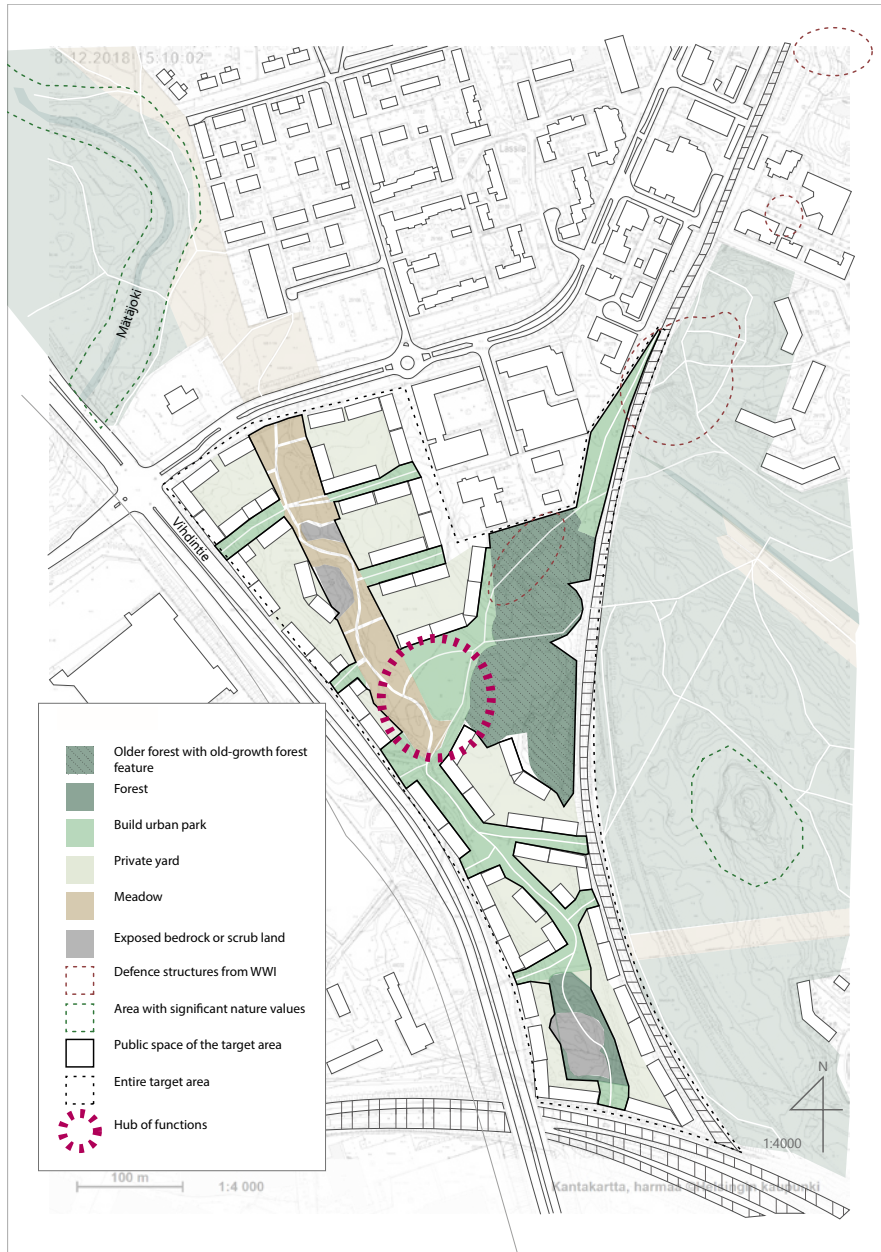


Figure 2. Master plan.

atmosphere and links together green areas, recreational activities, as well as commercial and other services. In addition, I also suggest an under- or overpass that would connect the Mätäjoki area and the target area effortlessly, creating an easily accessible recreational route. The green corridor also enables easy access to public transport, by providing routes to North-Haaga train station and Vihdintie. Here, at Vihdintie, there will be a significant hub for public transport, since there will be an extension of tramlines going along Vihdintie and Kaupintie to the North-Haaga train station.

FUTURE PROSPECTS

The greatest threats to the area are the increasing wear in the forest and meadow, as well as the decreasing size of habitat patches in the target area. Also, urban green areas are usually managed intensely, because people think that unmanaged areas are a result of lack of care or interest in the area, even if the amount of care is intentional for creating a more natural environment (Thompson & Sorvig, 2008; Nassaeur, 1991). The increased amount of inhabitants could mean a demand for more built, and managed, green areas.

In addition to ecological values, green areas are important for recreational purposes and leisure. This means that the aim of the green area, for example, preserving and supporting biodiversity, should be combined with the needs of the inhabitants and users. Urban green areas should connect humans, as well as nature.

With my concept I am to consider both nature and the users of the area. My concept is focused on green area planning, but the importance of management should not be forgotten. Especially, with natural green areas, management is part of the planning process (Soini 2009, 225). To answer the needs of urban nature, and the needs of inhabitants, the city structure and green network should be planned and managed carefully.

REFERENCES

Beninde, J., Veith, M., and Hochkirch, A., 2015. Biodiversity in cities needs space: a meta-analysis of factors determining intra-urban biodiversity variation. *Ecology Letters*, 18(6), pp. 581-592

City of Helsinki. 2009. *Haagan luonnonhoitosuunnitelma vuosille 2008–2017 II vaihe: lassila & pohjois-haaga*. [pdf] City of Helsinki: Urban Environment Division. Available at: <https://www.

hel.fi/static/hkr/julkaisut/vas/phaaga_lassila.pdf > [Accessed 5 December 2018]

City of Helsinki. 2016. *Helsingin yleiskaava – Kaupunkikaava – Helsingin uusi yleiskaava*. [pdf] City of Helsinki: Urban Environment Division. Available at: <https://www.hel.fi/hel2/ksv/julkaisut/yos_2016-3.pdf> [Accessed 5 December 2018]

City of Helsinki. 2007. *Haagan aluesuunnitelma 2007–2016*. [pdf] City of Helsinki: Urban Environment Division. Available at: < https://www.hel.fi/static/hkr/julkaisut/haagansuunnitelma1.pdf> [Accessed 5 December 2018]

Hamberg, L., 2009. *The effects of habitat edges and trampling intensity on vegetation in urban forests*. University of Helsinki, Faculty of Biological and Environmental Sciences. Doctoral thesis.

Hamberg, L., Tarvainen, O. and Malmivaara-Lämsä, M., 2010. *Kaupungistuminen vaikuttaa metsäkasvillisuuteen ja maaperään. Metsätieteen aikakauskirja*, 3/2010, pp. 303-308

Luonnonsuojelulaki 1996/1096. Issued in Helsinki, 20 december 1996. Available at: <https://www.finlex.fi/fi/laki/ajantasa/1996/19961096> [Accessed 5 December 2018]

Maankäyttö- ja rakennuslaki 1999/132. Issued in Helsinki 5 February 1999. Available at: <https://www.finlex.fi/fi/laki/ajantasa/1999/19990132> [Accessed 5 December 2018]

Niemelä, J., Furman, E., Halkka, A., Hallanaro, E.-L. and Sorvari, S., 2011. *Ihminen ja ympäristö*. Helsinki: Gaudeamus.

Raunio, A., Anttila, S., Kokko, A., and Mäkelä K., 2013. *Luontotyyppi-suojelun nykytilanne ja kehittämistarpeet – lakisääteiset turvaamiskeinot*. Helsinki. Ministry of the Environment.

Secretariat of the convention on biological diversity, 2014. *Global biodiversity outlook 4: CBD, Convention on Biological Diversity*. Montreal: Secretariat of the Convention on Biological Diversity.

Soini, T., 2009. *Viherrakentajan käsikirja*. Helsinki: Viherympäristöliitto.

United Nations, Department of Economic and Social Affairs, Population Division (2018). *World Urbanization Prospects: The 2018 Revision*. Available at: < https://population.un.org/wup/Publications/Files/WUP2018-KeyFacts.pdf f> [Accessed 5 December 2018]

Wheater, C. Phillip., 1999. *Urban habitats*. London: Routledge.

HOW BUILDING EFFICIENCY AND SETTINGS IN HOUSING STOCK AFFECT THE POPULATION – CASE VIHDIINTIE

Lauri Ovaska

BUILDING AFFECTING POPULATIONS

“Buffers around an area are consuming more land area than with common sense it is easy to realize due to the geometric principle, that size of an area isn’t growing linearly with the distance of its radius, but exponentially with the square of that distance. The principle works also on the city-level scale, where growing the radius of an area e.g. from one kilometre to seven is multiplying the area nearly fifty times (Unwin 1912, pp.12-13; Vaattovaara & Joutsiniemi 2016, pp.35-36).”

INTRODUCTION

Citizens of the city are the core of the city: most public services are produced for citizens and citizens are also the source of most of the income the city administration receives through taxes and service fees. This is why making estimations, despite considerable uncertainty, on future population figures is essential in justify decisions that can affect the future, for instance, through land-use planning and long-term investments (City of Helsinki 2017a, p.7). Understanding population dynamics, to make reliable forecasts on future population levels is, thus, important, but it is a demanding and complex task where it is necessary to consider many demographic, economic and political processes, on the local to the global scale. The relation between urban planning and forecasting the future works two-ways. Planning affects the future, and at the same time, planning attempts to respond to the predicted future by providing enough space for housing, business and services, and to arrange the transportation system in a sustainable manner.

In this article, a deeper review of comprehensive population forecasting is not the goal, but it is rather to discuss the potential effects that different settings in building efficiency, the share of dwelling types and sizes, might have on the population in a land area of a certain size. Three models, with varying settings in relation to these variables, are presented in this article for the Vihdintie boulevard area. The method is based on a rather simple spreadsheet using basic multiplication and division calculation formulas, but if input data is realistic, the results can help to evaluate the effects of different choices made concerning the housing stock. Input data used in calculations are based on real land area size and key figures from the newly built housing stock in Helsinki, and alternative models relate to the recent discussion on small apartments, presented in the next paragraph.

THE NEWLY BUILT HOUSING STOCK IN HELSINKI AND VANTAA

There has been recently an ongoing lively debate on the build-

ing amounts and sizes of one room apartments, and how should (or shouldn't) the production be regulated (Helsingin Sanomat 5.10.2018). The discussion of apartment sizes and types is closely related, in different aspects, to sustainable urban development: economic, social and environmental. The developer's interest might be to maximize the profit of every square meter of land area by building a high number of small apartments to rent, but it will not necessarily profit the occupant if the price per square meter is considered. Lower living space per person can be defended by ecological arguments, but it can lead to socially unsustainable situations, by packing people into unnecessarily low living spaces that could affect life quality. Building too many of one type of apartments in general, whether it is defined by room numbers or ownership, can lead to an unbalanced resident structure of a neighborhood and social segregation.

Especially, the City of Vantaa has gained attention with the so-called mini-apartments (15.5 m²) built in Martinlaakso, but also with other development sites where the share of one room apartments have reached over 40%, and the total share of one and two room apartments are close to 80%. This has also been a concern for the City of Vantaa, and it has started to limit the share of one-room apartments to a maximum of 30% in new houses by land use contracts with development companies (Helsingin Uutiset 17.9.2018). In table 1, it is possibly to see the share and size of apartments by room number of newly built housing stock in Helsinki and Vantaa. It can be observed that the share of one room apartments is remarkably higher in Van-

taa (+10 p.p.), but also the average size of one room apartments is smaller:

STUDY AREA: VIHDIINTIE BOULEVARD

The study area of this article is the Vihdintie road-area located in the western side of the Haaga district. The area is interesting because it is an essential part of the Helsinki city plan 2050 (City of Helsinki, 2018b), which proposed 'boulevardization' to seven entry roads to the city, Vihdintie being one of them. Boulevardization means the transformation of motorway-like roads into inner city-like streets which have densely built mixed-use buildings. City boulevards have gained a great amount of attention in public discussion, both for and against, and the proposal has been appealed to the Administrative Court by the local residents and state authorities. Conflicts have been concerned with the cutoffs of the nearby city forests and to the changes in the traffic conditions of the entry roads. The highest juridical instance in the field of urban planning, the Supreme Administrative Court, opposed the proposal 8.11.2018 of building four out of seven proposed city boulevards on the 8.11.2018 (Supreme Administrative Court, 2018). The decision is significant, since the boulevards are one of the main solutions for the growth of the city provided by the plan. Vihdintie is one of the four boulevards not repealed, and the more detailed planning of it has already begun in the Helsinki city planning department (City of Helsinki, 2018c).

Vihdintie Boulevard is part of a larger entity, "Vihdintie-Huopalahdentie boulevard city", which is defined in the planning principle document as "the street line starting in the south from Munkkiniemi square, including Huopalahdentie, the roundabout of Haaga and the part of Vihdintie street from the roundabout to the Kaupintie intersection in the north". The transportation system in the boulevard city will be strongly based on public transportation, especially, the Vihdintie light rail, that will, together with Jokeri light rail, connect all the existing railway stations nearby (Pohjois-Haaga, Pitäjänmäki, Valimo, Huopalahti) and provide a transverse connection to the east and west of the area. The nature of Vihdintie as an entry road will change considerably, due to the transformation to a main road of a neighborhood, and the speed limits for the road traffic will be reduced to inner city level (40-50 km/h). (City of Helsinki, 2018c.)

In the calculations of this article, only the northern part of the boulevard city, starting from Vanha Viertotie intersection in the south of the roundabout to Kaupintie is considered. The land area of the study area is 818979 m², which was formed by dig-

Share (%) and size (m²) of apartments by room number in new housing stock of Helsinki (2017-2018*, N=17500) & Vantaa (2017, N=3288)

Room number	* until 26.11.2018			
	Helsinki %	Vantaa %	Helsinki m ²	Vantaa m ²
1	22.9	33.3	32.6	29.9
2	36.7	35.6	48.0	47.7
3	23.9	21.3	70.5	67.7
4	12.6	7.3	93.0	96.7
5 ≥	3.9	2.5	127.3	135.8
	100	100		

Table 1. Based on: City of Helsinki 2018a; City of Vantaa 2018.

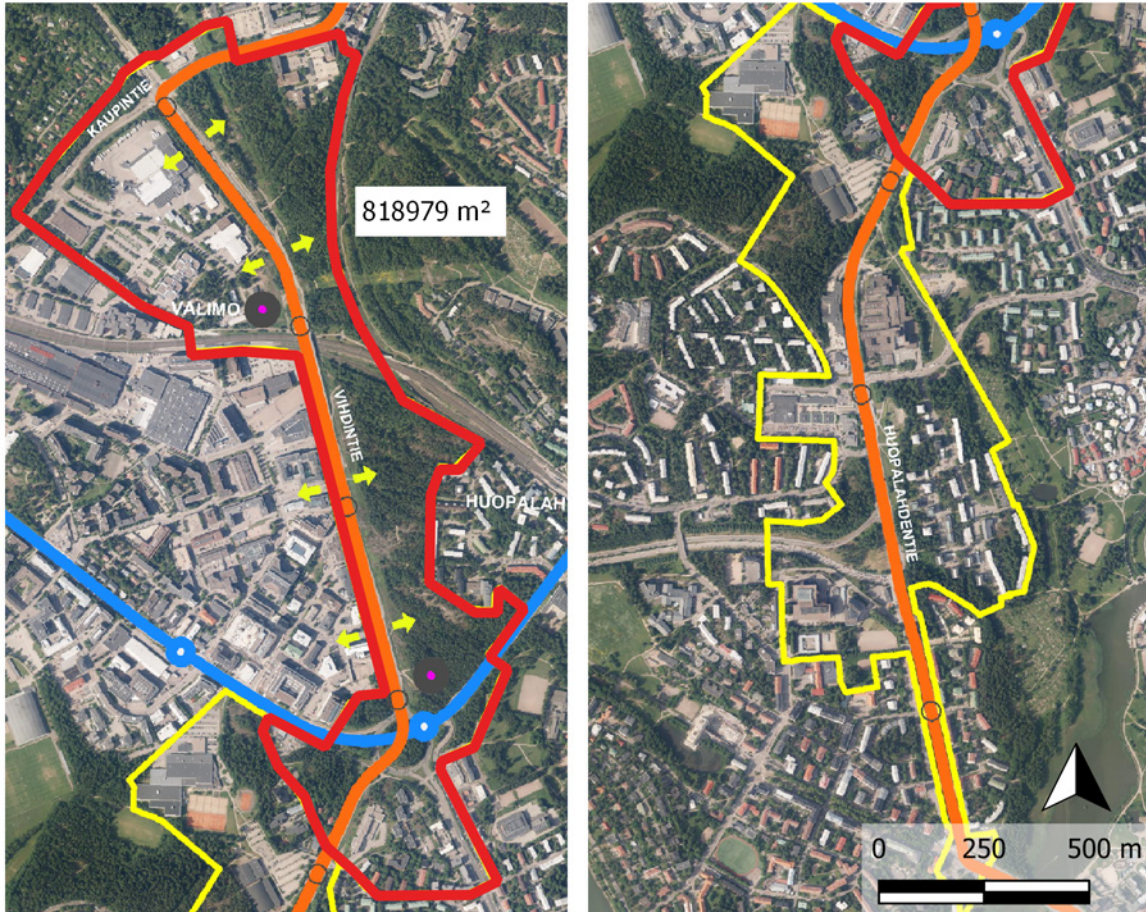


Figure 1. Vihdintie-Huopalahdentie boulevard city is the area inside of yellow and red polygons. Red polygon highlights the Vihdintie boulevard, which is the study-area of this article. Orange and blue lines are the planned light-rail connections. (Modified, original: City of Helsinki, 2018c)

itizing the area from the planning principle document using QGIS 3.4.-software. The boulevard city, and the study area (red polygon), is presented in figure 1. From the aerial picture, it is easy to observe that most of the eastern side of the planned Vihdintie boulevard is now wooded. This has, as expected, raised opposition among locals and others, who are concerned about the nearby city-forests in Helsinki (City of Helsinki 2018d).

INPUT VALUES

EFFICIENCY RATIOS AND THE FLOOR AREAS

An efficiency ratio is a commonly used area-based measure indicating density of floor area in a certain area, which can be calculated e.g. for blocks, plots or areas. Area efficiency (E-a) considers also parks, roads and other non-housed areas within the area, which therefore lowers the efficiency ratio. An efficiency ratio, or any other density measure, can easily be misleading, either intentionally or unintentionally, if the used area borders are not natural phenomena, such as administrative borders often are (Vaattovaara & Joutsiniemi, 2016, p.34.). This is important to keep in mind when describing or comparing any densities, whether they are calculated for a specific area within a plan or when making comparisons between districts or cities. An efficiency ratio itself, does not take a stand on whether the total floor area should be evenly distributed to the land area or whether it should be piled in a few blocks of skyscrapers.

In the city plan, the boulevards are marked with C2, which is defined as mixed-use, inner-city type of areas. In the description of C2 marking it is said, that “areas next to city boulevards must have block efficiency mainly over 1.8” (City of Helsinki, 2018b). In a brochure of the city plan, the city is using Kallio, Ruoholahti and Töölö as examples of dense neighborhoods, where the block efficiency exceeds 1.8 (City of Helsinki 2017b, p.2). Because there is no available information on the area of the future blocks in the Vihdintie boulevard, in the calculations of this article, I have used area efficiencies from Töölö and Kallio-Hakaniemi neighborhoods, where the block efficiencies are close to 1.8, and as an alternative with a lower efficiency ratio, I have used Arabianranta. Area efficiencies are presented in the upper part of figure 2, while in the lower part these efficiencies have been formed into smaller areas within the neighborhoods of the upper part, to demonstrate the block efficiencies. All ratios have been formed by summing the total floor area of the buildings from building registry data (HSY, 2013) within the defined area and dividing it with the size of the area.

Since the boulevards will be mixed-use environments, an assumption of 70% is used for the share of housing use of the total floor area. Computational amounts of the total floor areas and housing floor areas for Vihdintie boulevard area, with different area efficiency ratios, are presented in table 2. Comparing the floor areas with different efficiency ratios makes it clear how much the possible floor area varies depending on how the neighborhood is built:

Vihdintie boulevard land area m ² and floor areas m ² * by area efficiency				
* Housing floor area is assumption = 70 % of total floor area				
Reference area (efficiency, E-a)	E-a	Land area m ²	Total floor area m ²	Housing floor area m ²
Etu-Töölö	1.51	818979	1236658	865661
Kallio-Hakaniemi	1.30	818979	1064673	745271
Taka-Töölö	1.03	818979	843548	590484
Arabianranta	0.75	818979	614234	429964

Table 2. Land area and floor areas calculated with different area efficiency ratios.

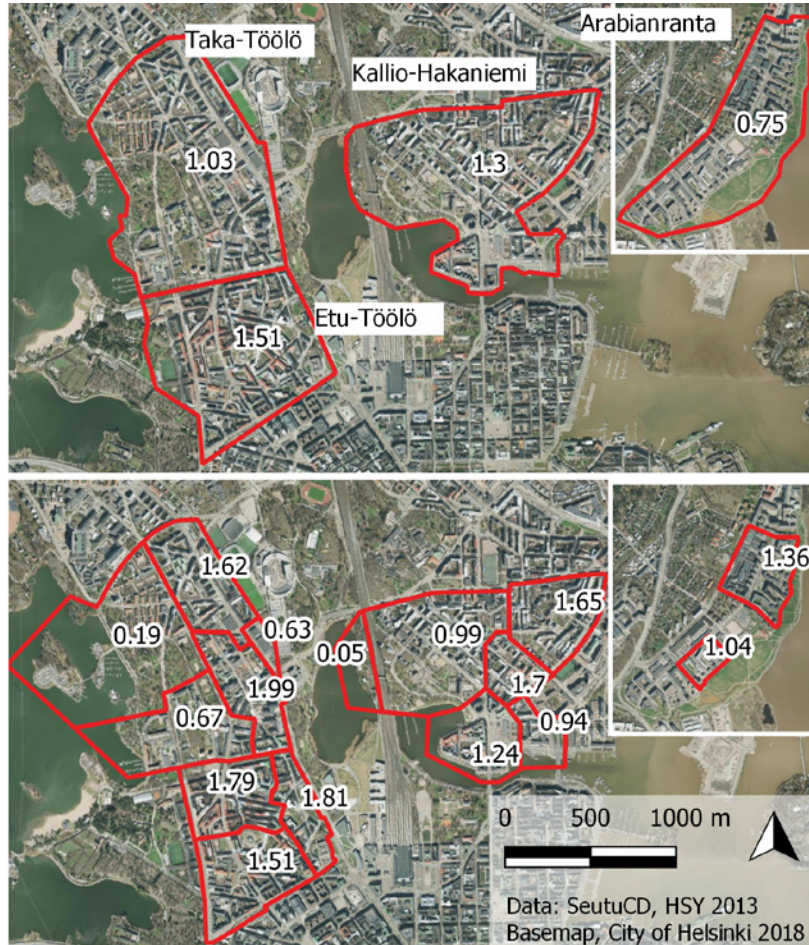


Figure 2. Reference efficiencies in Helsinki.

Share (%), size (m ²) and average number of residents (res.) of apartments by room number used in Model A, B & C									
Rooms	Model A			Model B			Model C		
	%	m ²	res.	%	m ²	res.	%	m ²	res.
1	23.0	32.6	1.0	30	32.6	1.0	30	29.3	1.0
2	36.7	48.0	1.5	40	48.0	1.5	40	43.2	1.5
3	25.8	70.5	2.5	20	70.5	2.5	20	63.5	2.5
4	14.5	93.0	2.5	10	93.0	2.5	10	83.7	2.5
	100			100			100		

Table 3. Housing stock setups used in calculations for Vihdintie boulevard: Model A, B & C.

Comparison table of Models A, B, C in Vihdintie boulevard										
Apartments total (Ap. total), One room apartments (1-r ap.), Population (Pop.)										
Reference area	E-a	Model A			Model B			Model C		
		Ap. total	1-r ap.	Pop.	Ap. total	1-r ap.	Pop.	Ap. total	1-r ap.	Pop.
Etu-Töölö	1.51	15244	3506	27256	16527	4958	27269	18363	5509	30299
Kallio-Hakaniemi	1.30	13124	3018	23465	14228	4268	23476	15809	4743	26085
Taka-Töölö	1.03	10398	2392	18592	11273	3382	18601	12526	3758	20667
Arabianranta	0.75	7571	1741	13538	8209	2463	13544	9121	2736	15049
Increase to Model A		0%	0%	0%	8.42%	41.42%	0.05%	20.46%	57.12%	11.16%

Table 4. Comparison table of models A, B, C in Vihdintie boulevard.

THE SHARE AND SIZE OF APARTMENTS AND THE NUMBER OF RESIDENTS

In order to estimate the possible amounts of housing units and inhabitants in the study area, three different models on share and size of apartments were compiled, based on the newly built housing stock data of Helsinki (table 1) and on reflecting the recent discussion on small apartments. All three models have apartment types of 1-4 rooms and they use the same assumption on the average number of residents per apartment type: 1 in one-room apartment, 1.5 in two-room apartment, 2.5 in three- and four-room apartments. Since the boulevard area will consist mainly of high-rise buildings, and the share of more than four-room apartments in high-rises built in Helsinki in the years 2017-2018 was only 1.6% (City of Helsinki, 2018a), the share of these apartments has been redistributed to apartments with three- and four-rooms in the models. Models A, B and C are presented in table 3. The key characteristics of the models are:

- Model A aims to be similar to currently built housing in Helsinki.
- Model B emphasizes the share of one room apartments (+7 p.p.) and two room apartments (+3.3 p.p.) but uses the same size of apartments as Model A.
- Model C emphasizes the share of one and two room apartments, such as Model B, but the size of all apartments is decreased by 10%.

RESULTS

Calculations were conducted with Microsoft Excel, using the data presented in tables 2 and 3. The amount of each type of apartment was calculated by distributing the housing floor areas (table 2) to follow the share and size of apartments in the three different models (table 3). Population estimates were calculated by multiplying the amount of each type of apartments with the assumptions of the average number of residents in each type of apartment (table 2). For the comparison, the three most relevant numbers to the subject of this study, total number of apartments, number of one-room apartments and population, are presented in table 4.

APARTMENTS AND POPULATION

Using the assumptions described earlier it results in very high numbers both in the apartments and, especially, in population.

If using the area efficiency ratio of Etu-Töölö (E-a 1.51), where the building efficiency is closest to what the city plan is pursuing (1.8 block efficiency), Model A results in 15 244 housing units and 27 256 inhabitants, which is equal to a population density of over 33 280 per km². To put the result in scale, the highest population density in Helsinki is in the Alppiharju district, with about 13 000 per km² (City of Helsinki, 2018e, p.85), and in Manhattan, where the population density is about 28 000 per km² (US Census Bureau 2018). More realistic results are achieved by using the lowest reference area efficiency from Arabianranta (E-a 0.75), which is a relatively new neighborhood, built in the beginning of last decade. Even with the lowest efficiency ratio, the population results are high, 13 538 inhabitants, which also exceed the population density of Alppiharju. These numbers of inhabitants are clearly not realistic, which indicates that, at least, the assumptions used in calculating the average number of inhabitants per apartment type are set too high.

After the Supreme Administrative Courts decision to repeal part of the boulevards in the city plan, there has been discussions on how much building potential, in terms of inhabitants and jobs, did the city “lose”. Pentti Murole, an active debater and emeritus professor on traffic planning, did recently comment on the subject in his blog-post, using the Vihdintie boulevard as an example. Murole argued that reaching a block efficiency of 1.8 is not realistic, and according to him, using efficiency ratios of 0.5-0.7 area could offer space for 8 000-10 000 inhabitants or jobs (Murole, 2018), which is closer to the results of the calculations presented above when using the efficiency of Arabianranta.

Even though the results are too high to be plausible, the land area of Vihdintie boulevard is factually large, holding a huge potential and it will eventually inhabit a high number of people and business. Comparison of the different efficiency ratios from existing neighborhoods in Helsinki shows very clearly, that the way in which neighborhoods are built has a great impact on the potential number of apartments and inhabitants of the area. The building efficiency of Kallio-Hakaniemi or Etu-Töölö, compared to Arabianranta, is approximately two times more efficient, meaning that, in theory, by building the area in a similar way to Kallio-Hakaniemi or Etu-Töölö, it would result in double the number of apartments and inhabitants.

COMPARISON OF THE MODELS

In relation to the discussion on the small apartments, it is interesting to compare the difference in the results on the alternative Models B and C to Model A, which aims to imitate the housing

stock built in Helsinki in last few years. Since it is clear that the results, in absolute numbers, are very much overestimated and should be interpreted as rough indicative estimates, comparison of the models is more reasonable to do by using percentages presented in the bottom row of table 4 (Increase to Model A).

Model B, which differs from A by emphasizing the amount of one and two room apartments, seems to have no remarkable effect on the total population (+0.05%). When looking at the difference in the total amount of apartments, the result on the total number of apartments will rise by 8%. The difference is more dramatic if we look at the number of one room apartments, where the increase is 41%, compared to Model A. Model C, which differs from Model A by emphasizing the amount of one and two room apartments, much like Model B, decreases the size of all types of apartments, seems to have a remarkable effect on the total population by increasing it by 11%. When looking at the difference in the total amount of apartments, the increase to A is 20%. Just like in Model B, the most dramatic difference to Model A is in the increase in the number of one room apartments by 57%.

As a conclusion to the differences in results on different models, it seems that emphasizing the share of small apartments does not have a significant effect on the number of the total population. The change is rather qualitative: if it is assumed that no families or couples are living in one room apartments, it means that the share of single adults will rise in the neighborhood, which will have effects on the nature of the neighborhood and, for instance, its local service demand. If the goal is to gain the amount of total population by adjusting the housing stock, decreasing the sizes of apartments, thus reducing the living space per person, seems to be the most effective, though it might not be the most socially sustainable way of doing it.

DISCUSSION

Even though the results do not provide an accurate view of the future in the Vihdintie boulevard, they are based mostly on real data and realistic assumptions, thus the results should be seen as a move in the right direction. It is obvious that the calculation formulas, input data and assumptions, should be refined if the level of accuracy needs to be improved. These kinds of calculations can be an easy and interesting way to review plans, while also being possible to do outside of the official planning departments, since there is usually plenty of key figures available in the public planning documents and from other open data sources. This article has focused mainly on the numbers related to building efficiency, land area and housing stock. Of course,

it is important to build numeric models, calculate and simulate effects of choices made in urban planning, but just as important is to understand the multi-dimensional social phenomena behind the numbers.

Housing is a question that is relevant to everybody, most people have an apartment and are paying a great share of monthly income for it. Buying an apartment is often the biggest investment made by a private person in his or her lifetime, while many are paying monthly rent to professional housing investors. The housing industry producing new apartments is also a major economic actor in the society, and its business is heavily dependent on the policies public authorities make and implement in the planning and building permission processes. Businesses must be profitable to their owners, while the policymakers must be concerned with the economy, among other aspects, and might use housing as an instrument, for instance, for social and environmental policy by guiding the development of housing stock.

Different models presented in the calculations would probably satisfy one stakeholder group more than another. A growing city might want to ensure that it can provide enough housing for all newcomers, and, especially, for families that are growing new generations of taxpaying citizens, at a price they can afford. A housing investor might want to maximize the number of housing units to maximize transactions on rents or, when sold, by emphasizing the share of small apartments. The city might not want this, because it would decrease the number of larger apartments suitable for families.

Building efficiency is not immediately related to the housing stock settings, but it does, however, determine how much floor area there is to be distributed with the different apartment types. Densifying urban areas, in which building efficiency is closely related, is very commonly set as a target in modern urban planning as a way to prevent uncontrolled urban sprawl, which, for instance, increases emissions of traffic and the costs of infrastructure. Even though the advantages of the agglomeration of people, companies and buildings in cities can accelerate positive interaction are undeniable, after some level of density, the negative externalities of it can outweigh the positive aspects. In the early 20th century, when cities were often unhealthy living environments, a goal in planning was often, especially, in the garden cities rather the inverse - to decrease the density (Unwin 1912; Vaattovaara & Joutsniemi 2016). Based on the study of this article it is not possible to discuss what would be dense enough for the Vihdintie boulevard. Despite this, the calculations demonstrate that even quite moderate efficiency ratios

lead to very high numbers of floor area, apartments and inhabitants, when the land area it is multiplied with is large enough.

It is obvious that the available land area is always limited, and it is not sustainable to consider all non-built green areas within the city as possible building sites. Wide and uniform non-built areas that are not green within the existing urban structure are rare, but despite this, in the Helsinki Metropolitan Area, approximately only under 5% of the total land area is covered with buildings. This means that land use is highly fragmented, which is also lowering area efficiencies. One reason for fragmentation, is the buffer zones around plots and blocks. The need for buffers should be evaluated critically case by case, but it must be noted that some of these are serving some necessary function, such as storm-water management. Buffers zones around an area are consuming more land area, though with common sense, it is easy to realize, due to the geometric principle that the size of an area is not growing linearly with the distance of its radius, but exponentially with the square of that distance. The principle works also on the city-level scale, where growing the radius of an area, for instance, from one kilometer to seven kilometers is multiplying the area nearly fifty times. (Unwin 1912, pp.12-13; Vaattovaara & Joutsiniemi 2016, pp.35-36). At the city level, this gives hope that there is a lot of suitable locations for buildings to be developed, and in a more detailed level, this encourages us to pay attention to the geometric details of, for instance, plots, blocks and streets, in order to gain building efficiency and minimize land waste through fragmentation.

REFERENCES

- City of Helsinki 2018a. *Huoneistot_2017_2018.xlsx* (apartments 2017-2018). Email attachment from Helsinki City Executive Office [Accessed 26 nov 2018].
- City of Helsinki 2018b. *Helsinki City Plan 2050*. Available through: Helsinki City Plan -website <https://www.hel.fi/hel2/ksv/liitteet/2018_kaava/YK_2016_Tullut_voimaan_20181205.pdf> [Accessed 10 dec 2018].
- City of Helsinki 2018c. *Vihdintien ja Huopalahdentien bulevardikaupungin suunnitteluperiaatteet, taustaa ja perusteluja*. Available through: The Urban Environment Committee's decisions 5.6.2018 <https://www.hel.fi/static/public/hela/Kaupunkiymparistolautakunta/Suomi/Paatos/2018/Kymp_2018-06-05_Kylk_16_Pk/1E5DA6B8-D412-C9C9-9473-63DF36E00000/Liite.pdf> [Accessed 4 dec 2018].
- City of Helsinki 2018d. *Bulevardikaupunkia suunnitellaan Vihdintien ja Huopalahdentien varsille*. Comments on the planning principles. Available through: Kerro kantasi-web service for public participation <<https://kerrokantasi.hel.fi/bulevardikaupunki/>> [Accessed 12 dec 2018].
- City of Helsinki 2018e. *Helsinki alueittain 2017*. Available through: City of Helsinki -website <https://www.hel.fi/hel2/tietokeskus/julkaisut/pdf/18_11_05_Hki_Alueittain_2017_Tikkanen.pdf> [Accessed 10 dec 2018].
- City of Helsinki 2017a. *Helsingin ja Helsingin seudun väestöennuste 2017-2050*. Available through: City of Helsinki -website <https://www.hel.fi/hel2/tietokeskus/julkaisut/pdf/17_10_04_Tilastoja_12_Vuori_Laakso.pdf> [Accessed 4 dec 2018].
- City of Helsinki 2017b. *Kaupunkikaava – Näin luetaan kaupunkikaavaa*. Available through: City of Helsinki -website <<https://www.hel.fi/hel2/ksv/julkaisut/esitteet/esite-2017-1-fi.pdf>> [Accessed 16 dec 2018].
- City of Vantaa 2018. *Rakentaminen Vantaalla 2017*. Available through: City of Helsinki -website <http://www.vantaa.fi/instancedata/prime_product_julkaisu/vantaa/embeds/vantaawwwstructure/138020_Rakentaminen_Vantaalla_2017_taulukot.zip> [Accessed 4 dec 2018].
- Helsingin Sanomat* 5.10.2018. Asuntomarkkinoilla on yksiökuplan riski – ”Kanakoppeja” rakennetaan liikaa, turhan kauas keskustasta ja väärille ihmisille. Available through: Helsingin Sanomat -website: <<https://www.hs.fi/koti/art-2000005852964.html>> [Accessed 5 dec 2018].
- Helsingin Uutiset* 17.9.2018. Yli 40 prosenttia asuinalueesta yksiöitä, moni sijoittajilla – Vantaa myöntää virheen: “Asukasrakenteen yksipuolistuu”. Available through: Helsingin Uutiset -website <<https://www.helsingin uutiset.fi/artikkeli/703396-yli-40-prosenttia-asuinalueesta-yksioita-moni-sijoittajilla-vantaa-myontaa-virheen>> [Accessed 4 dec 2018].
- HSY* 2013. SeutuCD Building registry. Reached through course materials (University of Helsinki).
- Supreme Administrative Court 2018. *KHO:2018:151*. Available through: Supreme Administrative Court -website <<https://www.kho.fi/fi/index/paatoksia/vuosikirjapaatokset/vuosikirjapaatos/1541580128040.html>> [Accessed 4 dec 2018].
- Murole, P 2018. *Bulevardisuunnittelun kiintoisa todellisuus*. Available through: Pentti Murole -blog: <<http://penttimurole.blogspot.com/2018/11/bulevardisuunnittelun-kiintoisa.html?m=1>> [Accessed 26 nov 2018].
- Unwin, R 1912. *Nothing gained by overcrowding!*, P.S. Jung & Son, Westminster.
- US Census Bureau 2018. *Quick facts: New York County (Manhattan Borough)*. Available through: US Census Bureau -website: <<https://www.census.gov/quickfacts/fact/table/newyorkcountymanhattanboroughnewyork,US/PST045217>> [Accessed 10 dec 2018].
- Vaattovaara, M and Joutsiniemi, A 2016. Väärinstynyttä tiivistä uusia tutkimuskysymyksiä. *Terra*, 128: 1/2016.

STUDY OF INFILL OPPORTUNITIES IN NORTH-HAAGA

Tommi Henriksson

INFILL DEVELOPMENT

“Even though Haaga lacks a bit of character it still is a very good place to live and seems to be in harmony with itself. Not everyone is willing to live in the hassle of city centre. It has a great location and maybe it would be good to fill it a bit more. No reason to waste space in such a great location. There is a lot of potential for infill for sure. Especially those locations that were pinpointed in this brief study, and those that are taken in consideration, and that have implementations underway by the City of Helsinki.”

FOREWORD

I used to live in Haaga, close by to the Rhododendron Park, during the period of 2005-2010. I saw how the middle parts of the area changed during that time. After that period, I would go through Haaga by bus. Before this, I lived for a while in Hakuninmaa, and during that chapter of my life, I used to change bus at the North-Haaga mall when I was commuting to various locations. Therefore, I have a rather clear impression of Haaga in various instances. However, to be honest, it might have been an impression full of bias. During this study, I clarified my view with the current situation of Haaga, and I did visit North Haaga a few times and decided to concentrate on the North. I did do a background study, checked the statistics, went there for fieldwork and combined it with all the experience and knowledge I have gathered during my life, especially, during the last years, and this course.

MY SCOPE

My perspective stems from Real Estate Economics. My task was to find possible infill sites in North-Haaga. However, I was not purely thinking economics first. I acknowledge that there are two Haagas, south and north. And there is a clear difference between those. South being a rather wealthy and peaceful place to live. Moreover, it is nearer to Central Helsinki and public transportation options are almost optimal. The northern parts of Haaga are further away from public transportation and are more “planned”. There is a rather ugly looking mall that is not that wealthy either; however, neither is it poor. There are a few social housing buildings, and so forth.

Southern people say they live in South-Haaga, whereas people from the north say they live in Haaga. That is what counts the most.

Or maybe I am full of bias.

However, I would like to try and bring these two Haagas closer

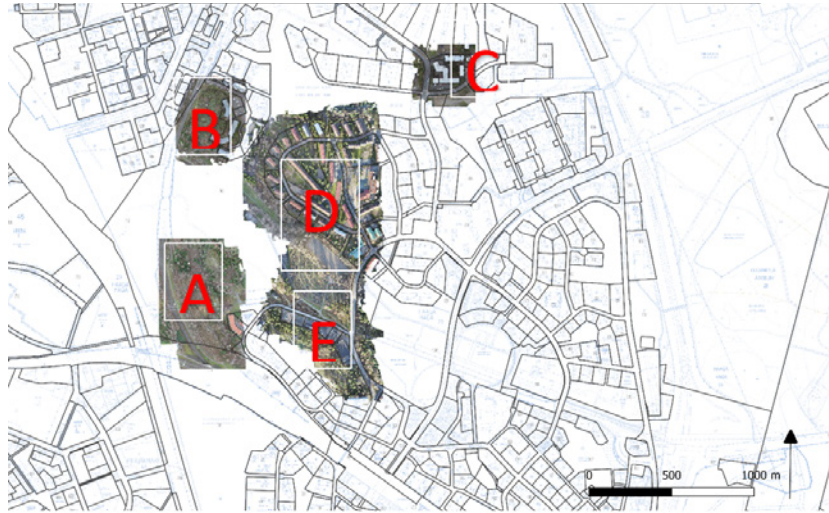


Figure 1. Recognized infill locations in the start.



Figure 2. Possible sites after site visits.

to each other, uniting the people. I would try to put more housing within the North parts, market priced especially. It would not solve anything if we put more social housing there. Maybe we should put more social housing to the south, however, I did this study concerning on North-Haaga's Infill possibilities. Maybe we should stop social housing and just give tenant-based subsidies for people who are in real need. There would not be us and them. Just us. It would be a lot better system and a whole lot of studies support this. However, I will not go deeper into this here.

It is good to acknowledge that gentrification is lurking behind every development project. Thus, if it is not considered in the planning, we probably will end up being gentrifiers. We could not gentrify South-Haaga since it is already a middle-class neighbourhood. Therefore, a gentrifier would focus on the north. There is still something to gentrify there. And I am not talking about gentrification as something good, something worth pursuing. Let us try to keep this in mind, the original inhabitants, local heritage and the nature of the area (Moskowitz, 2017). After all, we need infill. Helsinki keeps on growing and Haaga has a grand location. I would call it a transportation hub.

PS. I loved to live in Haaga. But to be honest I mainly slept there or stayed indoors in my home, it was a great location for me; it was in the center of my life triangle. I lived my life somewhere else. But my heart has always been where my home has been. And Haaga felt like home.

PRESENT REALITY, SITE VISITS

I started to study the map of Haaga through mainly aerial images. I did not want to check already the decided upon plans at all. I wanted to start from a clean sheet. By using aerial images it was good to check for possible infill locations.

After I identified 5 possible infill sites I started my fieldwork.

During the site visits I got a better understanding of the public realm of North-Haaga. I saw a lot of youngsters, pensioners and adults. Everyone seemed to be in a happy place, the area felt cozy. I was flying a drone; thus the people were interested and came to me and we had chats. There were also children playing in the green pockets in the middle of the housing area. They were having fun. The skyline was 3-4 stories high, besides those towers on top.

After my visits (3 in total) I thought I would not change a thing. I loved the skyline of Haaga and would not want to

break it with "skyscrapers". In infill area B (picture 1) there were trenches left over from the World Wars, so it was clear one could not build there. C indicates the mall; I had plans to relocate it to where the trenches were. Why is the mall where it is? Most social services are by the train station. The mall has a rather bad reputation, could we just move it to a better location, and start over? Why is it there? Does it have to be there in the future? Even though it is a conserved building.

Letter D indicates this green pocket in the middle of the buildings that would easily accommodate two apartment buildings. Furthermore, the buildings were low-rise and over 50 years of age, so it would be good to consider if it would be possible to give the housing companies allowance to build more. They could decide it by themselves. The demand for housing is sky high in Helsinki, so this would ease it a bit. Adjacent to this area, is maybe the best infill site, an old gravel field that no one uses. At least not so many, that there would be a need to save it. It is roughly 1,2 hectares. The City has built a new sports ground in the Middle of Haaga, just a stone's throw away.

On the other side of the common garden, which is by the Rhododendron Park, there is some low-rise industrial/office buildings (E). It would be good to re-consider the future of those plots. The ongoing plans in Haaga at the moment include increasing the amount of housing plots in the northern parts and rezoning the ISKU warehouse to housing. These plans are not conflicted with the proposals of my study.

THE STUDY

METHODS USED

I undertook GIS analysis in the very beginning with QGIS. I had real estate and building information, and the aerial image in the background. I generated a model where the buildings would be marked with different colors by their age. I made a layer from the real estate registry where I could see who owns the land, the City, or a private entity. And the borders of the real estates.

The financial analysis was conducted through a general model I generated, a Toolset I have developed in my professional capacity. So, I used a lot of knowledge I already had. However, some new searches were necessary, like the market price of building right square meters in Haaga. I found the price from the papers of City of Helsinki that were public. They had ordered an area property evaluation in 2015 from a third party assessor, thus it is a legitimate one (Municipality Law § 130).

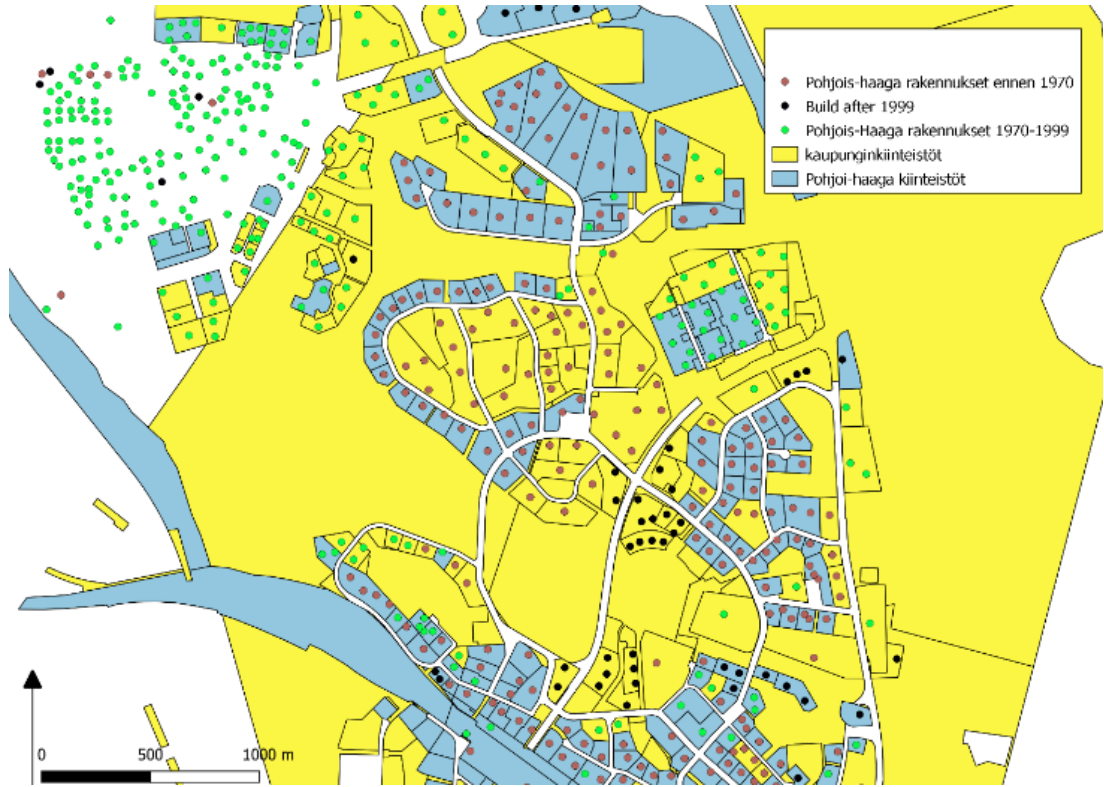


Figure 3. GIS analysis.

The general land value according to this assessment made in 2015 is 700 €/sqm in NorthHaaga.

Moreover, I have asked from the leading lawyer of the Association of Finnish Local and Regional Authorities how long a valuation can be considered valid for. The answer I received was that the validity lasts for 3 years in general, if there are no major altering matters during that time. I propose three different scenarios within the infill strategy. Demolishing, build on undeveloped land, or to build extra floors to existing buildings.

CALCULATIONS

Building and renovation costs differ from case to case, therefore the numbers used are generalizations. However, based on the studies from RAKLI (2016), Olli Turunen & Joonas Orava (2016) and Marko Kaarto (2015), and conversations with several developers, I came up with the below figures.

- construction cost 3 000,00 €/sqm
- renovation costs during 50y 1 350,00 €/sqm
- 1000 sqm value=700 000,00 € (1000sqm x 700 €/sqm)
- new building value=3 000 000,00 €
- 1000sqm x renovation cost expense=1 650 000,00 €

=1 650 000,00 €

55,00 % of the cost of building a new building minus renovation costs.

- Example where we add extra floors: building has 3 stories already and 1 000 sqm. + 2 stories and we have 1 666 sqm. Rough land value increase = + 666 sqm x 700 €/sqm = 466 200 €

However, we assume that the City takes half of the added value increase.

- $466\ 200 / 2 = 233\ 100\ €$

With 233 100 €, a Housing Company can, for example, cover maintenance and renovation costs in the future, or improve the real estate in other ways.

Example where old building is demolished, and the plot is rezoned:

The value of the land increases by rezoning the land by (+666 sqm) 466 200 € and, as above, the City takes half of the increased value = 233 100 €

There are major renovation and maintenance costs coming in

the near future, so the real cost of the new building is

$3\ 000\ 000\ € - 1\ 350\ 000\ € = 1\ 650\ 000\ €$.

$1\ 650\ 000\ € - 233\ 100\ € = 1\ 416\ 900$

We need to take into consideration the demolition costs as well, which are roughly 120 000 € per building.

- Finally 'real cost' of the new building is 1 416 900 € + 120 000 € = 1 536 900 €

In this example, the average size of the apartment is 50 sqm. New building is 1 666 sqm, and roughly 33 apartments. Cost of the new contemporary 50 sqm end demolishing option, in comparison to aged building with upcoming renovation and maintenance costs, apartment is $1\ 536\ 900\ € / 33 = 46\ 500\ €$.

However, the square meters that are counted in building right square meters includes other facilities as well, not just the apartments. Hallways, bicycles and other storage rooms etc. Nonetheless the maintenance and renovation costs will not all come when building turns 50 years, those are lodged during the years. However, the costly operations are around the 50th birthday. If rezoning would increase the housing square meterage by 2 357 sqm, and the City would not cut the value increase, the new building would be 'free' (minus demolishing costs, etc.). Zoning of the undeveloped land = in our context, this refers to land that does not have buildings on it, e.g. forest, recreation area, gravel pitch. Draft calculations are made with efficiency $e=0.8$. Reason for the nowadays, rather, small efficiency is that it includes everything, not only the structures that are counted to the building right ($e=$). Areas need civic infrastructure, like roads and other maintenance utilities, and parking lots. I have not made any precise plans, just rough drafts, recognizing the possibilities. Haaga is surrounded by public parks and recreation possibilities already, thus, housing plots would already have the adequate free space.

If the site A (picture 1) would be developed:

$\sim 15\ 000\ m^2$ area, with $e=0.8 = 12\ 000\ sqm \times 700\ €/sqm$ (Catella, 2015)

= 8 400 000 €

Before rezoning, the land has close to no value (market price), so the value increase would be more than 8 million. The City as a landowner gets all of that. However, there is a tremendous bill to be paid when constructing the civic infrastructure, including schools, daycare, nursing, parks and other recreation areas, health and social services, and community halls. And the

production costs of all the services occupants need (Cullingworth et al. 2015). It is not just profit. The City of Helsinki has already paid a lot when they have developed the Middle-Haaga area. Thus, it is a reasonable act to build more housing in the area after all the euros spent in upgrading the infrastructure of the area.

The value increase of the gravel field in area D would be as set below, if rezoned for housing with the area efficiency of 0.8.

- Area ~ 1,2 ha
- $e=0,8$ for whole area including infrastructure etc.
 $= 9\ 600\ \text{sqm} \times 700\ \text{€}/\text{sqm} = 6\ 720\ 000\ \text{€}$

Civic infra is already present.

Furthermore, the added value for the triangular shaped area in the middle of the suburban area (D) would be as follows;

- Area ~0,55 ha
- $e=1,0$ as it is a bit denser plot.
 $= 5\ 500\ \text{sqm} \times 700\ \text{€}/\text{sqm} = 3\ 850\ 000\ \text{€}$

CAR PARKING

After the new residents had arrived, there would be the need for new parking plots as well. Nowadays, streets are already packed with cars in Haaga. Extra space and on-the-street parking are commonly used. The City of Helsinki is developing the public transportation system at a quick pace, and Haaga has great public transportation already. Underlined spot in the future transportation plans. The new light rail starts soon, buses will exist in the future, even if they may be electric. The train serves a lot of people, and a new extra rail track to Turku might be a reality soon and this would make trains services more frequently. However, they are already here, aerial transportation units, aerial taxis. The future of transportation is unclear.

When traffic and transportation play a significant part in the future, it would be just foolish to skip it in this study.

As there is not a lot of certainties in the future of transportation, I would not force cars underground. It is a costly maneuver. What if we do not need that much parking space after 50 years? At the moment, one cannot even live underground, as it is disallowed by regulations. It costs a lot to put cars underground, and it can be seen in the prices of the apartments. How would we use the space in the future?

What if we are flown by drones in the future? Technology is already here. Parking would be on the roofs. Parking lots, or at least big number of those, would be released to use in other ways. It would free a lot of ground space for other uses. (<https://www.airbus.com/innovation/Urban-air-mobility-the-sky-is-yours.html>, <https://www.youtube.com/watch?v=HQeqQF-Wu17k>, <https://www.youtube.com/watch?v=0iaRed439q8>)

In my proposal, cars would be parked in a parking facility building in the back of one block. As driving an automobile would not be encouraged, people would use more public transportation. Constructions to accommodate cars just facilitates more traffic, as it has been proven many times before (Stähle, 2016). It is also true that we need cars and it is maybe the most probable future scenario where we drive less as individuals. Still the population increases exponentially, and this pushes the amount of traffic inevitably higher. Moreover, services are further removed from the people all the time, such as when healthcare and social services, and even the food markets, are relocated to larger units. Furthermore, people who have children have different kinds of needs, as well as the elderly, invalids and so forth. There is a lot of different examples of why we need to move more in the future. There will still be only 24 hours a day.

A drone model was made of one particular area adjacent to Rohodoren Park, using Phantom 4 Pro drone and professional software that uses photogrammetry to create a 3D model from the images and point clouds. The model is formed of 1 000 georeferenced aerial images taken from 50m above ground level. With the 3D model and the already recognized infill locations, I was able to locate the infill buildings to the model with Autodesk Infracore 360 and check how the infill would affect the skyline, aesthetics and the built environment of the neighbourhood, too check how infill fits with the neighbourhood.

Video of the model can be seen here:

https://drive.google.com/file/d/1ysJCocPZE9r_VoUoUna6-KBkhVrAajra/view?usp=sharing

(set quality to 1080p)

CONCLUSION

Even though Haaga lacks a bit of character, it is still a very good place to live and seems to be in harmony with itself. Not everyone is willing to live in the hassle of the city-centre. It has a great location and maybe it would be good to fill it a bit more. No reason to waste space in such a great location. There is a

lot of potential for infill. Especially those locations that were pinpointed in this brief study, and those that are taken in consideration, and that are part of implementations underway by the City of Helsinki.

REFERENCES

- Alexander, Ishikawa, Silverstein, Jacobsen, Fiksdahl-King and Angel, 1977. *A Pattern Language*. New York: Oxford University Press. pp.120.
- Cullingworth, Nadin, Hart, Davoudi, Pendlebury, Vigar, Webb and Townsend, 2015. *Town and Country Planning in the UK*. Routledge: Oxon. pp.167.
- Kaarto, M., 2015. *Sijoita asuntoihin*. Tampere: KM Growth.
- Mikoleit, A. and Purckhauer, M., 2011. *Urban Code*. Cambridge, The MIT Press. pp.32.
- Moskowitz, P., 2017. *How to kill a city*. New York: Nation Books.
- RAKLI, 2016. *Kustannuserot Suomen ja Itävallan asuinkerrostalokoh-teissa*. <https://www.rakli.fi/linikat/kustannuserot-itavallan-ja-suomen-asuinkerrostalokohteissa-fiat.html>
- Rydin, Y., 2011. *The Purpose of Planning*. Bristol: Policy Press.
- Stähle, A., 2016. *Closer Together*. Årsta: Dokument Press.
- Turunen, O. and Orava, J., 2016. *Osta, Vuokraa, Vaurastu*. Tampere: Alma Talent.

WHAT DO APARTMENT PRICES SAY?

Babak Firoozi Fooladi & Mika Korhonen

HOUSING PRICES

“Our results indicate that shorter distance to banks, clinics and bus stop might increase the value of apartment. On the other hand, shorter distance to kindergarten, restaurant, train station, pharmacy and library might decrease the value. The causality could be though in other ways too. Amenities could be locating themselves in places where the price of the apartments is relatively low or high and thus affecting the result.”

INTRODUCTION

In this study we try to identify the most important factors for apartment price in multi-story buildings in the Haaga area by using hedonic regression modelling. Also, we try to find out how different amenities, and their distance to apartments, affect a price estimate. With our study we try to contribute information about how different housing characteristics are valued in a narrow, neighborhood-scale housing market.

When considering dwellings as goods, we understand them as heterogeneous goods, as one dwelling differs from another, usually, in many ways. Homogeneous attributes, like the size of the dwelling, might be totally the same with two different dwellings, but still the price might be, and usually is, totally different. The difference is usually explained by physical and location-based characteristics. Apartment buildings can be very different by their shape, look or technology and, they are always in unique locations. Each of these characteristics have an impact on price.

Studying the relationship between these characteristics and apartment prices can give us some insights into the price impact of each characteristic. To model the price of heterogeneous goods we need statistical methods, like hedonic regression, to find out the most meaningful characteristics for apartment prices. We ended up constructing one hedonic regression price estimation model with the first dataset and Pearson correlation calculations with the second dataset. The datasets are described in section two. In section three we describe our methods, in section four we represent the results and conclusions, and the limitations are discussed in section five.

DATA

There are two datasets used in this study. The first one is downloaded from the “Asuntojen hintatiedot” -internet service on the 7th November 2018 and it contains 160 housing transactions from the past 12 months, only Haaga. This dataset has, in addition to the price of transaction, details about apartment’s

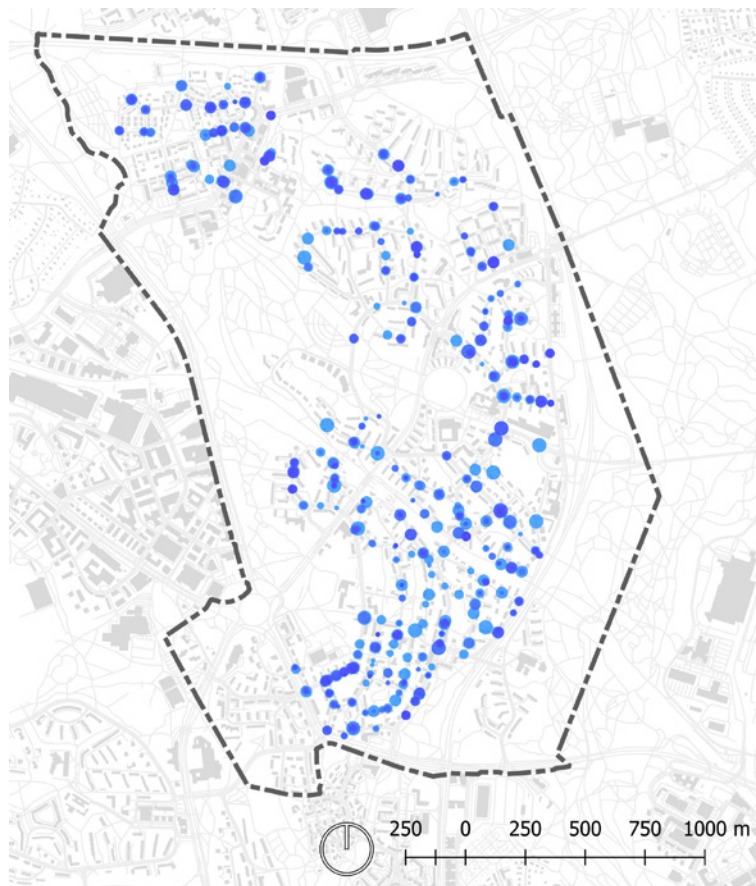


Figure 1a. Locations of the samples.

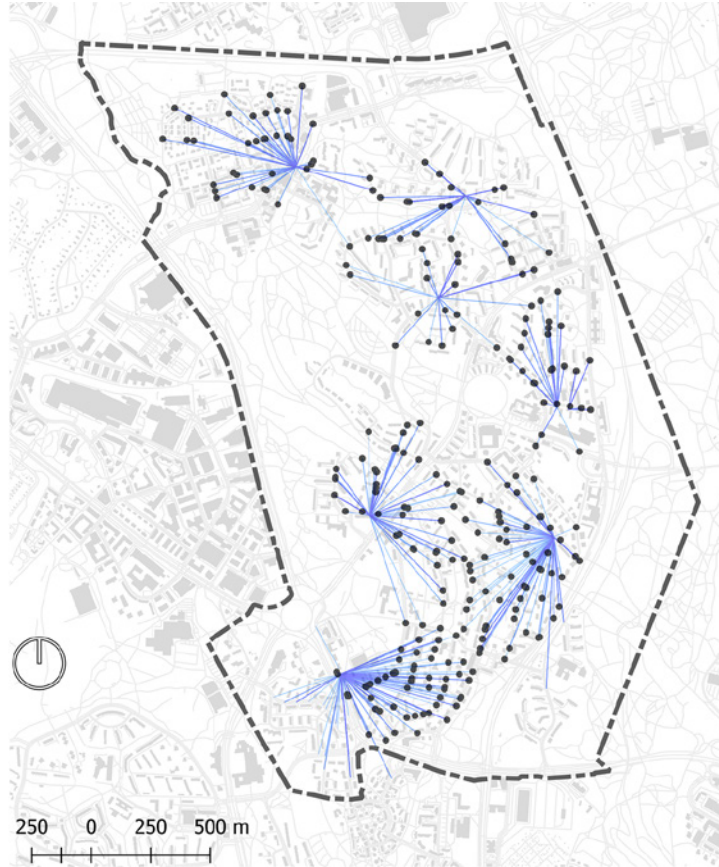


Figure 1b . Visual example of distance analysis (OD matrix).

characteristics (size, room number, age, floor number, condition etc.).

The second dataset is provided by oikotie.fi web service for dwelling transactions in Haaga during 2009 and 2010, and it contains more than 866 observations. This transaction price data has housing attributes, such as room number and sauna, but more importantly, it includes the exact coordinates of each observation.

For the second dataset, we calculated amenity distances to each apartment by using network analysis (see figure 1a and 1b). The method we used was the OD matrix. This method calculates the distance of each origin and destination based on the road network. The criteria we set for the analysis was to find the closest amenities of the kind to each of the buildings we had the pricing data. For each of amenities we could find in OpenStreetMap dataset, we ran the model. Then we exported the data to a spreadsheet and then merged them with the housing price dataset. There are eighteen variables included in our analysis.

METHODS

The method used for the first dataset was Ordinary Least Squares -regression (OLS) in which the aim is to find a function with coefficients that minimizes the squared residuals (Meier, Brudney, & Bohte, 2011). With OLS -regression we will try to find a function that describes as many of the observations in the data as possible in an acceptable way. In practice, we analyze which characteristics have stronger impact on price than others. We will use Best Linear Unbiased Estimate -conditions to accept or reject our models.

With the second dataset we constructed a matrix about the correlation between different variables by using Pearson correlation calculation, which is also the first indicative step in the OLS -process. This provides us with information, yet relatively imprecise and only indicative, on how different variables correlate with each other and, most importantly, with the studied depended variable, which in this case is price. The results tells us if each correlation is statistically significant and the magnitudes of correlations.

RESULTS AND CONCLUSIONS

RESULTS OF THE APARTMENT CHARACTERISTICS ANALYSIS

Using regression modelling for physical and location-based characteristics of the apartments, our model (function below) ended up including three variables which were size of apartment (square meter), condition of apartment (good or else) and location (North- or South-Haaga).

$$P = 56416.52 + 2906.53 \times sqm + 36806.40 \times d_{south} + 15751.56 \times d_{good\ condition} + 37438.10 \times d_{more\ than\ three\ rooms} + \varepsilon$$

According to our findings, the size of apartment has the most significant impact on price, which is expected. But the most interesting finding is the considerably large price difference between North- and South-Haaga. Based on our findings, the southern part, as a location, gives apartments an extra value of over 36,000 euros. This finding clearly indicates the difference between North and South-Haaga. The reasons for this difference require further studies; however, other articles in this publication present us with possible explanations. Indicatively, some historical parameters contributing to the difference between North- and South-Haaga are presented in the article by Tuomas Harju.

RESULTS OF THE AMENITY DISTANCE ANALYSIS

The analysis of the distances gave us some insights (figure 2). Our findings indicate there is a relation between price and the distance to different kinds of amenities. The degree of impacts and reasons are unknown, and not broadly discussed in this article, but it will raise questions for further studies.

Our results indicate that shorter distances to banks, clinics and bus stops might increase the value of apartments. On the other hand, shorter distance to kindergarten, restaurant, train station, pharmacy and library might decrease the value. The causality could be thought in other ways too. Amenities could be located in places where the price of the apartments is relatively low or high and thus affecting the result. Also, some business-related patterns behind locations of amenities would most probably have an effect on our results. These business-related patterns should be studied before making any conclusions about actual reasons behind the results.

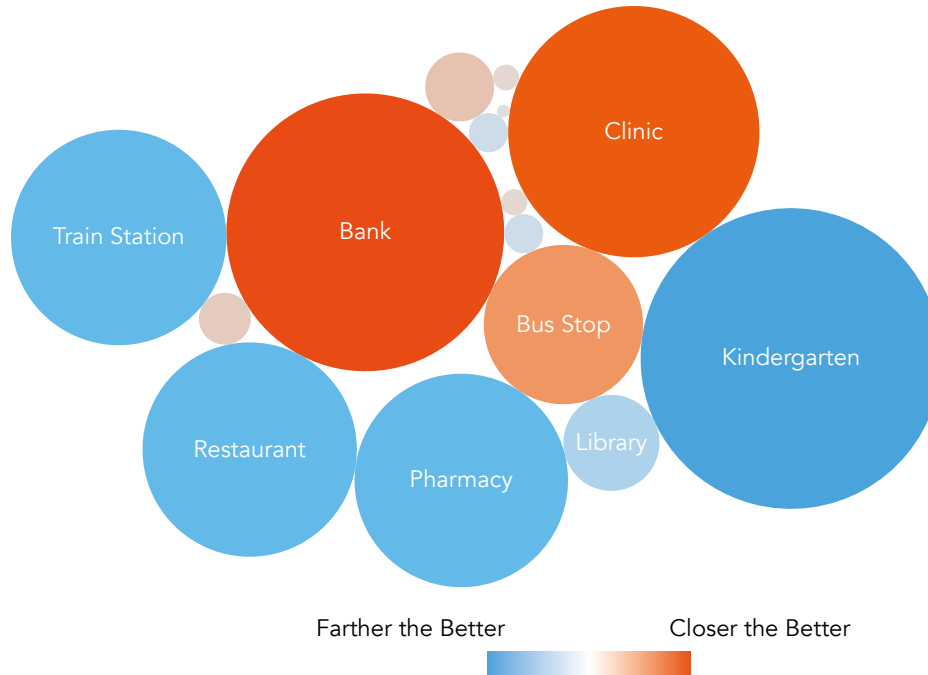


Figure 2. Correlations bubble chart.

LIMITATIONS

Our price estimate function includes location-based attributes which limits the use in the wider context. Also, with other variables, it is important to understand that the meaning of different attributes can vary considerably between different areas and cultures.

The dataset for price estimate modelling was rather small, but because of the small the geographic area, we could not get bigger without ending up with long-term data. That would make analysis more difficult, as time-related dynamics in economics, like inflation or market fluctuation, might have an effect on how comparable observations would be together. Also, the dataset was limited by variables, as there was no information about plot (freehold or leasehold), exact addresses of transac-

tions or repair debt of buildings.

When it comes to our study on price impact of amenity distances, as said in the methods section, it provides only indicative, uncertain results and contributes only by raising questions. Firstly, will our results be valid in deeper studies or would they be rejected? Secondly, what are the reasons behind these effects on prices?

REFERENCES

Meier, K., Brudney, J., & Bohte, J. 2011. Applied statistics for public and nonprofit administration 221. Successful Project Management.

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AFTERWORD

THE SPIRIT OF CITIES, THE SOUL OF FINNISH TOWNS – TODAY AND HISTORICALLY

Laura Kolbe

FINNISH CITIES?

“The spirit of Finnish cities? Immediately after the end of World War II, a book on Nordic values was published. *Nordisk samhörighet - en realitet* (1946) constructed a new image to the Nordic countries, damaged by the World War II. The work appeared at a time when the old world had collapsed, and a new one was emerging. The outcome of the World War contributed to the search for an ideological basis for convergence. Common roots in the Nordic countries were represented by nature and the natural landscape, as well as forests as a source of industry and industrial know-how.”

When the Berlin Wall broke down and the Soviet Union collapsed, a boom in urban culture and politics commenced, once again. The importance of urban space and place began to be emphasized in the writing of European history. As the German historian Karl Schlögel says in his book *Marjampole oder Europas Wiederkehr aus dem Geist der Städte* (2005), the *die Wiederkehr des Raumes* began to challenge the historical picture of the past. The political changes at the end of the Cold War became visible in the urban space and, as always, questions of the past arise from the need to explain what was happening in present situation. Thirty years ago, during and after 1989, demonstrations, crowds, street events, political symbols and colors, flags and a certain style became the hallmarks of urban life in many Central and East European countries, trying to cope with communist past in a new situation. Many cities are experiencing a revival of 'bourgeois', capitalist and 'nationalist' citizen-driven policies. A trip to Warsaw, Vilnius, Riga, Kiev, Prague, Moscow or Bucharest opens one's eyes to the enormous changes affecting urban planning and architecture, as well as urban culture.

THE CITY AND THE RETURN OF POLITICS

The city has turned out to be more and more a modern political stage. Contemporary politics takes place in cities and has an urban character. It might concern a parade, a samba carnival, the Orange Revolution (Ukraine) or Yellow Revolution (France), a protest march of nationalists or neo-Nazis; all is related to street life. In this kind of performances, urban culture is strong and signals expectations of a better future. In recent years, the city has also become a "landscape of the evil", with terrorist activities, attacks and war scenes. The evil has most often an urban face. All in all, the role of the countryside today is to be a passive bystander. The return of history can be seen in the cities. Old towns are being restored, and historic buildings are being renovated. At the same time, the most modernist dreams are fulfilled in cities. In cities, everything seems to be undergoing change - the rhythm of living, architecture and planning, the forms of commuting and commerce, the ways in which social encounters, even the pedestrian streets and the shop windows

are flourishing. The spirit of urbanism, *urbanité*, is strong.

The new keyword in urban research and urban history is transnationalism. It is generally defined as transnational processes and relationships in which non-state actors play a central role. Cities are ideally suited as transnational actors, to dismantle nation-state domination, and to break down the narrow “national” perspective of historical research. The challenge with urban research is that it is still easier to write the history of your own city than to do comparative research on cities of the same size. In Nordic countries, for example, dozens of histories of Copenhagen, Stockholm, Oslo and Helsinki have been produced, but there are just few comparative works that reflect on what unites or separates the Nordic capitals. Scandinavian cities are still seen in their national context, as part of a local, regional or state framework. London is English and Paris is French. Amsterdam and the Netherlands are connected. Berlin is for many identical with Germany. Capital cities are to be interpreted in their state and national background.

THE SPIRIT OF CITIES AND URBAN INDIVIDUALISM

Today more than half of the world population lives in cities. Huge change has taken place in 200 years as in 1800 less than 3 % of population was urban. Not surprisingly the city has become an important area of research and theories arguing for the general advantages of urban life are important and many. Anyhow, no theory exists on what makes cities special and different from each other, the individual citizens feeling of their city being unique. Why do people believe their city is unique? In a fascinating book, *The Spirit of Cities - Why the Identity of a City Matters in a Global Age* (2011) the authors Daniel A. Bell and Anver de-Shalit open discussion on the “non-visible” aspects of city life. They are cosmopolitan scholars, columnists and true globalists. Bell lives in China; de-Shalit is a political philosopher at the Hebrew University of Jerusalem. The writers are interested in the history of emotions and feelings directed toward cities. As they describe, there is very little comparative research on what makes individual cities special. Why and how do people become attached to the identity provided by their particular city? The authors set out to diagnose the pride of the city and to make comparisons and emotional analyzes of why “my own city” is perceived as unique and special.

Their starting point is an Aristotelian sense of community - to be social and cultural human being in one’s own community.

There is a strong historical continuity: today cities provide an individual experience more suited to our time than sticky, backyards and nationalist national identities. Cities are an inclined, global surface where modern man can reflect both his high-profile individual self-image and his sense of urban culture. Bell and de-Shalit call this feeling as *civicism*, which could be interpreted as a sense of urbanism. In essence, there is a fundamental sense of the distinctiveness of one’s own hometown, which produces an emotional attachment to the city and its values.

Not surprisingly, the most popular travel slogan of our time is “I love New York”. It adorns the fronts of hundreds of thousands of t-shirts, mugs, posters and postcards. Cities around the world copy the phrase and sell their own city with the same love and affection. You can scoff at this, but at the same time, you have to admit: the sentence has irresistible suction, and a genuine, sincere touch. People really love their cities and are attached to the layers, stories and stories urban life represent.

The interpretation of Bell and de-Shalit takes us to the silent knowledge of the urban world. Or at least something abstract must be uncovered. “Spirit” is a combination of a city’s ethos and soul. The above-mentioned New York is (as we sense) an individualistic and cosmopolitan melting pot, and at the same time strongly communal melting pot. A sample vast given at 9/11 as the entire city rose vigorously to counter terrorism and quickly engage in rescue operations. New Yorkers share the feeling that their city is different from other American cities. This feeling is not far from superiority, pride and arrogance. These features are often associated with metropolitan life or the capital. Not surprisingly, in other US cities, self-portraiture is being constructed by representing themselves as ‘not New York’.

In the footsteps of Bell and de-Shalit, it is easy to say: urbanization is not only a megatrend of our time, it is also profoundly changing the way we define the relationship between place, space and identity. In cities, global openness is combined with a sense of pride for the local specialty and the original community feeling it produces. This is “the spirit”, which is equal to soul, faith or habit and essence of urban life. But the word also translates into a quality of mind, a source of energy, and an enthusiasm, vitality, courage, and self-esteem.

How can we study the spirit or essence of a single city as it is abstract in character? It all starts with the story, the history of the city. Once it’s created, a good story is transferred to symbols, paintings, poems, novels, movies and TV series as well as to travel guides and advertisements. The city’s history takes a central place in the mayor’s speeches, council vision papers, and

political images and media reproductions. It becomes central element in understanding how urban planning and architecture are (and have been) shaped. It is essential component in urban monuments and street names, in people's way of being and facing each other, individually and collectively.

CITY LIFE: LEARNING BY WALKING

The ethos of different cities is best met by walking or being a *flâneur*. The German sociologist Walter Benjamin (1898-1940) created a method for urban strolling even though the phenomenon itself is older. A *flâneur*, an enthusiastic city observer, was drawn to the European imagery as cities began to industrialize and grow, that is, by the early 20th century at the latest. Benjamin's long and lingering walks in his revamped Parisian city opened his eyes to see how capitalism and modern consumerism were combined with a new kind of urban lifestyle. Benjamin examined intensely the urban life: the urban contemplation touched many layers of the human mind and helped us observe and understand modern social and cultural phenomena in a new, here-and-now way.

Being urban and sensing the spirit of cities builds a broader solidarity between global cities universal urbanism, thus rejecting nationalist fervor. Cities compete with each other, but rarely fight against each other. Many cities, especially capital cities, have their own foreign policy; they can diplomatically operate faster and more agile with other similar cities, or alliances such as the UN and the EU. It is more and more obvious, that a modern citizen does not need a nation state, but his own home, street and block are sufficient as identity construction frame.

As Bell and de-Shalit interpret, states find it increasingly difficult to provide a sense of uniqueness. Cities have taken the role as identity shaper and individual and collective level. In the 19th century nation became the main source of political identity and site for collective self-determination and traditions. State and nation were responsible for inventing the traditions, according the British historians Eric Hobsbawm and Terence Ranger, in their book *The Invention of Tradition* (1983). But looking to "traditions" in Bell's and de-Shalit's eyes, it is the city's physical infrastructure, ethos and essence, spirit, which makes an impact on the human dynamics and relationships. A city's ethos can be defined as a set of values and outlooks. A general rule is to get an idea this spirit: "When in Rome, do as the Romas do", the scholars indicate and according to them it is possible to feel at home in many cities.

WHAT MAKES CITIES SPECIAL?

Cities inspire not just ideas, but also stories and sentiments, which in turn inspire ideas. Many cities invest time, money and thought in protecting their unique ethos and spirit. For an urban historian it is possible to research on how the elements of "spirit" have been created, by using the archive material, city hall protocols and papers, other urban documents, maps, newspapers, advertisements and branding material etc. Every city is at the same time local and transnational, transmitting universal aspects of urban life into local surroundings. Four set of areas are common for most urban (western) areas: Sense of community / Sense of responsibility / Sense of civic spirit (civicism) / Sense of openness and encounters. When doing research on some of them – or all – one can one can get closer in understanding, how the formation of "spirit" has occurred in the town/city.

I SENSE OF COMMUNITY

- churches
- guilds
- town halls
- clubs
- societies
- neighborhoods, quarters, communities
- political, social and cultural movements
 - o manifestations, processions, parades
 - o carnivals
 - o celebrations

II SENSE OF RESPONSIBILITY

- laws, ordinances, bylaws
- urban rules and regulations
- city hall, politics and governance
- local bouncers
- social and health institutions (private, public)

III SENSE OF CIVIC SPIRIT (CIVICISM)

- great men/women in planning, administration, civic life

with the moral, political and legal authority to enact transformative plans to realize common goals and common public goal

- Every city has a long term rivalry with another city of town, often in the same country or region
- city's identity / ethos may be threatened by outside forces
- residents have a strong motivation to keep their identity
 - o state may threaten
 - o national policies versus urban policies
 - o regional interests too strong
- urban branding usually underlines the specific features

IV SENSE OF OPENNESS AND ENCOUNTERS

- multiculturalism
- tolerance
- liberalism
- commerce, trade, communication

FINLAND: A COUNTRY WITH MODEST URBAN HISTORY?

What is the spirit of Finnish cities? Can we learn anything from history? To be honest, the city has only recently become part of the national identity, a symbol of the Finns and Finnish way of living. Many urban images are embodied in waterways. The oldest urban layer is located by the Baltic Sea or the Gulf of Finland. The river, the ocean waterfront areas, the bays, shores and coastlines have, to a varying degree, figured prominently in the historical development of the cities. What is, then, the spirit and idea of Finnish urban culture, historically and today? In the Middle Ages, a German-type urban establishment spread to Sweden and its eastern parts, being Finland. Only five cities, Naantali, Rauma, Porvoo, Turku and Vyborg, can date back to this time. Turku and Vyborg with their historical buildings, Naantali churches, Porvoo and Rauma with their wooden towns were later considered to belong to the Finnish national landscape. The oldest city coat of arms evolved during the 14th and 15th centuries from medieval seals and was based on a letter theme. The VG (Vallis Gratiae = valley of grace) in the coat of arms of Naantali refers to the monastery where the town originated. C symbol of Porvoo is possibly related to the castle

(= Castrum). In the coat of arms of Rauma, the golden cross divides the shield into four fields, each with a small r letter. Coats of arms are still important urban symbols and they deliver the idea and spirit of the city through the ages.

The process of Reformation and the strengthening of central government in the 16th century made cities the core of a new culture of central government. During the reign of Gustav Vasa, commerce was concentrated in the cities. The aim was to reduce the influence of German network of merchant cities, Hanseatic League. Urban and military policies merged. Trade, defense and government centers were created in new areas such as the North Sea coast, Uusimaa region and inland lake areas. The royal city policies were arbitrary: cities were established and dismantled, some were emptied and others reinforced. The early stages of Helsinki (Helsingfors), which rose to the mouth of the Vantaa River in 1550, illustrate the conflict between dream and reality. Helsinki was established as a competitor to the prosperous Tallinn, the center of East-West and inland trade at the Baltic Sea and Gulf of Finland. The result was modest. The competitive position lost its significance when Tallinn surrendered to Sweden in 1561, and Helsinki's role diminished.

The founding phase is important, as always in urban history. Still, although no "old town" exists in Helsinki, in the history of the city the importance of the year 1550 is emphasized. The waves depicted in the coat of arms of the city in 1640 indicated to its location and the boat referred to its colonial history and to fishing, shipping and trade. At the 400th anniversary of Helsinki in 1950, a memorial was unveiled close to the Vantaa River with a relief of Gustav I Vaasa.

THE SWEDISH POWER AND WOODEN TOWNS

After the Thirty Years' War, Sweden became a European superpower. The strategic position of this Northern kingdom was emphasized and urban policy intensified. In the 16th and 17th centuries 50 new towns were established in Sweden, some 20 of them in the eastern part of the country. Counts and barons had the right to set up a town in their land. In Finland, the real urban development phase started during the reign of Count Per Brahe in the middle of 17th century. The number of cities increased to 28. The new type of emblem sealed by the king was first received by Usikaupunki (1617). The cities received the seal in connection with the letter of founding or privilege. Relevant symbols of this time are many, such as castle, tower,

salmon fishing, and forest or tar barrels. They started to provide historical identities.

New cities were established in places where the old harbors, sailing of trade stops, trade or church and defense sites had existed. Oulu (1605) and Tornio (1621) were established at the mouth of the river, next to the old market places. The castle (Oulu) and the parish (Tornio) became towns. Vaasa (originally *Mustasaari stadh*) was founded in 1606 on the side of the Mustasaari market and Korsholm Castle. The name was changed to Vaasa in the Privilege Book of the 1611 Vasa family. The seal was marked with the emblem of the Vasa, the sheaf. Kokkola was founded in 1620 by the deep Gulf of Kokkola and Pietarsaari replaced the old shopping center in 1652. The town of Hamina superseded the Vehkalahti market in 1653.

Trade was centralized in the cities. Swedish cities were divided into staple and country cities in line with mercantile economic policies. The full staple guaranteed the right of free trade directly; in Finland only Turku, Helsinki and Vyborg had this right. In Stockholm the state supervised all trade and collected the necessary fees. Stockholm was the center of the urban network. The 17th century formed the basic urban features or the spirit of the Finnish city - top-down control, geometric grid plan and regular street grid, rectangular or square blocks, large central square and public street space and all-in-all buildings made of wood.

The wooden town still dominates our views when talking about the Finnish small town. It gives a strong spirit of (positive) urban tradition, as the choice of city of Rauma to the UNESCO World Heritage List in 1983 showed. Then it was referred to be the best example of the “Nordic wooden town tradition”, as. Still, the trading cities of the Ostrobothnia are the basis of Finnish urban culture. The sources of wealth, such as tar, fishing, shipping, shipbuilding and marine equipment, continue to be portrayed in the histories of these cities of that region. Urbanization transformed people into members of the new urban middle class and bourgeoisie and created the conditions for the development of the early spirit of the city. Surnames became more common in cities and the bourgeoisie adopted other European cultural influences. 17th century wooden towns were cultural centers and school districts. The school culture then continued in urban high schools, whose development is intrinsically linked to Finnish cultural and elite history of the 19th and 20th centuries.

RUSSIA: IMPERIAL AND INDUSTRIAL URBAN ASPIRATIONS

The founding of Russian St. Petersburg in 1703 and the strengthening of tsarist Russia added a military dimension to urban development at the Baltic Sea. When Vyborg was lost to Russia in 1721, two new frontier towns, Hamina (1723) and Loviisa (1745), were established. Since then, the many stages of military training and officer culture have been linked to Hamina’s old cadet school (1821-1903) and to the reserve officer school that has continued its tradition during the republic. Kuopio (1775), Hämeenlinna (1775) and Heinola (1776) represent the administrative town of Gustav III, being the seats of the governor’s administration and residence. Urbanization also affected the hinterland. Tampere, transformed into a town in 1779, became a major industrialized center, as evidenced in the new coat of arms, showing symbols of industry and commerce (a hammer) and a caduceus (the symbol of Mercury).

Many cities are named after the ruler or the count (Vaasa, Kristinestad, Raahe, Loviisa and Fredrikshamn or Hamina). The cities also cherish the memory of their great men and women. Kokkola is the hometown of Anders Chydenius, a parliamentarian in the 18th century. Pietarsaari is the hometown of the national poet J. L. Runeberg and writer Z. Topelius. There are statues of Per Brahe in Raahe and statues of the poet Franzen in Oulu. Hämeenlinna is the birthplace of Fredrik and Uno Cygnaeus, Jean Sibelius, Larin-Kyösti and Paavo Cajander. Kuopio became the city of statesman Snellman and female writer Minna Canth.

The female writer Maila Talvio was the first to speak about Helsinki as the Daughter of the Baltic Sea in her literary trilogy of the 1920s. In her historical novels, Talvio described the life of Helsinki in the 18th century. Helsinki, and the Suomenlinna Castle rising from its front in 1748, experienced a rapid transition from royal rule to imperial rule in 1808-09, when Sweden handed over to Russia all provinces on the Finnish side. Emperor Alexander I promoted Helsinki to the capital of the Grand Duchy of Finland in 1812, and the classicist expression of the new city was born out of the emperor’s will. J. A. Ehrenström chaired the Reconstruction Committee. This widely traveled man and a former favorite of Gustav III received all the support of the new administration. The design was handled to Berlin-based architect Carl Ludwig Engel from Tallinn and St. Petersburg. Emperor Alexander followed the completion of the town plan himself. His successor (from 1825) Emperor Nicholas I personally devoted himself to the design of the capital’s

prestigious buildings.

The fourth phase of urban development in the 19th century created a forest industry and factory city. Although factories were built in existing cities, the forest industry was anti-urban in its spirit. The forest, pulp, paper and wood processing industries, sawmills, wood sanders, etc., rose to where there was no raw material and transportation facilities, which came later. Economic activity was visible at the mouth of the Kymijoki and Keminjoki rivers (Kemi and Kotka). The railway created a new type of junction city, like Riihimäki, Haapamäki and Hyvinkää.

The technological modernism brought by industry, port and rail transport was reflected in some new cities. Mariehamn (1861), Kemi (1869), Hanko (1874), Kotka (1878) and Lahti (1905) received the charter for their city rights in the “old way”, that is, by the merciful proclamation of the Emperor. The maritime and trading city of Mariehamn was named after the Emperor Alexander II’s wife, Maria Aleksandrovna. Lahti was developed at the junction of the Helsinki-St Petersburg railway line and Hanko became the only winter port in Finland. The first icebreaker *Murtaja* was placed there in 1890. Kemi lived on ‘green gold’, the wood processing industry, and Kotka was the site of steam saws and later paper and pulp mills. It became Finland’s largest export port.

FINNISH CITIES: THE SPIRIT?

In Finland, the historical roots and the spirit of cities are interwoven. In a large, sparsely inhabited and peripheral country like Finland, the central government has been active founder of towns and cities. Many historic cities are established by the crown for military, administrative, trade or educational reason. Public control exercised by a professional bureaucracy is well established and has been at least since the 17th century. The ambitions and investments of the central power have labelled the development of the capital city Helsinki pronouncedly. Helsinki is not an old bourgeois trade town. It came about as the result of political projects. The change in town planning policy that occurred around the year 1900 should be seen in the light of change in the relationship between the state and the citizens. It implied a gradual effort to transfer planning from the central power to the local level, from the civil servants to the citizens. In this sense, also, Finnish towns form interesting cases to study the formation of modernism(-s) and transnationalism. As elsewhere, industry, railways and ports became symbols of modern urban life and spirit. Rapid social change highlighted

the problems and shortcomings of cities. New phenomena in urban life included crime, prostitution, violence, political movement, strikes, gangs and hooliganism. They shaped a basis for modern urban fear. At the same time, the national self-image was strengthened with national-agrarian elements. The peasant-state connection, the rural ideal, the forest symbolism and the Kalevala-mythology strengthened their position.

When Finland got her independence in 1917; there were 41 cities, three of which were lost in the Continuation War (1944–1945). Between 1960 and 1977, 28 new cities were introduced. Migration to Helsinki and other urban centers went on steadily. After the war, urban and municipal planning was developed into a new era, where both urban and regional planning could be seen a whole and suburbs could develop. In the 1950s and 1960s, new city-dwellers were housed primarily in suburbs, the planning and construction of which changed the old rural landscapes around Finnish cities thoroughly. From a European perspective, urban areas received an exceptionally spacious and scattered urban structure. A disintegrated block structure and closeness to nature became prevalent in suburban planning. The idea of “organic decentralisation” was applied much in the spirit of Eliel Saarinen’s and Bertel Jung’s *Pro Helsingfors* plan.

The 1977 legislative reform made it easier to set up cities and many rural villages, towns and settlements took the status of a city. Statistically, the biggest growth phase of cities took place after 1945. Even in 1900, only about 7.5% of Finns lived in cities. Today, hundred years later, the number is reversed. The gravity of growth centers continues to drain the countryside, small towns and villages. The typical Finnish cityscape is located at the meeting point of the forest and the city, in the suburbs and in the suburbs.

CONCLUSIONS

The spirit of Finnish cities? Immediately after the end of World War II, a book on Nordic values was published. *Nordisk samhörighet - en realitet* (1946) constructed a new image to the Nordic countries, damaged by the World War II. The work appeared at a time when the old world had collapsed, and a new one was emerging. The outcome of the World War contributed to the search for an ideological basis for convergence. Common roots in the Nordic countries were represented by nature and the natural landscape, as well as forests as a source of industry and industrial know-how. The Nordic values were about justice, freedom of conscience and respect for law and order.

Interestingly, municipal autonomy, freedom of association and assembly, as well as popular movements and political organization, were raised as the ideological pillars of Nordic culture. Only one story was missing: the perspective on urban development and the understanding of the urban importance in the Nordic countries was thin. Yet cities and urbanization have been present in Nordic and Finnish history. There have been differences between urbanization and the tradition of urban research, but some roots are clearly the same: the sense of community, the sense of responsibility and the sense of civil spirit are based on legal understanding of urban life. Much more needs to be researched, especially by using comparative aspect, to show how the Nordic way of urbanism was created.

THE QUESTION OF FINNISH PUBLIC SPACE – AN ESSAY

Michail Galanakis

FINNISH PUBLIC SPACE?

“From the start, the Master’s Programme of Urban Studies and Planning (USP) has had an appreciation of contextualization. Universal ideals, general truths, international scholarship as well as national biases and regionalism(s) were to be challenged, poked and probed. Therefore, when at least two of our students expressed their confusion in the face of Finnish public space, I admit, I rejoiced.”

Public space is a term encompassing a plurality of meanings, depending on the angle one chooses to see it from. More often than not public space signifies free general access for everybody. Engel (2006: 162) includes under the umbrella term of public space “open spaces and buildings with free entry”. This understanding of public space builds upon the dichotomy between public vs. private spaces. The former being freely accessible to everyone and the latter only to those of us “entitled to all the privileges that come with ownership” (Mengestu, 2014: 236). This dichotomy and its consequences constitute a “grand narrative” (Whyte, 1980) that pervades our lives in overt and covert ways. The dichotomy between public and private has been blurred (Arendt, 1998; Habermass, 2000; Kaartinen, 2002), however the dichotomous understanding persists. In a study on the effects of ICT on urban public space in the northern Finnish city of Oulu we read:

[...] young adults claimed for example that “the walls of the home are invisible” because of the ICT; thus, the distinction between the home and outer world cannot

anymore be understood by drawing a strict line between private home and public city. These distinctions have become complicated and call for a more nuanced analysis.

(Ylipulli et al., 2014: 157)

ICT renders the public and/or private domains omnipresent, which are similar to what Kaartinen (2002) has called “meta-space”. Still, in Ylipulli’s study the young adults interviewed hinted at “subtle” uses of ICT that are appropriate for public space (Ylipulli et al., 2014: 155). “Subtle” here refers to quiet or unobstructive uses. Remarkably, elderly participants in the same study expressed similar views. In other words, while in our cities “physical and virtual layers overlapped” (ibid.), the “human conditions” (Arendt, 1998) of private vs. public persist. Is it possible that this persistence stems from the blurring of these very conditions? Edenius and Rämö (2011) explain how the use of ICT and smartphones alters our perception of moving in the city:

In times when mobility is embraced, new forms of placial interconnectedness are still needed. For the urban

flaneurs it is the café with WiFi access; for adolescents it is the social network website; and for the itinerant professional worker it is the smartphone that becomes a nodal place.

(Edenius & Rämö, 2011: 48)

A few years ago while using public means of transport in Helsinki, I judged fellow commuters harshly who, instead of looking at each other and the cityscape, were absorbed by their phones. Until I got my first iPhone and I became one of them, constantly connected and somewhat absent, perpetually surprised at how fast the bus, tram or train ride was. Finland has a very high usage of Internet at 89% of the population and increasing (Official Statistics Finland, 2018) and surely this has an impact on the way public space is experienced. Johanna Ylipulli and her colleagues (2014: 156-158) present recommendations about the ways ICT may be better integrated into public spaces in the city.

[...] we argue that the effect of public place on technology is reciprocal; technology can also have an effect on public space, and change its socio-spatial structures. The social norms are constantly negotiated as new devices, applications or services enter the public places.

(Ylipulli et al., 2014: 158)

Talking about Finnish cities it makes particular sense to see ICT as a resource to tap-into, in order to devise “location-based [...] solutions or experiences for people living amidst snow and the darkness of the winter” (ibid). Darkness and the winter have a profound effect on what happens in public spaces in Finland, more so than we often conceptualize. In Finland harsh winter conditions climatic conditions are seen as a necessary evil better not to analyse at length if possible. The famous Finnish *sisu* (guts, stamina, or iron-will) has been crafted through peoples’ remarkable endurance in such conditions. It makes sense then that Pressman (1996) discussed the “winter cities movement” and the practical ways life can be improved during these dark, freezing, windy, and ice-clad months. Pressman argued that universal (i.e. modernist) ideals created “a steady-state, thermally neutral environment (constant temperature and humidity regardless of natural conditions) where ‘indoors’ and ‘outdoors’ are no longer connected or related” (Pressman, 1996: 522). According to him, the dichotomy between public and private space is counterintuitive in designing for “harsh circumstances” and he proposes a “grammar of the North” that will “create an architecture of ‘in-between’ mediating between these opposing propen-

sities [private vs. public], and devising intermediate spaces of climatic and experiential transition” (Pressman, 1996: 526). This “grammar of the North” especially for the winter provides stimulating visual environments, improves human climatic comfort by studying micro-climates and providing protection (e.g. underground passages, colonnades, canopies, arcades, glazed roofs, etc.), pedestrianizes zones, makes sure that there are recreational spaces for all for each season, and establishes optimal transit to reduce walking (Pressman, 1996: 523-525).

Forward twenty odd years, and climate change, as well as health benefits from soft mobility, set quite a different agenda for winter cities. Giles-Corti et al. (2009) demonstrate how essential it is for healthy older children and adolescents to walk and cycle. Subramanian and Jana (2018) demonstrate the same for elderly people. The fact that we have for decades prioritized vehicle mobility, especially in harsh climatic conditions, has led to a situation where winter is seen as the enemy of soft mobility (walking and cycling). In most cases this is perfectly understandable; anyone who has to walk during harsh winter conditions even for a few minutes or has to wait outdoors for a bus will attest to the feeling that the city and weather become our worst enemies. This is not very different from what dwellers in southern climates attest regarding hot summers (see Nikolopoulou and Lykoudis, 2007). Chapman et al. (2018) indicate that as the climate changes, rain and wind will become the prominent deterrents of soft mobility and will need special consideration in the built environment of the North.

Lighting increases exponentially in importance, when due to reflection less snow signifies less ambient light in winter. As a dweller in the North, snow, sleet, and arctic winds are sufficient reasons to stay indoors; however, winter darkness makes life tough in- and outdoors. A “grammar of the North” cannot forgo climate change, local contexts, and health benefits. The latter may prove particularly decisive considering the severity of many accidents due to walking on slippery ice, or the sheer physical and mental benefits of physical activities such as sports and soft mobility all year round, but especially during the winter months, when melancholy and even depression get a foothold. In the developed global North, which Finland is a part of, we are used to the omnipresence of the welfare state as the provider of security. It is well known that the state monopoly on alcoholic beverages has for years been attempting to counteract the predisposition of Northern dwellers to drink somewhat excessively. Similar provisional precautions may come into place regarding soft mobility and other physical activities promoting good health. While smooth and fast vehicle-mobility is con-

stantly developing, soft-mobility will also gain in importance. This in conjunction with harsh winter conditions will certainly make a difference in the planning and architectural “grammar of the North”. If, however, we think that it is desirable that we, the people, take responsibility and decide what is “good” for us, then shouldn’t we be involved in forging that grammar?

The planning office of the City of Helsinki has been the main actor in what concerns urban development. It is not the only actor, however. The 4P model (Public-Private-People Partnership) that Majamaa et al. (2008) argue for, inserts end-users in the power balance of developing public services. Public space can be conceptualized as a public service or a resource; therefore, the 4P model is relevant to this discussion, especially as long as legal and administrative frameworks support it. So far, the 3rd P (People) in the model has been understandably and largely absent. In a welfare state where people could rest assured that public affairs were handled efficiently and where the public good was served, there was no need for the 3rd P to be actively involved except for during elections. However, in Finland too we experience the rise of civil society (Salamon & Sokolowski, 2003; Wallin and Horelli, 2010). People self-organize in the pursuit of what matters to them. Public space activism (Hou, 2011) has quite a few successful examples in Finland and Helsinki (for example the Ravintolapäiva or Restaurant day, and the Siivospäiva or Cleaning day). This seeming shift in power over place-making (including design and management) has enjoyed some endorsement from public authorities. The cultural “buzz” (Silver & Nichols-Clark, 2013) that various public space actions have created, also demonstrates how public space has been increasingly employed as lively “city’s scenes” (ibid.) in the stock market of location advantages. Expressive culture has been conceptualized as the antidote to lengthy over-regulation and bureaucracy and more and more people abide by it, dwellers in Finland included, as increasingly people become members of culture-related organizations (ibid.: 6).

In the almost 20 years I have lived in Helsinki, I have experienced the boom of expressive culture and its places. Progressively, recreation – applying the wider sense of the term – has become the main function of public space. Cultural and spatial planning have never been so overtly intertwined, it seems. While culture has been “legitimized” as an important factor in urban planning, the 3rd P is still struggling to assert some legitimacy. While the 3P model (Public-Private-Partnership) of urban development has not been end-user friendly (Majamaa et al., 2008: 1), in order for it to succeed, the 4P model requires such a radical redistribution of resources – especially from the

state and municipal authorities and powerful private interests – that it is doubtful it will ever take place. Even if:

[...] planners can qualify their planning by reflecting more on the way they arrange participatory governance processes and how they implicitly favour some citizens over others. In so doing, public authorities and participatory planning processes have a greater chance of achieving inclusive processes for affected stakeholders.

(Agger, 2012: 42)

Other decision makers (including elected politicians, non-elected public officers, and corporate capital) will have to abide by Eckenwiler’s (2018: 564-565) “relational solidaristic recognition” that advocates for our understanding of each other as radically relational embedded ecological subjects, mutually constitutive of each other and our spaces. This is not an easy task but it is a noble one, and according to Eckenwiler an ethical one as well.

What do ethics have to do with urban development, place-making, and public space-making? If we consider public space (for the sake of the argument here) as a public resource with variations in its qualities, and to which different people have different degrees of access, then we may understand how redistributing this resource may affect us and especially those with less access to it. Accessibility here encompasses overcoming physical as well as symbolic/mental/emotional barriers. Steven Flusty’s (1994) notion of “prickly spaces” has demonstrated how public spaces can be physically made hostile towards certain groups of users (e.g. the homeless). I too have demonstrated the many ways the design and management of public space contributes to the discrimination against people from ethnocultural backgrounds and the Other (Galanakis, 2008). Later, in my research I looked into public spaces for inclusion (Galanakis, 2013; 2016a). What I have realized so far is that just as exclusion requires some form of overt or covert, and conscious or subconscious, *intentionality*, the same applies to inclusion. Since many exclusions are unjust but still take place, what stops us from adopting more just inclusive attitudes?

It may be, as we have discussed with my colleague Mariana Salgado (Salgado and Galanakis, 2014), that participatory planning in Finland (and elsewhere) is unfortunately still seen as a form of benevolent gesture that lacks substance. Similarly, inclusion is seen as a charitable act, especially since we seem unable to institutionalize it.

[...] it is not simply to give them [urban actors] a voice,

but to enable them to take responsibility and action for their places, by their own contributions, in bottom-up grassroots processes.

(Caneparo and Bonavero, 2016: 205)

Caneparo and Bonavero discuss self-organization not inclusion, or participatory planning; however, they bring their model of “Incubators of Public Spaces” to the fore, showcasing that:

By catalyzing citizens’ willingness to ‘do their bit’ for improving spaces within a certain community, it provides the means to grow and care for places.

(ibid.: 207)

Catalyzing people’s hands-on approach to public space may seem as if the public authorities and official planning are sidelined. I have demonstrated that it is a well-known secret that top-down planning cannot provide the services required by an increasingly diversifying population with various needs and aspirations (Galanakis, 2013), while at the same time in order for public space activism to flourish the support of public authorities is required (Galanakis, 2016b). Does then the 1st P in Majamaa’s 4P model become a mere coordinator? If the 1st P withdraws, is transparency dangerously diluted for socio-spatial justice to even stand a chance? Local activism, community building and civic engagement require intentional and perpetual nurturing, and even then they are not guaranteed (Mahon et al., 2009). Therefore, I would argue that the 4th P in the 4P model is the key element in that it sets the ground for a *partnership* to emerge and evolve wherein the 1st P could really make a difference with the organizational, administrative, legal, and distributive resources it has been bestowed.

The lack of this intentionality on the side of a large chunk of public authorities is evident in the urban development currently taking place in the Helsinki metropolitan area. Densification has become a buzzword, representing a form of urbanity to take over the suburbs. In many aspects densification may prove advantageous; however, for the nature-loving Finns, densification will also make urban green scarcer. In this context, concerned people and scholars in Scandinavia point to the increasing value of green spaces that were previously unthinkable as public, namely Christian and multifaith cemeteries (Evensen, Nordh and Skaar, 2017; Nordh and Evensen, 2018). In the face of densification, public spaces with or without strict scripts or programmes, may become more valuable. Maybe then it will become evident what people appreciate in or as public spaces. And maybe then we will be able to realize what Finnish public

space can be.

The above account is inconclusive in that I briefly present only a few aspects of public space in order to open up the problematics of *Finnish* public space. From the start, the Master’s Programme of Urban Studies and Planning (USP) has had an appreciation of contextualization. Universal ideals, general truths, international scholarship as well as national biases and regionalism(s) were to be challenged, poked and probed. Therefore, when at least two of our students expressed their confusion in the face of Finnish public space, I admit, I rejoiced. Nandara Mendes and Eglė Pilipavičiūtė coming from two different continents puzzled over public space in Finland, in Helsinki and in Haaga in particular. Their contributions foreground the need to conceive public space design within harsh winters as well as within existing communities and promote social infrastructures. In the same vein Mathew Page argues for streets and squares, culture and recreation, shops and services, in effect places wherein, as Sandercock and Attili (2009) have demonstrated, “strangers become neighbours”. The socio-spatial infrastructure was also at the core of the articles by, in no particular order, Kamilla Kreice, Sirpa Ojansuu, Jiayi Dong, Chaowen Yao, Tuomas Harju, and Liang Yen-Chi. By socio-spatial infrastructure I mean places whose design requires or calls upon people’s actions and interactions, or according to Eckenwiler (2018), calls for their embeddedness as ecological subjects in recognition of their interdependencies.

Kreice analyses the social dynamics of the two Haaga public libraries in relation to staff and patrons. Doing so she reveals the two-way effects between organizational culture and ethnocultural milieu. Ojansuu delves into a re-imagining of a 1959 shopping mall as a multifunctional space for commerce as well as community building. Harju in his article highlights the distinctiveness of Pohjois (North) vs. Etelä (South) Haaga and argues for the importance of existing public spaces – such as the Rhododendron Park – in bringing communities together. Dong redesigns the Huopalahti train station in the older Etelä Haaga area as a multifunctional public space, not just another transportation hub. In doing so he provides galleries protecting people from harsh winters as well as places for informal encounters, public exhibitions, and commerce. Yao looks at pedestrian paths and circulation, allotment gardens and dog parks, tree density and topography, and more, in order to redesign an existing indistinct green area he identifies as potentially “central” and calls it a “community centre”. At the eastern edge of Haaga lies the main lung of Helsinki, Central Park (Keskuspuisto in Finnish). Therein lies a small cemetery where people from all over Hel-

sinki may bury their pets. Although strictly speaking outside Haaga, this is the site Yen-Chi chose to intervene by designing a pet cemetery as a gradient public space, and framing activities so that they don't clash.

A few more students discuss issues ranging from class struggles, mobility, land values, to cultural politics all pertinent to public spaces. Since their focus was not on public spaces I won't go into them. Two, however, that address public space in relation to mental health tap into a question that will increasingly occupy decision makers: how can cities be designed and managed in ways that contribute to both our physical and mental health? The relationship between city space and physical health has been acknowledged (WHO, 2016), while the impact of cities on people with cognitively disabling disorders as well as people with depression and schizophrenia are less discussed, possibly because they fall within uncharted waters. This makes Tuomas Tavi's and Asta Hiippala's articles all the more valiant. Our nascent programme enters its 3rd year and, based on the brilliance of the cohort of 2018, I am confident that it will train scholars and professionals who will have a positive impact on public spaces around the world.

REFERENCES

- Agger, A. (2012). Towards Tailor-made Participation: How to Involve Different Types of Citizens in Participatory Governance. *The Town Planning Review*, 83 (1): 29–45.
- Arendt, H. (1998). *The Human Condition*. Chicago, London: The University of Chicago Press.
- Caneparo, L. and Bonavero, F. (2016). Neighborhood Regeneration at the Grassroots Participation: Incubators' Co-creative Process and System. *International Journal of Architectural Research*, 10(2): 204–218.
- Chapman, D., Nilsson, K., Rizzo, A., & Larsson, A. (2018). Updating winter: the importance of climate-sensitive urban design for winter settlements. *Arctic Yearbook*, pp. 86–105. Available online at https://issuu.com/arcticportal/docs/arctic_yearbook_2018 [Accessed 29.07.2019]
- Eckenwiler, L. (2018). Displacement and Solidarity: An Ethic of Place-making. *Bioethics*, 32: 562–568.
- Edenius, M. and Rämö, H. (2011). An Office on the Go: Professional Workers, Smartphones and the Return of Place. *International Journal of Technology and Human Interaction*, 7(1): 37–55.
- Engel, B. (2006). Public space in the Blue Cities in Russia. *Progress in Planning*, 66: 147–239.
- Evensen, K.H., Nordh, H. and Skaar, M. (2017). Everyday Use of Urban Cemeteries: A Norwegian Case Study. *Landscape and Urban Planning* 159: 76–84.
- Habermas, J. (2000). The Public Sphere. In K. Nash (Ed.), *Readings in Contemporary Political Sociology*. Oxford, Massachusetts: Blackwell, pp. 288–294.
- Flusty, S. (1994). *Building Paranoia: the Proliferation of Interdictory Space and the Erosion of Spatial Justice*. Los Angeles, CA: Los Angeles Forum for Architecture and Urban Design. Available online at: http://architectureofwar.artun.ee/wp-content/uploads/Steven_Flusty_-_Building_Paranoia1.pdf [Accessed on 29.07.2019]
- Galanakis, M. (2008). *Space Unjust: Socio-Spatial Discrimination in Urban Public Space - Cases from Helsinki and Athens*. Dissertation, monograph. University of Art and Design, Helsinki, Publication series A.
- Galanakis, M. (2013). Intercultural Public Spaces in Multicultural Toronto. *Canadian Journal of Urban Research*, 22(1): 67–89.
- Galanakis, M. (2016a). Public Spaces for Youth? The Case of the Jane-Finch Neighbourhood in Toronto. *Space and Culture*, 19(3): 208–223.
- Galanakis, M. (2016b). Intercultural Public Space and Activism. In G. Marconi and E. Ostanel (Eds.), *The Intercultural City: Migration, Minorities and the Management of Diversity*. London: IB Tauris, pp. 122–136.
- Giles-Corti, B., Kely S.F., Zubrick S.R. and Villanueva K.P. (2009). Encouraging Walking for Transport and Physical Activity in Children and Adolescents: How Important is the Built Environment? *Sports Med*, 39(12): 995–1009.
- Kaartinen, M. (2002). Public and Private – Challenges in the Study of Early Modern Women's Lives. In A. Korhonen and K. Tuohela (Eds.), *Time Frames – Negotiating Cultural History*. Säätjärvi: Gummerus, University of Turku, pp. 89–104.
- Mahon, M., Fahy, F., Ó Cinnéide, M. and Gallagher, B. (2009). Engagement and Governance in the Urban-Rural Fringe: Evidence from Ireland. *Nature and Culture*, 4(1): 57–77.
- Majamaa, W., Junnila, S., Doloi, H. and Niemistö, E. (2008). Ene-user Oriented Public-Private Partnerships in Real Estate Industry. *International Journal of Strategic Property Management*, 12: 1–17.
- Mengestu, D. (2014). *All Our Names*. New York: Alfred A. Knopf.
- Nikolopoulou, M. and Lykoudis, S. (2007). Use of Outdoor Spaces and Microclimate in a Mediterranean Urban Area. *Building and Environment*, 42: 3691–3707.
- Nordh, H. and Evensen, K.H. (2018). Qualities and Functions Ascribed to Urban Cemeteries across the Capital Cities of Scandinavia. *Urban Forestry & Urban Greening*, 33: 80–89.
- Official Statistics of Finland (OSF). (2018). Use of information and communications technology by individuals [e-publication]. ISSN=2341-8710. 2018. Helsinki: Statistics Finland. Available online: http://www.stat.fi/til/sutivi/2018/sutivi_2018_2018-12-04_tie_001_en.html http://www.stat.fi/til/sutivi/2018/sutivi_2018_2018-12-04_tie_001_en.html [Accessed 27.07.2019]
- Pressman, N.E.P. (1996). Sustainable Winter Cities: Future Directions for Planning, Policy and Design. *Atmospheric Environment*, 30(3): 521–529.

- Salamon, L. M., & Sokolowski, W. (2003). Institutional Roots of Volunteering: Towards a Macro-Structural Theory of Individual Voluntary Action. In P. Dekker & L. Halman (Eds.), *The values of volunteering: cross-cultural perspectives*. New York: Kluwer Academic/Plenum Publishers, pp. 71–90.
- Salgado, M. and Galanakis, M. (2014). “So What?” Limitations of Participatory Design on Decision-making in Urban Planning. *PDC '14: Proceedings of the 13th Participatory Design Conference: Short Papers, Industry Cases, Workshop Descriptions, Doctoral Consortium papers, and Keynote abstracts*, 2, pp. 5–8.
- Sandercock, L., and Attili, G. (2009). Towards a Cosmopolitan Urbanism: From Theory to Practice. In L. Sandercock and G. Attili (Eds.), *Where Strangers Become Neighbours*. Springer Science+Business Media, pp. 192–229.
- Silver, D. and Nichols Clark, T. (2013). Buzz as an Urban Resource. *Canadian Journal of Sociology/Cahiers canadiens de sociologie*, 38(1): 1–31.
- Subramanian, D. and Jana, A. (2018). Assessing Urban Recreational Open Spaces for the Elderly: A Case of Three Indian Cities. *Urban Forestry & Urban Greening*, 35: 115–128.
- Wallin, S. and Horelli, L. (2010). The methodology of user-sensitive service design within urban planning. *Environment and Planning B: Planning and Design*, 37: 775–791.
- WHO, 2016. *Urban Green Spaces and Health. A Review of Evidence*. Regional Office for Europe, Copenhagen. Available online at: http://www.euro.who.int/__data/assets/pdf_file/0005/321971/Urban-green-spaces-and-health-review-evidence.pdf [Accessed on 29.07.2019]
- Whyte, W.H. (1980). *The Social Life of Small Urban Spaces*. Washington: The Conversation Foundation.
- Ylipulli, J., Suopajarvi, T., Ojala, T., Kostakos, V. and Kukka, H. (2014). Municipal WiFi and Interactive Displays: Appropriation of New Technologies in Public Urban Spaces. *Technological Forecasting & Social Change*, 89: 145–160.

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