HELSINKI Quarterly

CITY OF HELSINKI ▸ URBAN RESEARCH AND STATISTICS

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2020

Helsinki

Disappearing jobs?
How digitalisation reshapes the labour market

Helsinki housing production at record levels

Segregation – beyond the residential domain

Helsinki

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UNSPLASH / NEIL DAFTARY

Monitoring Helsinki's development in challenging times

The coronavirus pandemic has tested Helsinki's alertness mechanisms and reacting capabilities like no other crisis in recent decades. As in other cities, the priorities during the first phase of the COVID-19 crisis lay in protecting the most vulnerable population groups and reorganising our activities to prevent the worst possible outcomes of an epidemic caused by a virus that was still largely unknown.

TO THIS date, Helsinki has faced challenging circumstances yet the situation has been somewhat less dramatic than in many European capitals. At the time of writing, just over 8,000 COVID-19 cases had been detected in Helsinki and 16,000 in the Helsinki–Uusimaa Hospital District (around one-third and two-thirds of all cases in Finland, respectively). Cities such as Stockholm or Amsterdam have reported figures multiple times larger relative to population size.

EVEN IF the local coronavirus epidemic has been contained to a greater extent than in peer cities, the impact of the crisis is expected to be immense in the social and economic spheres. The dire consequences will be felt in key industries such as services and the creative economy. The financial hardship in the private sector is likely to pose some challenges to the City's capability to provide quality public services. To help combat these challenges and to draw up and execute postcrisis recovery plans, Helsinki needs up-to-date, on-point data and analysis – often in real time.

THE CORONAVIRUS crisis has put the City's monitoring systems and practices to test as well. While we have a long experience in analysing the current state and development of the City of Helsinki – with a breathtaking variety of different data sources, reports and projections – putting together a coordinated effort to respond to a sudden crisis such as the COVID-19 pandemic with data was neither easy nor seamless. The lessons learned from this process will be a valuable asset as we develop our monitoring and information systems further. In future, as till now, Helsinki will place great emphasis on facilitating informed decision-making both with quick analyses and real-time dashboards as well as with more in-depth studies and research. ■

Timo Cantell

UNSPLASH / ŠTEFAN ŠTEFANČÍK

Digitalisation and the future of work

– what changes are on the horizon for Helsinki area labour markets?

HENRIK LÖNNQVIST & MINNA SALORINNE

It is no news that technological advances are reshaping the world of work. More or less dismal pictures of the future are often drawn up in the public debate. But what kind of work – and for what kind of wages – are we in for? This article presents an overview of the debate on the disappearance of jobs as well as an assessment on how likely the various jobs and occupations in the Helsinki Metropolitan Area are to disappear or be replaced over the next 10–15 years. In our calculations we will apply methodology developed by Oxford researchers to analyse data compiled by Statistics Finland on the job market structure in the Helsinki area cities.

Work is changing – as it always has

There is nothing new about anxieties created by job loss. History textbooks tell us about the Luddites in Great Britain, who protested against the mechanisation of the textile industry and, particularly, the deterioration of the position of skilled workers in that process. The worries concerned, most of all, people's own income, rather than the mechanisation itself. Others have considered that the growth of productivity thanks to machines is a desirable development.

IN HIS work *Economic Possibilities for Our Grandchildren* (1930), the highly influential economist John Maynard Keynes estimated that rising work productivity would sooner or later enable significantly shorter working hours. The resources set free by increased work productivity could be used for producing altogether new goods and services. Indeed, we can largely thank technological advancement for the rise of living standards in the western world.

IN THE current debate, new digitalisation-related technologies – particularly those relying on artificial intelligence (AI) and robotics – are a factor crucially influencing change in work life. Robotics solutions are many times as efficient as human labour in mechanical routine tasks. AI-based solutions reduce costs, and ideally they liberate human labour for tasks where automation and robotics perform less well.

WHEN DISCUSSING the impacts of technological advancement on the labour market, we often talk about *skills bias*. This refers to the tendency of technological advancement to favour tasks that require high skills. The proportion of tasks requiring high skills has grown considerably in recent decades.

FOR THE most part, the tasks that technological advancement has enabled us to automate so far are routine tasks typical of average-wage jobs. This phenomenon is known as *routine-biased technological change*, and it has been seen as an explanation for why work in medium-paid occupations has diminished (cf. Oesch & Rodriguez Menes, 2010). Over time, as AI becomes more autonomous and better apt to learn, increasingly complicated tasks can be automated.

APART FROM technological advance, other drivers in society also contribute to the transformation of work. One is the location of work. With urbanisation, a considerable share of new jobs are created in growth centres. In terms of occupational structure, too, new jobs are different from those that disappear.

THE IMPORTANCE of the service sector as an employer has grown, and the proportion of service jobs is largest in big cities. Technological advancement in transport and communications has enabled a more intense economic integration between national economies. The global division of labour has deepened first through international trade in goods and services, and later with the unbundling, splitting up and offshoring of production processes (Baldwin, 2006). From Western countries, substantial numbers of jobs in manufacturing, for example, have been offshored to countries with lower cost levels, typically in Asia. With advancement in communication technologies, production processes can more efficiently be split up and carried out where it is most profitable. This applies not only to manufacturing but increasingly also many other occupations, even such expert jobs that were earlier considered less prone to the globalisation of work.

23 per cent of all jobs

in the Helsinki Metropolitan Area are in high risk of being replaced by 2030.

Occupations at risk of disappearing – Frey and Osborne's approach

Many assessments have been made of the impact of technology on jobs and occupations in the future. In 2013, Oxford University researchers Carl Benedikt Frey and Michael A. Osborne developed coefficients for the risk of automation by 2030 of different occupations. They applied these coefficients on the labour market in the USA and found that no less than 47 per cent of employment was at high risk of being replaced as a consequence of technological developments, particularly digitalisation.

FREY AND Osborne analysed the occupations in terms of three dimensions. *Social intelligence* is manifested in human interaction as an ability to negotiate and persuade; also as care and attention. It is needed in many ways in the social and health care sector and in upbringing and education. *Creativity* is embodied by new inventions and valuable ideas as well as the ability to use concepts in a versatile way. *Human perception* and the ability to observe and identify objects in surprising situations is necessary, for example, in the handling and transport of goods in a changing environment. To date, people have been considered to be better than machines in these tasks.

THE MORE these qualities are required in an occupation, the less prone it is to the effects of digitalisation in the near future, according to Frey and Osborne. And vice versa: the less social intelligence, creativity and perception are required, the more automatable a job is. For each occupation, a coefficient was calculated for its replacement risk. If the risk rate was over 70 per cent, the occupation was defined as running a high risk of being replaced by technology. Frey and Osborne found that jobs at high risk of disappearing due to automation were particularly common in the service sector, sales work, and administration and support tasks.

IN 2014, researchers Mika Pajarinen and Petri Rouvinen at ETLA Economic Research converted the occupational titles in the calculation model to correspond to the classification used in Finland. As a reference level for the number of jobs they used occupational data in Statistics Finland's register-based employment statistics of 2011. According to the calculation model, 36 per cent of jobs in Finland that year were at high risk of being replaced by 2030. A corresponding analysis was made for jobs in the city of Vantaa (Fröberg & Lönnqvist 2018).

IN THE following, we use the coefficients determined by the ETLA researchers to analyse how the advancement of digitalisation affects the number of jobs in the Helsinki Metropolitan Area.

Changes in job numbers by occupation in the Helsinki Metropolitan Area until 2030

According to Statistics Finland's employment statistics, there were 634,700 jobs in the Helsinki Metropolitan Area at the end of 2017. Applying Frey and Osborne's method, 23 per cent would be at high risk of being replaced by 2030. As stated above, high risk means that 70 per cent or more of jobs in an occupation could be replaced through automation. In theory, this equals around 140,000 jobs in the Helsinki Metropolitan Area. This is a slightly lower proportion than in Finland as a whole, where 26 per cent of jobs would be in a high risk of being replaced, based on data from 2017.

TABLE 1.

Number of jobs in 2017, and the number of jobs at high risk of being replaced by 2030 in the Helsinki Metropolitan Area and Finland.

	Jobs in 2017	Jobs at high risk of being replaced by 2030	Proportion of jobs replaced by automation %
Helsinki	397,346	89,000	22
Espoo	120,676	24,000	20
Vantaa	116,320	30,000	26
Helsinki Metropolitan Area	636,690	144,000	23
All Finland	2,327,730	609,000	26

– Source: Statistics Finland employment statistics 2017

THE PROPORTION of jobs running a high risk of being replaced varies somewhat between the big cities of the Helsinki Metropolitan Area: in Helsinki, it was 22 per cent, in Espoo 20 and in Vantaa 26 per cent. These differences are explained by the industrial structures of the cities. Although the total proportion of market services is rather similar in them all, differences between industries may be great. Espoo and Vantaa are clearly more trade-dominated than Helsinki. Logistics-related industries stand out in Vantaa, while information and communication jobs are concentrated in Espoo and Helsinki. In the field of finance, Helsinki is the centre. The category *professional, scientific and technical activities* has clearly larger proportions of jobs in Helsinki and Espoo than in Vantaa.

IN ADDITION, automation already seems to have taken a part of those jobs that are easily replaceable. In Helsinki, for example, jobs at high replacement risk decreased by four percentage points between 2014 and 2017. Nevertheless, the total number of jobs grew by five per cent during that time.

Jobs at the highest risk of being replaced

An occupation-based analysis reveals that shop sales assistant jobs, in particular, would seem to diminish in near future. At present, this is the most common occupation in the Helsinki Metropolitan Area. In trade, the effect of digitalisation can be detected a growing proportion of shopping being done over the Internet and of growing numbers of self-service tills in supermarkets.

AT HIGH risk of being replaced we find the categories of secretaries, accountants, accounting associate professionals, bank tellers and related clerks, as well as jobs in statistics, finance and insurance. IT software has replaced much of the computing work involved in these tasks. Part of the customer service work that requires reasoning can already be done by AI. Predictable inquiries in customer service are increasingly addressed by chatbots.

MANY JOBS in the sorting and delivery of post are disappearing. Much of this work has been automated, and the transformation in this field is often due to changing consumer behaviour: traditional greetings by mail have been replaced by text messages and social media.

IN FREY and Osborne's model, automation strikes hard on the restaurant business and institutional catering services. The role of self-service is growing, and some fast-food restaurants already have automated self-ordering. Many phases of the production process can also be automated. As growing numbers of consumers order their meals online in advance, possibly including home delivery, the need for waiters and sales staff in cafés and restaurants decreases.

OTHER LARGE occupational categories threatened by replacement include contact centre salespersons, telecommunications engineering technicians, information and communications technology operations technicians, and cashiers and ticket clerks.

IN ESPOO, the occupations strongly threatened to be replaced are roughly the same as in Helsinki (Figure 2). One exception is chemical industry process workers, a group that is more concentrated in Espoo. Both Espoo and Helsinki have more high-skill specialist jobs that are not yet replaceable by digitalisation, compared to Vantaa.

FIGURE 1.

Jobs in Helsinki at high risk of being replaced by 2030.

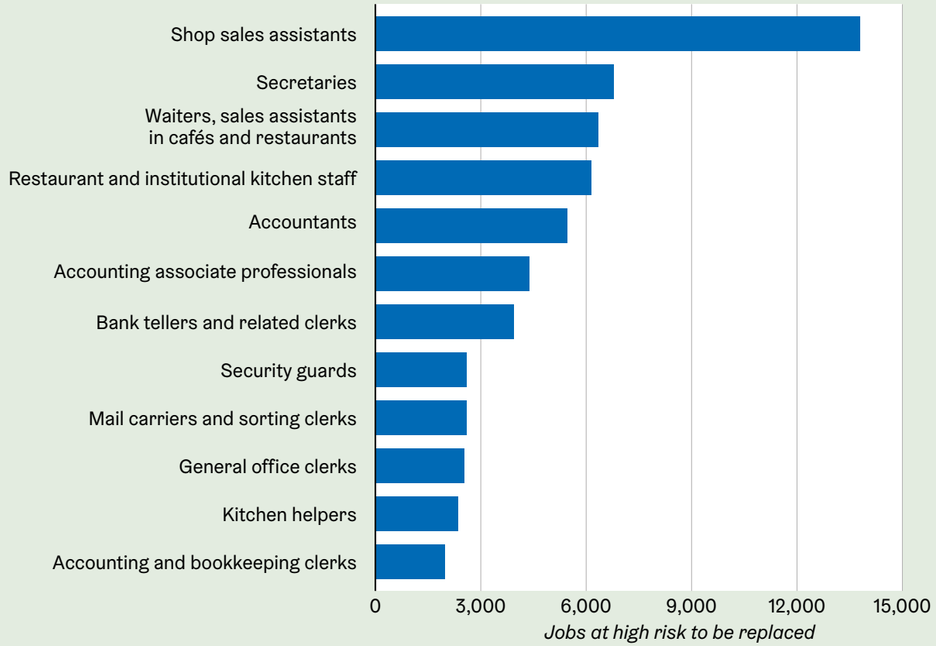
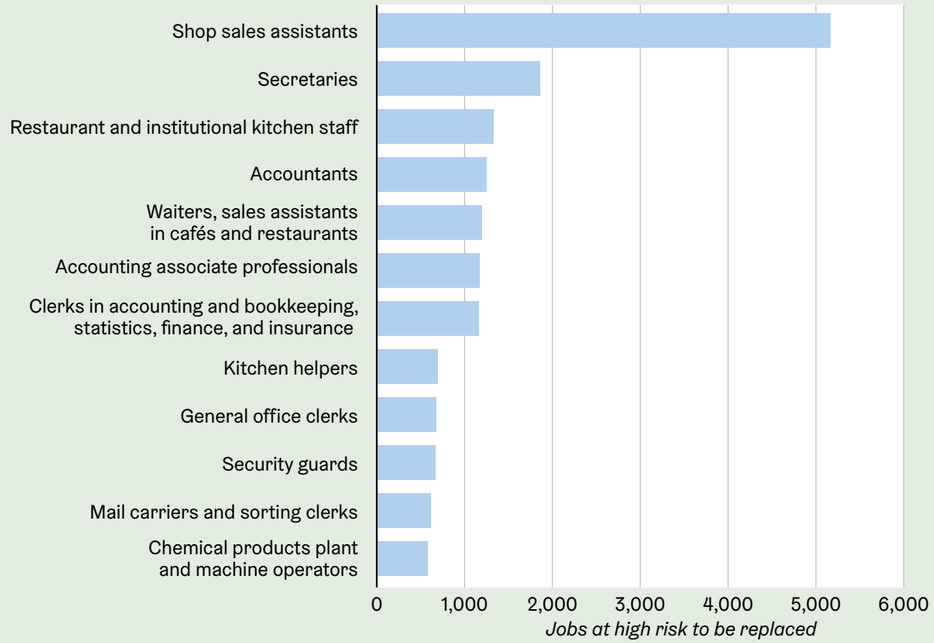


FIGURE 2.

Jobs in Espoo at high risk of being replaced by 2030.



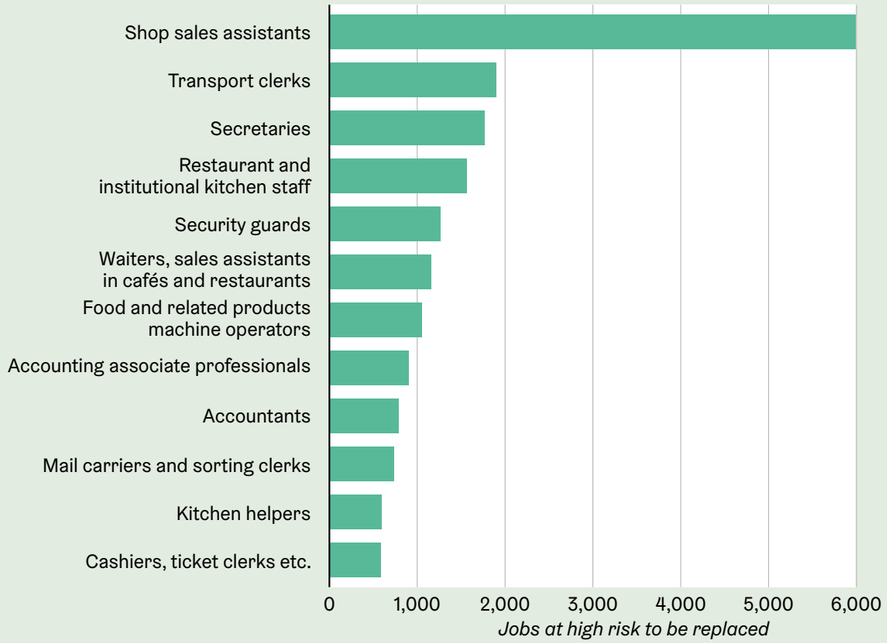


FIGURE 3.

Jobs in Vantaa at high risk of being replaced by 2030.

FIGURE 4.

Percentage change in the number of jobs in Helsinki Metropolitan Area in 2010–2017, selected occupations at high risk of being replaced

VANTAA HAS the highest proportion of jobs in trade, storage and logistics, all of which are among the branches most touched by automation. Vantaa differs from its neighbours in the sense that office workers in transport, as also process workers in the food industry, are high on the list of the most threatened occupations. The need for security guards is likely to decrease as surveillance cameras increase in numbers.

Changes in job numbers by occupation in the Helsinki Metropolitan Area in 2010–2017

Frey and Osborne's original analysis assessed the change in the numbers of jobs between 2010 and 2030. We now have the opportunity to make a "half-way report" about how the numbers of jobs in various occupations have changed.

THE ACTUAL change seen in the numbers of jobs can be studied by analysing Statistics Finland's employment statistics for 2010–2017. During this period, the number of jobs grew by a total of five per cent in the Helsinki Metropolitan Area. On the level of different occupations, however, the trends point in different directions.

OUR ANALYSIS does not allow us to easily determine which changes in the number of jobs are due to digitalisation and which are for other reasons. A major factor behind changes in job numbers is economic trends. Businesses are closed down primarily during economic downturns. At local level, the geographic location of businesses – and their relocations – may cause substantial changes in the number of jobs in cities. In the long term, the numbers of jobs are also influenced by consumer behaviour and cultural factors. The values that steer consumption tend to change relatively slowly and are harder to observe. Online shopping and the spread of a 'coffeehouse culture' can be seen as examples of such consumption-related change.

FIGURE 4 shows occupations that Frey and Osborne's model identifies as being at high replacement risk due to digitalisation. In the category of administrative and support service activities, numbers of jobs have decreased strongly in many occupations. In the category *general and keyboard clerks* (secretaries, general office clerks, typists and word processing operators, data entry clerks) over 10,000 jobs disappeared in the Helsinki Metropolitan Area over 2010–2017, amounting to a 40 per cent decrease. One of the strongest relative decreases in jobs has been seen in the group *statistical, finance and insurance clerks* and for cashiers and ticket clerks.

2,400 BANK clerk jobs disappeared in a six-year period, and almost all major banks have announced layoffs and staff reduction needs since 2017. At the same time, however, banks have announced large numbers of new vacancies due to digitalisation-related changes in job descriptions. Thus, digitalisation also creates new jobs and new tasks.

THE NUMBER of jobs for postmen and mail sorters decreased by 1,500 (this figure does not yet include the much-publicised need for staff cuts in the Finnish postal service in 2019). Jobs for IT technicians and support staff decreased by 2,000 in the Helsinki Metropolitan Area, and this reduction is probably chiefly explained by the increased usability of IT software.

AS REGARDS the administrational jobs described above, the Frey and Osborne model seems to work – the number of jobs in these occupations has decreased substantially. Another large occupational group diminishing due to digitalisation are service sector employees. For the latter, the actual change in job numbers in the Helsinki Metropolitan Area does not seem to match the model (see figure 4).

In the long term, the numbers of jobs are also influenced by consumer behaviour and cultural factors.

HELSINKI MARKETING / JUSSI HELLSTEN

UNSPLASH / XPS

ACCORDING TO Frey and Osborne's model, a large proportion of shop sales assistant jobs would be disappearing. In fact, the number of shop (retail) sales assistants in the Helsinki Metropolitan Area remained the same in 2017 as in 2010. The area has many large shopping centres needing retail assistants. In addition, the Helsinki Metropolitan Area has seen strong population growth, which increases private demand. Yet the success of online shopping has posed difficulties for traditional trade. Nonetheless, the stagnancy in the numbers of sales assistant jobs is partly explained by the fact that staff demand is regulated through flexible work contracts. Sales staff increasingly work part-time. In addition, shops often employ workers through staff agencies, and use people paid by the hour during rush hours and high season.

IT IS also possible that the terminology used in the model will influence our interpretations concerning certain occupations. For example, a cashier (the English term) is typically someone working at a till, while the corresponding Finnish occupation may refer to a wider job description – including salespeople in specialist shops who also interact with customers and give advice on products. The classification used in Finland includes the small group *cashiers and ticket clerks*, and these jobs really have diminished rapidly: between 2010 and 2017 by 38 per cent.

JOBS IN restaurants, institutional kitchens and cafés have increased in the Helsinki Metropolitan Area. The number of kitchen helpers grew by 1,000, and restaurant or institutional kitchen staff by over 1,400. Private consumption has increased demand as both residents and tourists spend more and more time in cafés. At the same time, these businesses have large numbers of vacancies and these are difficult to fill. This is probably due, in part, to atypical work contracts and low wage levels, and in future the recruitment troubles may increase businesses' interest in automation.

Criticism and alternative approaches

Frey and Osborne's (2013) method has also been criticised. Although technological advancement reshapes tasks to a high degree, some of the tasks undergoing change will continue to exist, albeit with a different content (Arntz, Gregory & Zierhan, 2016). The assumption about a rapid technological change contributing to the disappearance of jobs has also been put into question. It is possible that some opportunities opened up by new technologies are never actually taken, if the consequences of these changes are not considered acceptable by society (Arntz, Gregory & Zierhan, 2016). Whether or not jobs are destroyed apparently also depends on other solutions such as arrangements related to wage-setting (Dauth, Findelsen och Woessner 2017).

IT IS by no means self-evident that the coefficients for the disappearance of jobs presented in Frey and Osborne's original study – based on US data – are applicable on a global scale. Even within a single occupational title, there is often significant variation in job descriptions and automatability between jobs in one country, on the one hand, and between countries on the other.

THE STUDY of Arntz et al (2016) used the so-called PIAAC (Programme for the International Assessment of Adult Competencies) data which describes the kind of tasks included in different occupations. According to the findings of Arntz et al, the proportion of tasks with a high probability of automatisation varies between six and 12 per cent in industrialised countries. The study gives Germany and Austria the highest rates for the disappearance of occupations. In both countries, over 12 per cent of jobs could be automated. For Finland, this figure is seven per cent. Significant changes, however, may be expected in many jobs in terms of their contents and qualifications requirements.

THE ANALYSIS by Arntz et al (2016) is extended by Nedelkoska and Quintini (2018) who examine a total of 32 countries. They also include a larger number of occupations. According to their findings, 14 per cent of jobs in OECD countries can be automated, and another 32 per cent will face significant pressure to change as tasks become automated. Differences between countries are nevertheless great. According to Nedelkoska and Quintini, the impacts of automation are smallest in the Anglo-Saxon countries, Scandinavia and the Netherlands, and strongest in eastern Europe, Germany and Japan. In Finland, along with Norway and Sweden, the risk for jobs to be lost is smallest among all the countries in the study.

AS WE have already seen, job trends in many Western countries have been influenced not only by technological advance, but by economic globalisation – itself made possible by technological advancements. To give an example, Blinder (2009) has estimated that between 22 and 29 per cent of jobs in the US may be regarded as likely to be offshored. Tuhkuri (2016) applies the same method to a data material from Finland, and concludes that roughly one-quarter of jobs may be on the line due to globalisation in the next ten years. It is possible that globalisation has played an even bigger part than technology for developments in job markets. Using a research material collected in the USA, Acemoglu and Restrepo (2017) make the assessment that economic globalisation and offshoring of manufacturing to Asia – particularly to China – explains a considerably larger part of the decrease in manufacturing jobs in the US over 1990–2007 than robotics.

Job trends in Western countries have been influenced not only by technological advance, but by economic globalisation – itself made possible by technological advancements.

UNSPLASH / MICAH BOSWELL

***The coronavirus pandemic** also seems to have brought a shift towards teleworking and online shopping.*

Conclusions

We can conclude, regarding the changes in job numbers up to this point, that the need for labour seems to already have diminished due to technological advancement – essentially digitalisation – in precisely those occupations where the replacement risk will also be greatest in future. At the same time, the high demand for services related to urbanisation and urban life, such as the coffeehouse culture, will be creating new jobs at least for a while. Of course, these jobs too have seen significant change of late. As an example, many fast food restaurants offer automated self-ordering. Digitalisation spreads in phases and affects different occupations at different pace.

ALTHOUGH NEW technologies and digitalisation cause significant change on the job market, the assumption sometimes made that work will disappear is unrealistic. The amounts of work and jobs in a society are no constants. Yet it is obvious that the new technologies affect, in many ways, the contents of tasks and the vacancies available. With new technologies, the productivity of work rises. Technological advancement creates jobs, too, both directly and indirectly (OECD, 2016). In the best cases, technology leads to the automation of routine tasks while more demanding tasks will remain for humans to handle. The question remains how many of us – and in what ways – will be able to master the transition to new tasks with many new skills requirements? Will there be sufficient opportunities for providing and acquiring re-education? As skills requirements change, the position of many occupational groups may change considerably on the job market. The coronavirus pandemic has, on its part, also rapidly contributed to change in our society, as telework and online shopping have quickly expanded everywhere. How permanent these changes will be – and what long-term effects the pandemic will have – remains to be seen. ■

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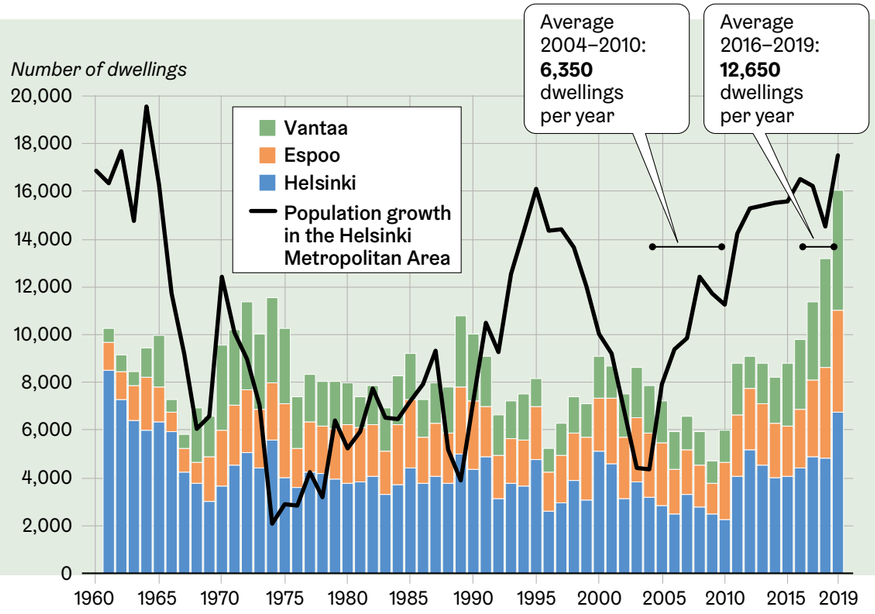
HELSINKI MARKETING / YIPING FENG AND LING OUYANG

Helsinki area housing production breaks records

– An overview of construction and population trends in 1961–2019

PEKKA VUORI

In the Helsinki Metropolitan Area, 2019 turned out to be a record year for housing production. *A total of 16,056 dwellings were completed in the three big cities of the metro area – Helsinki, Espoo and Vantaa – a number clearly exceeding any previous annual output. In the 2010s as a whole, the output was around 100,000, a record-high figure as well. In 2017–2019 the annual total was over 10,000 new dwellings – a figure exceeded in the area only in the early 1960s and 1970s, and in 1989–1990.*



Sources: Municipal statistics (housing production), Statistics Finland and municipal statistics (population data).

FIGURE 1. **Dwellings completed and population growth in Helsinki, Espoo and Vantaa in 1961–2019.**

In all three cities, housing construction was at a record level in the late 2010s. Both Espoo and Vantaa reached new record levels in 2019, and in Helsinki annual outputs have been larger only in 1960, 1961 and 1962.

The large housing outputs in the Helsinki Metropolitan Area in the years after 2015 contrast especially with the situation ten years earlier, following an exceptionally calm period in construction. Whilst in 2016–2019 the annual average output in the area amounted to 12,650 dwellings, it was still only 8,800 in 2011–2015, after a historical low of only 6,350 per annum in 2004–2010. That is only half the annual figure for the last four years in the Helsinki Metropolitan Area.

ANNUAL POPULATION growth in the Helsinki Metropolitan Area, now 17,501, is also particularly strong. It has been larger only in 1963 and 1965.

Population and housing production in the Helsinki area – what reasons for the current trends?

Population growth was very rapid in Helsinki and the surrounding areas in the 1950s and 1960s, during a major wave of urbanisation. This structural change, which in Finland lasted well into the 1970s, was among the fastest in all of Europe. However, in the late 1960s, the national economy deteriorated, and Finland's population decreased by 35,000 over 1969–1970, primarily due to emigration to Sweden and rapidly falling birth rates. Although the people moving to Sweden chiefly came from the countryside, the 1970s turned out to be a time of slower population growth for Helsinki and its surroundings, too. A brief economic upswing in the early 1970s brought full employment to all of Finland, and migration to the Helsinki Metropolitan Area levelled out. In 1970–1973, the capital region's migration gain from the rest of Finland was 20 per cent smaller than it had been in the early 1960s.

HOUSING AND infrastructure production were accelerated due to the earlier rapid population growth and the consequent forecasts, but also the need to raise the housing standards. Thus the early 1970s saw the construction of unprecedented numbers of new dwellings in the Helsinki Metropolitan Area – records not surpassed until the last few years.

***The early 1970s** saw the construction of unprecedented numbers of new dwellings in the metropolitan area – records not surpassed until the last few years.*

With the economic upturn of the 1980s, population growth also returned to the Helsinki Metropolitan Area.

DURING THE economic depression in Finland in the early 1990s, the Helsinki Metropolitan Area's population grew faster than previously. Part of this growth followed the new Municipality of Residence Act which allowed students to register their residence officially in the city where they already lived. A new phenomenon in the 1990s was also that immigration from abroad increased – not having earlier influenced the population in any notable way. During the depression, market-initiated housing production more or less collapsed, and families held on to their smaller homes in Helsinki instead of moving to spacious housing in the periphery.

AFTER THE depression in the 1990s, employment gradually picked up again, and interest rates fell. This led to a new phase of suburbanisation or exurbanisation in the early 2000s, often called the 'Nurmijärvi phenomenon'. Families that had been cooped up in their flats in Helsinki were again able to move to more spacious housing, often located in the outer parts of the Helsinki Region. Furthermore, a recession in the ICT sector came down hard on a number of industries that are typical of the metropolitan area, and population growth slowed down considerably. But the Nurmijärvi phenomenon did not last for very long, and the metropolitan area soon saw rapid population growth again. This reversal of the trend was at least partly caused by the finance crisis starting in 2007, which not only increased foreign immigration but also reduced people's motivation to acquire new homes.

HOUSING PRODUCTION decreased dramatically as the financing outlook tightened. Young adults, in particular, stayed in rented housing in Inner Helsinki, and this was associated with a cultural change: the renaissance of inner-city living. Although the population of the metropolitan area started to grow rapidly, the planning process could not react to the changed situation soon enough, and housing production remained slow. In Helsinki, the decision to move cargo harbours from the inner city to the suburban Vuosaari was delayed, and there was a scarcity of land for development. Housing production could not thus not keep pace with population growth.

Land use, housing and transport agreements

The problems in housing production during the first decade of the 2000s gave birth to a new kind of development-oriented cooperation between the Finnish state and the major city regions. The essential idea was to link transport projects and land use planning closer to each other. The aim was to launch projects that would support the population growth of the major city regions and to increase housing production.

ON 20 June 2012, the State and the municipalities of the Helsinki Region signed a letter of intent, the MAL Agreement on Land Use, Housing and Transport 2012–2015. Its objective was to strengthen the functionality and competitiveness of the Helsinki Region, as well as to increase housing production and its conditions in the region, and to help achieve the goals of metropolitan policy. The vital elements of the letter of intent are sustainable community structure, energy efficiency and shared responsibility in housing policies.

IN THE MAL agreement, the State pledged to work for sustainable solutions through shared responsibility by co-funding measures for transport and other infrastructure and taking supportive action for affordable housing production. The municipalities committed themselves to co-fund measures for transport infrastructure and other infrastructure. For the Helsinki Region, the housing production goal was to have 12,000–13,000 dwellings built per year. The State took the commitment to relinquish land that is no longer in its use, is suitable for redevelopment and complies with the goals of the agreement, against a fair compensation. The condition was set that the municipalities had to plan affordable housing on the land handed over by the state.

THE MUNICIPALITIES were also to ramp up their efforts to exploit primarily those land areas relying on existing or soon-to-be-completed rail links or other public transport, or on transport development projects specified in the agreement.

THE SECOND agreement for 2016–2019 placed importance on responding to the housing demand brought about by

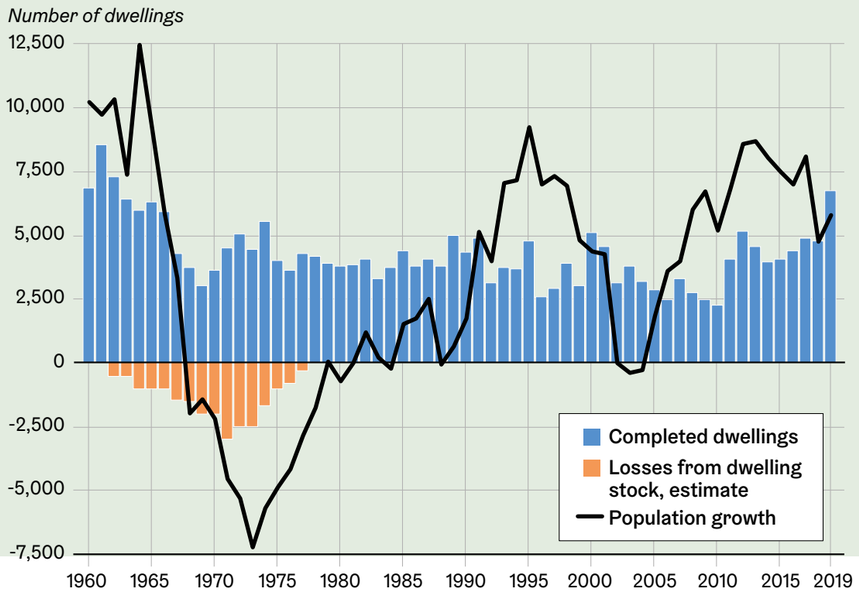


FIGURE 2.

Dwellings completed and population growth in Helsinki 1960–2019.

Sources: Municipal statistics (housing production), Statistics Finland and municipal statistics (population data).

the strongly increasing immigration. The goal was to build, over the four-year period, a total of 60,000 new dwellings in the entire Helsinki Region, of which 45,000 in the metropolitan area. Another goal was to complete housing plans for 6.2 million square metres of dwelling floor space, of which 4.5 million in the Helsinki Metropolitan Area.

THE OUTCOME was that 51,000 dwellings were completed in the Helsinki Metropolitan Area in 2016–2019 – in other words, 6,000 more than the goal stated in the MAL agreement[1].

Housing production in Helsinki, Espoo and Vantaa

In 2019, the number of new dwellings completed in Helsinki was 6,736. Only in 1960–62, with the onslaught of suburban development, had there been more dwellings built in the capital. However, over the 1960s and 1970s, the dwelling stock did not grow at the same pace as the housing production, because an estimated 23,000 dwellings disappeared in Helsinki due to demolition or conversion into offices. This figure was obtained by comparing the dwelling numbers in the censuses in 1960–1980 with the contemporary production figures.

OVER A 15-year period in 1996–2010, only an annual 3,200 dwellings on average were completed in Helsinki. In the early 2000s, the population of Helsinki decreased slightly as people at large showed an increasing interest in lower-density detached and terraced housing. Ten years later, things looked very different. This was bound to have an effect on city planning.

AFTER 2005, population growth started accelerating, and although housing production picked up again when the new Vuosaari harbour had been completed, it took ten years until housing production outputs finally matched the need caused by the population growth. Population growth in Helsinki has been characterised by rapid changes as in-migrants to the Helsinki Region from the rest of Finland or from abroad typically move to Helsinki proper, and economic fluctuations are also usually experienced immediately in the capital. Migration has usually influenced the population numbers in Helsinki more than in the neighbouring municipalities, where natural population growth has played a more significant role.

THE 2016 implementation programme for housing and related land use (Hometown Helsinki 2016) set the goal of building at least 6,000 dwellings annually in Helsinki, either as new construction or through change of use. Another objective was to create the prerequisites for increasing the annual housing production to 7,000 by no later than 2019. In fact, the number of new dwellings started growing: in

1) In spring 2020 the negotiations for a new MAL agreement between the City of Helsinki and the State of Finland were concluded. This is not included in the present analysis.

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2019, especially, a considerably larger number of new dwellings were completed than in any other year since 2000.

IN 2019, Espoo also saw more dwellings completed than ever before, namely 4,300. The annual output has not varied to a similar degree in Espoo since the 1970s, but it was at its lowest in the years 2006–2009. Since the signing of the MAL agreement, more dwellings have been built than earlier. In 2017–2019 an annual average of 3,800 dwellings were completed, compared with 2,300 in 2000–2016.

POPULATION GROWTH has accelerated in Espoo as well, and 2019 broke the all-time record, with 6,069 more inhabitants than the previous year. In the background, there are some major transport infrastructure investments – the West Metro in particular – and related housing construction, possibly also the zone reform of the HSL public transport service. Espoo's net migration gain from Helsinki was significantly larger in 2019 than any previous year in the 2010s.

OF THE municipalities of Helsinki Metropolitan Area, Vantaa has had in relative terms the biggest increase in housing production in recent years. In Vantaa, as in Espoo, the number of dwellings completed (5,020 in 2019) was the largest ever. During the period 2015–2019, more than twice as many new dwellings were built compared to 2000–2014. In 2018, around 4,500 new dwellings were completed, and in 2019 over 5,000. Such high numbers were not attained even in the 1970s, when the population occasionally grew by over ten per cent a year. The large transport infrastructure investment in the Ring Rail Line made it possible to create new well-connected neighbourhoods. Housing production has also increased in those older neighbourhoods that are within comfortable reach from rail links. Vantaa's migration gain from Helsinki has also grown significantly.

IN THE last few years, housing construction in the Helsinki Metropolitan Area has been extensive even on an international scale. Among other Scandinavian capitals, only Copenhagen has in recent decades seen more than 6,000 new dwellings built within one year, namely in 2018.

STOCKHOLM HAS 50 per cent more inhabitants than Helsinki and its annual population growth in 2015–2019 was 1.3 per cent, versus 1.0 per cent in Helsinki. Yet, the number of new dwellings completed per annum during that time was the same in both cities, 5,000 on average.

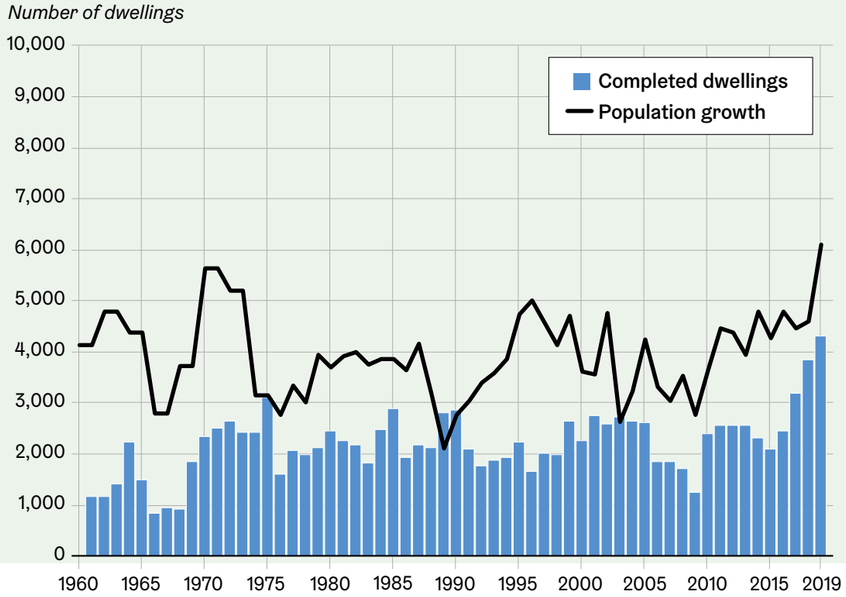
GREATER STOCKHOLM has twice as many inhabitants as the Helsinki Metropolitan Area, and annual population growth in Greater Stockholm over the last five years has been around 1.6 per cent, slightly faster than in the Helsinki Metropolitan Area (1.4%). With notable increases in housing production in Espoo and Vantaa, the number of dwellings completed in the Helsinki Metropolitan Area in 2017–2019 was only 10 per cent smaller than in Greater Stockholm. In absolute numbers, 1,000 dwellings more were completed in the Helsinki area in 2019 than in the Swedish capital region.

IN OSLO and Greater Oslo, 30 per cent fewer new dwellings were completed in the last few years than in Helsinki and the Helsinki Region. Both Oslo and its region are roughly the same size as Helsinki and the Helsinki Metropolitan Area. In rough terms, population growth has long been equally fast in both regions, but in the last few years, it has been faster in Oslo proper than in Helsinki proper.

TODAY'S COPENHAGEN *(Københavns kommune)*, or the core municipality of its region, is slightly smaller than Helsinki and with its 630,000 inhabitants. In 2015–2019, it had the fastest annual population growth of all Scandinavian capitals, namely 1.7 per cent. The number of dwellings completed during that period was as large in Copenhagen as in Helsinki: 5,000 per annum on average. In the two-million inhabitant Copenhagen Capital Region, fewer new dwellings built than in the Helsinki Metropolitan Area.

FIGURE 3.

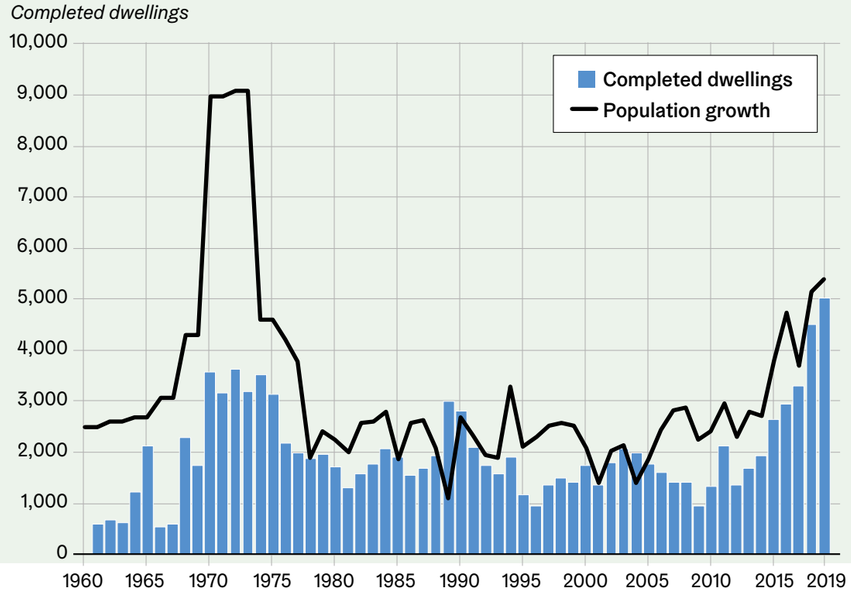
Dwellings completed and population growth in Espoo 1960–2019.



Sources: Municipal statistics (housing production), Statistics Finland and municipal statistics (population data).

FIGURE 4.

Dwellings completed and population growth in Vantaa 1960–2019.



Sources: Municipal statistics (housing production), Statistics Finland and municipal statistics (population data).

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IN OTHER words, although population growth has been slightly faster in the Scandinavian capitals than in Helsinki and its region, more new dwellings have been built here than in our Scandinavian peer cities.

Prospects for housing production in the 2020s

Finland, Europe and the rest of the world are going through exceptional times due to the coronavirus pandemic. No one knows how long it will last and what effects for business and the national economy it will have at the end of the day. It would seem probable that housing construction in 2020 – maybe also a few years ahead – will turn out slightly smaller than the record figures of 2019. The international workforce needed on Finnish construction sites are not allowed to enter the country, and there are difficulties in acquiring construction material, especially from abroad.

WITHOUT THE coronavirus crisis, housing construction in Helsinki would probably have continued under good economic conditions, and some 6,000-7,000 new dwellings would have been completed annually for another few years. In Espoo, the assumption was that last year's output, over 4,000 completed dwellings, could have been equalled for a few years more, subsequently to approach the long-term average again. In Vantaa, building starts for dwellings began to decrease already in 2019 as compared with the previous year, and therefore the record number of dwellings completed is not expected to be broken in the forthcoming years.

THE NEXT few months will show what kind of consequences the economic downturn caused by the coronavirus crisis will have for construction in Helsinki and its neighbouring municipalities, and how permanent these changes are likely to be. ■

Pekka Vuori is a senior specialist working on population projections, population statistics and data systems.

TABLE 1. **Dwellings completed in Helsinki, Espoo and Vantaa in 2000–2019**

Year	Helsinki	Espoo	Vantaa	Total
2000	5,098	2,256	1,732	**9,086**
2001	4,569	2,757	1,355	**8,681**
2002	3,137	2,590	1,801	**7,528**
2003	3,810	2,726	2,064	**8,600**
2004	3,218	2,651	1,990	**7,859**
2005	2,854	2,626	1,755	**7,235**
2006	2,515	1,851	1,607	**5,973**
2007	3,308	1,854	1,400	**6,562**
2008	2,787	1,723	1,404	**5,914**
2009	2,512	1,250	956	**4,718**
2010	2,261	2,391	1,326	**5,978**
2011	4,081	2,567	2,132	**8,780**
2012	5,175	2,564	1,360	**9,099**
2013	4,556	2,547	1,675	**8,778**
2014	3,985	2,323	1,920	**8,228**
2015	4,059	2,107	2,629	**8,795**
2016	4,395	2,454	2,956	**9,805**
2017	4,890	3,190	3,288	**11,368**
2018	4,801	4,173	4,607	**13,581**
2019	6,736	4,300	5,020	**16,056**

– Source: Municipal statistics on housing production

Sources:

Aluesarjat.fi [Helsinki Region Statistics Database]. www.aluesarjat.fi

Cities of Espoo, Helsinki and Vantaa. Statistics and information services. Housing production statistics; population statistics.

Cities of Stockholm, Oslo and Copenhagen. Preliminary statistics on population and housing production, 2019. City websites.

Kotikaupunkina Helsinki [Home Town Helsinki]. Asumisen ja siihen liittyvän maankäytön toteutusohjelma 2016. Helsingin kaupunginkanslia. Helsingin kaupungin keskushallinnon julkaisuja 2016:19

MAL-sopimus 2012–2015. Valtion ja Helsingin seudun kuntien välinen maankäytön, asumisen ja liikenteen aiesopimus. [MAL agreement on land use, housing and transport.]

MAL-sopimus 2016–2019, Valtion ja Helsingin seudun kuntien välinen maankäytön asumisen ja liikenteen aiesopimus. [MAL agreement on land use, housing and transport.]

Nordstat Database. Comparative statistics on major Nordic cities and city regions. www.nordstat.org.

Multi-local living

broadens our understanding of urbanisation

CITY OF HELSINKI / JUSSI HELLSTEN

VISIT FINLAND

- **What is multi-local life, and what does it imply for Helsinki and the Helsinki Region in future?**
- **Is the coronavirus pandemic causing a flight from cities, as some commentators have suggested?**

Helsinki Quarterly invited researchers working on multilocality to join a virtual discussion, and as befits the topic, the participants spanned across Finland from Helsinki to Oulu.

We live in an era of intense urbanisation. In Finland, the population is projected to increasingly concentrate in a handful of urban regions in future decades, leaving behind small towns and rural areas facing depopulation. Even among the bigger cities, only the most attractive ones are expected to stand out in the fierce interregional competition.

AT THE same time, competing trends – a second-home boom, rural urbanism, or return migration to the countryside – are in evidence, and all of these tend to attract city-dwellers at least seasonally to relocate to sparsely populated rural areas. Urbanisation and the co-occurrent digitalisation are linked to increasing possibilities to live a multi-local everyday life.

WHEN THE coronavirus began to spread especially in urban areas last spring, one of the topics raised in the media was whether the pandemic might make people consider moving away from the city. As teleworking practices are becoming more advanced, it is likely that the time spent at the workplace will diminish. How then is this phenomenon interconnected with the dynamics of multi-local living? Will the changes also show in official population statistics in future, and what other information do we still lack in order to fully understand these developments?

VIRTUAL PANEL

Olli Lehtonen
Senior Scientist,
Natural Resources Institute Finland (Luke)

Toivo Muilu
Principal Scientist,
Natural Resources Institute Finland (Luke)

Ulla Ovaska
Research Scientist, Group Manager,
Natural Resources Institute Finland (Luke)

Hilkka Vihinen
Research Professor,
Natural Resources Institute Finland (Luke)

Pekka Vuori
Senior Statistician, Data Systems Manager,
City of Helsinki Executive Office

Multilocality is a complex phenomenon

“Whilst multilocality as a trend and a term has entered the public debate relatively recently, it is in fact an ancient phenomenon”, says Principal Scientist **Toivo Muilu**. “Thousands of years ago, hunter-gatherers and nomads lived a multi-local life, and it was only with agriculture and the birth of cities that humans became settled in one place.”

In this sense, we are witnessing the revival of an age-old custom: people inhabit and earn their livelihood in one place or several, whatever suits their needs. Digitalisation, in particular, has been the enabler of many new forms of multilocality.

“In some occupations, mobile life has been customary even before the digital revolution. For instance, a relative of mine worked as a plumber in the countryside in the 1990s, moving around depending on where work was needed,” says Research Scientist **Ulla Ovaska**.

“Nowadays a multi-local way of life is of course an option also for knowledge workers, since work can be performed almost anywhere with adequate ICT connections.”

Finns have a variety of reasons for dividing their life between two or more places. A typical case is a household with two homes: for instance, a ’main home’ in the city, and a holiday home or a second home in a rural area. Often a large part of the year is spent at the second home.

> ***Multi-local living*** *as a phenomenon is not noticed by conventional population statistics.*

In many cases, the second home is located outside of Finland, including Spain's Costa del Sol or the Estonian island Saaremaa. It is not uncommon for retired couples, for example, to spend several weeks every year in such locations. There are, of course, also couples where each partner has a main home of their own, and they are not registered in the same address.

Another case of multi-local life is a child who lives in two homes after the parents' divorce. Other forms, some less common than others, also exist. For instance, a number of adults, whether working or retired, split their time to act as family caregivers of elderly parents who live elsewhere.

Statistics fail to describe multilocality

A definition of multi-local living must exclude the issues – such as commuting – that do not fall within the category. Commuters who make daily two-way journeys between residence and workplace – even long-distance – are not 'multi-local'. But if they acquire a second home at a location near the workplace, they can be said to lead a multi-local life.

According to Research Professor **Hilkka Vihinen**, identifying multilocality challenges the structures and practices of the current population statistics.

"A person can only be registered in one address. Multi-local living as a phenomenon is not noticed by conventional population statistics, which are based on housing data from population registers."

Vihinen says this can be problematic for rural municipalities that are faced with depopulation – statistics may show them locked in a demographic downward spiral.

"The data used as the basis for service planning does not always reflect the real situation. When the official meters in an area turn red, a vicious circle is created: at the worst, no-one wants to invest there, houses stop selling, infrastructure becomes outdated."

No matter how inevitable the trend when viewed statistically, a shrinking municipality may in fact have many more users than seems on the surface. This is because the ways we use places are changing.

"Finland has more than half a million holiday homes, and the people visiting them also drive on the local roads – yet the traffic network has been designed for the regular population flows," says Toivo Muilu.

"Seasonal residents often use municipal services as well, such as libraries, but these users are more or less invisible to the authorities."

Hilkka Vihinen points out that researchers have contemplated the fairness of the current system in as much as the availability of basic services is determined by a person's registered address.

"Would it be possible to make the service offering more flexible according to where people actually spend their time? It has been hypothesised that the forthcoming social and health sector reform might offer some solutions to the problem, but this is not only a question of social services and health care," she underlines.

Coronavirus and multi-local living

When the coronavirus crisis hit Finland, there was public debate about whether the epidemic might contribute to a reversal of the long-standing urbanisation trend and attract people from Helsinki and other main cities to move to areas of lower population density. The experts interviewed in the media last spring did not consider a large-scale deconcentration and 'escape to the country' very likely, but increased migration to exurban areas was deemed a possibility.

"It makes sense when you think about it – with the epidemic running loose, a dense urban centre may not feel like the ideal environment to live in, even when it is a very desirable location in normal times," says Ulla Ovaska.

Ovaska points out that the latest Rural Barometer did not indicate any rise in respondents' intentions to move to country. The survey was conducted just before the coronavirus pandemic.

"No new patterns appeared in plans for permanent relocation. Around 15 per cent of the respondents were considering moving either from city to countryside or the other way around."

Statistics show, however, that certain sparsely inhabited rural municipalities have received migration gain during the coronavirus epidemic, even ones that had previously been on the red.

"This could indicate that some people have recorded a pre-existing second home in a rural area as a permanent address," says Senior Scientist **Olli Lehtonen.**

Lehtonen warns against generalising too much about such short-term observations – they do not signal that the attraction of major urban regions is fading away on a larger scale.

"Urbanisation as a megatrend is not going to disappear," he says. "The big picture is that any significant migration gain in rural areas will concentrate in those municipalities that are already doing relatively well. Among cities, too, the most successful will be the ones already growing the fastest."

> ***Certain sparsely inhabited*** *rural municipalities have received migration gain during the coronavirus epidemic.*

Multi-local life – in a nutshell

- **Multi-local living, as a phenomenon, remains relatively poorly understood.**

  The definition of multi-local living depends on the approach but it can refer to second-home owners, 'rural urbanites' and dual-household children, among others.

- **In statistics, people are 'mono-local', registered in one address. In real life, many of us regularly spend long periods of time in another area.**

  This is usually not acknowledged when planning for services.

- **The coronavirus pandemic has accelerated the adoption of teleworking practices, and the time spent at second homes has increased.**

  We can assume that, on some occasions, Finns have recorded a registered address in the municipality where their second home is located.

- **The geographic centre of Finland's registered population has moved some 700 metres per year towards the south and is now slightly north of Hämeenlinna.**

  Meanwhile, the centre of the seasonal population is moving slowly northeast.

- **Multi-locality is unlikely to turn the direction of urbanisation on a large scale.**

  However, it is expected to have a variety of impacts on the population, services and other dynamics of both the source and target areas of multi-local mobility.

The City of Helsinki has monitored the possible effects of the coronavirus epidemic on in- and out-migration. Do the statistics for 2020 show that COVID-19 is moving people out of the city at a greater rate than normally, and if so, which population groups are leaving?

"Our hypothesis was that a certain number of young people, students in particular, would cancel or postpone their move to Helsinki because of the pandemic. They are being taught online and at least part of them appear not to have moved here," says Senior Statistician **Pekka Vuori.**

According to Vuori, it is still somewhat too soon to conclude anything about the population development of Helsinki for the latter part of 2020.

What about the rise of teleworking – can we expect it to have an effect on the registered population changes in Helsinki?

"As people get used to working from home, it is of course possible that many will prefer to live somewhere more affordable than Helsinki – now that they can also avoid tedious commutes. If such a trend intensifies, it can have some impact on our population growth in the long run."

Nonetheless, Vuori remarks that population flows are also affected by many other factors.

"If a major economic depression in Finland develops after the corona crisis, it will perhaps be noticed in migration trends as well – depending on which industries are hit the hardest," says Vuori.

"But here again it is too early for far-reaching conclusions."

The pull of cities and urban areas is largely based on vibrant city centres, abundant service offer or interesting urban culture. The businesses that are responsible for a large part of these features – hotels, restaurants, cultural institutions, events or tourism – are currently in dire straits due to the pandemic. Since these industries are overrepresented in Helsinki, there was a sharp rise in unemployment at the start of the corona crisis, compared to the rest of Finland.

Pekka Vuori ja Hilkka Vihinen agree that the recovery of these industries is a crucial question for cities. The present situation where cities are unable to offer the things that are their main attraction is likely to leave long-standing marks on the urban fabric.

"It will take years for international travel, for instance, to return to anything resembling the pre-corona times, and this will undoubtedly affect the Helsinki Region," argues Pekka Vuori.

What are the implications of multilocality for Helsinki and Uusimaa?

Many places that benefit from seasonal population influx are sparsely populated rural municipalities far from the major centres, including in eastern and northern Finland. For them, the importance of seasonal residents and even small increases in the registered population is immense. But how will the trend look like when viewed from the Helsinki Metropolitan Area and other densely populated Finnish regions?

"It is true that multi-local living has been analysed chiefly from the perspective of the areas with seasonal population increase," says Hilkka Vihinen. "More recently, however, the lens has been turned on the areas with seasonal population deficit: how big a question is it for Helsinki, for instance, that a considerable part of its residents are out of the city for at least part of the year?"

Such analysis should identify who the 'missing' residents are and why they spend time temporarily elsewhere. From the perspective of service needs or infrastructure planning, it may be important to know what part of these people are at holiday homes, dual-household children or something else.

"We should also remember that multi-locality does not only concern city-dwellers – there are also a number of people with a rural permanent residence and an urban second home in Helsinki, for example," says Toivo Muilu.

Some residents of the countryside parts of the Uusimaa region are 'rural urbanites' for whom multi-locality is a lifestyle choice. Many belong the so-called creative class, and they want to live and work mainly in the peace of the countryside but choose to keep a city home – perhaps just a flatshare – should they miss the vibrancy of a busy city.

"This is also linked to the multi-locality of ownership," Hilkka Vihinen adds. "Private real-estate investors, for example, may own property in several municipalities, but so far we lack analysis on the precise linkages of this phenomenon to multi-local living."

It has long been predicted that improved data connections could diminish people's dependency on place. Now the latest steps in online working practices have finally enabled efficient telework, and the coronavirus pandemic has given the trend a further push.

For different parts of the Uusimaa region, the dynamics of multi-local living produce rather different outcomes. The region already has a large number of second homes and holiday properties. In Western Uusimaa, for example, the registered population and job numbers have declined in recent years, whereas they have grown strongly in the Helsinki Metropolitan Area. On the other hand, the seasonal population increases in the summer months in many parts of Western Uusimaa while it drops in Helsinki, Espoo or Vantaa.

"This could be an increasing trend in the Uusimaa region in future," says Vihinen.

There has been some debate this year about the rise of vacant dwellings in Finland. Could this phenomenon have a connection to the effects of multilocality – for instance, people with permanent residence in Helsinki spending long periods of time out of their city homes?

"It's hard to say because our register-based data does not really allow us to examine whether dwellings are actually vacant or in temporary use," says Pekka Vuori. "If we look at residential buildings with at least one permanent occupant, we cannot see any significant increase in the number of vacant dwellings in Helsinki. Some degree of register error has also been identified – the system is not always up to date, for example, about conversions of residential units to office space."

Olli Lehtonen regards it as highly unlikely that multi-local living should pose a threat to the dynamism of Helsinki or other attractive urban areas – at most, the phenomenon challenges our conventional perception of the city–country divide to a certain extent.

"The rural municipalities with good ICT connections and the readiness to offer other services to newcomers may benefit from people's desire to escape from the city. For some municipalities, this can be an opportunity to find significant new dynamism," says Lehtonen.

Future of multi-local living?

It has long been predicted that improved data connections could diminish people's dependency on place. Now the latest steps in online working practices have finally enabled efficient telework, and the coronavirus pandemic has given the trend a further push. What are possible future scenarios for multi-local living in Finland?

"Our biggest baby-boomer cohorts retired almost ten years ago. A possible incentive for increased multilocality in coming decades is if they bequeath their children the second homes and other dwellings they own in various parts of Finland," says Ulla Ovaska.

Pekka Vuori agrees. "In any case, a huge number of people will rather soon turn from active pensioners to old people, and a big question is how these people wish to spend their final years – what kind of environments they want to live in, and what services they will require."

Another unknown factor in the future of multi-local living is the growing population with immigrant origin. Those with a foreign background will form a major part of the population especially in the largest cities such as Helsinki.

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Multi-locality Facts:

- Only 67,000 jobs in Finland were place-neutral before the corona epidemic, and their number had grown by a mere 20,000 in ten years. However, 519,000 Finns (21% of all employed) worked from home at least once a month.
- Permanent population is increasing in less than one-fifth of all statistical map grids in Finland. Meanwhile over 50% of the grids show growth in seasonal population[1].
- The urban population of Finland has grown by 307,000 between 2005–2016. In rural areas, the number seasonal residents increased by 67,000 in the same period.
- Finland has 511,900 summerhouses[2]. A total of 800,000 Finns live in a household owning a summerhouse. The regions with most summerhouses are Southwest Finland, Southern Savonia, Pirkanmaa and Uusimaa.
- In the Uusimaa region, population decreases by 30 per cent in the summer months, while Southern Savonia sees a 16% seasonal increase[3]. About 250,000 Uusimaa residents are away from their home region in July, often at second homes or summerhouses.
- More than 100,000 Finnish children live in dual households[4].
- 36 per cent of Finns identify themselves as both urban and rural. 40% have a fully urban identity and 24% identify as only rural.[5]

1) Analysis period 2005–2016, source: Natural Resources Institute Finland (Luke).
2) 2019. Source: Statistics Finland (https://www.stat.fi/til/rakke/2019/rakke_2019_2020-05-27_kat_001_fi.html).
3) Video "Monipaikkaisuus haastaa yhteiskunnan suunnittelua". https://www.youtube.com/watch?v=h1b7Jlj6c4k
4) 2018. Source: Statistics Finland (https://www.stat.fi/til/perh/2018/03/perh_2018_03_2019-06-17_tie_001_fi.html)
5) Maaseutubarometri [Rural Barometer] 2014.

__Multi-local living__ has been studied in the __EU Horizon 2020__ funded project __ROBUST__ (Rural–Urban Outlooks – Unlocking Synergies), aiming to advance our understanding of rural-urban interaction. The City of Helsinki and the National Resources Institute Finland (Luke) are partners in the project consortium. Results on multi-locality are also presented in a video (in Finnish) produced within the ROBUST project:

https://www.youtube.com/watch?v=h1b7Jlj6c4k

"We do not know for sure how much of the current multilocality in Finland is based on urban Finns being connected by roots or even land ownership with other parts of Finland," says Hilkka Vihinen.

Many native Finns own a lakeside sauna or, say, a former farmhouse somewhere in rural Finland. According to Vihinen, the question is how likely the immigrants or new Finns are to engage in multi-local living in Finland.

"Today the immigrants are strongly divided into groups that are relatively different from one another," says Pekka Vuori.

"Of the major groups, those with Estonian or Russian origins may find it rather natural to relocate to rural parts of Finland, because they are culturally more or less accustomed to the local summerhouse habits and the Finnish countryside environment."

Hilkka Vihinen points out that new forms of multilocality may also emerge if persons with a foreign background lead a multi-local life between Finland and another country.

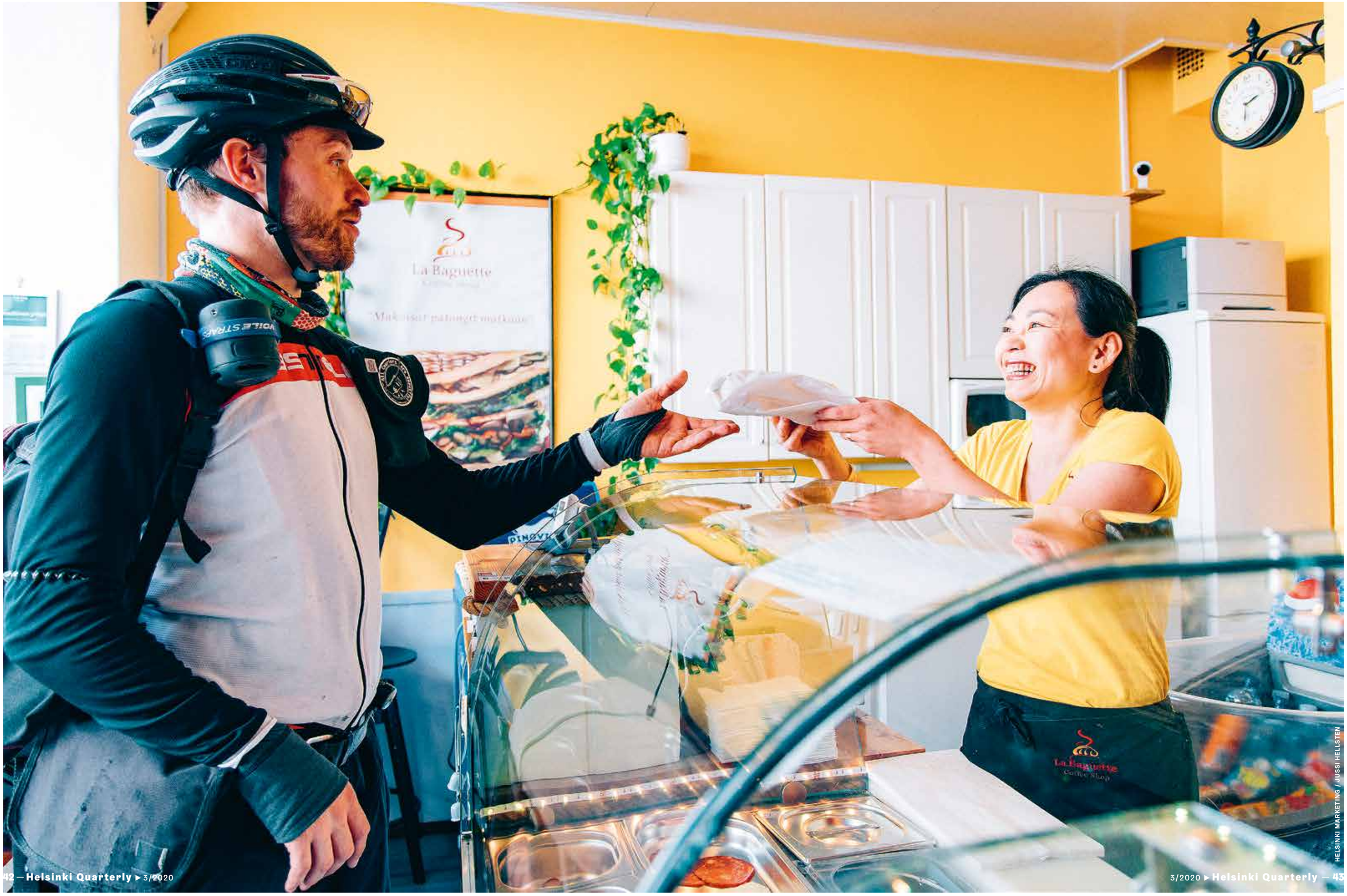
What about problems related to increased multilocality? What types of new information are necessary for Finnish society to better take it into account in planning and service design?

"To give an example, we still lack systematic impact analyses about the implications of multilocality in the destination areas as well as the departure areas," says Toivo Muilu. Muilu says new research is looking to identify the connections between multi-local living and sustainable development.

"Seasonal living, for example, typically involves a lot of car traffic back and forth. Assuming that cars are unlikely to go fully electric very soon, any increase in multilocality will probably contribute to our carbon footprint as well. Sustainability issues are therefore inevitable."

Hilkka Vihinen says more research is needed in order to map the extent and significance of multi-local living and give us a better picture of the phenomenon in general. Further studies would also give us an answer to the question of whether the corona crisis will have a real bearing on the issue or not.
"It is possible that corona has served to trigger some latent desires to live in two places at once, and as a result, people may end up spending more time at their second homes, for instance. It is too soon to tell whether we should expect long-term impacts on the distribution of the permanent population." ■

INTERVIEW & TEXT: KATJA VILKAMA ● TEEMU VASS ● TIMO CANTELL



HELSINKI MARKETING / JUSSI HELLSTEN

Immigration to and integration in Helsinki

Because of international mobility, Helsinki, the capital of Finland, has become increasingly multi-ethnic and multi-cultural. Therefore, the integration of immigrants and their descendants has also grown in importance. While Finnish integration policy has been lauded as one of the best in its class, in actual life it is rarely what it looks like on paper.

HELSINKI MARKETING / AKKESI POUTANEN

Helsinki as a destination of international migration

In terms of post-war immigration, Finland is similar to no other country. When the other Nordic countries started recruiting foreign labour to remedy labour shortage, Finland still was a country people left in search of a better life, mostly to the neighbouring Sweden. Immigration started to increase in the late 1980s, in connection with the transformation and eventually collapse of the Soviet Union. The change from a country of emigration to a country of immigration took place at the same time in Ireland, Portugal, Spain, Italy and Greece.

However, whereas many newcomers in those countries came to work, in Finland the largest groups to arrive were Ingrian remigrants[1], Somali asylum seekers, and spouses and family members from Estonia and the Soviet Union, later Russia. Labour migration to Finland only started to significantly increase after Estonia joined the European Union, in 2004. (OECDa 2018; Saukkonen 2016a.)

IN MANY countries, immigrants have largely concentrated in the big cities. In this case, Finland makes no exception. From the very beginning, the share of newcomers of the whole population was higher in Helsinki and the larger capital region than elsewhere, and the difference between the metropolitan area and the rest of Finland has only grown during the last three decades. Many foreigners who arrive in Finland and first settle in other parts of the country finally move to Helsinki or to the neighbouring two larger cities, Espoo and Vantaa. In 2019, the population share of those born abroad was 14.6% in Helsinki and 7.3% in Finland as a whole. In Helsinki, the number of foreign-born population was 87,551, in Espoo 42,685 and in Vantaa 38,347. Roughly half of all those born abroad lived in the capital region. (Statistics Finland.)[2]

PEOPLE WITH background in the Soviet Union or Russia still make the largest group, and Russian-speakers are by far the largest new language minority.[3] The number of Estonians and Estonian-speakers has increased considerably during the last fifteen years but the situation has recently stabilized. Some Estonians already settled in Finland have actually moved back to their original home country where the standard of living has gradually improved. The Somali community is also noteworthy, especially taking into account the children born in Finland to parents born abroad. The number of those with an Iraqi background increased after 2015-2016 when Finland received what was one of Europe's largest numbers of asylum seekers in relation to country size. There are people from almost all of the world's countries in contemporary Helsinki, but many of these groups are quite small.

1) The concept of an Ingrian remigrant refers to citizens in the former Soviet Union that are of Finnish origin. Based on their Finnish descent, they were in the early 1990s given the right to move to Finland.

2) Statistics Finland has a specific website for immigrants and integration: https://www.stat.fi/tup/maahanmuutto/index_en.html.

3) In fact, Russian speakers are also a traditional language minority in Finland. Their number was, however, relatively small before the increase in immigration in the 1990s.

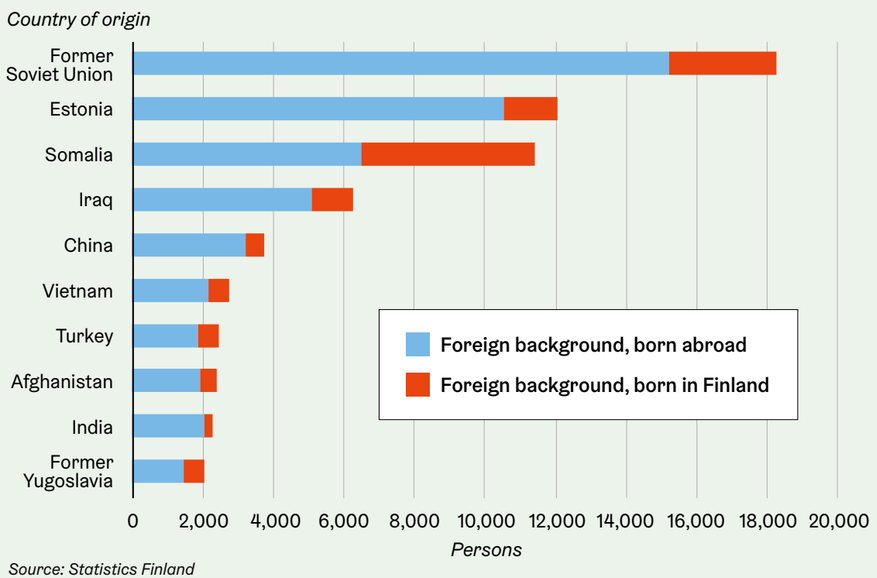


FIGURE 1.

People with a foreign background in Helsinki in 2019 according to the country of birth and the country of origin, the 10 largest groups.

Source: Statistics Finland

> ***Finland's transformation*** *from a country of emigration to a country of immigration took place at the same time as in Ireland, Portugal or Spain.*

Finnish integration policy development

Finnish response to increasing immigration was relatively swift, while many countries in Western Europe had waited for decades to recognize the changing demographic structures and the needs of immigrants for support in the early phases of settling in. The first national Act on the Integration of Immigrants and Reception of Asylum Seekers came into force in 1999 but some local communities, the City of Helsinki among them, had already started their own efforts to smooth the settlement. The early practices were often based on the experiences gathered during the small-scale arrival of Chilean and Vietnamese refugees in the 1970s and the 1980s, and on examples provided by other northern European countries. The Act was revised in 2010 without major changes in the guiding principles. Since then, integration services have been, in theory, available for all newcomers irrespective of the reason for migration. The reception of asylum seekers is now regulated in a separate act. (OECDa 2018; Saukkonen 2016a.)

THE FINNISH integration policy is in harmony with the basic principles for immigrant integration accepted in the European Union in 2004.[4] Integration is understood as a two-way process that requires adaptation from both those that arrive and from the native population and Finnish national and local social institutions and welfare services. Integration in Finland also includes the right to maintain own language, culture and identity while participating in the host society. Employment is in the core of the integration process but incorporation to the Finnish society is also perceived as a multidimensional, long-term development.

IN SOME countries, there have been clear differences between the national and the local level approach to immigrant integration (cf., Bosswick & Heckmann 2006; Caponio & Borkert 2010; Scholten 2015). In Germany, many cities recognized the consequences of immigration much earlier than the federal level which only very reluctantly admitted the transformation of the country to *ein Einwanderungsland*. In France, many local communities had been much less strict than the nation to require of newcomers one-way assimilation to the French society. In Denmark, differences between the national and also nationalist Danish policy and the more liberal and tolerant Copenhagen policy have often been obvious.

4) The Common Basic Principles for Immigrant Integration Policy in the EU can be downloaded from here: https://ec.europa.eu/migrant-integration/librarydoc/common-basic-principles-for-immigrant-integration-policy-in-the-eu.

IN FINLAND, the municipalities enjoy of a large degree of autonomy, and the integration legislation leaves much leeway for local communities to decide upon their approach. Nevertheless, despite some nuances, the three cities of the capital region have a relatively similar approach that also coincides with the main objectives of the national level. This congruence probably is a result of a shared understanding of the situation and of the challenges involved. The main actors in the field work in close interaction, and there has been, at least so far, little politicisation of integration issues with the exception of the right-wing populists represented by the Finns Party. (Saukkonen 2017.)

Immigrant integration in Helsinki and Finland

In recent years, international debate on integration has strongly emphasised that integration above all takes place at the local level (OECD 2018b). Recent studies give us an opportunity to examine the state of immigrant integration in the City of Helsinki at the moment. By integration, we here mean finding one's place and active participation in society and the local community, the feeling of being included and having a sense of belonging. Integration thus takes place at different spheres of life that can be clustered, for example, as structural, cultural, social and identificational dimensions of securing one's place in society. (Cf., Heckmann 2005; Garcés-Mascareñas & Penninx 2016; Saukkonen 2016b.)

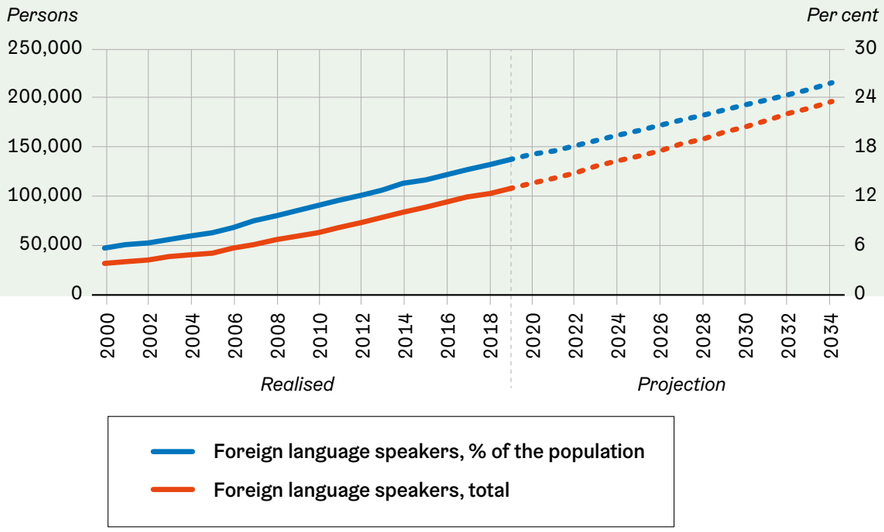


FIGURE 2. **The development of foreign language speaking population in Helsinki 2000-2034, N and %. Source: Statistics Finland**

THE PICTURE of immigrant integration reveals both good news and some causes for worry. Helsinki's foreign-background population is also very diverse. For almost anything that can be said about them, the opposite argument can also be made. In the light of statistics, a large proportion of those with a foreign background do well in most fields of life. Indeed, much positive development has taken place in pace with, for example, the duration of stay in Finland. Employment rate has become higher, language skills have improved, social relations have been established, identification with Finland has increased. (Nieminen, Sutela & Hannula 2015; Saukkonen & Peltonen 2018.)

NONETHELESS, HELSINKI resembles many other cities of immigration in the world in the sense that some immigrants – and their children – have difficulties in finding their place in society. This shortcoming is most visible in their struggling to enter the job market. Those with a refugee background, in particular, but also many family migrants, belong to the labour force less often, and their unemployment rate is higher. Unwanted low economic activity is lamentable for immigrants and their families, but it also has negative consequences for the City of Helsinki and Finnish society. Having a job that does not correspond to one's qualifications is also worryingly common among immigrants. (Saukkonen 2018; Saukkonen & Peltonen 2018, Jasmin & Luukko 2018.)

FINDING A job is often the key to successful integration in other arenas of life, too. But not always. In some cases, immigrants have to have their life otherwise in order before even trying to find a job. The total picture is more complicated than often imagined. Many immigrants who go to work may simultaneously have problems with the social, cultural and identity-related part of integration. At the same time, some of those who are unemployed or outside working life may have learned Finnish or Swedish well, for example. They can also have a large social network and a close relationship to Helsinki and Finland. (Kazi, Kaihovaara & Alitolppa-Niitamo 2019.)

ACTIVE CITIZENSHIP is also important. Especially those who have moved to Finland from other EU member states do not always have an interest in acquiring Finnish nationality. Although most public services are at the disposal of foreign nationals, participation in decision-making tends to be limited among them. This said, a positive trend can be seen at local elections in terms of both voting and of running as a candidate. At the latest elections, particularly Helsinki Somalis participated actively. But as a rule, those with a foreign background are still clearly under-represented in politics. (Sipinen & Wass 2018; Sipinen 2020.)

COMPARED WITH the rest of the population, those with a foreign background often live in crowded homes. Many of them cannot afford buying a home of their own, and those in particular who belong to refugee groups often live in social housing. A growing proportion of the homeless in Helsinki have been born abroad. The consequences of international migration can nowadays be observed in a growing number of neighbourhoods in Helsinki, and ethnic-cultural differentiation between neighbourhoods has also continued. In comparison with corresponding Nordic cities, segregation in Helsinki is still moderate. (Hirvonen 2019)

A LARGE proportion of those residents in the Helsinki Metropolitan Area who have a foreign background feel they are part of the Finnish society. The level of trust in public authorities and social institutions is, as a rule, high. Identification with Finnish culture and nationality is, however, more difficult. Even among those born in Finland, some do not feel they are Finnish. Feeling of affinity with one's own background country or ethnic-cultural community is often easier. Those, in particular, who do not come from other Western countries, often lack the kind of social ties that reach all the way to those with a Finnish background. (Pitkänen, Saukkonen & Westinen 2020.)

OF THOSE with a foreign background but born in Finland, a large proportion are still children or adolescents. In countries and cities with a longer history of immigration it is a known fact that children of immigrants often have more problems at school and with achieving a degree, or with finding a job, than do the rest of the population (cf. OECD & European Union 2018). Signs of such difficulties appear in Finland as well. For example, school performance of pupils belonging to this so-called second generation lags behind their peers without the foreign background (Harju-Luukkainen, Tarnanen, Nissinen & Vettenranta 2017). Many of them also suffer from discrimination and even racism.

Opportunities abound, challenges ahead

According to the newest population forecast for the Helsinki Region, the foreign-background proportion of the population would more than double by 2035. Their number would reach 437,000 by then, and they would make up one-quarter of the region's entire population. Of all residents with a foreign background in the region, the share of Helsinki would be about 45 per cent. The proportion of those with a foreign mother tongue in the city's population growth would be 83 per cent, corresponding to around 100,000. Today, a large proportion of Helsinki's immigrant population consists of people with a European background. By 2035, however, the number of those with a background in Africa, the Middle East or the rest of Asia would have increased substantially. (City of Helsinki Executive Office, City of Espoo & City of Vantaa 2019.)

THUS, FIFTEEN years from now, the City of Helsinki will be increasingly multi-ethnic, multi-linguistic and otherwise multi-cultural. Many immigrants will have lived in Finland for decades, whereas others have arrived only recently. Many children of immigrants are already young adults in the process of finishing their studies and entering working life, and their share of city residents belonging to their age group has grown remarkably. New minorities have taken root, and many of them have consolidated their collective activities. Much of cultural diversity can be observed only in the private sphere but a lot is also publicly visible.

THIS DEVELOPMENT entails new challenges for Helsinki, but it also provides the city with many opportunities. Through the roots and networks of newcomers and their descendants, the city becomes increasingly connected to the rest of the world. The rest of the world is also continuously present in Helsinki city life, and this can be an asset in Finnish science, culture and business. Creativity flourishes in circumstances of diversity. A peripheral geographical situation does not matter much if there is a broad and solid knowledge basis about developments elsewhere around the globe and if information flows smoothly back and forth.

AT THE same time, however, increasing pluralism makes it necessary for Helsinki, the Helsinki Metropolitan Area and the whole of Finland to learn what it takes to live side by side in conditions of ethnic and cultural diversity. Shared rules and common identity are needed to guarantee peaceful living together while respecting the liberties and cultural rights of individuals. Providers of public services will have to consider how best to safeguard the accessibility of services and the equal treatment of all.

THERE ARE also obvious risks related to demographic and local segregation. Poverty, unemployment, inadequate housing, political passivity, poor health, are all problematic individually. The situation is much more serious if these disadvantages are intertwined and form multi-dimensional social deprivation. If these difficulties are finally linked with certain geographical areas within the city, this phenomenon can become a wicked problem that the city has to struggle hard to get rid of.

Towards proper implementation

As mentioned, Finland and the City of Helsinki reacted swiftly to increased immigration in the 1990s. Furthermore, the international comparison of integration policies, MIPEX, has evaluated the Finnish policy as one of the best in its class.[5] In recent years,

5) The Migrant Integration Policy Index (MIPEX) is a tool for measuring policies to integrate migrants in all EU Member countries, other European countries, and countries in Asia, North America, South America, and Oceania. https://www.mipex.eu/.

the City of Helsinki has also increased its efforts to support integration and enhance the realization of equity and equality. The most recent local integration programme for 2017–2021 includes ambitious goals regarding competitiveness through immigration, fighting social disparity, active participation of all, and effective education and learning. The Education Division of the City also prepared it first Development Plan for Immigrant Education in 2017.[6]

HOWEVER, I am personally of the opinion that the main shortcoming in Finnish integration policy for a long time has been its insufficient, otherwise limited, or too fragmented implementation. This issue can be divided into two parts. Firstly, even though the original point of departure conceives integration as a two-way, two-track policy aiming at long-term improvement and development, in reality the approach is much narrower. Policy practices are mainly targeted at immigrants only, not the whole of society. Little attention has been paid to the maintenance of language or culture that makes the policy more assimilationist than it might seem at first glance. Employment as soon as possible after settling in in Finland has been prioritized high above other issues. From basic principles to concrete realization, Finnish integration policy is pressed through a funnel, as it were, and it has become almost unrecognizable by the narrow end.

SECONDLY, INTEGRATION measures have often been implemented half-heartedly, otherwise inadequately or without sufficient funding. The initial assessments that are used to determine whether somebody needs integration services should be available for all irrespective of the reason for moving to Finland. In fact, these mappings of skills and competences mainly been carried out only for the registered job seekers and those that receive basic income support. These assessments and the following personal or family integration plans guiding to integration services are also usually too short and sketchy to truly build a path forward. Waiting times for language courses and other education have, at times, been much too long, and the groups of students too heterogeneous to fulfil their tasks. Many activities are run on a project-basis, often forcing the organizers to invent something else when the funding period ends. Evaluations are scarce, and discussion about the results of evaluations almost non-existent.

6) These programmes in English can be downloaded at https://www.hel.fi/static/liitteet/kanslia/maahanmuuttajat/compressed_Koto%20englanniksi.pdf, https://www.hel.fi/static/liitteet-2019/KasKo/maahanmuuttajat/development-plan-immigrant-education.pdf.

CITY OF HELSINKI / SHOOT HAYLEY

To avoid half-hearted and therefore inefficient realization, the implementation of integration policy must be sufficiently resourced.

HELSINKI MARKETING / YIPING FENG AND LING OUYANG

IN ORDER to improve the situation both at the national and the local level, some suggestions can be made, based on international experiences and relevant literature. In order to bring clarity to the discussion regarding the matter, there should be a clear conceptual distinction between integration as a broad phenomenon and the activities aiming at supporting newcomers during their first years of stay. There should also be a more explicit vision about the most important areas of integration public authorities should concentrate their efforts on. Policy objectives should be formulated so as to enable proper evaluation of the results and effectiveness of integration policy measures. To avoid half-hearted and therefore inefficient realization, the implementation of integration policy must be sufficiently resourced. ■

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This article is based on Saukkonen's recent publications in Finnish (Pitkänen, Saukkonen & Westinen 2019a; 2019b; Saukkonen 2020a; 2020b; 2020c). See also the website Population with Foreign Background in Helsinki: https://ulkomaalaistaustaisethelsingissa.fi/en/content/population-foreign-background-helsinki.

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Non-drinking and problem drinking concentrate in the same groups in Helsinki

NETTA MÄKI

Helsinki residents consume more alcohol on average than people in the rest of Finland. This has been evidenced in studies on alcohol overuse, binge drinking and alcohol-related mortality. Much less is known about non-drinkers in Helsinki, although they make up 14 per cent of the city population. Total abstention from alcohol is associated with both age and gender. More surprisingly, there are many population groups that simultaneously show high prevalence of non-drinking and harmful use of alcohol. These groups include low-educated people and those in weak health.

CITY OF HELSINKI / JUSSI HELLSTEN

Introduction

Lifestyles and health behaviours among Helsinki residents are, in many respects, in a better shape than with Finns in general. Concerning alcohol use, however, the situation is the opposite. In Helsinki, a larger proportion of the population are heavy drinkers or binge drinkers than elsewhere in Finland. In addition, deaths from alcohol-related diseases or accidental alcohol poisoning are more common in Helsinki (Mäki 2020, Mäki & Martikainen 2016).

LATEST DATA on Helsinki residents' alcohol consumption, on one hand, and its consequences, on the other hand, appear to be partly conflicting. According to the National FinSote Survey 2018, there is no longer any significant difference in alcohol consumption between Helsinki residents and Finns on average. Among those aged 20 or older in Helsinki, almost 40 per cent of men and around one in four women drink too much alcohol. The proportion of binge drinkers in Helsinki was 15 per cent among men and barely 4 per cent among women. These figures are more or less in line with corresponding data on all of Finland; only the proportion of women who drink excessively remains statistically higher in Helsinki (Mäki & Ahlgren-Leinvuo 2020.) Meanwhile, fresh data on rising alcohol-related mortality rates following a comprehensive reform of the Finnish alcohol legislation tell another story: it seems that mortality from alcohol-related diseases has risen particularly in Helsinki after 2017 (Mäki 2020).

IN A long-term perspective, the number of non-drinkers has fallen in Finland, especially with older people, among whom the proportion was large. This has been shown by the Finnish Institute for Health and Welfare's Drinking Habits Survey, conducted at regular intervals since 1968. Among men, on average, no major changes have been witnessed. Among older men, however, non-drinking is now somewhat less common than it was, and slightly more common among younger men. Among women, change over time has been more significant. The proportion of non-drinkers in young women has decreased slightly, but among 50–69-year-old women, the proportion has declined from 50 per cent in the late 1960s to around 15 per cent in 2016 (Mäkelä 2018).

WHILE THE above figures are for the national level, much less information has been available about non-drinkers in Helsinki. We know that among young people, the proportion of non-drinkers has grown in the 21st century. According to the 2017 School Health Inquiry, their proportion among Helsinki respondents was 64 per cent for junior high school students, 33 per cent for senior high school students, and 28 per cent for those in vocational education. These figures have risen clearly since the early 2000s. (Lyly-Falk 2018). Hardly any data is available on non-drinking adults in Helsinki, and that is why the present article looks at the situation among Helsinki residents aged 20 or over.

Data material and methods

THIS ARTICLE is based on data from the nationwide FinSote survey conducted by the Finnish Institute of Health and Welfare THL in 2018. The survey examined perceived welfare, health and lifestyles among the adult population, and had a total of 3,646 respondents in Helsinki. Possible change over time in the occurrence of total abstention from alcohol was analysed using data from the ATH Regional Health and Well-being Study conducted in 2013–2015 with a total of 9,717 respondents living in Helsinki.

IN THE present article, non-drinkers refer to those who had given a negative answer to the question (in either the ATH or FinSote survey) of whether they had used alcohol during the last 12 months. In the ATH survey, 1,491 respondents reported they had not, against 602 in the FinSote survey. A corresponding definition of non-drinkers is used in the THL Drinking Habits Survey, for example. Thus the group of non-drinkers may include people who have never tasted alcohol or who had abstained from drinking in the previous 12 months, or people who had stopped drinking altogether.

WHILE EXAMINING the different aspects of alcohol use, non-drinkers are compared to the proportion of heavy drinkers or binge drinkers. The FinSote survey measured at-risk drinking using the AUDIT-C assessment tool, frequently used for this purpose. The three questions in AUDIT-C measure the frequency and quantity of the respondents' alcohol use. One of the questions is how often they have six drinks or more on one occasion. This is interpreted as indicative of binge drinking.

TABLE 1.

Proportion of non-drinkers in Helsinki in 2013–2015 and 2018, by gender and age group.

	2013 – 2015		2018	
	%	Confidence interval	%	Confidence interval
MEN				
20–54-year-olds	7.9	6.6–9.2	8.7	6.0–11.3
55–74-year-olds	14.2	12.1–16.2	13.8	10.7–17.0
75 + year-olds	29.4	25.7–33.0	26.2	20.8–31.6
Total	**10.7**	**9.7–11.8**	**11.6**	**9.6–13.6**
WOMEN				
20–54-year-olds	8.4	7.3–9.4	11.1	8.8–13.4
55–74-year-olds	16.5	14.8–18.3	16.0	13.3–18.8
75 + year-olds	48.9	45.9–51.9	46.4	41.7–51.1
Total	**14.5**	**13.5–15.4**	**16.1**	**14.4–17.9**
TOTAL	**12.8**	**12.1–13.5**	**14.1**	**12.8–15.4**

THE RELATIONSHIP of the prevalence of non-drinking to several sociodemographic, socioeconomic, and health-related background variables was analysed by using cross-tabulation and a logistic regression model so that the effect of age structure, for instance, was adjusted for. Besides gender, age and education, the association between non-drinking and perceived economic difficulties and with main activity status were also examined. Economic worries were measured by asking how well a household's income covered its costs. Main activity status refers to the type of economic activity with which respondents are mainly engaged. We also used several different variables to describe the association between, on one hand, health and quality of life and, on the other, total abstention from alcohol. As an example, severe activity limitation was measured by looking at how severe and permanent a health-based limitation was. This question is addressed by the Global Activity Limitation Indicator (GALI), a validated indicator of activity limitations (Mäki et al. 2013).

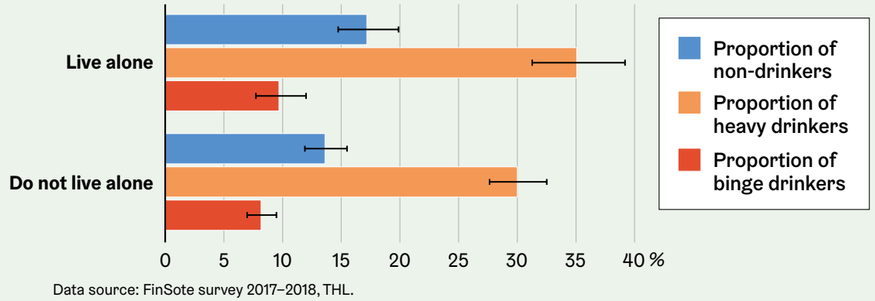
THE FINDINGS of the logistic regression analysis are presented as an odds ratio. In practice, the models always give the value 1.00 to the proportion of non-drinkers in the reference category of a certain variable, and the proportions of non-drinkers in the other categories of the same variable are then compared against that specified reference category. The analysis was made using the codes in the SAS EG 8.1 analysis software. The impact of possible survey bias was compensated by weighting the results to correspond to the age, gender, marital status, education and language structure of the population.

FINDINGS

Non-drinking more common among women and elderly

GENDER AND age were associated with non-drinking. In 2018, roughly 12 per cent of men and 16 per cent of women in Helsinki were non-drinkers. However, percentages varied strongly by age group (Table 1). Of under-55-year-olds, slightly less than 10 per cent of men and slightly over 10 per cent of women abstained from alcohol completely. Of 55–74-year-olds, around 15 per cent were non-drinkers. Among those aged 75+, one-quarter of men and almost half of women were non-drinkers.

In a long-term perspective, the ***number of non-drinkers has fallen*** *in Finland, especially with older people.*



Data source: FinSote survey 2017–2018, THL.

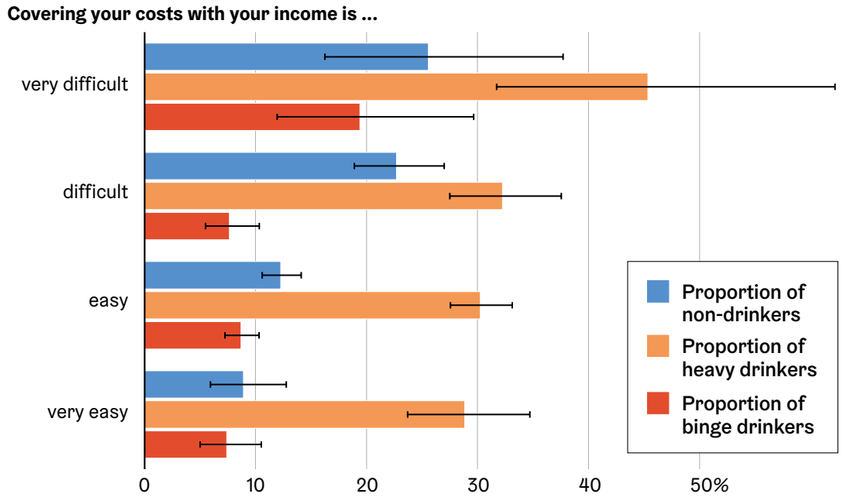
FIGURE 1. **Age-standardised proportion of non-drinkers, heavy drinkers and binge drinkers among 20+ year-old Helsinki residents by whether living alone or not.**

AN ANALYSIS of the proportion of non-drinkers by five-year age group showed that, among those under 50, age does not have a linear correlation with non-drinking. Among those aged over 50, each five-year increase in age corresponds to a 36 per cent rise in the proportion of non-drinkers.

COMPARED WITH the period 2013–2015, the proportion of non-drinkers has grown from 13 to 14 per cent. This change is not statistically significant but it shows a similar trend for both men and women.

THE THREE larger cities in the Helsinki Metropolitan Area – Helsinki, Vantaa and Espoo – all had a 15 per cent age-standardised proportion of non-drinkers, while Kauniainen had a clearly lower proportion, only 9 per cent. This is in spite of the fact that Kauniainen had a similar proportion of heavy drinkers as the other cities and a significantly smaller proportion of binge drinkers.

FIGURE 2. **Age-standardised proportion of non-drinkers, heavy drinkers and binge drinkers among 20+ year-old Helsinki residents with or without economic worries.**



Data source: FinSote survey 2017–2018, THL.

Both non-drinking and heavy drinking are common among those with economic worries

Besides age and gender, many other socioeconomic factors have an association with non-drinking. For example, non-drinking is slightly more common among single dwellers, who are also more often heavy drinkers or binge drinkers (Figure 1). A similar polarisation can be seen with many other variables as well. For instance, the proportion of non-drinkers is clearly larger among low-educated people (age-standardised proportion 21%) than among high-educated (10%), and there is a difference of a similar kind for heavy drinkers (33% among low-educated, 30% among high-educated) and binge drinkers (low-educated 10%), high-educated 8%).

FIGURE 2 shows the relation between economic worries and non-drinking or alcohol use. In those groups that find it difficult or very difficult to make ends meet the proportion of non-drinkers is considerably larger than for those without economic worries. Similarly, the proportion of heavy drinkers and, partly, binge drinkers is larger among those with economic worries.

TABLE 2 shows the relation between certain socioeconomic background factors and the probability of non-drinking. In model 1 in the table, age and gender have been adjusted for, while in model 2 the analysed variables have also been adjusted for each other. The probability of non-drinking in the reference class of each variable analysed is always given the value 1.00, and the probability of non-drinking in the other categories of the same variable are then compared against that.

FOR EXAMPLE, the probability of non-drinking is more than twice as high among low-educated as among high-educated. A more detailed analysis showed that this difference was explained, in particular, by differences between educational groups in the occurrence of economic worries. Even after the effects of main activity and economic worries were adjusted for, the differences in non-drinking between low- and high-educated remained significant.

DIFFERENCES IN the probability of non-drinking were very significant when looking at the variable 'main activity'. Those receiving a disability pension or a rehabilitation subsidy were nine times more likely to be non-drinkers as those working full-time. Similarly, for all the other 'main activity' categories – including the unemployed – non-drinking was more common than among the full-time employed. However, heavy drinking or binge drinking was no more common in these groups than among full-time workers – with the exception of the unemployed who ran twice as high a risk (Mäki & Ahlgren-Leinvuo 2020).

AMONG THOSE finding it very difficult to cover their expenses with their income, the probability of being a non-drinker was four times as high as in the reference group. This association remained rather strong even after the impact of differences of education and main activity were adjusted for.

THUS, DIFFERENCES in economic worries explained part of the difference between categories in the other variables for socioeconomic status. For example, there was no longer a difference in non-drinking between unemployed and full-time workers when we adjusted for the difference in economic worries. This, in other words, explained the higher occurrence of non-drinkers among unemployed people compared to the full-time employed. Economic worries also explained part of the high probability of non-drinking among disability pensioners.

The probability of non-drinking
is more than twice as high
among low-educated
as among high-educated.

TABLE 2. Certain socioeconomic factors and the probability of non-drinking among 20+ year-old Helsinki residents in 2018.

	MODEL [1]			MODEL [2]		
	Odds ratio	95 % confidence interval		Odds ratio	95 % confidence interval	
EDUCATION						
High education	1.00			1.00		
Mid-level education	1.21	0.90	1.61	0.96	0.66	1.40
Low education	2.33	1.76	3.10	1.53	1.05	2.23
MAIN ACTIVITY						
Working full-time	1.00			1.00		
Working part-time	2.30	1.16	4.57	2.10	1.03	4.30
Old-age pensioner or part-time pensioner	1.95	1.22	3.12	1.98	1.22	3.21
Disability pensioner or rehabilitation subsidy recipient	9.14	5.18	16.12	5.97	3.13	11.38
Unemployed or laid off	2.03	1.08	3.84	1.14	0.52	2.50
On family leave, housewife or house husband, student or other	2.14	1.30	3.51	1.77	1.04	3.01
ECONOMIC WORRIES: COVERING YOUR COSTS WITH YOUR INCOME IS ...						
Very easy	1.00			1.00		
Easy	1.39	0.90	2.15	1.21	0.73	2.01
Difficult	3.25	2.02	5.22	2.33	1.35	4.02
Very difficult	4.10	1.91	8.79	2.71	1.18	6.19

1) Age and gender adjusted for
2) Age and gender adjusted for; also the variables with each other

TABLE 3. Certain health and life quality factors and the probability of non-drinking among 20+ year-old Helsinki residents in 2018.

	MODEL [1]			MODEL [2]		
	Odds ratio	95 % confidence interval		Odds ratio	995 % confidence interval	
Feel their health is average or poorer						
No	1.00			1.00		
Yes	1.96	1.55	2.49	1.15	0.85	1.58
Severe activity limitation [3]						
No	1.00			1.00		
Yes	4.45	3.05	6.49	3.27	2.12	5.03
Feel lonely rather often or all the time						
No	1.00			1.00		
Yes	1.98	1.35	2.91	1.15	0.73	1.81
Perceived quality of life (WHO8-EUROHIS standards)						
Better than average	1.00			1.00		
Average or poorer	2.14	1.68	2.71	1.57	1.15	2.14
Suicidal thoughts during the previous 12 months						
No	1.00			1.00		
Yes	2.00	1.23	3.24	1.01	0.58	1.77

1) Age and gender adjusted for
2) Age and gender adjusted for; also the variables with each other
3) Health problem severely limiting activity for at least 6 months

Non-drinking more common among functionally impaired and those who score low on perceived life quality

Many health and quality-of-life-related factors had a relation to the probability of total abstention from alcohol. Those who felt they had a poor health or low quality of life, as well as those who felt lonely or had had suicidal thoughts, had twice as high a probability of being non-drinkers compared to those who had not felt that way (Table 3).

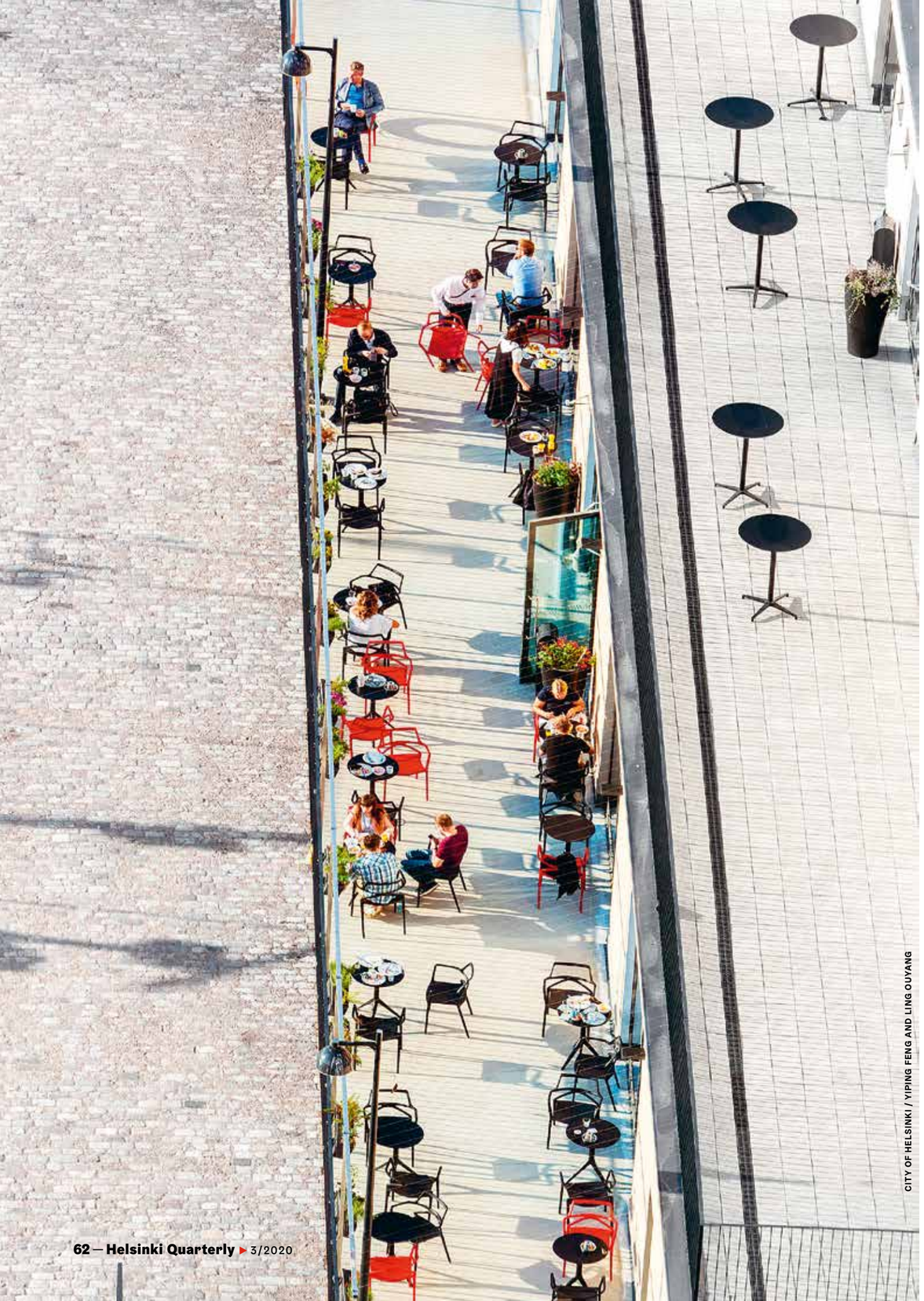
SIMILARLY, SEVERE activity limitation – here measured in terms of how severe and permanent the health-related limitation was – raised the probability of non-drinking more than fourfold. These severe activity limitations had no association with heavy drinking. However, an alternative indicator of activity limitations – measuring the ability to carry out certain activities such as walking or reading a newspaper, or memory-related tasks – was associated with excessive alcohol use. Those who were had severe activity limitations by these standards had twice as high a risk of binge drinking as those with better health.

NONETHELESS, SEVERAL activity limitation explained, to a fairly large extent, the link between total abstention from alcohol and the other factors of health and quality of life. Perceived quality of life also had a link to non-drinking – even after standardisation – and those with a low perceived life quality had a 60 per cent higher probability of being non-drinkers. After the other variables had been standardised, the association between activity limitation and non-drinking weakened as well, but the functionally impaired still remained three times more likely to be non-drinkers.

Poor health does not explain the prevalence of non-drinkers in lower socioeconomic status

Although severe activity limitation, which indicates poor health, was more common among both low-educated and especially people with economic worries, it did not explain at all why these groups had a larger proportion of non-drinkers. Instead, these groups had an independent association with non-drinking.

SIMILARLY, THE adjustment of socioeconomic differences reduced the probability of those with severe activity limitation to be non-drinkers only slightly. Instead, differences in socioeconomic status did explain the increased probability of non-drinking among those with a lower perceived life quality.



CITY OF HELSINKI / YIPING FENG AND LING OUYANG

Discussion

We know that in the last few years, total abstention from alcohol has become more common among young people, but we know less about non-drinking adults. The proportion of those who do not drink among Helsinki residents – 12 per cent of men and 16 per cent of women – is very similar to the figures for the whole of Finland presented in the Finnish Institute for Health and Welfare THL's Drinking Habits Survey. The fact that a larger proportion of older people and women are non-drinkers has been shown earlier as well. Moreover, the proportion of non-drinkers in various educational brackets in Helsinki is also very similar to that in all of Finland: in the capital, 21 per cent of low-educated residents are non-drinkers, against 23 per cent in the entire country. Correspondingly, 10 per cent of those with a high level of education are non-drinkers in Helsinki, and 9 per cent in all of Finland (Lintonen & Mäkelä 2018, Mäkelä 2018).

A LESS expected finding was that many factors associated with non-drinking also have a link to increased alcohol consumption. For example, the proportion of non-drinkers was considerably greater among those respondents who had economic worries than among those finding it easy to cover their expenses with their income. Nonetheless, excessive alcohol use and binge drinking were also more common among those who struggled to make ends meet. A similar polarisation could be seen for the low-educated.

THESE FINDINGS can partly be a matter of how non-drinking is defined. The present material describes alcohol consumption during the 12 months immediately preceding the survey. Thus, some of the respondents classified as non-drinkers may have consumed alcohol earlier, and then quit for various reasons. We know from other indicators measuring alcohol use that non-drinking men, in particular, may include a large number of former problem-drinkers now seeking to quit alcohol altogether (Rahkonen et al. 2003).

CORRESPONDINGLY, BOTH non-drinking and heavy drinking was more common among those who, according to various indicators had weak health. According to the Drinking Habits Survey, non-drinkers most typically explained their choice with lifestyle reasons and with concrete benefits such as having more time for hobbies or friends and relatives. Half of non-drinking respondents also reported that alcohol did not suit them for reasons of health. Compared with lifelong abstainers, those who had quit drinking later put more emphasis on health factors. A previous history of binge drinking among non-drinkers was also associated with emphasising health-related reasons (Katainen & Härkönen 2018.)

ALTHOUGH LIFELONG abstainers could not be distinguished from recent quitters in the present research data, it is likely that some of Helsinki's non-drinkers are former problem drinkers. Nonetheless, we see that non-drinking is associated with morbidity, poor health and lower quality of life. In a cross-section material, it is impossible to determine what is cause and what effect, or which other background variables also explain the correlation. In any case, the present study serves as a reminder that not even those population subgroups customarily linked with higher risks of problem drinking are, by any means, uniform in this respect. ■

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Beyond neighbourhood differentiation:

Towards a multi-domain approach to segregation in Helsinki

MATHEW PAGE

The Helsinki City Strategy 2017–2021 outlines that curbing differentiation between population groups and neighbourhoods is high on the city's agenda, setting the goal of Helsinki maintaining its position as a 'textbook example in Europe of how to prevent segregation' (City of Helsinki 2017).

FINLAND REPORTS some of the lowest levels of wealth inequalities in Europe, and Helsinki has so far been successful in preventing the acute segregation seen in many other European and international cities. However, there are signs that this could be changing, and Helsinki is yet to encounter many of the challenges that its Nordic neighbours have already had to navigate. Wealth inequalities have been growing in Helsinki in recent years and immigration, historically low and increasing only since the 1990's, is forecast to become increasingly important for the city. In this light, the topic of urban segregation will only become increasingly relevant for Helsinki.

THE HELSINKI City Strategy stresses the importance of reducing population differentiation at the neighbourhood level . This framing is consistent with most discussions on urban segregation, concerned largely with the static distribution of different population groups in residential space. However, if one of the goals in preventing segregation is to promote integration, and ensure equity of access and outcome between population groups, then only considering where people live is far too limited an approach. In recent years, there has been increasing academic attention on expanding notions of segregation beyond the residence, to other places and times. This stems from a recognition that populations are mobile, that segregation can occur throughout any of life's domains, and that experiences of segregation may have different implications in different contexts. This article will draw from these discussions, seeking to highlight the complexity and interconnectivity of social segregation in different domains, particularly as it relates to Helsinki.

Segregation and Inequality

What is urban segregation?

Urban segregation is generally defined as the unequal distribution of different social groups in urban space. At a spatial level, segregation may be seen as a physical manifestation of inequalities and diversity within the city. As social segregation often becomes visible in our neighbourhoods and public spaces, there is a tendency to reduce segregation to being a spatial problem pertaining to certain neighbourhoods. In reality, segregation is a much more dynamic and complex phenomenon, and may be experienced in many different ways throughout people's daily lives.

Who is segregated?

Segregation discourse often emphasises concentrations of low socio-economic or ethnic minority households in certain neighbourhoods. However, in European cities "the highest social strata appear to be the most segregated" (Marcińczak et al. 2015 p. 362). The importance of the actions of these more privileged groups is understated, with increasing evidence that it is mainly through middle-class avoidance and mobility strategies that segregation is produced and sustained, both in our neighbourhoods and within our schools (Bernelius & Vaattovaara 2016; Skifter Andersen et al. 2016; Tunström & Wang 2019). Similarly, ethnic segregation in Helsinki appears to be driven largely by the mobility decisions of Finnish-origin residents, with minority groups preferring mixed neighbourhoods and displaying moving patterns which act to decrease segregation (Dhalmann 2013; Kauppinen & van Ham 2019). Whilst there are legitimate reasons for concern with concentrations of poverty and disadvantage, the lack of problematising the role of the wealthiest and most advantaged groups in contributing to segregationist patterns and market trends distracts from the fact that segregation is a city-wide problem (Tunström & Wang 2019).

When can segregation become a problem?

Segregation is not necessarily a negative phenomenon. People may prefer to live or socialise with others like themselves, with whom they perceive to share a common set of norms, values, culture, language or way of life (OECD 2018). Living in communities with people who share similar preferences and lifestyles can provide agglomeration benefits of shared services such as shops, cultural and religious institutions, and in precarious situations may also provide a safe haven from harassment and abuse (Cheshire 2013; OECD 2018).

CITIES, LIKE their populations, are not homogenous, and spatial differentiation is an inherent trait of urban development. However, if spatial differentiation represents, or is produced by, social disadvantage and inequality, it may become problematic for individuals, and for society. This is particularly the case if already-disadvantaged groups live segregated against their will, and experience compounded disadvantage as a result. This disadvantage may result from physical isolation, social problems, a lack of municipal services and amenities, or higher exposure to environmental hazards such as air pollution, which can affect health and wellbeing (Park & Kwan 2018).

EVEN IF segregation is 'voluntary', public and political attitudes towards segregated areas and communities may produce negative outcomes. Discrimination and stigmatisation of population groups and neighbourhoods can reinforce, if not create disadvantage (e.g. Blanc 2010). Jørgensen (2015), for example, contends that the Danish policy interpretation of low-income areas as ghettos is stigmatising, reinforcing existing patterns of segregation and discrimination. Helsinki is not immune from this, with stigmatisation appearing to affect the lived experiences of residents, with clear spatial patterns (Hiekkavuo 2015).

IF SEGREGATION results in people living in sustained 'social bubbles', there is concern that their daily lives and experiences become increasing disconnected. This may have implications for societal development, hindering integration and social cohesion. It is particularly in this regard that it is important to understand the many domains in which segregation can occur, and the mechanisms which may produce or moderate experiences of segregation throughout daily life.

A multi-contextual 'domains approach' to segregation

Segregation is often considered a residential problem that can be curtailed through housing policy. Focussing only on the residential context can understate the importance of segregation experienced in other domains of life, including work, education, transport and leisure (Kukk et al. 2019; Park & Kwan 2018; Piekut et al. 2019; van Ham & Tammaru 2016). It may be that the public realm; the community centre, workplace, park, or other public spaces, are more meaningful sites of segregation or integration in people's everyday lives (Piekut et al. 2019). It is here where parallel or integrated lives may play out. Segregation can be multi-contextual, presenting differently for different people in different domains. Experiences of segregation in one domain may further intensify, or moderate, experiences of segregation in another, highlighting the need to consider the linkages between domains.

Residential Domain

The residential domain is where people begin and end their day, and remains an important centre of activity for many people (van Ham & Tammaru 2016). Whilst living in segregated neighbourhoods can have negative outcomes in some contexts, the neighbourhood may not hold the same importance in structuring the daily life of all residents. Local contacts within a neighbourhood have been observed to be of higher significance for ethnic minorities and residents of low socio-economic status, whilst for children and the elderly, mobility limitations may accentuate the importance of the neighbourhood (van Kempen & Wissink 2014). For other groups, the neighbourhood may be less important. With an increasingly mobile population (both physical and virtually), contacts outside the neighbourhood have become more significant. Limiting the focus to the residential context, can therefore ignore a considerable share of everyday experiences, which may reinforce or temper the impact of segregation experienced in the residential domain.

Work Domain

If night-time segregation is more closely associated with residential segregation, workplace segregation may be more significant during the day. For many, workplace interactions may represent the bulk of their socialising, spending more time at work than they do awake in their neighbourhood. Interactions occurring within the workplace may reduce or reinforce the impact of segregation in other domains, although the causal relationships can be complex and multi-directional (van Ham & Tammaru 2016). Contacts within the residential neighbourhood may lead to job opportunities, whilst residential decisions may arise from contacts with colleagues. Similarly, work may be sought close to home, or people may change residence due to work.

THE FIRST line of segregation in the work domain is between those who are employed, and those who are absent or excluded from the labour force. Employment may be influenced by a number of factors including gender, ethnicity and age (Statistics Finland 2015; THL 2018). Being without work may inflate the importance of the residential domain. Even for those residents who spend the majority of their time in the residential neighbourhood, it is insufficient to only consider residents who live in a neighbourhood when analysing segregation. This can discount potential interactions with people working or trading in the area, which may represent important regular interactions.

WHEN IN work, specialisation in professions means that workplaces are often characterised by division. This may be in terms of education level, income, ethnicity, gender, age or otherwise. Certain industries may have a more homogenous workforce, and even within individual workplaces there may be hierarchies or divisions which create vastly different lived experiences for different employees. This division can also be temporal if shift-work is considered. Consequently, even if an employer has a diverse payroll, social segregation may still exist within a workplace if there is limited interaction between the different population groups. Spatial divisions may also arise if the workplaces of different population groups are separated into geographically distinct areas of the city (Marcińczak et al. 2015).

INEQUALITIES AND segregation within the employment domain limit possible inter-group interactions and can affect income levels, which may then contribute to sorting residents into high and low-income neighbourhoods. Residential and workplace ethnic segregation may also be connected, with immigrant groups that are more segregated at home found to also be more segregated in workplace neighbourhoods (Marcińczak et al. 2015).

Education Domain

Segregation and education have a complex relationship. Students may be segregated within schools or universities, whilst educational attainment can itself become a factor for segregation in other domains, namely work. Schools have the opportunity to be key places of early inter-group interaction, fostering long-term social integration. Parents, however, may associate a school's composition and the socio-spatial characteristics of the catchment area with its educational quality, with middle-class parents in particular more likely to exercise 'flight' or 'avoidance' behaviour when making decisions about schools (Bernelius & Vaattovaara 2016; Bernelius & Vilkama 2019; Kauppinen & van Ham 2019). Educational outcomes are highly related to family socio-economic background (OECD 2019), and in Finland immigrant background is also associated with lower education outcomes (Bernelius & Vilkama 2019). Accordingly, 'school-shopping' of this nature not only reduces potential inter-group contacts and intensifies segregation within schools, but can also have the effect of exaggerating differences in educational outcomes between schools.

THERE IS a strong connection between school segregation and segregation in the residential domain. As schools generally collect pupils from the surrounding residential neighbourhood, the social composition of pupils within a school will often reflect that of the neighbourhood. In many cities, Helsinki included, school selection strategies are also accelerating residential segregation, as school preferences may provoke relocations within the residential domain (Bernelius & Vaattovaara 2016; Bernelius & Vilkama

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> ***Leisure time activities*** *have the potential to be important sites of inter-group contact, and may be highly connected to geographies and activities in other domains.*

2019). Segregation within education and work can also be interconnected. Educational outcomes and social networks formed during education may influence sorting into different occupational fields and workplaces. If educational outcomes influence income via mechanisms within the work domain, this can in turn affect residential opportunities.

Leisure Domain

Leisure time activities have the potential to be important sites of inter-group contact, and may be highly connected to geographies and activities in other domains. Many leisure activities still take place close to home, so the residential domain remains important, however leisure activities may equally arise from school or work connections, or take place close the geographies of these domains. The relationship may also be inverse, as work opportunities may arise from leisure-time contacts for example.

WHEN CONSIDERING leisure time activities, a distinction may be made between segmentation and segregation (Kukk et al. 2019). *Segmentation* refers to the structure of leisure time activities which may differ between groups based on factors such as differences in wealth, age, gender, status identification and cultural preferences. For instance, cultural differences will influence attendance at a place of worship, whilst sports activities such as skateboarding can be both gendered and predominantly a youth activity (Bäckström & Nairn 2018). *Segregation* in leisure time activities refers to the spatial dimension of differentiation. This is an important distinction, as different groups may share the same activities, but in geographically distinct locations. At a minimum, groups must share the same activity and location to permit the possibility of interaction. However, even when groups share the same location and activity, such as visiting a café, they may visit at temporally distinct times of the day, or co-habit a location without any cross-group interaction.

SPATIOTEMPORAL DATA revealing leisure-time activities has historically been limited. In recent years, novel forms of data have increasingly been analysed to reveal population movements outside of work and home, finding evidence of segregation in leisure activities. In their analysis of mobile phone data from Tallinn, Järv et al (2015) found significant ethnic differences in the activity spaces of Estonian and Russian speakers. In Helsinki, language analysis of Instagram postings made within parks in Helsinki identified geographically distinct usage patterns when comparing Finnish speakers to other language groups (Heikinheimo et al. 2020). The question often left unanswered in these exposure studies, is whether those different groups we know to be present are interacting in any meaningful way.

Evidence from Helsinki and local policy responses

In the residential domain, the spatial organisation of the housing market and housing systems play a large role in determining the extent to which income inequalities lead to socio-economic segregation (van Ham et al. 2016). The City of Helsinki has a considerable advantage in its ability to regulate the housing market due its large share of land ownership. The tenure mixing policy which Helsinki has pursued since the 1970's has resulted in the large social housing sector being much more dispersed than its Nordic neighbours (Skifter Andersen et al. 2016). Spatial differentiation of population groups in Helsinki is thus more fine-grain compared to other cities. Foreign-born residents have been overrepresented in social housing in Helsinki for some time, so tenure mixing has had some effect in moderating ethnic segregation. This reliance by on state-subsidised housing has, however, been decreasing for foreign-born residents since 2006 with private rental becoming more common (City of Helsinki 2020c). Currently, segregation by income and education are both notably higher than ethnic segregation in Helsinki (Bernelius & Vilkama 2019). In some cities, institutional arrangements mean that the neighbourhood in which you reside directly affects the quality of public services. Helsinki's egalitarian approach in public service delivery, prioritising equal access to necessary services such as health, education and childcare goes a long way to reducing

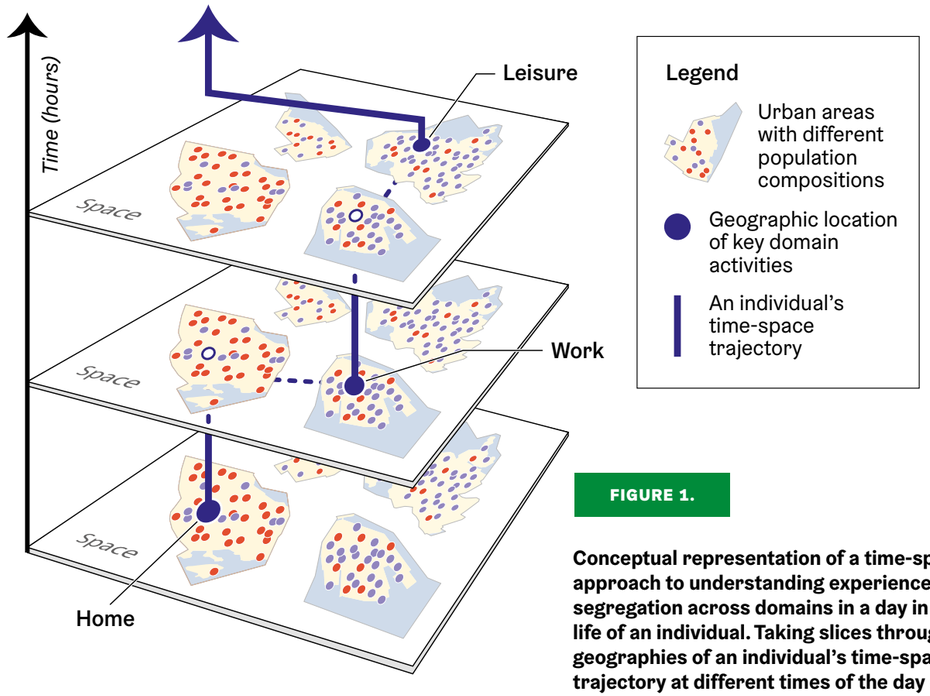

FIGURE 1.

Conceptual representation of a time-space approach to understanding experiences of segregation across domains in a day in the life of an individual. Taking slices through the geographies of an individual's time-space trajectory at different times of the day can reveal spatio-temporal mobilities and the different population structures in these areas.

inequalities between neighbourhoods. Despite early successes, tenure mix has not stopped selective migration becoming a major driver of segregation in Helsinki and the ongoing strength of these policies has been questioned as to their inefficiencies in addressing the structural drivers of segregation (Vaattovaara et al. 2018).

ONE REASON for thinking beyond the residential domain is that, broadly speaking, housing policy in Europe has poorly achieved its intended outcomes of reducing segregation once patterns are already established (Bolt et al. 2010). Whilst 'place-based' policies may be effective in redistributing population groups within static space, they often do little to address the underlying inequalities, and risk displacing existing residents into more disadvantaged locations (Jørgensen 2015; van Ham et al. 2016). Helsinki's strategy of building low-rise dwellings within the greenbelt surrounding the city's large housing estates is one example of a place-based approach (Vaattovaara et al. 2018). Longitudinal studies investigating selective migration have yet to be undertaken for such renewal projects, so the long-term impact remains unknown. On the other hand, 'people-based' measures, focussed on improving education and employment situations, such as Sweden's area-based urban policy, generally take longer to see any results and suffer from issues around selective migration, meaning the local result is not always as intended (Andersson et al. 2010; van Ham et al. 2016). To be most effective, a combination of both place-based and people-based measures is likely required, with neighbourhood measures viewed in connection with city-wide processes and other interconnected domains. Whilst tenure mix has been successful in distributing population groups in Helsinki, the capacity of socio-spatial mixing policies to achieve the desired outcomes of increased bridging capital and integration between population groups remain unclear (Cheshire 2013; van Kempen & Bolt 2012; Vaughan & Arbaci 2011). Rather than living integrated lives, different population groups may instead be living 'parallel lives', with only fleeting contact. Determining the extent to which groups may be integrated requires a consideration of how segregation is playing out in other domains.

WITHIN THE employment domain, Finland may be considered highly segregated both in terms of ethnicity (Statistics Finland 2015) and gender (THL 2018). Unemployment and underemployment is more common for those with foreign background in Helsinki. This is particularly acute for those of Somali, Afghani and Iraqi background (City of Helsinki 2020b; Saukkonen 2017). Whilst holding tertiary qualifications can improve chances of employment (Statistics Finland 2015), even when holding equal qualifications compared to native residents, ethnic minorities in Finland may experience discrimination when applying for jobs (Ahmad 2020). Being unemployed may have the effect of reducing contacts and networks outside of the residential neighbourhood.

DIFFERENT POPULATION groups also remain segregated on an occupational and sectoral basis. Many professions in Finland remain highly gendered, and ethnically divided. Residents with a foreign background are underrepresented in expert occupations and over-represented in service and sales work compared to persons with Finnish background (Statistics Finland 2015). The temporal variances of segregation are underscored by the fact that residents with a foreign background are also more likely to work shift-work than those with Finnish background (Statistics Finland 2015). Gender can also be an important intersectional factor in workplace segregation. Women continue to undertake more unpaid domestic work and childcare than men (Grönlund et al. 2017), are overrepresented in lower-paid occupational sectors (THL 2018), and suffer labour market disadvantages in the transition from education to work, despite outperforming men in school (Vuorinen-Lampila 2016). In addition to affecting income, this may have the effect of increasing the importance of networks within the neighbourhood, and requiring a need to work closer to home (Marcińczak et al. 2015).

***Novel forms of data** have increasingly been analysed to reveal population movements outside of work and home, finding evidence of segregation in leisure activities.*

LEADING BY example, the City of Helsinki has undertaken to employ a public sector which reflects the diversity of its population (City of Helsinki 2019a). Currently 8.5% of city employees are foreign-language speakers. Whilst this percentage is increasing, it remains short of the 16% of the city's residents who have an immigrant background (City of Helsinki 2019a). From the beginning of 2021, the city is set to take over responsibility for the statutory employment services of over 50,000 jobseekers, including all foreign language speakers (City of Helsinki 2020a). This nationwide municipal employment experiment will provide the city an opportunity to learn more about challenges encountered, and test new policies and support measures for disadvantaged residents.

FINLAND HAS been at the top of international rankings for educational outcomes and educational equalities for many years. In the most recent 2018 PISA results, between-school differences in Helsinki accounted for less than 15% of the total variation in performance, well below the OECD average of 29% (OECD 2019). There is limited evidence in European cities that the residential neighbourhood one grows up in is a deciding a factor in educational outcomes. Kauppinen (2007 p. 440) reports "no neighbourhood effects on the probability that young people will complete secondary education in Helsinki". However, this has not prevented parental decisions regarding school choice from amplifying segregation within the classroom, whilst equally contributing to residential segregation. Whilst this may impact educational outcomes for individual schools, the negative effects have been somewhat tempered by the Helsinki's 'positive discrimination' policy. This policy, where disadvantaged schools receive additional funding, has been effective in increasing the likelihood of pupils continuing their studies in secondary education, particularly for those pupils with an immigrant background (Silliman 2017).

WHILST IT is more difficult for the City to intervene directly with leisure activities compared to other domains, the City can play a role in providing the facilities and encouraging participation in leisure activities which may facilitate inter-group contacts. On this front, the City strategy states the objective that every child and adolescent has a hobby, and emphasises the need for high-quality leisure facilities to be provided throughout the city (City of Helsinki 2017). Some segmentation of leisure time activities is inevitable and can be highly beneficial for residents, concerning participation in cultural activities for example. Research from Tallinn suggests that it may actually be more difficult to reduce segregation during leisure than to reduce segmentation (Kukk et al. 2019). This spatial dimension of leisure activities has already been shown to be highly interlinked with activities in other domains.

CITY OF HELSINKI / JUSSI HELLSTEN

Discussion

The Helsinki City Strategy outlines ambitious targets for reducing inequalities and segregation between population groups and neighbourhoods in the city. Helsinki has had success thus far in keeping acute residential segregation at bay through preventative housing policy, however there are signs that this may be changing. Wealth inequalities are growing in Helsinki and both residential segregation and school segregation are on the rise. The number of residents with a foreign mother tongue is expected to grow to just over 25% of Helsinki's population within the next 15 years (City of Helsinki 2019b). Helsinki's modest levels of immigration to date may have contributed to previous successes in keeping ethnic segregation low in the city. Experience from other Nordic cities suggests that larger immigrant populations may lead to stronger processes of 'white flight and avoidance', accelerating segregation (Skifter Andersen et al. 2016). With these developments, the topic of segregation is poised to remain a key focus in Helsinki.

THIS ARTICLE has sought to extend this focus beyond the residential domain, presenting segregation rather as a dynamic and multi-contextual phenomenon. Whilst addressing disadvantage and societal challenges produced by neighbourhood differentiation remains of high importance, housing policy alone is insufficient to address the inequalities for which segregation may be symptomatic. Simple segregation indexes derived from static register data can not go so far as to speculate on whether a mixed neighbourhood is actually integrated or inclusive, who is actually in the neighbourhood at any time, or that its residents are not disadvantaged by exclusion in other domains. For this reason, segregation research has increasingly adopted a time-space approach (e.g. Järv et al. 2015; Tan et al. 2017; van Ham & Tammaru 2016). Novel forms of data, such as mobile phone and

> ***Simple segregation indexes*** *derived from static register data cannot go so far as to speculate on whether a mixed neighbourhood is actually integrated or inclusive.*

social media data, are permitting an increasing understanding of spatial practices and segregation dynamics through time and space. Whilst these methods may provide a better reflection of the lived experiences of residents, comprehending the potential mechanisms of interconnectivity between segregation in all of life's domains remains a key challenge.

TAKING A domains approach to segregation underscores the need for coordinated and transversal policies focussed on addressing the systemic inequalities which can produce negative outcomes for segregated groups, in different domains. On this front, the Helsinki City Strategy outlines wide-ranging goals, from gender equity and immigrant employment through to educational opportunities and softer goals of promoting tolerance and inclusivity (City of Helsinki 2017). The important connection between school segregation and residential segregation has been well studied in Helsinki, emphasising that patterns of segregation in one domain cannot be fully understood without understanding what is going on in the others.

WITH A diverse population, some degree of segregation is unavoidable in a city, and is not always a negative occurrence. A multi-contextual approach prompts a reflection of some of the fundamental questions concerning segregation flagged at the beginning of this article; Who is segregated? When does segregation produce negative outcomes, and in what contexts? What are the underlying goals of anti-segregation policy? And on what basis can measures be deemed successful?

POPULATIONS ARE mobile, and this mobility can result in dynamic patterns and processes of segregation with varying temporal rhythms. Segregation and exclusion may be experienced in many different contexts throughout people's daily lives, and the causal links between segregation in different domains can be multidirectional. By embracing this complexity and taking a multi-contextual approach to segregation, Helsinki can continue to take a leading role on the subject in Europe. ■

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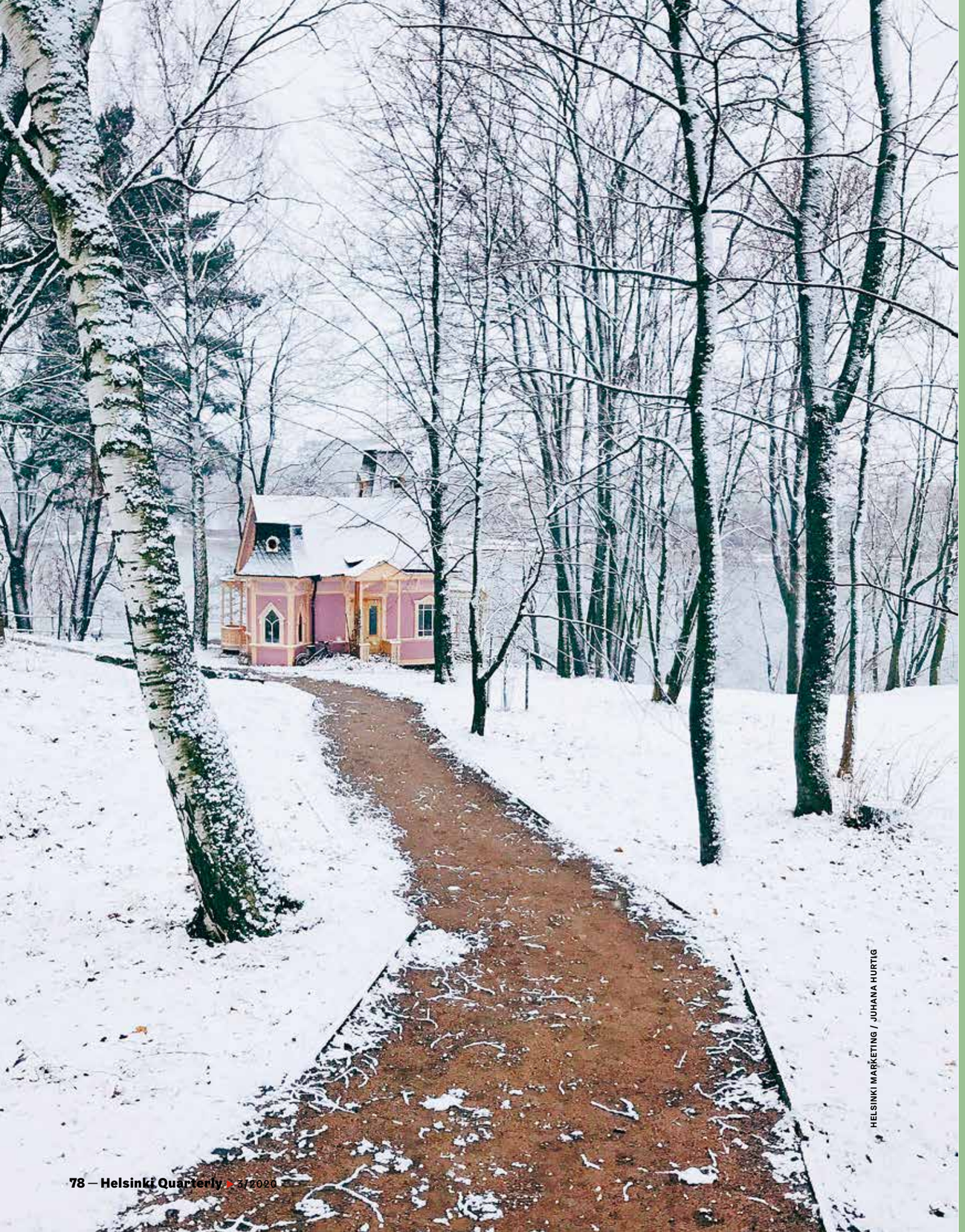

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