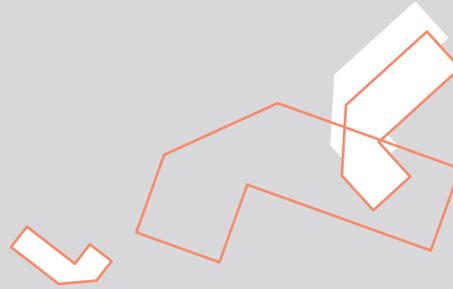
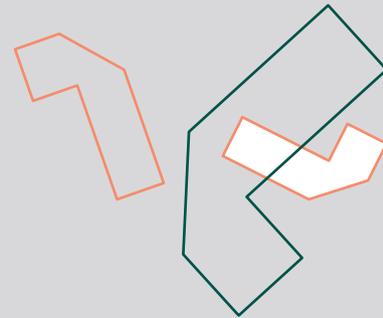


# U R B A N P L A N S T U D I O S & E S I N I N G



## Confused Suburban Identities: A Case Study of Helsinki Region

Edited by: Anssi Joutsiniemi, Hannu Linkola,  
Mia Puttonen, Kristin Swan, Mari Vaattovaara



Studio Publication 1

**Confused Suburban Identities : A Case Study of Helsinki Region**

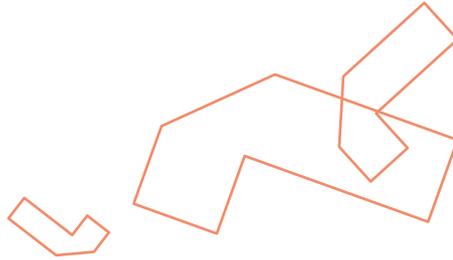
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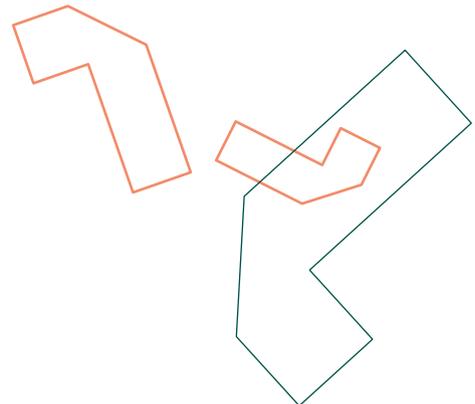




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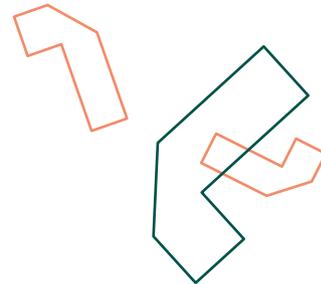


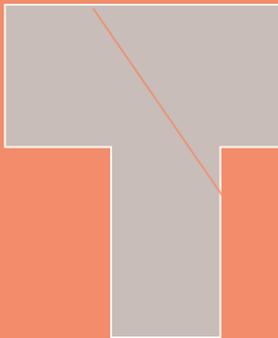
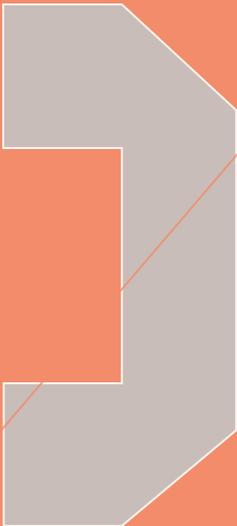
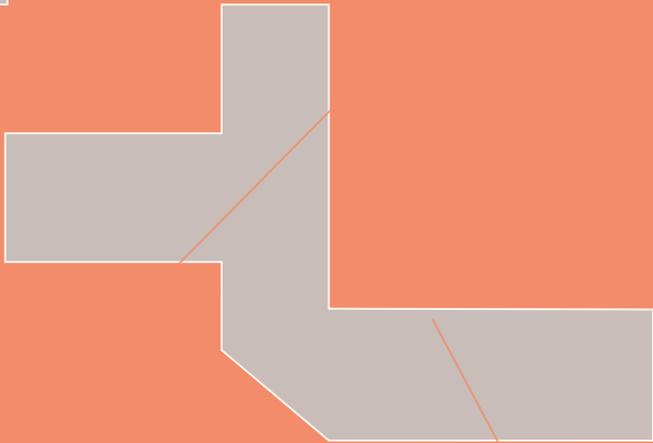
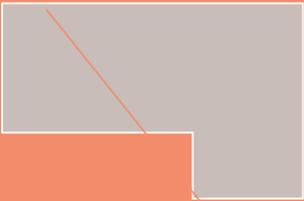
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# Foreword

*by Anssi Joutsiniemi, Matti Kortteinen,  
Hannu Linkola, Kristin Swan, Mari Vaat-  
tovaara*

This book is the first product of the Master's Program Urban Studies and Planning (USP) that started in autumn 2017 as a joint programme of the University of Helsinki and Aalto University. The theme of the first studio course was "Confusing Suburban Identities." It followed the main goal of the Program - an attempt to combine the perspectives of both research and planning.

So far, Finland has been one of the few developed nations in which the education of experts in urban studies and urban planning has been arranged separately. This has caused difficulties in mutual communication and understanding the concrete challenges in urban renewal. The USP Program was created to overcome this problem, i.e. to bring together the expertise of research and planning.

The lack of common ground has been acknowledged both on the fields of research and city administration, and as a result, a well-functioning network of cooperation has been created within the programme. The base of this cooperation has been set up by the University of Helsinki and Aalto University, and the major cities of the Helsinki Region - Helsinki, Espoo and Vantaa - have enriched the Program with a strong presence of their representatives. From an academic perspective, the base of the Program is exceptionally wide. It reaches from social, humanistic and environmental studies to architecture, real estate, planning and landscape expertise. The different challenges that inevitably emerge from this multitude of perspectives have been overcome without complications due to the common enthusiasm.

We are all accustomed to discussions on multi-, inter- or transdisciplinary initiatives, but this Program is a more ambitious project: we are trying to link the expertise of science (trying to find out what pertains

at present, on the basis of empirical analysis) to that of planning (trying to develop a better future with an objective in view). We aim at practical approach that responds to concrete challenges. Our aim is to educate people who can do profound research and people who can plan, but who are - at the same time - able to understand each other. It would be great to transmit the challenges of planning into research, and to integrate the results of the research into planning practices. If the problem of integration is approached from this perspective, instead of using the Occam's razor principle, the endeavor is refined with a sense of purpose.

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Our first class began roughly a year ago. The fundamentals of our pedagogy are based on the idea of working together on common problems from different perspectives. The courses are called studios in order to emphasize the idea of solving the problems together. This publication is the first publication of the Program's studio courses. The motivation of the teachers, representing different academic disciplines and professions, and the feedback from the students confirm the mutual experience: the enthusiasm of the teachers has been conveyed to the students. The cooperation during the courses has been exceptional, and the pre-given roles have been mixed in a fruitful way - every now and then the students actually have become teachers.

During the studio course, the students worked in multidisciplinary groups, under the guidance of teachers. The assignments approached each theme from a multitude of perspectives, with an aim to co-create a boundary-breaking big picture. The common meetings were used for discussing about the research problems in general and the challenges that emerged when the perspectives were combined. These were the first steps that were taken when trying to transcend the conventional borders and develop the expertise that is needed in understanding and effecting the complex processes of urban renewal.

While we are aware of the difficulties and acknowledge that no quick fixes are available, we simultaneously argue that the social need for education like this is urgent and acute. At the moment, an initiative of building an Urban Research Institute as a base for our Master's Program is well on its way. With the current plans, it will be the biggest single investment in the field of socially oriented sciences in Finland in decades. At the same time international interest abounds. It is no coincidence that this preface has partly been written in China, where we have been invited to present our project.

A large part of this book was written in November and December 2017 by the USP studio course students. The students first suggested some broad themes of interest, and later compressed these suggestions into rough research questions, around which four working groups were formed. Those groups, consisting of 3-6 students, moved on to formulate more precise study settings and develop the actual research plans. The main themes - smart city development, local identities and space, segregation, and sustainability - were identified quickly by the groups, but the deeper methodological and theoretical approaches were co-created both in the studio classes and in other cooperation between the students and the teachers. Later, after the students had finished their case-studies, the teachers wrote short commentaries inspired by the students' texts in order to tie the outcomes into broader scholarly discussions and theoretical contexts. The dynamics between the research texts and commentaries highlight, for their part, the discursive, dialogue-oriented, and nonhierarchical atmosphere of the studio course.

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The book begins with a critical review on the discussions about density as the criterion of urbanity. Professors Anssi Joutsiniemi, Franz Oswald and Mari Vaattovaara argue that the essence of urban and suburban life cannot be defined by the amount and appearance of buildings, but rather by the spaces in between. Their claim stands

against the current popular trend in Helsinki Region to define urbanity by the amount of densely built area.

The authors take steps beyond the simple density analysis and scrutinize the ways of utilizing the urban space. Based on a historical review on the development of Helsinki Region, they argue that urban and suburban surroundings are actually "not differentiated by the number of people, but by their core activities." Their analysis shows that openness remains a key characteristic in the suburban fringe, and it should be taken into account in the city planning. Consequently, the authors plead for a diverse understanding of suburban identities: 'If [the] openness of the suburban landscape, however, is not considered as a threat but rather as a key asset of individual neighborhoods, it is difficult to build viable urban strategies by borrowing them from elsewhere.'

The actual study area of the course is presented in the analysis on the functional structure of the Capital Region of Finland. Oya M. Duman questions the tendency among scholars to study cities from a monocentric perspective, and argues that the functionality of city regions should be examined by outlining the interconnectedness between different centers and sub-centers. She frames her analysis with a historical review on city planning strategies and discusses the advantages and disadvantages of a multi-central city structure. Currently, for example, there is a heated and politically charged debate on whether the multi-central structure supports sustainable development or if the city structure should be compressed. As Duman points out, it has also been noted that multi-central structure is problematic from the point of view of city branding and identity politics - how can the various regional identities associated with different sub-centers be fitted under the umbrella of one city or regional brand?

In her analysis, Duman shows that the functional and physical structure of Vantaa is highly subordinate to Helsinki. This role turns Vantaa rather into a network of sub-centers than a functionally (and identity-wise) coherent whole. The sub-centers of



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Vantaa are located by the railway routes and main roads that lead to Helsinki, and the connections between sub-centers within Vantaa are somewhat abrupt. However, as Duman's heat maps show, there are signs of clustering within different fields of economy, and it supports the development of Vantaa into a more coherent multi-central city. Even so, this development is not straightforward. On the other hand, as Duman argues, "the population distribution and the social service distribution are still quite monocentric," and the development of sub-centers does not follow the development and distribution of economic clusters.

In his commentary on Duman's analysis, Professor Kimmo Lapintie, remarks that researchers easily leave the city planners alone after pointing out the various problems and challenges considering the functionalities and spatialities of cities. He requests both researchers and city planners to adopt a more creative approach and, instead of building planning on one dominant future scenario, see the urban future(s) as an ever-changing interplay of possible spatial relations. Lapintie admits that everything that is possible is not easily seen, but he nevertheless requires more ambitious attempts to visualize and design different possible futures. This would help to tighten the fruitful interaction between researchers and planning, and thus result in a more justifiable and resilient city development.

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One way of stepping beyond the traditional and spatially fixed way of understanding how cities function is the smart city development. This theme is observed by Noora Haavisto, Chang Liu, and Barbara Radaelli-Muuronen, who study the adoption of smart city strategies in Vantaa from the perspectives of economic attractiveness, smart mobility, and participatory art. They build their study on the notion that the city of Vantaa has, together with five other Finnish cities, launched "The Six City Strategy" in order to improve urban services by creating innovation platforms, open data services,

and open participation services. This strategy has affected Vantaa's recent budgetary plan, and is seen as one of the main development themes in the future. However, as the articles show, the smart city development is, for the time being, only casually seen in the current city space.

Several traces of development can nevertheless be observed. As Liu notices, the ICT industry job rate in Vantaa has slowly grown following the development of the Aviapolis area close to the Helsinki-Vantaa airport, and the industry has even affected the brand and image of the Aviapolis area. Overall, the growth of the ICT field has, however, been significantly slower than in the neighboring cities, Helsinki and Espoo. Liu thus remarks that Vantaa should concentrate on improving its attractiveness in the eyes of the ICT companies by providing a more compelling business environment, creating better communication tools between the municipality and startups, and simplifying the bureaucratic processes.

Haavisto, on her behalf, aims to recognize several car use identities in order to illuminate the smart mobility possibilities in Vantaa. Her study shows that car usage is tied to peoples' income and geographical location, and therefore only 31 percent of Vantaa residents are using public transportation. Moreover, despite the clear possibilities to develop public transportation and increase its popularity through smart solutions, Vantaa has not included smart mobility possibilities in its transport report for the 2020 Master Plan. From the perspective of sustainable development and functional coherence, there seems to be a lot to be done in public transportation planning and development. Haavisto thus asks for encompassing mobility strategies and points out that "it is a mistake to believe that by concentrating the building of houses beside the railways would automatically decrease the use of cars."

The smart city approach is completed by Radaelli-Muuronen's review on the possibility of maximizing Vantaa's cultural value, developing new suburban identities, and finding participatory tools for local planning through smart art. She compares some

recent art projects in Vantaa with international examples, and proceeds to discuss new forms of financing public art. The analysis shows that smart art can be used in both negotiating the values of urban environments and in integrating the local residents into the planning processes. The dialogue that smart art supports, increases the commitment of local people in maintaining the qualities of their surroundings, and improves the comfort of suburban centers. Therefore, Radaelli-Muuronen argues, the possibilities of art should be taken into account in the planning of new areas, such as the Aviapolis area, where art can also be used to promote Finland's brand as an innovative design hub.

Professor Hossam Hewidy provides commentary for the smart city chapter, and raises the issue of the problematic and complex nature of smart development. While smart technologies can be used to overcome some problems caused by rapid urban growth, several global processes, such as climate change, immigration, and regional competitiveness, distort the traditional planning contexts and set more requirements towards the urban land use. As Hewidy argues, the ever-changing urban morphology needs to be understood profoundly while the urban imageries that frame the smart city strategies are being created. He asks for assemblage approaches that refuse "to accept that the current way of urban development is necessarily the ideal," and claims that the "transformative practice must be imagined as differing radically and structurally from the present reality." Indeed, smart strategies can help to develop new standards and perspectives for urban planning, but only if the technologies are utilized in innovative ways instead of just augmenting them into current procedures - a perspective that is embraced also by university lecturer Rami Ratvio and Tuomas Väisänen in their commentary on the technics and data through which the smart city development can be studied.

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Urban strategies and policies usually handle cities on a large scale, but different phe-

nomena manifest themselves locally. Consequently many social issues become comprehensible when they are studied on site. In their text Aleksandra Borzęcka, Eero Kujanen, Jalmari Sarla, and Katja Toivola concentrate on local manifestations of socio-spatial control, publicity of space, and the effect of economic assessments on suburban identities. They cast four views on the Hakunila Shopping Center, a characteristic representative of Finnish suburban planning, and a significant local node of social and economic interaction. The authors suggest that such multidisciplinary cross-exposure is needed in order to understand comprehensively the complex nature of place-bound social processes.

The chapter begins with Kujanen's analysis on the real estate market development at the Hakunila Shopping Center. He shows that the expectations of property owners do not always match the city's plans of restructuring the suburbs. The Capital Region has seen a trend of demolishing old shopping centers and replacing them with apartment buildings, and it is also proposed that the Hakunila Shopping Center should be torn down. But while the "city wants to provide plans that would enhance the area's image, attract new residents, and make the life of people more enjoyable," an ambitious plan may actually hinder the development by leaning on unrealistic economic and demographic prospects and not paying enough attention to the local needs and preferences. On the other hand, the current buildings need to be renovated, the detailed plan must be updated, and the service supply needs to match the current customs and trends of consumption. Unfolding this cross-purpose, Kujanen suggests that a profound market analysis is required for understanding the realistic potential and preconditions of regenerating the shopping center.

Sarla uses a different approach for getting in touch with the "grassroots realities" of the Hakunila Shopping Center. His study leans on observatory methods through which he analyses the quality and liminal nature of the public space. Sarla also assesses the qualities of the physical environment and discusses the usability and



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aesthetic comeliness of the shopping center. He sees the inevitable need for refreshing maneuvers. Sarla suggests, for example, that closed facades should be opened, storefront windows should be refreshed, and social exchange should be facilitated with additional seating in the central square. However, despite the apparent necessity of a complete renovation, the confusion concerning the ways of developing the center has made the conditions stagnant and pushed the center toward the state of liminality. This “in-betweenness” can, as Sarla argues, be also seen as a positive state, since it can invite different groups to negotiate the content and identity of the center.

Toivola goes deeper in the dialogue between place and identity in her analysis on the behavior patterns of the users of the Hakunila Shopping Center. She approaches the socio-cultural aspects of the physical space by exploring the ways in which space affects human behavior as it turns into nodes and codes that are read intuitively and interpreted intentionally. Moreover, Toivola observes the meanings of space by mapping and analyzing peoples’ ways of spending time at the shopping center. She sees the center as a place that is designed for allowing people to reach their daily services and create spaces of social interaction. During her field work Toivola noticed that the publicity of the space allowed people to take it into their own use “without having to feel looked down upon by people of a higher class.” She also realized that the way of socializing in the space actually proved that “there is [...] a demand for non-consumer related spaces for [...] existing communities to use and meet in.”

Borzęcka closes the chapter by studying the mechanisms through which space is used for expressing power relations and social identities. Following feminist theories on control, sense of safety, and gender-based inclusions and exclusions, she analyzed how different groups use the space, and found certain patterns. For example, the proportion of men and women changed from the morning to evening. The square was also subordinate to the male “gaze” that was embodied in the spatial behavior of young and

middle-aged men who sat at the local pizzeria and observed the by-passers. The social codes and norms manifested themselves also in the ways in which shops, offices, and public services were allowed to specify the rules for permitting or prohibiting entrances. As a future vision, Borzęcka points out the importance of mapping different agencies in order to formulate feminist claims for planning and development of the shopping center. A feminist urban redesign strategy would provide a platform to observe hidden political agendas in planning, and turn the planning processes into multi-vocal and equally participatory conversations.

The visit to the Hakunila Shopping Center ends with commentary by post-doctoral researchers Salla Jokela and Johanna Lilius. They broaden the scope by pointing out that the case of Hakunila superbly describes the conditions of old shopping centers throughout the Helsinki Region. As consumers are directed to new shopping malls, usually located further away from the old suburban cores, the old shopping centers “are left to develop more organically.” While the spaces have become more liminal, they have opened themselves for local “place-making” and re-producing peoples’ local identities. This actually matches many planning and branding strategies of the cities by introducing the spaces as platforms for community engagement, new business ideas, and bottom-up ways of participating in the development of the centers and suburbs. The question is, however, whether these possibilities will be maintained or lost when the development later adopts the terms of economic profit, effectivity, and productivity.

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From Hakunila we move on to Koivukylä, another suburb in Eastern Vantaa, characterized by a large number of apartment buildings from the 1960s-1980s. Koivukylä is actually one of the best documented suburbs in the Helsinki Region, as it was the key area in Matti Kortteinen’s pioneering study on the social relations in Finnish suburbs, Lähiö, in the early 1980s. In this book, the area is revisited by Yu-Yi Huynh, David



Kerr, Ella Stark, Aino Suomalainen, Juuda Tamminen, and Daria Tarkhova, who have focused on the young people of Koivukylä from the perspectives of theories on social control and segregation. The authors ask if any traces of segregation can be observed in young peoples' customs of using the space, in the ways of using social control towards the young people, and in the relations between young people and local authorities.

The chapter leans on the social control theory which explains how moral codes and social norms come into being both through the institutionalized forms of power use and governance, as well as peoples' own behavior and self-regulation. For example, a neighborhood that is considered a safe place is usually characterized by largely shared views of what is accepted and what is not. On the other hand, spaces where social norms are contested are usually stigmatized by a visible presence of social control institutions such as police or guards. In such places people and social groups also get easily labeled from the perspectives of authoritative power institutions that renew their role through processes of inclusion, exclusion, and marginalization.

Being a group with no access to the power institutions and groups that define the social codes, young people are easily seen as a potential threat towards "mature harmony" in space. Their action and presence in space is usually limited by other groups, and their use of space is regularly intervened. These processes reflect also socio-economic conditions. As the authors point out, segregation, for example, "has causal effects in poorer neighborhoods, in the way local policing target [young people], compared to their peers living in wealthier and better educated neighborhoods." This entails a potential for conflicts in socio-economically delicate and ethnically diverse areas such as Koivukylä.

In their multi-method study, the authors suggest that the social control in Koivukylä is performed by various local institutions, such as police, youth workers, and employees of the local library. The strategies of controlling young people vary from authoritative customs to soft-edge strategies, but

regardless of the procedures they maintain the power relations in which the final borders and norms are defined by adults and representatives of the public sector. Since the social control is tied to space and manifested in it, the authors suggest that the roles of young people and actors who work with them should be taken into account when the spaces where young people hang out and spend their time are being designed. As the study shows, spaces of self-determined codes and spontaneous emergence of social control are needed.

University lecturer Venla Bernelius answers to these challenges by agreeing that the Helsinki Region consists of areas with different socio-economic profiles. She sees segregation as a multi-scalar phenomenon that is tied to societal structures as well as to peoples' personal identities and action. Moreover, traces of segregation can be observed on different scales, for example on the regional level or on the level of a single block. This complex character where different spatial scales and social processes are intertwined makes the consequences of segregation hard to tackle. However, by identifying the strengths of each area or suburb, and supporting the positive outcomes and diversity of urban life, the urban planners and decision-makers can prevent the most fragile areas from turning into "black holes," where social control mismatches the societal expectations and spatial power is operated through authoritative and non-dialogical procedures.

At the end of the chapter professor Kortteinen takes a walk down the memory lane to the "old" Koivukylä where he once started his suburban studies. He recalls the frustration he faced in 1978 when he intuitively noticed that there was something worth studying in the social atmosphere, but could not find the proper methods or research questions. Later, as the research developed, Kortteinen's arguments turned into heavy critique towards the communal planning and housing politics, but also paved the way for later research on both the social problems and potential of Finnish suburbs. Even today these studies give a valuable ground against which the trends of socio-economic develop-



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ment, urban differentiation, and urban policies can be evaluated. Kortteinen finishes his personal story with testamentary words that pass the ball on to the next generation of urban researchers - "it remains to be seen what happens."

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One attempt to accept Kortteinen's challenge - to try to see what happens - is presented in chapter 5. In their methodologically ambitious text Christina Itkonen, Andrea Gilly Marquez, Heta Seppälä, and Apichaya Sindhuprama compile four future scenarios ("tech driven community," "transitional urban villages," "an unequal future," and "from materialism to mental development"). They focus their study on Hakunila and Sotunki, two neighboring areas that are very distant by their socio-economical and physical structure. The scenarios carry us to the year 2050 by illustrating the possible results of different - yet intertwined - paths of technology, demography, planning, and ecological conditions.

In order to contextualize the scenarios, the authors have familiarized themselves with the current conditions in Hakunila and Sotunki. As noted in chapter 3, Hakunila is characterized by a high-rise suburban landscape, dense population, a large proportion of foreign country citizens, and the average income in Hakunila is remarkably less than the average in Vantaa. Sotunki, on the other hand, is the opposite in almost every sense: its landscape is characterized by rural elements and forests, its approximately 650 residents are mostly Finnish citizens, and the average income is over 10,000 euros higher than the average of Vantaa. Based on this juxtaposition, the authors compose an analysis on landscape structure, socioeconomic factors, accessibility, and planning, and bring it together with some key concepts in sustainability studies (resilience, economic degrowth, ecomodernism, green economy, agrarian urbanism, and urban permaculture). Finally, this dialogue is turned into a SWOT-analysis of Hakunila and Sotunki.

The chapter culminates with four reviews on life in Hakunila and Sotunki in the year

2050. These diary-like, belletristic scenarios are written from different narrator positions, but their coterminous structure make them easily understandable and commensurate. Despite many features that may seem utopic (or dystopic) from the current perspective, the texts interestingly illuminate the future challenges that should be taken into account in current planning policies. The subjective grasp in the scenarios reminds us that the future is not just an imaginative structural or macro-scalar construction, but rather a result of a number of complex ecological, political, and social chains of interactions that are lived and experienced by real people. Seen from this perspective, the future scenarios also show that urban identities are never fixed, but rather are in constant change. Hence current suburban identities or ideas of such identities - despite their importance on both personal and intersubjective levels - should not be treated as predominating entities in urban planning.

The four scenarios are reviewed by associate professor Juanjo Galan and university lecturer Johan Kotze who ask, with the trajectory of urban green space in mind, "which permanent and conjunctural factors are affecting the cities nowadays; and how can we integrate all those factors, limitations and expectations in speculative models that could help us to visualize desirable futures for our cities and [...] react accordingly." They divide their answers on two levels. First they ponder the factors behind the contemporary evolution of cities, and proceed then to the ways of reasoning the possible futures. Both temporal levels - past and future - are presented as complex and unwieldy entiresities that should be studied with a multidisciplinary approach that encompasses an understanding of ecological processes, political tides, and different dimensions of humankind. Moreover, Galan and Kotze, emphasize the role of ecosystems by scrutinizing the anthropocentric character of the concept "sustainability." The authors claim that nature is often being "othered" in planning processes and policies - especially in urban areas where the land use is intensive and every green space is affected

by human presence - and argue that sustainability often is evaluated from the perspective of ecosystem services. While this may result in some good planning practices, there is a constant danger of producing one-sided urban greenspaces that may provide most of the requested services but do not contain elements of pristine nature.

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The book ends with a contentious article written by professors Kortteinen and Mari Vaattovaara. They bring the questions about the future back to the level of actual planning, and discuss the ways in which different politically charged assumptions of demographic trends affect the urban strategies and identities. With the net "migration win" of Helsinki in the last ten years as their example, the authors claim that the growth expectations behind the current urban strategies and policies actually lack a broader understanding of peoples' preferences. Whereas the politicians and decision makers in Helsinki tend to see the migration surplus as evidence of urban renaissance and peoples' willingness to live in dense urban areas instead of the surrounding municipalities, the professors suggest that the transition actually can be a consequence of the economic depression of the early 2000s.

Hence they forewarn that since the new Master Plan of Helsinki, for example, heavily believes in a strong population growth in the future, it could actually be built on sand. A failure to interpret the changes in peoples' values could prove to be pricey in the future, and lead to a development that contradicts the preferences and even needs of the residents. Consequently, Kortteinen and Vaattovaara request for a critical dialogue between planning policies and academic urban studies in order to ensure that policies are negotiated with sufficient knowledge, and that the plans produce socially and ecologically sustainable cities with strong but yet flexible identities.

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The editing team wishes that this book proves to be a provocative and interesting commentary on urban identities, con-

fused or not, in the Helsinki region. This book culminates an incredible amount of work from both students and professors and other teachers across a multitude of disciplines. All comments and initiatives - both on the substance and on the program - are more than welcome. We are just about to get started.

In Helsinki and Shanghai

5.3.2018



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## Excursions into suburban density

by Anssi Joutsiniemi, Franz  
Oswald, Mari Vaattovaara

If one had to name a single feature that characterizes the urban, a strong candidate would be density. Unfortunately this is almost as far as we can get along the road to agreeing on this magical term. In our excursion into understanding the Finnish suburbs have almost come a full circle from one extreme to another. In fact, not more than 70 years ago the grand old man of Finnish town planning, Otto-Iivari Meurman, stated that<sup>1</sup>: “At the end all detriment in urban settlements is caused by packing people too tight. The principal remedy for healthy reorganization is to space out the existing densities.” (Meurman 1947, 311) The ideology that built the Finnish suburbs couldn’t be further from the current slogan, adopted by a public Facebook group (with almost 18 000 members) for urban visions in Helsinki: “more city to Helsinki” (Lisää kaupunkia... 2018).

The relative easiness of measuring density also makes it a prime source of confusion and misunderstanding. The loose talk about density seems to hide several other facts and depart from its intrinsic assumptions that any line of discussion should pay far more attention to individual mobility patterns. Density is not a single quality, but an obsolete concept that our current mobile lifestyle has assigned to oblivion.

According to the standard definition, density is a measurement that compares the amount of matter contained within an object

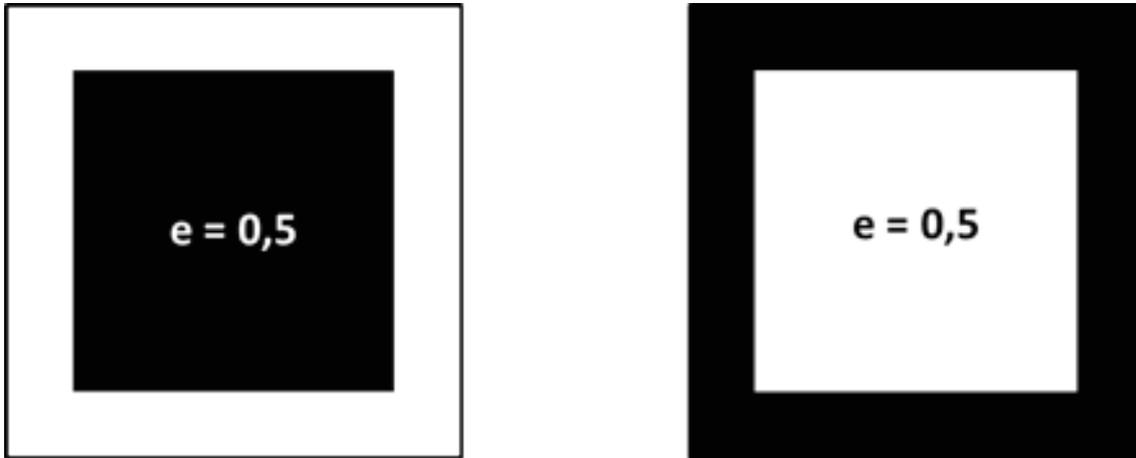
to the volume it occupies. In more generic terms, it is used to measure the number of any units in a given container. Thus it is natural that instead of a single density concept we are doomed to operate with a plethora of competing definitions, which makes the density discussion highly value driven. It is easy to understand that density of coffee shops may be desirable, while density of pickpockets in the same spatial enclosure is not. The vague use of a technical term has caused some serious confusion as the idealized forms of historical phases of urbanization are used in the assessment of metropolitan structure.

Never since the introduction of motorized transport has the density ideology been so vulnerable to exploitation. For example the slogan “A compact city is a contact city” introduced by Pentti Murole, one of the prominent young urbanists in the 1960s, paved the way for Finnish suburban development from the early Tapiola experiment towards the suburban high-rise developments utterly different from the original urban ideal. Despite the initial utopia of a city reborn, the density ideal only became perverted in the housing boom of the 1970’s and resulted in a suburban development that had none of the qualities that could retain the economic or social activity. With the wisdom of hindsight we may conclude that the container for measuring density and container for daily activities no longer went hand in hand - changes in accessibility took over the assumed favor of proximity and left density as a mere half-baked ideal.

If nowadays the bean counters of density have increasing difficulty in defining what type of densities to favor, they need to be even more careful when defining the container of analysis. The essence of spatial objects as two-dimensional entities sets all

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<sup>1</sup>”Kaikki kaupunkimaisen asutuksen epäkohdat pohjautuvat lopulta asutuksen liialliseen kasaamiseen ahtaalle alueelle. Tämän vuoksi on terveyttämisen tärkeimpänä tarkoituksena asutustiiviiden harventaminen.” (Meurman 1947, 311)



*Figure 1: In both figures the black parts cover exactly half of the surface area.*



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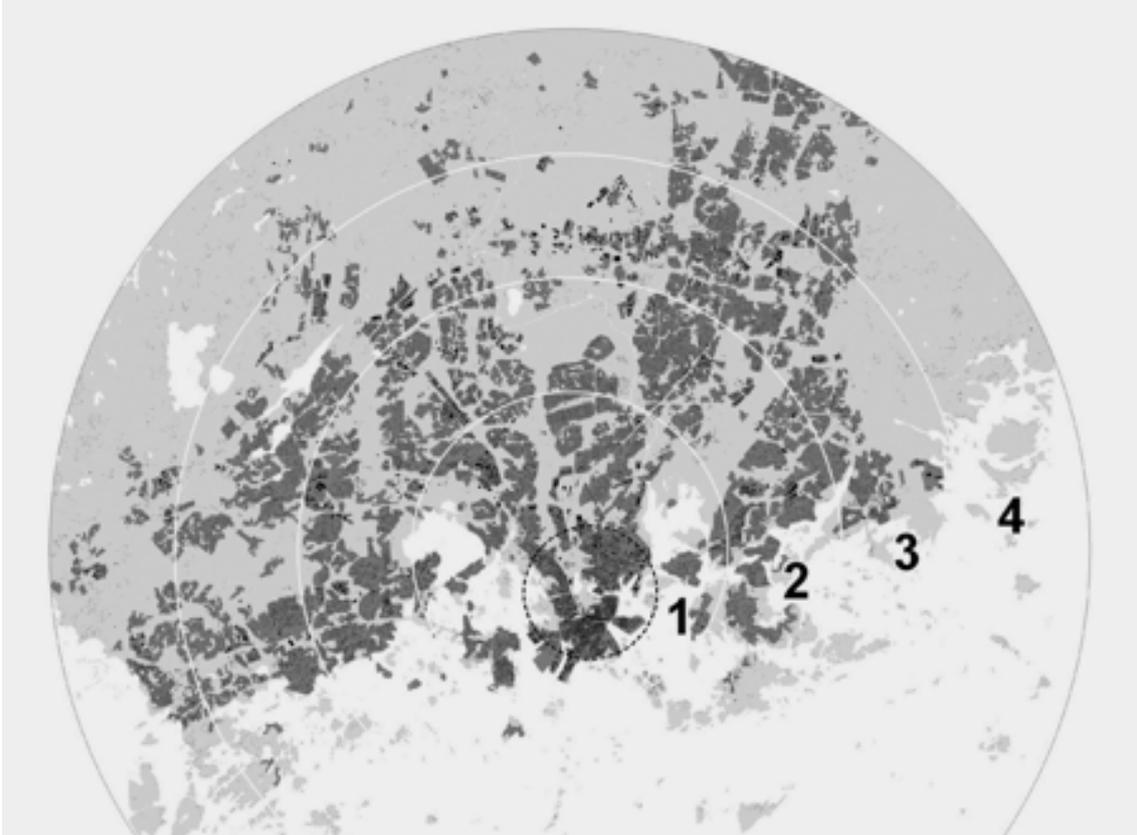
spatial phenomena in an exponential context. For example, increasing the size of the edge of a plot by 30 percent causes the plot area to increase 70 percent. Thus a minor overestimation in a measured buffer size (or other reference area) will cause major decrease in density values. This is easy to see in Figure 1.

The same feature can also have a more elementary meaning if connected to the actual areal growth. In his seminal text *Nothing gained by overcrowding* Raymond Unwin (1912) observed the same thing. The increased travel speed enabled by the railways in the late 19th century provided a vast amount of land for urban development and rendered feasible the entire garden city movement. The possibility to move ten times faster opened up a land supply a hundred times greater than be-

fore, which eventually led to the mushrooming of suburban development.

From the perspective of density analyses, however, it is important to recognize how the space was actually utilized - what did we gain from garden city ideology? The most obvious guess would be of course the gardens, but in fact the abundance of land was so huge that it couldn't be covered by gardens alone. In the structural analyses of Helsinki it is easy to see from a few key figures that the permanent change in the urban structure took place long before the great influx of suburbanization. The great divider in urban planning was the modernistic planning and construction principle, which favored the open typology and the location of the house in the center of the plot instead of the perimeter location. Exactly as the principle shown in Figure 1

<sup>2</sup> If the area shown in black in above figure represents a building, in standard planning terms both of these figures are described with efficiency coefficient (e) 0.5. (For a single-storey house the floor area ratio (FAR) would also be 0.5).



*Figure 2: Four concentric 5 km circles around the Helsinki metropolitan area. The innermost, slightly offset 2.5 km circle represents the Helsinki urban core dating back to before the era of modernistic planning and the rapid decrease of transportation costs.*



suggests<sup>2</sup>.

The analyses of the region in four concentric circles shows this surprisingly well (Joutsiniemi 2008). It is easy to see from Figure 2 that the share of settlement areas (areas divided into plots and streets) decreases as the distance from the city center increases. Urban metropolitan structure as such becomes sparser. Not so trivial, however, is the fact that the share of buildings within the settlements remains nearly constant in all four concentric circles. The percentage shares of buildings in the settlement areas in circles 1 to 4 are respectively: 18.7 % - 14.2 % - 14.0 % - 11.3 %. It is noteworthy that even the most central 5 km zone makes no difference. Only the innermost 2.5 km size core - shown in dots in Figure 2 - has a notable 30.1 percent share of the settlement area covered by buildings. The city core is different, not because of its density, but because of its reduced openness.

The city core is a different container for different activities - characteristics that are not easily captured by density measures. Urban and suburban surroundings are not differentiated by the number of people, but by their core activities. The profound structural feature of the suburban fringe is this constant 85 percent openness, which remains a key characteristic of the surroundings regardless of how many storeys we add to the buildings. It cannot be changed by increasing the population or any other type density, and remains decisive for present and future activities.

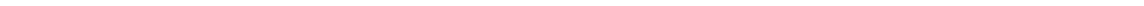
If this openness of the suburban landscape, however, is not considered as a threat but rather as a key asset of individual neighborhoods, it is difficult to build viable urban strategies by borrowing them from elsewhere. In the suburban fringe the decisive characteristic seems to be the attempt to provide simultaneous access to both the core of urban activity and its green edge. This affords perfect reason to seek: identity, diversity, flexibility, self-sufficiency or resource efficiency (Oswald & Baccini 2003) - more important aspects of suburban confusion than what can be captured with simplified measures of packing

or densification. The essence of urban and suburban life is not defined in buildings and their contents, but in the spaces in between.

#### REFERENCES

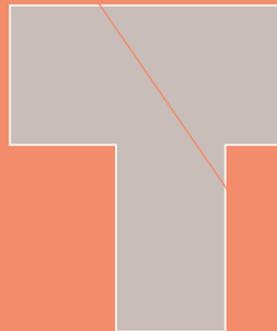
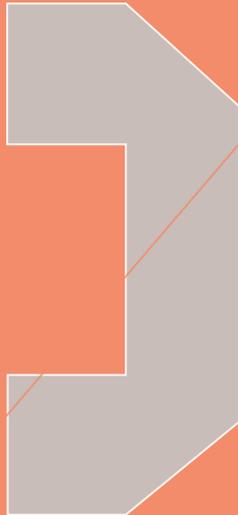
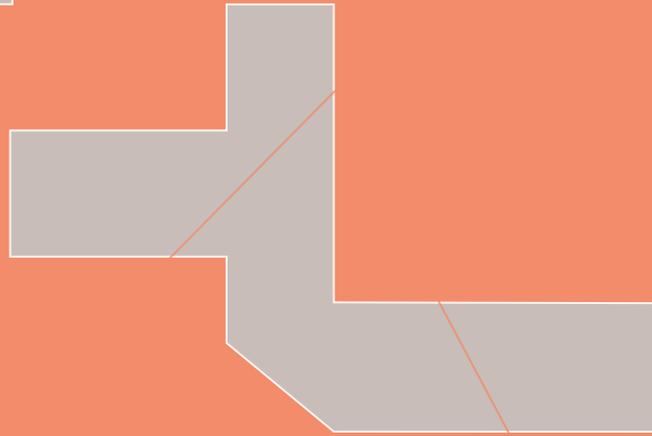
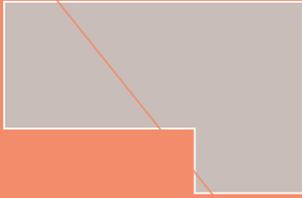
- Joutsiniemi, Anssi (2008): "Kaavoituksen tilasta". Yhdyskuntasuunnittelu 2/2008, 41-52.
- Lisää kaupunkia Helsinkiin (2018). 31.5.2018. <https://www.facebook.com/groups/184085073617/about/>
- Oswald, F. & Baccini, P. (2003). *Netzstadt - Designing the Urban*. Birkhauser, Basel.
- Unwin, R. (1912). *Nothing gained by overcrowding! How the Garden City type development may benefit both owner and occupier*. P. S. King & Son, Westminster.





# Chapter 1

U R B A N  
S T U P L A N  
D I N I N G  
E S &





## Introduction

The patterns of urban growth have been a heavily theorized and discussed issue, especially among scholars of urban planning, sociology and economics (e.g. Burgess 1925/2008; Hoyt 1964; Parr 1973; Evans 1985). From the concentric zones model to the multiple-nuclei model, many attempts have been made to comprehend the dynamics of how cities grow, as well as what happens on different scales when they grow. Lately, the concept of multicentricity has found itself in the spotlight of debates concerning varying scales in varying contexts all over the globe (e.g. Albrechts 1998; Kloosterman & Musterd 2001; Parr 2004; Hall & Pain 2006). Even though the exact definition of multicentricity, in terms of urban growth, remains open to discussion (e.g. Riguelle 2007; Meijers 2008a; Adolphson 2010), the consensus among scholars is that monocentric cities have been evolving into more complex multicentric regions. As expressed by Hannes Taubenböck et alia (2017), “standard monocentric models of constantly decreasing densities with increasing distances to the center are not reflecting metro regions’ today’s urban spatial structure.”

In general, monocentric cities are dominated by a highly concentrated central business district (hereinafter referred to as CBD) (Gottdiener & Budd 2005). In the European context, the primacy of the urban centers essentially comes from the predominance of the central railway stations in the city-level distribution, and concentration of workplaces in the late 19th century industrial cities (Kloosterman & Musterd 2001). In a monocentric city model, it is assumed that the benefits of agglomeration economies draw employment opportunities into the CBD and push the workforce out to homogeneous suburbs. Unlike this rather conventional way of looking at cities and conurbations, in their simplest sense, multicentric regions are those which comprise numerous sub-centers alongside multiple centers (Meijers et al. 2003; Taubenböck et al. 2017). Contemporary European cities are usually small cities distributed over the landscape,

creating regional synergies (Kloosterman & Musterd 2001), even though the cities of regional importance, following the historical primacy of central railway stations, are numerous. Therefore approaching European cities, including Finnish cities, from a monocentric perspective is tricky in a world in which urbanization is one of the fundamental challenges that humankind has to face.

Controversies over the definition of the multicentricity phenomenon start when more layers of attributes (e.g. sectoral specializations in the sub-centers, daily commuting relationships between centers and sub-centers or the number of well-defined, dominating centers) are attached to the abovementioned basic definition. Similarly, methodological differences in defining centers and sub-centers also lead to the emergence of varying perspectives on what makes a region multicentric (Taubenböck et al. 2017). Additionally, scale of analysis has impacts on the definition (Riguelle 2007; Vasanen 2012). According to Antti Vasanen (2012), an area can be interpreted as monocentric on one scale and as multicentric on another scale.

In the specifics of this study, multicentricity refers to regions with multiple centers and sub-centers. Centers refer to historically-acknowledged city centers with the highest densities of population, as well as workplaces and services which are distinguishable by their predominance in terms of administrative or similar roles within the region. Whereas sub-centers refer to younger centers, which are the concentrations of population and employment in different sectors, that are able to compete with the centers in terms of employment opportunities. In this study, sub-centers are also expected to develop within suburbs and show increasingly higher densities of population, workplaces, and services than their immediate surroundings, in order to be distinguishable as a regionally influential node (adapted from the definitions of Riguelle 2007 and Taubenböck et al. 2017).

There are several reasons why multicentricity is such a hot topic in urban planning and urban governance, especially after the 1990s when strategic spatial planning



became a focus in European-level discussions (Burger et al. 2014). One reason is that multicentric development is considered to be an ecologically sustainable way of harnessing the benefits of economies of agglomeration (Bailey & Turok 2001; Meijers 2008a). As explained by Evert Jan Meijers (2005):

*Polycentric urban regions, or urban networks, are often associated with the notion of synergy, the assumption being that the individual cities in these collections of distinct but proximally located cities relate to each other in a synergetic way, making the whole network of cities more than the sum of its parts.*

Multicentricity is also considered to have the potential to make the best out of two worlds -suburbs and high-density urban cores-, which is interestingly similar to what Ebenezer Howard claimed to achieve with Garden Cities. A multicentric development can create compact (sub-)centers in which sustainable modes of living and transportation can be promoted, unlike the decentralized suburbs dominated by individual car ownership. Similarly, it can provide the spatial setting in which different business sectors can thrive in a spatial organization influenced by sectoral specializations and network effects. Correspondingly, the European Spatial Development Perspective (hereinafter referred to as the ESDP) aims toward such an urban development pattern on different scales. This includes encouraging the establishment of new centers outside the European Pentagon on the largest scale, and the creation of functional urban regions on the smallest scale (Hall & Pain 2006).

Multicentricity is a spatial planning tool rather than a land use planning paradigm on its own (Kloosterman & Muster 2001). Therefore, the ESDP's encouragement of multicentricity and territorial cohesion seems timely for an increasingly urbanized Europe under the current economic, social, and environmental pressures. Regional branding is another reason why multicentricity is discussed widely. As pointed out by Anssi Paasi (2003), regional identity is one of

the essential elements in the development of regions as social and political spaces. From a public policy-laden point of view, the collective success and economic competitiveness of multiple centers within a single region partly depend on a region-level, comprehensive brand, which acts as an umbrella bringing together different centers and sub-centers. Understanding the dynamics of multicentricity is an important step towards building a regional brand.

The general formation rule of (sub-) centers within a multicentric city-region in the European context includes a successive and iterative centralization and decentralization in the spatial structure of cities over a long period of time (Hall & Pain 2006). The process started with the decentralization of spatial structures in the form of suburbs on the outskirts of the uncontested, dominant city centers roughly after World War II in Europe and in the 1950s and 1960s in Finland (Kolbe 2006). In time, social, environmental, and economic costs of such decentralization, together with the congested city centers, pushed towards two similar processes. First, knowledge-intensive sectors requiring high social interaction but small amounts of land, started to concentrate in the city center. Simultaneously, the residential functions started to come back to the city center, as the living conditions of the cities started to improve. Second, certain businesses (e.g. industrial, large retail and manufacturing) began to decentralize, moving from the city centers to suburban locations with easier access to highways, rapid rail networks, and airports (Riguelle 2007). Subsequently, a new centralization of jobs, people, and services in a decentralized spatial structure, with high levels of interconnectedness and interdependency started to occur. Whether these new centralizations are influential enough on the surrounding urban fabric to compete with the CBDs is one of the fundamental questions of multicentricity studies (e.g. Hall & Pain 2006; Vasanen 2012).

When the formation steps of multicentric urban regions have been examined, the Helsinki Metropolitan Region (also known the Helsinki Region or Helsingin seutu,





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and hereinafter referred to as the Helsinki MR) represents itself as a fitting case for a study on a city-region slowly becoming a multicentric, functional urban region. The Helsinki MR has a population of 1,452,972 (Helsinki Region... 2016) and is made up of 14 municipalities and a multitude of centers and sub-centers therein. In his study including a chronological comparison of multicentricity in the Helsinki MR from 1980 to 2007, Vasanen (2012) pointed out that the Helsinki MR is evolving into an increasingly complex multicentric region day by day. According to his study, the number of employees in sub-centers has risen from 40,255 to 153,711 within the aforementioned years, whereas in the core area from 219,052 to 276,830. This proportionally dramatic increase in the employment numbers in sub-centers necessitates a higher level of attention, given the way in which the city structure is changing. This change also has an impact on how the city planning departments, as well as the Uusimaa Regional Council, should respond to those changes.

From a European-level planning point of view, even though the ESPD promotes polycentricity in the urban regions (i.e. regions with spatially disconnected but functionally connected centers), rather than multicentricity (i.e. existence of spatially and functionally connected centers thanks to the advancements in the transportation and telecommunication sectors) (Gottdiener & Budd 2005), both terms share fundamentally the same approach to the declining primacy of an urban core, to the emergence of competitive sub-centers, and to the interdependencies in between. Therefore, when the spatial characteristics of the Helsinki MR are taken into account (which will be presented in the upcoming chapters), the Helsinki MR makes an important case for a study of multicentricity in the national planning debates when it comes to conforming to the European-level planning policies, rather than a study of polycentricity.

As there has been a considerable amount of research on the Helsinki MR as a whole (Vasanen 2012, 2013), the purpose of this study is to downscale and to focus on Vantaa within the Capital Region of Finland

(hereinafter referred to as the CR; pop. 1,200,000 [Helsinki Region Website 2016]). The CR consists of four municipalities that make up the core of the Helsinki MR: Helsinki (pop. 628,000), Espoo (pop. 269,000), Kauniainen (pop. 9,400) and Vantaa (pop. 214,000) (Helsinki Region Website 2016). The motive for such a focus is twofold. First, traditionally Vantaa is seen merely as an annexation to Helsinki, which prevents the city of Vantaa from establishing an identity as a city of its own within a larger whole. This point is especially significant as the identity formation, through the understanding of the spatial structure, affects goals, priorities, and actions that the city planning department wants to take with the master plan. Second, having a bottom-up and intra-urban approach to study the CR instead of a top-down and inter-urban approach might help with conceptualizing multicentricity from a different point of view.

In the next section, I describe the methods and data. Thereafter, a morphological approach to multicentricity will be taken through a population-based grid system, based on European Commission recommendations. I will then present the analyses on the spatial structure of Vantaa and discuss those analyses from the point of view of multicentricity. Finally, I will conclude with some remarks on the study.

#### **Methods and Data**

In this study, multicentricity in Vantaa is approached from a morphological point of view. Simply put, in this study, a morphological point of view is similar to that of Taubenböck et al. (2017) and refers to their description, “distribution of objects in a given area and centers are considered as substantial spatial densifications of these objects.” Functional interrelationships, which according to Vasanen (2012) are fundamental to multicentricity, and theories on spaces of flow are not included in this study.

The study consists of two main steps. First, a population-based grid system is used as an attempt to identify the centers and sub-centers within Vantaa. Second, spa-

tial clustering of various phenomena is introduced as a new layer onto the centers and sub-centers that are identified, in order to study the spatial characteristics of those centers and sub-centers.

In the first step, I used the 250 meters by 250 meters statistics grid prepared by Statistics Finland (hereinafter referred to as the YKR grid). This grid contains aggregated data about the population structure, number of employees, income and education levels of residents, occupational sectors of workplaces and other similar data. I converted this grid into a 1 kilometer by 1 kilometer grid, in order to comply with the European Commission's proposal for population-based definitions of urbanization, as explained in a regional working paper (Dijkstra & Poelman 2014). This provides a simple theoretical framework for identifying centers and sub-centers in accordance with European level methods, versus local methods.

According to this regional working paper (Dijkstra & Poelman 2014), I made some adjustments in the definitions and developed three types of grid cells so that they could be used to identify urban centers and sub-centers. Those three types of cells were as follows: high-density clusters grid cells (min. 1,500 inhabitants / 1 sq. km., hereinafter referred to as HDC), urban clusters grid cells (min. 300 inhabitants / 1 sq. km., hereinafter referred to as UC), and rural grid cells (grid cells which are neither HDC nor UC). Normally, the next step of working with these cells would be to classify the urbanization level (city center, suburban / town or rural) of local administrative units. However, in the specifics of this study, there was no need for further analysis using the grids, as it was not crucial to define the characteristic of each local administrative unit. Instead, centers and sub-centers beyond such boundaries are more significant. Therefore, HDCs and UCs were employed only to check the existence of centers and sub-centers, and if there are any, how they are distributed within Vantaa.

In the second step, I combined the occupational sectors in the YKR grid with the data from the Service Map of Helsinki (e.g.

locations of libraries, hospitals, cultural centers, theaters and citizen information centers) (Pääkaupunkiseudun palvelukartta 2017). As a result, I produced different heat maps presenting local concentrations of certain values, e.g. a heat map showing the density of all work places, knowledge-intensive businesses, manufacturing businesses, cafes / bars, municipal services such as libraries, citizen information centers, cultural centers and so on. The general idea behind these heat maps was to add more layers to the population-based HDCs and UCs so that the spatial clustering of generally acknowledged elements of urbanization, in morphological terms (e.g. existence of cafes), could be used to identify centers and sub-centers within Vantaa.

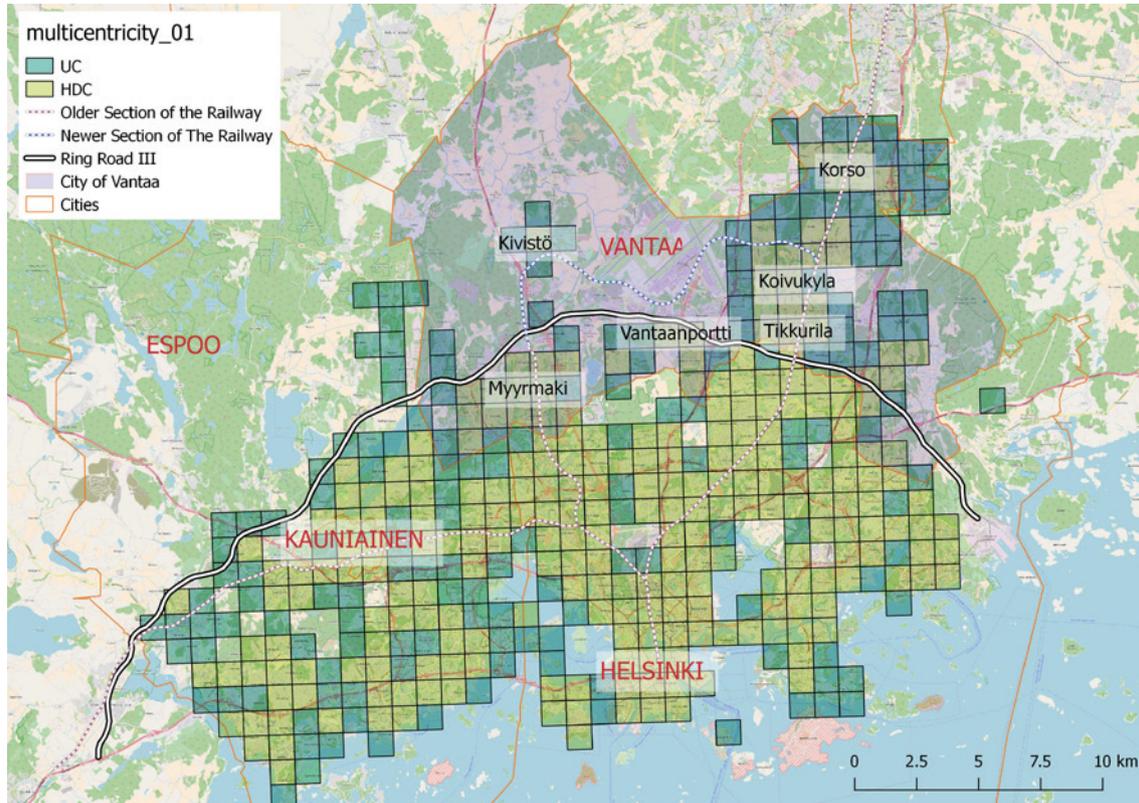
At the end, I placed the heat maps on top of the map from the first step showing HDCs and UCs, to check if there were clusters of specialized economic activities, or specific centers or sub-centers.

It should be noted that limitations of the dataset and the utilization of the dataset, heavily impact the interpretation of the spatial structure of Vantaa. Given a different dataset and methodology, the multicentricity of Vantaa and the Helsinki MR could be different from what is presented below. Similarly, the chosen scale, as well as the geographical scope of the study are also of great importance. As mentioned earlier, according to Vasanen (2012), a change of scale can also change the interpretation of an area as being monocentric or multicentric.

## **Results and Discussion**

The results suggest that within the CR, Helsinki still seems to be the dominant leading center, creating a circumference around its center, and reaching up to Ring Road III (Kehä III) (which surrounds Helsinki from Kartanonranta (in Kirkkonummi) in the west, to Vuosaari Harbour (in Helsinki) in the east) and creates an artificial border for the "urban" Helsinki (Figure 1). Whereas Espoo and Kauniainen follow a circumferential growth direction reaching up to Ring Road III; beyond this "boundary" Eastern Vantaa also grows alongside the railway lines.





**Figure 1.** Map showing urban clusters and high-density urban clusters in the capital region. HDCs: Cells with minimum 1,500 (1,500 included) inhabitants per 1 sq. km. UCs: Cells with minimum 300, maximum 1,500 (1,500 excluded) inhabitants per 1 sq. km. As seen in this image, the CR is quite dense radially starting from Helsinki, up to the Ring Road III and sub-centers are quite difficult to distinguish. Beyond the Ring Road III, train tracks are the decisive factor for the sub-centers in Vantaa and it is rather easier to distinguish 6 spatially connected sub-centers: Kivistö, Myyrmäki, Vantaanportti-Aviapolis, Korso, Koivukylä and Tikkurila.

The first part of the railway network going through Vantaa was built in the second half of the 19th century, connecting Helsinki with Hämeenlinna. As seen in Figure 1, this more-than-a-century-old connection created a linear and continuous growth along the railway, from Tikkurila to Korso within the boundaries of Vantaa. Such a result is not entirely a surprise, as increasing the accessibility level of a place within the region will increase its likelihood of becoming a preferred, and thus denser environment (Vasanen 2012). Similarly, as explained by Taubenböck et al. (2017), path dependencies created by transportation investments are dominant factors in the spatial configurations of urban regions.

The most important conclusion to be drawn from Figure 1 is that the leading center Helsinki is so dominant within the CR that emerging new sub-centers are still locating around it. Consequently, even though there are developing sub-centers such as Koivukylä (pop. 27,272), Korso (pop. 29,573), and Tikkurila (pop. 41,530) (Statistical yearbook... 2017) along the earlier section of the railway, Vantaa is still in the very early stages of multicentricity. These sub-centers are connected to each other through their connection to Helsinki, instead of their functional relationships with each other. This result can also be explained through the planning decisions made by the city of Helsinki, as well as the rather flexible characteristics of the regional land use plan. Even though the regional land use plan, drawn up by the Uusimaa Regional Council (Regional Land... 2014) (which is legally binding over the city-level master plans), presents certain regional nodes within Vantaa, the regional land use plan mostly functions as policy-level guidelines, and gives freedom to the city-level planning departments to decide their own concrete steps. Therefore, as seen in the master plan of Helsinki (Helsinki City... 2015), transportation investments are planned according to the “network city” plans of Helsinki, which will lead to establishing even stronger connections to Helsinki.

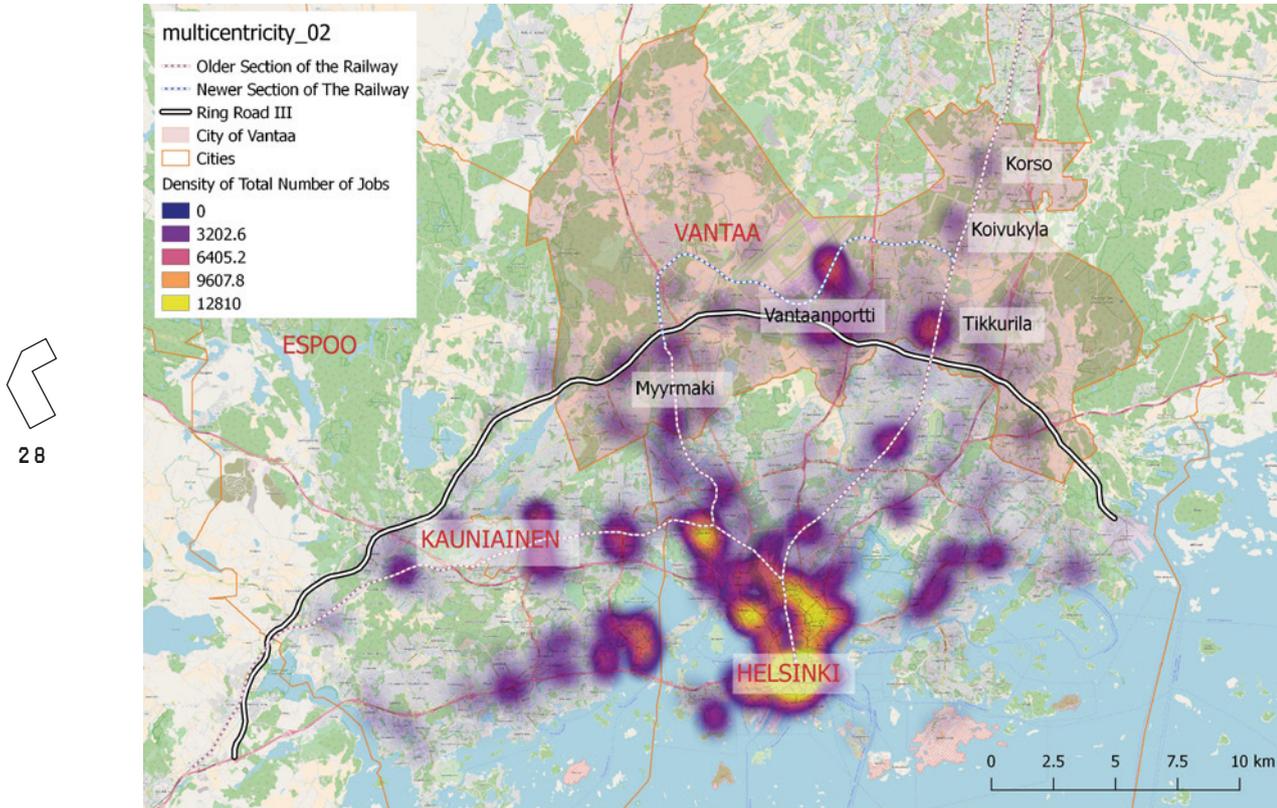
As can be seen in Figure 1, the most populated district (suuralue) of Vantaa is

Myyrmäki (pop. 53,902 [Statistical yearbook... 2017]) in the southwest. Myyrmäki seems to lead the way for a similar kind of development around the newer section of the railway as occurred in the aforementioned locations of Koivukylä, Korso and Tikkurila. Myyrmäki is one of the districts of Vantaa right on the Helsinki border, and the ring rail connection on this side was built quite recently. The latest part of the railway network enhancing the connectivity within Vantaa was completed in 2015 and it connects Myyrmäki to the earlier section of the ring rail from Tikkurila to Korso within the borders of Vantaa. Even though it is premature to jump to conclusions, the latest part of the ring rail is likely to generate new sub-centers along the rail tracks and densifications in between, similar to the one taking place along the Tikkurila-Korso section of the rail tracks.

However, as seen in Figure 1, Kivistö (pop. 10,074 [Statistical yearbook... 2017]), seems to be slightly different than the rest, even though it is also located alongside the newer part of the ring rail. Currently it is spatially disconnected from the other centers but is connected to both Tikkurila and Myyrmäki through the ring rail. Even though this seems to be a promising step towards a strong sub-center within a multicentric city, Kivistö seems predominantly to be a residential suburb, lacking a strong concentration of jobs and services. Also, similar comments made for Myyrmäki can also be made for Kivistö: densification along the ring rail will probably result in new sub-centers along the rail tracks.

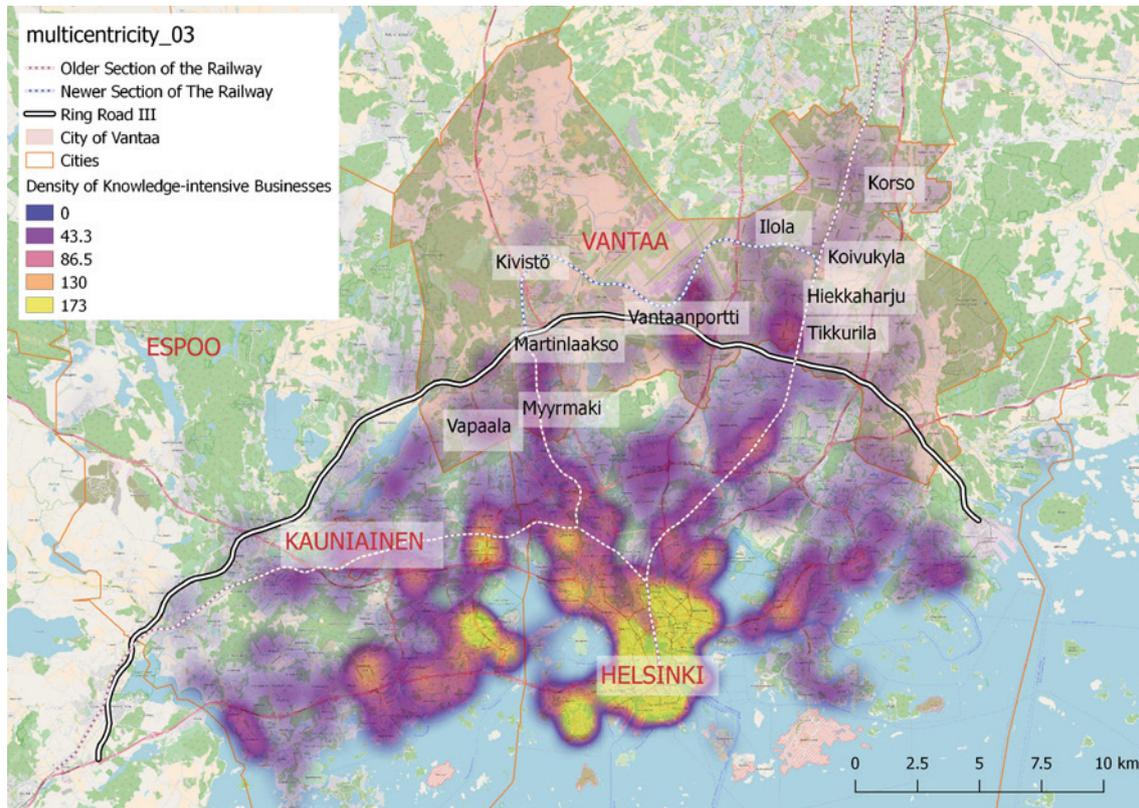
As seen in Figure 1, the only potential sub-center of a specialized occupational sector, that could support the larger multicentric region, is Vantaanportti (next to Ring Road III and reaching up to Aviapolis, next to the airport). Even though the main source of development in the area is the Jumbo shopping mall (the biggest shopping mall in Finland when it was opened in 1999), the current plans of the Vantaa City Planning Department include developing the area as an employment center specializing in airport-related services and jobs, as well as introducing new residential blocks favoring





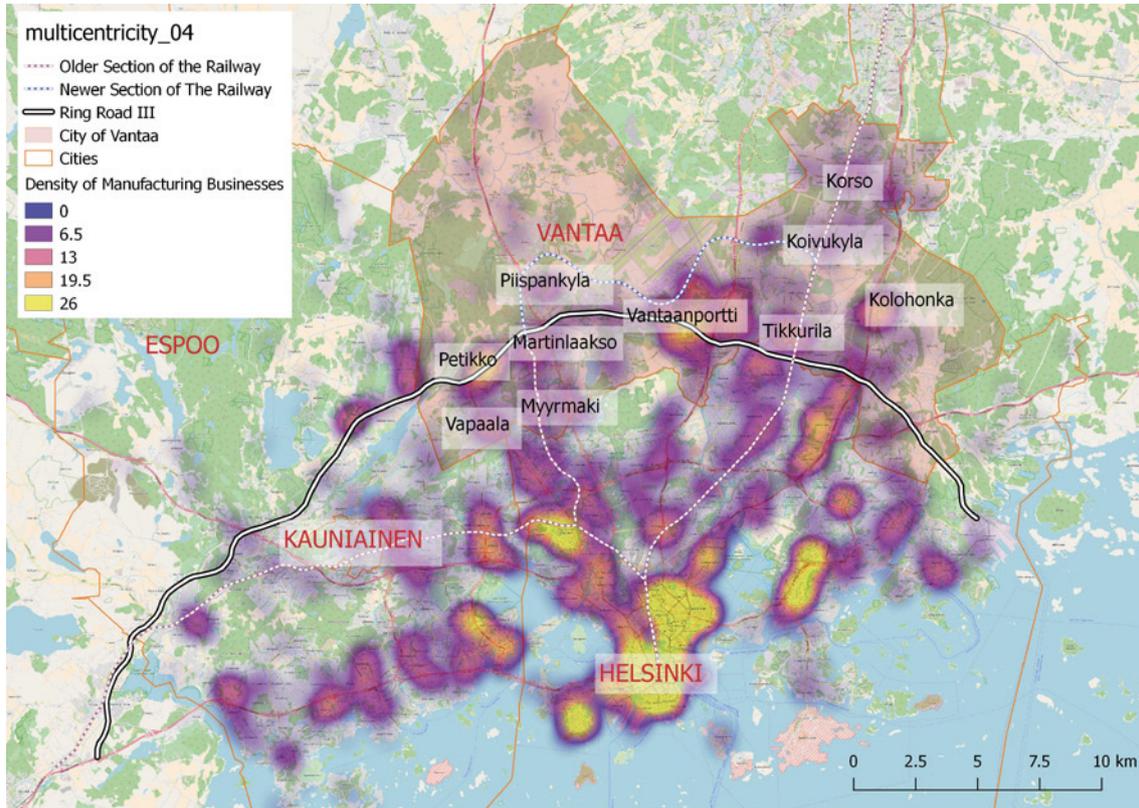
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*Figure 2.* Heatmap showing the density of workplaces in the whole capital region. As seen in the image, central Helsinki is the dominant workplace location within the CR. Tikkurila and Vantaanportti-Aviapolis are the leading sub-centers in Vantaa.

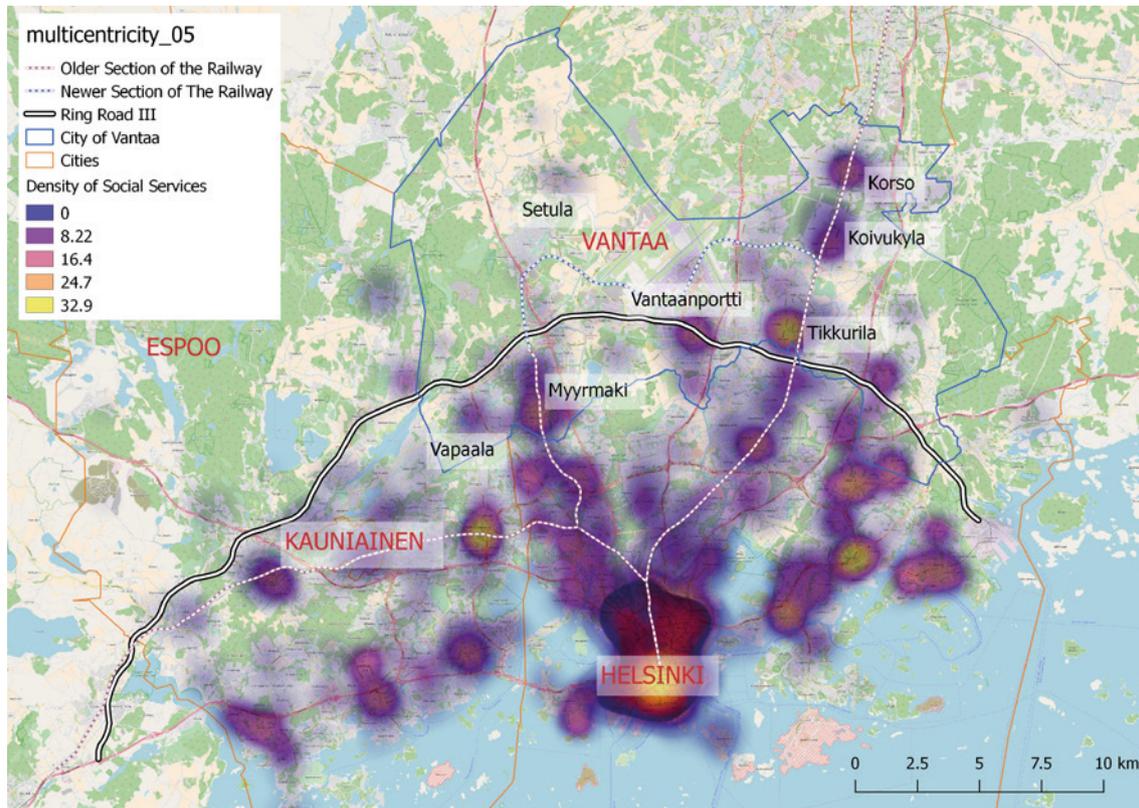


**Figure 3.** Heatmap showing the density of knowledge-intensive businesses in the whole capital region. Even though knowledge-intensive businesses spread around the CR, mainly within Ring Road III, central Helsinki is the uncontested center. Tikkurila, Vantaanportti-Aviapolis, Martinlaakso and Myyrmäki are the leading sub-centers in Vantaa.

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*Figure 4. Heatmap showing the density of manufacturing businesses in the whole capital region. Manufacturing businesses display a rather dispersed location choice. Even though the largest spatial cluster is still in central Helsinki, competitive centers are to be found in other locations, as well. Petikko, Kolohonka and Vantaanportti-Aviapolis are the leading centers in Vantaa.*



*Figure 5. Heatmap showing the density of social services clusters such as cafes, bar, cultural centers, libraries, citizen information centers, etc. in the whole capital region. Central Helsinki is the uncontested center when it comes to social services provision. In Vantaa, Tikkurila, Korso, Koivukylä, Vantaanportti-Aviapolis and Myyrmäki are the leading sub-centers which are not competitive with central Helsinki at all.*

a walkable, green neighborhood (Aviapolis Urban Blocks 2017).

When Figure 2 is analyzed, the general distribution of all sectors shows a compatible pattern to the population distribution shown in Figure 1. Especially when Figure 3 and Figure 4 are analyzed together, a clear pattern of decentralization is visible. As expected, knowledge-intensive sectors are located mainly in central Helsinki and have a spillover around the CR, but still within Ring Road III (Figure 3). On the other hand, also as expected, manufacturing businesses show a more homogenous distribution than knowledge-intensive businesses (Figure 4).

As shown in Figure 5, social services clusters also follow a similar finger-shaped distribution following the population distribution shown in Figure 1. Even though various services can be found outside Helsinki, the concentration still remains in Helsinki. This finding correlates with Evert Jan Meijers' (2008b) study which asserts that monocentric regions provide more cultural, leisure and sports amenities.

In regard to Vantaa, as clearly seen in Figure 6, Myyrmäki, Vantaanportti-Aviapolis, Tikkurila, Koivukylä, and Korso stand out with the highest concentrations of population, jobs, and services. These sub-centers can encourage ecologically sustainable ways of living as they are relatively denser and compact. On the other hand, they lack the necessary concentration of economic specialization that would increase the economic competitiveness within the CR, as well as high enough levels of population, job, and service density to be able to compete with central Helsinki.

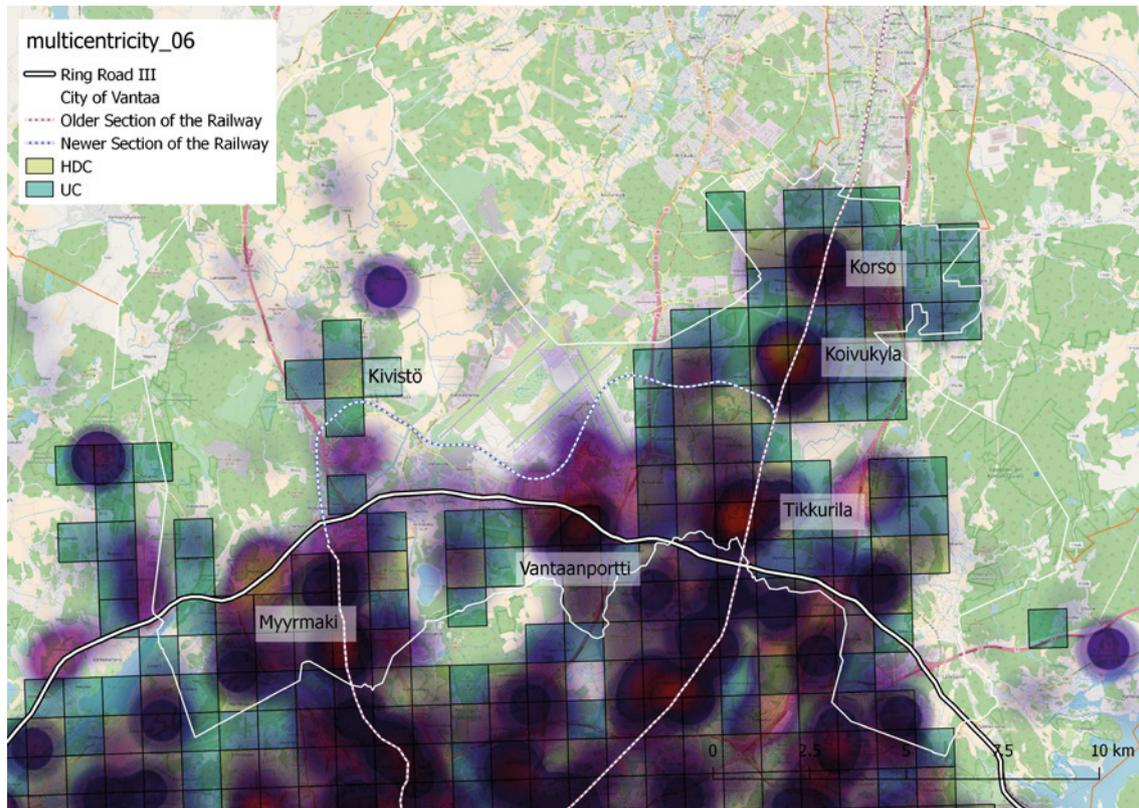
### **Conclusion**

As much as being an exciting and promising concept for European-level discussions of territorial cohesion, multicentricity is a very complex phenomenon. As mentioned earlier, one aspect of a city might imply a direction towards a multicentric development, whereas another aspect might suggest an expansion of the monocentric city (e.g. through infill developments in the emerging

transport-oriented sub-centers). What happens to Vantaa in connection to Helsinki is exactly as such: Vantaa is neither multicentric nor monocentric, which corroborates the findings of Vasanen (2012) on the whole Helsinki MR. Employment distribution implies a trend towards multicentricity, as various business sectors started to form their own spatial clusters within Vantaa. On the other hand, both the population distribution and the social services distribution are still quite monocentric, as the sub-centers emerge around the transit-corridors connecting Vantaa to Helsinki, rather than developing in connection to the clustering of varying businesses. Therefore, despite being morphologically neither monocentric nor multicentric, one thing that is certain is that Vantaa is changing along with the CR, under the heavy influence of Helsinki.

As Vantaa's role in the CR remains rather unclear, it affects the way the whole city and its districts define themselves. The multicentric metropolitan region does not entirely replace the local identities with an overarching regional one, but instead it expands them (Kloosterman & Musterd 2001). Therefore, showing both monocentric and multicentric characteristics, Vantaa does not have one but has several urban and suburban identities, which are also confused within themselves. Such confused identities might also confuse the City Planning Department of Vantaa, attempting to develop the city according to a set of strategic goals. As pointed out by Monica Brezzi and Paolo Veneri (2015), urban policy-making in a metropolitan region has many levels to be coordinated. One of those levels is the decision-making process within Vantaa. Another is the regional land use plan of the Uusimaa Regional Council, and in relation to this, the master plan of Helsinki. These various city-, intercity-, and regional-level forces put the city of Vantaa under constant pressure when it comes to preparing its own master plan and local detailed plans, as the absolute authority to prepare those plans still belongs to the city of Vantaa within the planning framework of the Finnish State. Without having an established city-level identity, it is a challenge for both plan-





*Figure 6.* Map showing the HDCs and UCs together with the workplaces and social services clustering in Vantaa. Korso, Koivukyla, Vantaanportti-Aviapolis, Tikkurila and Myyrmäki are the leading sub-centers in Vantaa. Kivistö seems to be quite homogenously residential.

ners and researchers to approach the city of Vantaa as a strong entity on its own and to devise a set of strategies that respond to those intercity- and regional-level forces accordingly.

## REFERENCES

- Adolphson, M. (2010). Kernel densities and mixed functionality in a multcentred urban region. *Environment and Planning B: Planning and Design* 37(3), 550-566. DOI:10.1068/b35061
- Albrechts, L. (1998). The Flemish diamond: Precious gem and virgin area. *European Planning Studies* 6(4), 411-424. DOI:10.1080/09654319808720471
- Aviapolis Urban Blocks. (2017.). City of Vantaa 12.12.2017. <[www.vantaa.fi/housing\\_and\\_environment/urban\\_planning\\_and\\_land\\_use/aviapolis\\_urban\\_blocks](http://www.vantaa.fi/housing_and_environment/urban_planning_and_land_use/aviapolis_urban_blocks)>
- Bailey, N., & Turok, I. (2001). Central Scotland as a Polycentric Urban Region: Useful Planning Concept or Chimera? *Urban Studies* 38(4), 697-715. DOI:10.1080/00420980123684
- Brezzi, M., & Veneri, P. (2015). Assessing Polycentric Urban Systems in the OECD. OECD Regional Development Working Papers. DOI:10.1787/5jz5mpdkmvr-en
- Budd, L. & Gottdiener, M. (2005). Key concepts in urban studies. Sage Publications, London.
- Burger, M. J., Knaap, B. V., & Wall, R. S. (2014). Polycentricity and the Multiplexity of Urban Networks. *European Planning Studies* 22(4), 816-840. DOI:10.1080/09654313.2013.771619
- Burgess, E. W. (1925/2008). The growth of the city: An introduction to a research project. In Marzluff J.M., Shulenberg, E., Endlicher, W., Alberti, M., Bradley, G., Ryan, C., Simon, U. & ZumBrunnen, C. (eds) *Urban Ecology*, 71-78. Springer, Boston.
- Dijkstra, L. & Hugo Poelman, H. (2014). A harmonised definition of cities and rural areas: the new degree of urbanisation. EU Directorate-General for Regional and Urban Policy, Regional Working Paper 2014. [http://ec.europa.eu/regional\\_policy/sources/docgener/work/2014\\_01\\_new\\_urban.pdf](http://ec.europa.eu/regional_policy/sources/docgener/work/2014_01_new_urban.pdf)
- Evans, A. W. (1985). *Urban economics: an introduction*. Basil Blackwell, Oxford.
- Hall, P. G. & Pain, K. (2006). *The polycentric metropolis: learning from mega-city regions in Europe*. Earthscan, London.
- Helsinki City Plan Draft (2015). Planning Department of City of Helsinki. [www.hel.fi/hel2/ksv/julkaisut/esitteet/esite\\_2015-1\\_en.pdf](http://www.hel.fi/hel2/ksv/julkaisut/esitteet/esite_2015-1_en.pdf)
- Helsinki Region Trends (2016). City of Helsinki. [https://www.hel.fi/hel2/tietokeskus/julkaisut/pdf/16\\_12\\_28\\_Trends\\_2016\\_Hiekkavuo\\_Hietaniemi.pdf](https://www.hel.fi/hel2/tietokeskus/julkaisut/pdf/16_12_28_Trends_2016_Hiekkavuo_Hietaniemi.pdf)
- Helsinki Region Website. (2016). City of Helsinki. 12.12.2017. <<https://www.helsinginseutu.fi/hs/selkosivut-fi/kaupungit/paakaupunkiseutu/>>
- Hoyt, H. (1964). Recent distortions of the classical models of urban structure. *Land Economics* 40(2), 199. DOI:10.2307/3144351
- Kloosterman, R. C. & Musterd, S. (2001). The polycentric urban region: Towards a research agenda. *Urban Studies* 38(4), 623-633. DOI:10.1080/00420980123921
- Kolbe, L. (2006). An Eastern or a Western capital city? The spirit of Helsinki. *International Review of Sociology* 16(2), 329-346. DOI:10.1080/03906700600708964
- Meijers, E. J., Romein, A. & Hoppenbrouwer, E. C. (2003). Planning polycentric urban regions in North West Europe: value, feasibility and design. DUP Science, Delft.
- Meijers, E. (2005). Polycentric urban regions and the quest for synergy: Is a network of cities more than the sum of the parts? *Urban Studies* 42(4), 765-781. DOI:10.1080/00420980500060384
- Meijers, E. J. (2008a). Measuring polycentricity and its promises. *European Planning Studies* 16(9), 1313-1323. DOI:10.1080/09654310802401805
- Meijers, E. (2008b). Summing small cities does not make a large city: Polycentric urban regions and the provision of cultural, leisure and sports amenities. *Urban Studies* 45(11), 2323-2342.



- DOI:10.1177/0042098008095870
- Paasi, A. (2003). Region and place: regional identity in question. *Progress in Human Geography* 27(4), 475-485.  
DOI:10.1191/0309132503ph439pr
- Parr, J. B. (1973). Growth poles, regional development, and central place theory. *Papers in Regional Science* 31(1), 173-212. DOI:10.1111/j.1435-5597.1973.tb00893.x
- Parr, J. (2004). The polycentric urban region: A closer inspection. *Regional Studies* 38(3), 231-240.  
DOI:10.1080/003434042000211114
- Pääkaupunkiseudun palvelukartta (2017). 1.12.2017. <<https://palvelukartta.hel.fi/>>
- Regional Land Use Plan (2017). Uusimaa Regional Council. 12.12.2017. <[https://www.uudenmaanliitto.fi/files/19646/Kaavayhdistelma\\_2014.png](https://www.uudenmaanliitto.fi/files/19646/Kaavayhdistelma_2014.png)>
- Riguelle, F., Thomas, I. & Verhetsel, A. (2007). Measuring urban polycentrism: a European case study and its implications. *Journal of Economic Geography* 7(2), 193-215. DOI: 10.1093/jeg/lbl025
- Statistical yearbook of Vantaa (2017). Vantaan kaupungin tietopalveluyksikkö. 12.12.2017. <<https://www.avoindata.fi/data/en/dataset/vantaan-kaupungin-tilastollinen-vuosikirja>>
- Taubenböck, H., Standfuß, I., Wurm, M., Krehl, A. & Siedentop, S. (2017). Measuring morphological polycentricity: A comparative analysis of urban mass concentrations using remote sensing data. *Computers, Environment and Urban Systems* 64, 42-56. DOI:10.1016/j.compenuurb-sys.2017.01.005
- Vasanen, A. (2012). Functional polycentricity: Examining metropolitan spatial structure through the connectivity of urban sub-centres. *Urban Studies* 49(16), 3627-3644. DOI:10.1177/0042098012447000



## Commentary:

### The next step

by *Kimmo Lapintie*

Having read Oya Duman's excellent analysis of the overall structure of Vantaa, I feel the temptation to start at the end. This is how it is written: "Without having an established city-level identity, it is a challenge for planners as well as researchers to approach the city of Vantaa as a strong entity on its own and devise a set of strategies to respond to those intercity- and regional-level forces accordingly."

This is a very logical conclusion from the theories of mono- and multicentricity referred to, as well as the analysis of the geographical data. Vantaa, although an administrative entity called a city (or *kaupunki* in Finnish, referring to *kauppa*, commerce) is not a city in the sense we understand cities, emotionally or historically. Its concentrations of people, businesses and services vary, but they do not follow the administrative borders. Rather they follow the old rail-line and Ring Road III, the backbones of accessibility. On the other hand, the City of Vantaa consists of sub-centers that have somewhat different identities. This is consistent with the perception of the planners of Vantaa: people do not so much consider themselves as residents of Vantaa but different parts of town, such as Myyrmäki, Tikkurila, and Korso. Outside these suburban centers, there is a lot of 'nothingness'. Thus, Vantaa cannot be understood by looking at its map, analysis at the level of (at least) the metropolitan area is necessary. And at that scale, the CBD of Helsinki still rules.

However, I can imagine that these results - illuminating as they may be - would be frustrating to the planners and policy makers. They hate to hear that the situation is "complex" - neither monocentric nor mul-

ti-centric - and what they have in front of them is a "challenge". What to do with it, then, they would ask. What is the next step?

Urban development is indeed complex, and its planning is a challenge. However, this is often where urban studies leave planners, in the middle of the baggage from history and state-of-the-art - the being and nothingness, paraphrasing Jean-Paul Sartre - and the mist of the future. Researchers can close their books and files and come back in ten or fifteen years to see how the situation has evolved. Planners can't do that: within the same period of time they have made their master plan, followed its implementation, and are busy preparing a new one.

In fact, maps are time-slices, particularly when they are based on reliable data and not just Utopian or subjective projections. But the city, as we know, is a dynamic system evolving in time, and its evolution is - indeed - complex. We can always compare our contemporary maps with historical maps and thereby get a glimpse of what is happening. This is speculative, however, since history is the result of several inputs, one of them being the planning itself and the political ideas within it. There is path-dependency, for sure, but history is no guarantee for the future, as the stock market would teach us.

Of course, history can be better understood if we read it as a story, a narrative. The story could tell us, for instance, that Vantaa is not a city because it was not originally a city but part of the countryside around Helsinki. It was even called *Helsingin maalaiskunta* (the rural municipality of Helsinki) until 1972, and it was only officially nominated as a city in 1974, when the great migration from the countryside was already on its way. The former rural municipalities around Helsinki understandably had difficulties in coping with the migration, both economically and politically. Sipoo was the only municipality that wanted to stay rural and almost 'closed' its borders, which later led to annexing the Western part of it (*Östersundom*) to Helsinki. Espoo and Vantaa, on the contrary, formed alliances with



the major developers, allowing them not only to build but also to plan the new suburban neighborhoods, where the growing population would be housed. In return, the developers were to provide the basic infrastructure to the neighborhoods. Quality was not a priority in those days.

Thus, it is no wonder that both Espoo and Vantaa did not develop into cities in the traditional sense, but rather were networks of smaller neighborhoods without a clear center. They became cities only administratively, following the growth of their population and their economy. They are not politically weak anymore, resisting effectively any suggestion to merge the four municipalities of the Helsinki Metropolitan Area (HMA) into one city. This can also be seen in the very different planning and political cultures of the cities, resulting in very different built environments.

This is the tale of the two cities, Helsinki and Vantaa, although it could also be told differently. But what about the future? Even if we could represent history as a series of time slices - as a space-time continuum - and tell a story to make sense of it, what should we do with the future? Should we turn to science fiction? Draw up alternative scenarios with more or less probable features and even black swans? This would require creativity (indeed, planners want to identify themselves as creative), but it would also be difficult from the planning point of view. A plan in the traditional sense is not a set of scenarios and stories but a blueprint of the future, a description of the city in its desired state. Unfortunately, however, plans can only prevent things from happening, not make them happen. Planning scholars have suggested that these blueprints should give way to more strategic tools, but this is not easy. Planning must follow the law, but it is also the major tool for politicians to decide what they want to have - an expression of political will.

The future is different from history in its openness. The implicit idea behind both planning and politics is that the future is

not determined, that we can do something to make it happen (or to prevent something from happening). But since the future is not yet here, it is essentially behind a veil of ignorance (paraphrasing John Rawls in his Theory of Justice, 1971). The picture of the future is necessarily blurred, but it can also contain surprises that will change everything. The future is made up of possibilities.

The word possibility, on the face of it, is easy to understand. However, as philosophers have been trying to make sense of it, it has turned out to be extremely complicated. What are the possibilities that are not actually here? Let me again try to explain with a story, originally published in my blog Possible Cities (<possiblecities.blogspot.fi>).

In Finland, we have this odd tradition of socializing by inviting people to have a sauna (together, naked), and then discussing and drinking beer after that. Once we were wrapping up one of our courses in a sauna owned by the student union of our university. In addition to our urban planning course of, I knew that the students had already taken a course on urban design (called "Urban Space"), so I asked them what they understood by urban space. Nobody even tried to define it.

I don't blame them. Students of architecture usually take space to be something that has a form, which can then be designed to have a different form. It is not material, since it seems to be between the material things like buildings. It may have some meanings, such as being intimate or pompous, in addition to its form. It is where people go, but the people are not needed to define the space in the first place. The students naturally suspected that I was playing a trick on them. Which I was.

As they did not respond, I tried to explain my own understanding of urban space. Since there was no blackboard in the sauna, I used what I had, an empty can of beer in front of me. I changed its position on the table and said that they were hardly surprised to see that it could also take this different place on the table. Which meant,



I suppose, that they already knew, before I moved it, that it could have taken this new position, although they had no idea that it would be moved, or where I was going to move it. So, in perceiving the can of beer, they had not only perceived a physical object in the place where it happened to be, but also the many possible places that it could occupy.

I don't know whether any of the students understood what I was talking about. My assistant lecturer certainly did not, since he suggested that I should make a video clip of where the can was moving back and forth, like commuting cars between housing and workplaces. This was, of course, a total misunderstanding of the idea. It was not the actual movement that mattered, but the possibility of movement, the access-ability. And if you have a power to move, you also have a power not to move. Even cans can have that sort of power.

This may sound self-evident, but it is not. Philosophers know that I am talking about the difference between actuality and possibility that goes back to Aristotle and through the scholastics to the modern philosophy of possible worlds. I am not going to discuss that, however. What I am trying to do is to show the way from the can of beer to urban studies and planning.

The city could be thought of as a big material object. Architects could think of it like a big building, with streets resembling corridors, central parks the atrium, and squares the rooms. No big difference, just the scale. But in both cases, we need to take into account the movement of people. The things are not fixed, they are changing all the time in space, so that we are speaking of a spatio-temporal reality. Like the flowing water, people move through corridors or streets and take places in rooms and squares. This is still easy, since we may observe what they are doing, at a certain moment, or during a certain period of time. Being and moving is real, because it can be observed. *Esse est percipi*, as George Berkeley would say.

But what if we include in our world the

realm of the possible? This is something that you cannot observe. You could see the can in its original position, and then again in its new position. But you cannot see the many possible positions on the table that it has. Does it mean that you can only see the fixed can and its movement, and you have to imagine the other possible positions? Hardly, since you can always imagine the can floating in the air, but this is not one of its physical possibilities. No help from psychology here.

But what if we think of cities as realities that include not only things (the buildings, the trees, the pavement, the cars) and their recorded movement, but also their possibilities? Instead of the cars commuting back and forth, we would have the drivers considering whether to take the car or the bus, or where they should be heading and which road to take. The driver would have a set of different options to choose from. If we make it very unpleasant or expensive to take the car, he or she will not take it. The driver is not stupid. Unless of course if you forget the driver and see the flow of traffic as a natural force, like rivers. Then you will end up building more roads and lanes, in order to avoid congestion. But as we know, they will again be filled with cars. Why? Because more drivers will consider it a good idea to take the car.

Again, this may sound like a simple thing, but it is not. Urban researchers want to study the empirical reality (because at least that is real, not speculation), by observing the mobility of people and cars, and asking about their preferences through surveys. But there is no way of observing what they could have done, or what they should have done. In time, the scholars will develop theories of how cities develop, what kind of patterns they exemplify, and how the housing market leads some districts to prosper and others to decline, for instance.

For planners and designers, the reality consisting of possibilities instead of actualities seems much more natural. The basic assumption behind every act of planning and



design is that the future is not determined; why else should we plan for it, and not just expect it to happen? So, there must be a belief in possibilities other than the ones that we see before our eyes, and where things seem to be going.

The thing is that not everything that is possible is easily seen. My students could easily figure out where on the table the beer could be. But those developing our cities cannot see so easily what the cities could be. The realm of possibilities is infinite, even if we respect the physical (or economic, or ecological, or political, or social) context. The future of cities, the possible cities, cannot be seen. They have to be made visible. They have to be designed.

#### REFERENCES

Rawls, J. (1971). *Theory of Justice*. Belknap Press, Cambridge.

