

New forms of multi-local working: Identifying multi-locality in planning as well as public and private organisations' strategies in the Helsinki region

Mina Di Marino (*corresponding author*)
Arch., Ph.D. in Urban Regional and Environmental Planning
Associate Professor
Department of Urban and Regional Planning
Norwegian University of Life Sciences
Faculty of Landscape and Society
As, Norway, NO 1432
mina.di.marino@nmbu.no

Johanna Lilius,
MSc in planning geography
PhD in land use planning and Urban Studies
Post-doctoral researcher
Department of Architecture
Aalto University School of Arts, Design and Architecture
Miestentie 3, P.O. Box 16500, FI-00076 AALTO
Tel +358 50 361 0694
Johanna.lilius@aalto.fi

Kimmo Lapintie
Arch., PhD in Architecture
Professor of Urban and Regional Planning
Department of Architecture
Aalto University School of Arts, Design and Architecture
Miestentie 3, P.O. Box 16500, FI-00076 AALTO
+358 50 5842710

Abstract

Over the last decades, there has been a significant development towards new forms of multi-locality, particularly for job-related reasons. In addition to offices, many can work in multiple places (such as the home, co-working spaces, coffee shops, and public libraries). In addition to workers in start-ups and small entrepreneurs, who are traditionally known to be more mobile, white-collar workers employed by organisations are increasingly becoming multi-local. However, little is known about the ways in which multi-locality is addressed within the urban regions. This phenomenon has been studied at XXX and XXX University within the XXX research project by analysing recent policy and planning documents, as well as organisations' strategies within the Helsinki region. In addition to a literature review, a qualitative analysis of planning documents was conducted as well as semi-structured interviews with five organisations (both private and public) in Finland employing mobile white-collar workers. The findings reveal that while policy makers and city planners have not yet addressed the complexity of multi-locality, both private and public organisations are focusing on more concrete multi-local strategies and working practices. More dialogue is needed amongst policy makers, city planners and organisations to address multi-locality at different levels of analysis and planning.

Introduction

Multi-locality has mostly been studied in the fields of geography, cultural and social studies, whereas it is a fairly new topic within spatial planning. Thus far, scholars have mainly focused on multi-local housing and related socio-spatial implications, although multi-locality also refers to workplaces (Koroma et al., 2014) as well as leisure and free time (McIntyre, 2009). Rolshoven (2008) stated that "multi-locality provides a space that makes new beginnings possible, and new opportunities to withdraw or participate in different milieus" (p.19).

For planners, multi-locality presents both challenges and opportunities to re-think the role of localities in urban regions. Traditional approaches which plan pre-defined areas as separate projects for the residents, workplaces, and services, do not recognise the network of both permanent and temporary locations chosen by people for working. Since multi-locality can be an alternative to commuting and also allows the provision of less space at the main office, it can have positive effects on urban sustainability. In contrast, the multi-functionality of temporary

workplaces can become an incentive to create places which are flexible and attractive to mobile workers. They can be public spatial services, such as public libraries (Di Marino and Lapintie, 2015), or semi-public, such as coffee shops. The availability of these places for different purposes adds to the vitality of urban spaces, supporting the ambitions of urban design.

Human activities have often included travelling between different locations in order to best satisfy everyday needs (Weichhart, 2013). One of the reasons this arises is because not all geographical locations are able to provide a similar set of satisfying goods and services, thus encouraging inhabitants to use multiple places instead of their home and workplace; they are engaged in so-called parallel consumption (Heinonen *et al.*, 2013).

Within this context, the residential mobility and daily-to-weekly mobility (travelling within and between cities) for purposes of work is gradually characterising our contemporary society (Hanson, 2005). In addition to this, the ways of working have become more flexible, thus increasingly developing diverse working time patterns (Eurofound, 2016). As an example of this, workplaces are undergoing intensive organisational change in both private and public sectors (Eurofound, 2014). In addition, both the development of the Internet and advance of virtual and mobile digital services are radically transforming the ways of living and working. Therefore, multi-locality can be interpreted as a way of life (Kaufmann, 2005) in which daily experiences, including both work and leisure, transpire in diverse physical and virtual locations.

This paper focuses on the multi-locality of working, particularly on private and public organisations employing white-collar workers. In addition to several forms of multi-local workers (such as migrant workers, freelancers and small entrepreneurs), an emerging category of multi-local workers are office workers employed by small, medium and large organisations (Di Marino and Lapintie, 2017). In addition to the new types of employment contracts (e.g. more flexible), white-collar workers are able to adopt new working practices. Organisations have provided new spatial layouts within the offices, for instance, non-assigned desks and floor plans instead of traditional cubicles. The advancement of ICTs and growth of alternative workplaces around the city (e.g. rented co-working spaces, libraries, coffee shops, public transportation, and hotel lobbies) allows these workers to work in multiple places. In addition to this, some organisations have also created new co-working spaces for their employees.

The reasons for being multi-local differ, such as the need to change the working environment in search of more concentration or inspiration, the proximity to clients' premises, or home-work logistics (Di Marino and Lapintie, 2017). Furthermore, the ways of choosing multiple places to work can be really varied: multi-local workers might have a routine (when using an established network of urban spaces for working purposes) or they might frequently move to new places. In addition to this, the ways of reaching the workplaces can be different, for instance, by commuting from the first or second home, or by booking temporary accommodation (such as hotels).

From the urban planning perspective, this calls for a new understanding of the effects of multi-locality within the built environment and multi-functionality of urban spaces. Multi-functional districts and urban spaces can be increasingly found in our cities (Louw and Bruisma, 2006). However, this seems to characterize the most central areas or former industrial and commercial districts which have been converted into multi-functional and multi-level buildings (Hoppenbrouwer and Erik, 2007); while several suburban areas are still mono-functional districts (Di Marino and Lapintie, 2017; Batty et al., 2004). This is also the case in the Helsinki region. Multi-functional spaces and buildings, such as the new central library (Oodi) and Library 10 in the city centre of Helsinki have challenged the traditional concept of public libraries by renewing spaces and by providing new public services. The Oodi Library has been conceived as a multi-functional and multi-level building which will host commercial, cultural and recreational activities, as well as spaces for working.

In addition to this, places that have been traditionally used for leisure time, such as summer cottages, have also become new temporary (or more stable) workplaces, which has extended the network of workplaces to several urban regions and even countries. The social and environmental qualities are becoming central determinants of the workplaces as well as the services around. Therefore, regional and urban planners, as well as policy makers should recognise multi-local working and its impacts on urban sustainability and the quality of the built environment. Traditional issues, such as commuting distances, service provision, functionality and place-making have to be re-thought in light of this networked use of urban and regional locations.

An understanding of multi-locality can also help to understand the innovation capacity of cities with respect to both spatial transformation and digitalization of urban spaces (Castells, 2012). Some of the effects are already visible in many cities, such as the reducing square metres of office buildings and re-using industrial commercial districts for multi-functional activities, as well as digitalizing libraries, and other public spaces that have been transformed into new spatial and technological incubators (Foth et al., 2016; Di Marino and Lapintie, 2015). In addition to this, when re-thinking urban spaces, urban planners and designers should be aware of the multi-local people who seek, shape and create places for their own purposes, despite the furniture and equipment provided often being designed with specific functions in mind (Di Marino and Lapintie, 2017).

Thus, the aim of this paper is twofold: to analyse if and how planning currently addresses the issue of multi-locality, and to analyse the possible ways in which larger public and private organisations employing mobile white-collar workers have included multi-locality in their strategies. Thus, the study presents a literature review first focusing on multi-local living and working, and then on multi-functionality in non-traditional workplaces, as well as related impacts on the re-organisation of work and the built environment. The Helsinki urban region, Finland, is then used as a case to study empirically the ways in which mono and multifunctionality are constructed in planning documents as well as private and public organisations' strategies. All these aspects have been investigated through selected policy and planning documents produced by the Helsinki Regional authorities and the City of Helsinki, as well as by conducting five interviews with the managers of some of the major Finnish private organisations (Microsoft, Telia and ISS) and public ones (SYKE and Senaatti Properties) employing mobile white-collar workers. The discussion highlights the relevance of the topic amongst planning scholars and practitioners as well as the need for collaboration with private and public organisations when developing new approaches to urban development.

Multi-local living and working

Although multi-locality has gained increasing academic interest during the past decade (Hiltunen & Rehunen, 2014; Rinne *et al.*, 2014; Paris, 2009; Perkins & Thorns, 2006), the research has remained restricted within specific disciplinary traditions. Multi-locality has been

chiefly studied from the perspective of sociology, anthropology, geography, and organisational studies, and only more recently from the perspective of urban and regional planning. Multi-locality is often identified through dichotomised research settings, such as "urban versus rural", "city home versus leisure-time home", and more lately through "unknown places versus familiar places" (Nadler, 2016).

"Multi-locality means *vita activa* at several places" (Rolshoven 2006, p. 181). With the implicit reference to Arendt (1992), Rolshoven (2006) specified that the 'active life' is designated as *conditio humana*. A multi-local conduct of everyday life which aims to gain access to the employment system is one of the main efforts of human adaptation (Weiske *et al.*, 2015.). However, as Weiske *et al.* (2015) asserts, the practice of multi-local living arrangements involve spatial population movements without residential relocations, meaning that the number of residences increases, although not the number of households. The everyday lives of some household members extend over several places where they alternately live and work.

Scholars have also tried to define multi-local people. In addition to migrants, nomads and tourists, multi-localists can be "the contemporaries who are mobile for economic or private reasons" (Rolshoven, 2008, p. 19). The multi-localists benefit from both physical and virtual spaces and time 'in-between' while commuting to living, working and recreational places (Hilti, 2009). Accordingly, multi-locality might be described as a spatio-temporal strategy of households and workers in which both home and workplace are no longer single locations (Nadler, 2016). Multi-locality can be an alternative to daily or weekly commuting and migration. Nonetheless, compared to the past, in addition to home and office, the multi-local worker seems to move within a wider network of urban spaces (e.g. home, office, car or public transportation, coffee shops, libraries and co-working spaces).

Within this context, it is still difficult to identify a major motive behind being multi-local (e.g. job-related or educational reasons, recreational forms, or family arrangements when couples are separated) (Dittrich-Wesbuer *et al.*, 2015). Referring to job-related reasons, Reuschke (2015) argued that people can perceive their job-related secondary residences as mere physical units in the sense of having a roof over their head, but as non-places in terms of a locus of activities and social relations, a place of identity, well-being or intimacy.

However, there are still inadequate data on job-related second homes and those accessing their workplaces from their secondary residences (Reuschke, 2015). This happens for several reasons: data about multi-local everyday life have not been yet collected, and surveys remain traditional and limited to regional and national statistics (Dittrich-Wesbuer *et al.*, 2015). Moreover, households cannot be identified by one residence. Already debated in the 1960s, the spatial container (also called abstract space) is not compatible with multi-local everyday life (Weichart 2015; Weiske et al., 2015) or modern life in general. Territorial units, which are still used for registering people, are no longer sufficient to characterize the everyday life of citizens (Dittrich-Wesbuer et al., 2015; Weichart, 2015). Therefore, scholars and some politicians have suggested revising the geographical taxation system in order to better fit a population that are increasingly mobile, allowing people to consume a wider range of public services out of a formal place of domicile (Knudsen, 2017). As Weichart (2015) stated, despite the distinction between primary and secondary home (i.e. payment of taxes and political citizenship in only the primary residence), selecting a place to live depends on individual choice. This is based on a wide range of feasible reasons that are still difficult to track.

In recent studies, various forms of work have been associated with nomadicity and itinerant work, as well as digital immigrants and natives (Czarniawska, 2014). Technology-enabled nomadic practices are proliferating around the world and becoming more common (Humphry, 2014). To date, mobile technologies and mobile organisations have facilitated the mobile work itself. Within the growing nomadicity, there is still a need to understand these ways to account for changes of work in terms of space and time (Humphry, 2014). In addition to managers and sale persons, today the concept of nomadic workers is extended to other categories of workers (e.g. writers, designers, academics, programmers) who are increasingly working in multiple places (Liegl, 2014). In this context, however, there are flexible working practices that are not strictly nomadic, but allow people to achieve work tasks in multiple locations (Ciolfi and Pinatti de Carvalho, 2014).

Multi-functionality and re-organisation of work

In addition to socialising and conversing, the functions of some third places are evolving into new forms of working and co-working (Houghton et al., 2018). Originally, the concept of third

places referred to public or semi-public places on neutral ground where people can gather and interact (Oldenburg, 2001). These places were not initially associated with a workplace or home. Currently, coffee shops, public libraries, squares and parks, as well as public transportation and hotel lobbies, have been increasingly used as spaces for work, although they are not originally designed for working purposes (Di Marino and Lapintie, 2017; Foth *et al.* 2016, Bilandzic & Foth, 2013). For instance, coffee shops were identified as temporary incubators by Forlano (2008) who observed people at work. Compared to the past, these places have become more multi-functional and are often considered to be non-traditional workplaces.

The true mobile place makers originally described by Hampton and his co-authors (2008 and 2010) increasingly work in urban settings, such as squares and parks. These urban spaces are seen as places for social engagement and interactions, both online and offline, but also as places for individual and collaborative work (see Dundas Square in Toronto). The Bryant Park in New York also provides flexible furniture, such as moveable tables and chairs for students and mobile workers (Hampton et al., 2010; Forlano, 2008).

Forlano et al. (2011) as well as Townsend and his co-authors (2011) also focused on collaborative work in parks and other public spaces within the so-called 'Break out' project. Results from the study showed that *ad hoc collaboration* is increasingly occurring amongst mobile workers and within alternative workspaces equipped with mobile furniture (e.g. Wi-Fi and online platforms). The study was conducted in the dense urban settings of New York. From the spatial planning perspective, the findings suggested that the street level of several buildings around the districts studied should provide more places for temporary collaborative work (Townsend et al., 2011). In addition to this, there are still environmental and infrastructural challenges to face when working in alternative urban spaces, such as noise, work outside on the laptop in the sun, Internet connection, and spaces for sitting down (Forlano et al., 2011).

Furthermore, there is a proliferation of paid and free co-working spaces that can be provided by both private and public organisations. There are several reasons for using a co-working space. In addition to supporting a precariat workforce (Brown, 2017), co-working is currently seen as a way to shift beyond the traditional offices by developing extra productivity in government employees in the case of co-working spaces being closer than offices to home, and by encouraging more interactions between employees (Houghton et al., 2018). Lately,

particular attention has been given to the socio-spatial and technological features of the co-working spaces themselves and public libraries, as well as the ways in which the design of the space can support the co-production of knowledge and mutual learning (Foth et al., 2016; Bilandzic & Foth, 2013). People can also develop their own hybrid personal learning environments in libraries, museums and within a range of physical and online spaces, technologies and community groups. For instance, these new forms of learning can influence places, such as universities, when re-thinking the physical spaces of classrooms (Caldwell et al., 2012).

Hence, this calls for an understanding of new multi-functionality in our cities. In architecture and planning, the functionalistic division of urban spaces into the basic functions of housing, work, leisure, and mobility has been criticized since the 1980s, but it still dominates land-use planning ethos, for example, through the functional division of land-use. Therefore, planning still has difficulties in dealing with this dynamic multi-functionality of spaces and places, which cannot simply mean non-planning or increased flexibility in land-use control.

In this sense, we still need to collect data to clearly picture the transformation undergone by cities. Several private and public organisations are developing new policies through tangible resources (e.g. the geographical location and built environment of the organisations) and intangible ones, such as knowledge capital, skills, and networks of information and actors (Laasonen & Kolehmainen, 2017). These strategies are increasingly reshaping both multi-local working practices and arrangements affecting the employees' work-life and the built-environment. In the current working climate, employees are often online and may find that the use of ICT interferes with their leisure time (Barley et al., 2011). Employees may benefit from the use of ICT when simultaneously coordinating their everyday work-life and family duties by working in multiple places (Par & Jex, 2011). However, within organisational strategies, there has recently been a broader re-thinking of remote work. While in the 90s, working remotely was considered strategic and innovative from the organisational perspective, several organisations, including Yahoo and IBM, have begun re-thinking physical presence at work and the importance of the work community for innovation. The new trend consists of calling employees back to the office and working "shoulder to shoulder" (Kessler, 2017; Beekmann, 2011).

In this context, multifunctional urban functions, local infrastructures and public services need to be reconsidered by the planners when investigating multi-locality (Huning et al., 2012). The ways to allocate workplaces are based on several parameters, such as commuting distances, knowledge workers' distribution, central location of business areas and accessibility via public transport (Säynäjoki *et al.*, 2014; Hermelin & Trygg, 2012). These criteria are valid for both organisations and planners. However, organisations also consider additional factors, such as the availability of the workforce, suitability and prices of business premises, as well as the reputation of the urban district itself. An extended catchment area for skilled workforce through remote work can broaden the choice of location.

The case study of the Helsinki Region

The study focuses on the Helsinki Uusimaa region and the Finnish capital city, Helsinki. In order to promote a common understanding, the study named the Helsinki Uusimaa region 'Helsinki Region'. The Helsinki Region consists of 26 municipalities and has a population of 1.6 million (29 % of Finland) as well as 820,000 jobs. The share of the total Finnish labour force is about 31 %. The main fields of business are wholesale and retail trade, information and communication, industry, administration as well as professional, scientific and technical activities (Helsinki Uusimaa Region, 2014).

The reasons for selecting this Region and the City of Helsinki is the growing interest between policy makers, practitioners and academics to understand the kinds of factors which should be considered when investigating the re-organisation of work (Helsinki Uusimaa Region, 2014). The Regional Land-use Plan (Helsinki Uusimaa Region, 2016) has also identified reserves for urban and workplace areas which influence the master planning strategies of several municipalities, such as the City of Helsinki. Regional development has been based on several objectives, such as improving logistic connections, maximizing effective and flexible use of land, as well as cost-effectiveness, improving opportunities for employee recruitment, and the proximity of workplaces to transport nodes and corridors, which might be outside the city centres.

Furthermore, the Finnish government, City of Helsinki, and academics are also notably promoting several studies on multi-locality. Nonetheless, multi-locality has been investigated focusing mainly on the second home from the leisure-time perspective (see e.g. the ASU-LIVE, funded in 2014 by the Finnish Academy), rather than investigating urban environments and the diversifying nature of working-life styles.

Research materials and methods

The qualitative content analysis focused on the policy and planning documents of the Helsinki Region and City of Helsinki, and five semi-structured interviews with the managers of some of the major private and public organisations in Finland that employ mobile white collar workers. The aim is to examine the differences and similarities between the planning and organisations' strategies when addressing the issue of multi-local working. There are three selected categories of analysis: the re-organisation of work (in order to explore the ways the re-organisation of work impacts multi-locality); multi-local working practices and arrangements (including non-traditional workplaces and second-home or alternative accommodations for job-related reasons); and mono and multi-functional urban structure and urban spaces. These categories were considered relevant themes to explore further based on the findings from the literature review presented in this study. For the qualitative content analysis, we have employed a selected number of planning and policy documents providing long-term strategies for urban development (to live and work).

- 1) The Helsinki-Uusimaa Regional Programme "Vision and Strategy 2040, Strategic Priorities 2014–2017" (Helsinki Uusimaa Regional Council, 2014). This programme has been drawn up as a co-operation between the Uusimaa Regional Council and the regional Centre for Economic Development, Transport and Environment (ELY-keskus). The document aims to depict a sustainable growth, considering opportunities for economic growth, practical everyday life and sustainable ecology. The strategic vision has helped to define the objectives of the regional land-use plan.
- 2) The Local Master Plan for Helsinki (Helsingin yleiskaava). The City Plan – The New Local Master Plan for Helsinki. Vision 2050. (City of Helsinki, 2013). Vision 2050 highlights the strategic goals of the city plan. Based on values, predictions and strategic guidelines,

Vision 2050 provides an overall understanding of the themes and directions pursued by the City of Helsinki.

- 3) The Local Master Plan for Helsinki (Helsingin yleiskaava). Report. The City Plan – The New Local Master Plan for Helsinki (City of Helsinki, 2016). The City Plan is a strategic land-use plan used to guide the development of Helsinki's city structure. The City Plan sets out Helsinki's path for growing into a city of some 860,000 inhabitants by 2050.

The semi-structured interviews (N=5) were conducted with the managers of five medium- and large-sized organisations employing several mobile white-collar workers. The study has extracted five organisations from both public and private sectors as examples, due to both sectors increasingly challenging the traditional ways of work (e.g. the possibility of being both virtually and physically at work as well as the concept of workplace).

The Finnish Environment Institute (SYKE) and Senaatti Properties are public organisations, whereas Telia, Microsoft and ISS Services are part of the private sector. SYKE is a public research and expert institute conducting several studies on the Finnish environment and related trends. Senaatti Properties manages and develops Finnish government property assets, while ISS Services is one of the largest Finnish private organisations and a leader to other organisations on managing company properties and office services (e.g. real estate maintenance and security services). In addition to ISS, the multinational organisations are represented by Telia and Microsoft. Whereas Telia is the largest mobile operator in the Nordic and Baltic area providing landline telephone and Internet services, Microsoft is a technology company specialised in several areas, such as software products, personal computers, licenses and services. The five organisations have several premises around Finland in addition to the metropolitan area (e.g. Oulu, Turku, Tampere and Jyväskylä), while some of them are also operating internationally (Microsoft and Telia). The main premises around the Helsinki region are located in the vibrant districts of Helsinki, such as Kallio (Telia), Töölö (SYKE), as well as Keilaranta in the municipality of Espoo, (Microsoft) (Fig. 1).

The reasons for selecting these five organisations is their challenging of the traditional ways of working, thus indicating their awareness of the various aspects of re-organisation of work. These organisations experiment with new working arrangements for their own employees as well as create new concepts of workplaces. Additionally, ISS, Microsoft, Telia and Senaatti have

recently changed location, and SYKE will be imminently moving to a new place at the time of writing. Therefore, the organisations are interested in ensuing new habits for their employees already caused or might be caused by the change of location (such as commuting longer distances, working more remotely, renting a second home, or booking a temporary accommodation for job-related reasons).

The semi-structured interviews dealt with several topics, such as the type of work contract for employees, the current and future location of the organisations, and the evolving concept of the workplace. In addition, the managers were asked to share their awareness, and by which means it was acquired, of their employees' need to rent a second home for job-related reasons. The interviewees were also questioned whether their organisations have been involved in the decision-making processes within the regional and city planning strategies.

Data collection and analysis

The qualitative content analysis was based on a textual analysis of policy and planning documents and managers' interviews. Based on the three selected categories of re-organisation of work, multi-local working practices and arrangements, as well as multi-functionality, we analysed the contents coding the statements in texts (see Table 1). The aim was to understand similarities and differences between planning and organisations' strategies.

Table 1. Differences and similarities in the approaches to multi-local working, mono-multi-functionality, and re-organisation of work. Selected content analysis of the planning documents (The Helsinki-Uusimaa Regional Programme Vision and strategy 2040, strategic Priorities 2014–2017) and semi-structured interview with the Director of Government Affairs | Microsoft Finland and Ireland)

Category	Code	Excerpts from the policy and planning documents and interviews	Preliminary argumentations
MONO-FUNCTIONALITY	MofP1	<p>Easy to reach and live and work in – emphasis on effortless transport, working and functioning, and an agreeable living environment. (Helsinki Uusimaa Council, 2014, p. 10)</p> <p>“A better integration of urban structure also positively impacts the provision of housing, services and other everyday functions as well as environmental sustainability. Its most important dimensions are work and livelihood, smooth transport, good housing and living environments, and active participation in the immediate surroundings and society at large.” (Helsinki Uusimaa Council, 2014, p. 11)</p>	In order to achieve the better integration of the urban structure, huge emphasis is given to the smooth transport that are supposed to guarantee people’s lives within a sustainable environment. However, this is still related to the mono-functional division of the land-use.
MULTI-FUNCTIONALITY	MufP1	<p>“In the future, island living could be an ecological and natural way of life that combines housing and work by utilising the latest communication and environmental technology.” (Helsinki Uusimaa Council, 2014, p. 22)</p>	The main idea is that communication and technology can help the combination of working and living functions. The concept of island living is addressing the integration of living and working
MULTI-FUNCTIONALITY	MufP2	<p>“A mixed urban structure creates the preconditions for shorter distances to work” (p. 126). “In the expanding inner city, excellent and diverse traffic connections will serve people even better with the travel destinations in the densifying urban structure often being less far apart” (p.52) (City of Helsinki 2016)</p>	These statements provide a multi-functional vision of the City of Helsinki, however, since the metropolitan area is a common job- and housing market, and there is no guarantee that people living along the boulevards would also work there, or want to work there if they have a choice (which is essentially what multi-locality is).
RE-ORGANIZATON OF WORK	ReowO1	<p>“In the last 2 years, we have been located mainly in Espoo, and only a few employees have been working in the premises of Tampere and Salo. Because of this merge, Microsoft has provided for a certain period a bus for 100 employees who used to daily commute from Salo to Espoo.” (Microsoft’s manager interview, April 21, 2017)</p>	Strategic choice of the company to merge the premises and concentrate more workforce in the Helsinki Region.
MULTI-LOCAL WORKING	MlwO1	<p>“Some of the white-collars have rented or bought an apartment in Helsinki. Others are still commuting by train since there is good public transportation. Those employees did not search for a second home, since they wanted to stay close to their family over there.” (Microsoft’s manager interview, April 21, 2017)</p>	The organisations’ strategies can affect several forms of multi-local working of their employees, as well as opportunities for searching a second home for job-related reasons.
MULTI-FUNCTIONALITY	MufO1	<p>“The subway is affecting the built-environment in Espoo as well as remote spaces. Offices, services and housing will be probably located along the extension of the subway. The large constructions such as the new district of Kalasatama and the bridge in Herttoniemenranta will affect the big picture of how people live, work and move across the city.” (Microsoft’s manager interview, April 21, 2017)</p>	New multifunctional districts are producing several effects on the built environment but also unpredictable multi-local behaviour around the Helsinki Region.

List of codes used within the content analysis and number of examples for each code found

- MofP Mono-functionality from the policy and planning perspectives= 20
MufP Multi-functionality from the policy and planning perspectives =13
MlwP Multi-local working practices and arrangements within the policy and planning strategies= 0
ReowP Re-organisation of work that impacts multi-locality from the policy and planning perspectives= 0
- MlwO Multi-local working practices and arrangements within the organisations’ strategies= 16
MofO Mono-functionality from the organisations’ strategies=0
MufO Multi-functionality from the organisations’ strategies= 7
ReowO Re-organisation of work that impacts multi-locality from the organisations’ perspectives=14

Results

In the following paragraphs of *Policy and planning perspective* below, we gathered the most relevant findings from the regional policies of the Helsinki Region, as well as the results from the qualitative content analysis of the planning documents of the City of Helsinki. The results from the managers' interviews are presented within the section entitled *Employers' perspective*.

Policy and planning perspective

When discussing sustainable living conditions of the Helsinki Region, a great emphasis is laid on the ways of allocating workplaces within the so-called 'integrated urban structure'. The 'integrated urban structure' consists of housing, services, green areas and workplaces. However, this approach is still part of a traditional functionalist vision, where workplaces should be centrally located (within the central areas or new urban centres) with the housing base, and close to public transport and local services; therefore, being coded as mono-functional (MofP, n=3).

In the regional vision, an integrated urban structure, pleasant living environments, and flexible transportation are the pillars for the functioning of everyday life. Although the regional strategy does not explicitly mention the concept of multi-locality, it depicts the future living environments by stating that they should provide "a natural way of life that is able to combine housing and working by utilising the latest communication and environmental technology" (Helsinki Uusimaa Regional Council, 2014, p.22). In this statement, more relevance seems to be attributed to the work-life balance. In contrast, there is an initial awareness of the potential of ICT and its benefits within the everyday life of people itself.

When defining the objectives of the regional land-use plan, the regional plan focuses on ways to further re-organise jobs and workplaces claiming that this contributes to citizens' well-being, as well as the vitality of the Helsinki region itself. The current regional structure is considered quite fragmented due to the 'strong cores' as exemplified by the cities of Helsinki and Espoo. One of the main strategies is to strengthen the network-like structure by identifying new areas, namely 'versatile centres' which can be interpreted as multi-functional districts. It means that the Helsinki region aims to develop "residential areas as centres of housing, jobs and services

that reduce people's need to travel to the capital, shortens journeys and makes services easily accessible by public transport, on foot or by bike" (Helsinki Uusimaa Regional Council, 2014, p. 34). However, this idea of ensuring more urban and mixed neighbourhoods still embraces an implicit functionalism of having functionally designed buildings and urban spaces close to each other; thus, the statements referring to 'versatile centres' were interpreted and coded as mono-functional (MofP, n=3).

Similar to the Helsinki region, in the City of Helsinki, the development of new workplaces, is envisioned within a 'mixed urban structure' based on a mono-functional approach (MofP, n=14). The themes of jobs, workplaces and business are embedded in the larger picture of the 'multi-centre structure' of the City of Helsinki. Workplaces and business premises are relevant when showcasing the attractiveness of urban areas. The new urban centres will provide a 'versatile concentration of functions'. New workplaces will be placed and co-exist with existing housing and services functions (e.g. in Myllypuro) (City of Helsinki, 2013). So-called 'key-business zones' and 'innovative hubs' will be further developed within the urban structure (e.g. Jätkäsaari-Ruoholahti-Meilähti area, Pasila-Ilmala-Käpylä-Metsälä area, Vallila-Kalasadama, Roihupelto-Herttoniemi area) as well as hub-projects, such as the Pitäjänmäki business district (Fig.1).



Figure 1. The main development of business premises in the City of Helsinki and Espoo discussed in the planning documents

In addition to this, accessibility to workplaces has been significantly emphasised: “accessibility has been one of the most important factors during the last years.” (City of Helsinki 2016, pp. 130-131). By developing the city boulevards and new major districts, the city seeks to expand by densifying, and render the inner city structure more mixed (City of Helsinki 2016). The master plan further stresses that “a mixed urban structure creates the preconditions for shorter distances to work” (City of Helsinki 2016, p. 126). Long-distance trips within the city are estimated to decrease: “In the expanding inner city, excellent and diverse traffic connections will serve people even better with travel destinations in the densifying urban structure often being less far apart” (City of Helsinki 2016, p. 52). In the new urban structure, along the new ‘city boulevards’ (which are part of the transformation of existing motorways into main streets, in the sections that penetrate into the city), workplaces will be located in residential areas and inside the housing buildings themselves. On the neighbourhood scale of planning and building, the master plan recommends a new style of construction that should also favour the functions of housing and workplaces in the same buildings. This is the way in which the City of Helsinki has recently approached multi-functionality; thus, related statements were coded and interpreted as such (MulP, n=9). However, the metropolitan areas cannot guarantee that people living along the boulevards would also work there, or want to work there if they have a choice (which is essentially what multi-locality is).

Other multi-functional approaches were found in the master plan when discussing the physical proximity between businesses and universities along the so-called ‘science route’ (MulP, n=4). The ‘science route’ (a combination of bus, metro and rail routes) aims to connect several university campuses and key workplace areas between the districts of Tapiola, Otaniemi (one of Aalto University’s premises), Pasila and Viikki (one of the sites of the University of Helsinki). Along the science route, new residential units will be allocated for better integrating the university campuses into the city (City of Helsinki 2013).

While mono and multifunctional approaches were found within the qualitative content analysis, the master plan does not explicitly refer to new forms of multi-local working and living. In the strategic Vision 2050, the City of Helsinki has recognised the necessity of providing

an urban structure that enables space for new creative thinking and new technologies. “We need more spaces in which people meet, enjoy themselves and engage in recreational activities, and in which there are incentives to work and be an entrepreneur” (Helsinki City, 2013: 6). However, by analysing the master plan of 2016, one cannot find evidence of plans that could support the vision mentioned.

Additionally, the master plan stated that the “City of Helsinki aims to create the preconditions for the development of areas to accommodate new business premises according to the needs of the business. However, the development of the new business areas can depend on several additional factors that are not affected by urban planning decisions” (City of Helsinki, 2016, p. 130-131). When organisations choose new workplaces, they also analyse the existing regional and urban workforce, the costs of business premises, as well as the business district itself (e.g. accessibility). The availability of local workforce can affect multi-local living and working practices. However, the links between the re-organisation of work and impact on multi-functional built-environment as well as emerging ways of living and working in multiple places have not yet been acknowledged within the master plan.

Employers’ strategies

Unlike the regional and urban planning strategies, managers are more aware of new forms of multi-locality within the Helsinki region and City of Helsinki. They discussed multi-locality from several perspectives (e.g. working in multiple places, both traditional and non traditional workplaces, as well as renting a second home and alternative accommodations for job-related reasons).

The managers are aware that the multi-local work might be at the cost of human interaction with colleagues. “We are missing the human level of interaction. Sharing goals and dreams with our colleagues is becoming again relevant to organisations” (ISS manager). An emerging scenario has to be now considered: “while the organisations used to encourage employees to work at home 3-5 years ago, today they are asking people to return to work at the office” (Senaatti manager). Thus, a new balanced working environment (both place-based and virtual network oriented) needs to be achieved.

Managers have also talked about the concept of remote work, which has been common in the last few years, especially in private organisations, but less used in the public sectors. “In the last decade, broadband has been installed at the first or second home of our employees. It could be also the summer cottage, we have paid for only one installation, but we do not care where it is located” (Microsoft manager). The managers from the public organisations of SYKE and Senaatti Properties stated that the relevance of flexible work is increasingly awarded to Finnish government employees (from 1 to 2 days per week).

The increasing demand of multi-functional spaces and related impacts on the quality of the built environment were analysed in several managers’ statements (MufO, n=7). Although the organisations of Telia, Microsoft and ISS are located within mono-functional districts of the City of Helsinki, the managers were aware of the relevance and need for less homogenous districts and more multi-functional buildings and spaces, resulting in no references being found to the concept of mono-functionality.

In addition to the home or summer cottage, managers provided a comprehensive picture of non-traditional workplaces that multi-local workers can visit. “When my colleagues work remotely, they might work at home, but also in cafés or libraries especially when they are in the city centre and in-between meetings” (ISS manager). New forms of renting offices for temporary use are increasingly growing, such as the ‘work around’ in the Nordic Countries. “Freelancers and entrepreneurs can rent an office for individual and temporary use. Through this popular trend called ‘work around’, freelancers or business people can rent an office for 1 or 2 hours. The booking system is very similar to Airbnb.” (Senaatti manager).

A new creative place for start-ups and young entrepreneurs, the so-called “community place” was mentioned by the Microsoft manager. This place, which has been invented by Microsoft Flux and recently opened in the central district of Koskenranta in the City of Helsinki, provides free network, high tech devices, coaches, networking events and advisory boards. “It happens that I prefer staying in the city centre and working in this community place, rather than going back to Espoo” (Microsoft manager).

The common understanding among the managers is that temporary workplaces will play a key role in the future urban structure of contemporary cities. Some of these hubs were recently

created for government employees who work more often outside the office. “We have conducted a couple of pilot projects in the City of Helsinki, which we called ‘temporary working hubs’. These hubs will probably occupy larger strategies in the future considering the ways in which digitalisation is affecting our work-life” (Senaatti manager). The managers’ perspective is that in the last five years, digitalisation has increased very rapidly: “On one hand, it is important to combine human interaction and the effects of digitalization. On the other, it is difficult to predict what will happen in the next five years and how to invest in real estate; therefore, in this context, constructions should be more flexible when built” (Senaatti manager).

With the support of the City of Helsinki, new workplaces have also been created as hubs for startups, such as ‘Maria 01’ and places for research activities, such as the ‘Think Corner’. The two places have lately opened in the City of Helsinki. The core idea behind these new workplaces was stated by the Microsoft manager: “Today, teachers, researchers and students are no longer attracted to traditional libraries or lecture rooms. Students are involved in work groups using different technologies.” (Microsoft manager). According to the manager’s vision, new types of work environments will be able to inspire future ways of working.

Although it is not easy to trace multi-locality, the managers provided interesting and varied pictures about the habits of their employees in their statements (MlwO, n=16). According to the managers, efficient public transportation and the relevance of the first home where your significant others reside might influence the ways of working in multiple places (for example, by moving between two or three workplaces) as well as the option of renting a second home. To this end, the Telia manager was aware of several colleagues who did not want to rent a second home, because they already had a house and family in their home place. He also stated that “between our premises of Tampere, Turku and Lahti, public transport, such as trains, are very fast and efficient; therefore, the employees can periodically work in-between two to three premises and easily commute.” There are also more varied multi-local working practices as the SYKE manager argued: “I know several colleagues from Turku who work in Helsinki, travelling every day or commuting 2-3 days per week. On the other hand, there are other colleagues, for instance, from Tampere who need a place to stay during the week; they rent a flat or share it with friends or other colleagues.”

In addition to renting or buying a second home, temporary accommodation, such as Airbnb, are increasingly emerging in the multi-local living and working of white-collar workers. “I know several colleagues that rent a second home for job-related reasons in Helsinki; however, the use of Airbnb is increasingly supporting temporary living in the city” (Senaatti Manager). According to the manager, this occurs for several reasons: “Various colleagues tend to use the same Airbnb over and over. They have established a good relationship with the owner. I assumed that it is not a cost-related matter. This solution is cheaper of course, but they mostly have a personal attachment to the place.”

Furthermore, when discussing the ways in which the re-organisation of work impacts multi-locality (RewO, n=14), the managers stated that organisations are currently and increasingly considering the physical closeness to start-ups and university campuses; however, collaboration with universities and researchers, also occurs despite the physical distances from the organisations’ premises. For instance, Telia is placed within the sprawling and vital business district of Vallila, but several of Telia’s suppliers are located within the university campuses around the Helsinki urban region. “Near the universities, we have several organisations that work with us, such as Tieto and Microsoft” (Telia Manager). In addition to this, the new location of government premises is based on a state strategy (Ministry of Treasury, Government Resolution on State Building Strategies, 2014) which asked public research institutes to move to the university campuses (e.g. Otaniemi and Viikki). There has been a recognised need to improve the existing contacts between public research institutes and universities. This is the case of SYKE that will move to the district of Viikki, where several bio-science disciplines are taught.

Moreover, it is necessary to have more efficient public and private services around the workplaces. The Senaatti manager stated that real estate is shifting the old way of developing business premises: “When you work in a coffee shop, you occupy a space. In the coffee shop, you do not pay rent for that space, but you buy a coffee, or food.” Thinking of this approach, the new challenge for real estate is not only to provide square metres, but also services for employees. Moreover, he envisioned that the efficient use of office space will become a big driver for both government properties and private real estate.

It is difficult to predict the ways people will live, work and move across the city. As the manager of Microsoft mentioned, large constructions in the urban region (e.g. Kalasatama district and the bridge in Herttoniemenranta) will certainly affect people's habits. He depicted two on-going trends and factors in the urban region. First, the proximity to public transport and the geographical concentration of several organisations which characterises certain business areas (see e.g. Keski-Pasila) (Fig.1). Secondly, he referred to the on-going constructions based on which the two districts of Keilaniemi and Miestentie districts in Espoo will be merged (Fig.1). This will produce new dynamics in the re-organisation of work and urban growth of the Helsinki Region.

Furthermore, private and public organisations can definitely play a key role in planning and decision-making processes. The managers have experienced this in different ways. "The organisations' point of view can be relevant when allocating working functions, as well as understanding the effects of multi-local working on the urban environment. However, we have never been involved in the development of urban policies and planning strategies" (Telia Manager). In contrast, Microsoft and other organisations around the Keilaniemi district have been called to envision with the city planning department the new sustainable urban development of Espoo, both business and residential buildings.

Discussion

This paper investigated how planning is currently addressing the issue of multi-locality and, secondly, the ways in which larger public and private Finnish organisations employing mobile white-collar workers have included multi-locality in their strategies. The study aimed to highlight differences and similarities between planning and organisations' strategies in approaching the emerging phenomenon of multi-locality.

First, the findings show that the policy and planning perspectives have not yet recognized the phenomenon of multi-locality (see Table 1). The local master plan of Helsinki recognised the need to create more spaces to initiate social and entrepreneurial working activities. However, the new forms of multi-locality were not identified. Therefore, there is no awareness yet of the ways in which the re-organisation of work can impact the multi-locality and built environment. For instance, the development of workplaces is envisioned within a new urban structure that

is named in different ways (e.g. integrated structure and versatile concentration of functions), where housing, workplaces and services will co-exist. On one hand, this vision moves beyond the current state of Finnish cities and their suburban areas that are more homogenous. On the other hand, the cities will have few means to control where living and working actually happens: the metropolitan areas are unified housing and job markets, and multi-locality can also create incentives for travelling longer distances, as one is not obliged to commute daily from house to workplace. These issues are not discussed in planning documents that aim at shorter distances.

Additionally, the reason for the Helsinki Region and City of Helsinki allocating several functions to the same districts or mixed centres is to create more sustainable mobility patterns. However, this approach does not take into account the potential impact that might be caused by multi-local working practices. The location of new workplaces does not always guarantee the success of the urban development itself nor the availability of workforce. To this end, the findings show that white-collars work within a wider network of traditional and non-traditional workplaces for several reasons, such as the need to visit several business premises within the Helsinki Region. Simultaneously, they are willing to stay closer to their families. This represents an important aspect of being a contemporary multi-local worker, which might have several implications for the organisations' strategies and the sustainability of urban regions (transport, need for temporary accommodation, vacancy of the housing stock, and availability of temporary working locations).

Secondly, the results show that managers are aware of the emerging forms of multi-locality. In addition to this, managers are informed about the increasing demand of multi-functional spaces (see Table 1). In this context, some of the managers expressed the organisations' interests in collaborating with policy makers and official practitioners in constructing policies and urban strategies on the re-organisation of work and multi-locality (see the managers of Telia and Microsoft).

Thirdly, the findings show that the multi-local working practices can have several implications on urban design and place-making (Hampton 2008, 2010). The model of 'work around' that enables multi-local workers to book an office for short periods (through a system similar to the Airbnb), the 'temporary working hubs', provided by SYKE and Senaatti Properties, as well as

'the community place' created by Microsoft Flux should be further explored when analysing the phenomenon of place-making and emerging urban functions in the built environment. In addition to the place-makers originally investigated by Hampton, this study suggests that the white-collar workers, employed by organisations from both public and private sectors, are becoming part of the new place-making. Furthermore, the idea of providing more creative spaces for innovation and research (such as Microsoft Flux and Think Corner) can support the hybrid learning environment in both spatial and technological spaces (Caldwell, 2012). These creative spaces can inspire the re-design of public libraries, university buildings and lecture rooms themselves.

Fourthly, the emerging phenomenon of multi-locality should also be further studied in terms of the innovation capacity, both spatial and technological, provided by urban regions and cities (Castells, 2012). The findings show that the community place of Microsoft Flux, as well as temporary working hubs for government employees, are increasingly becoming part of the new urban structure that allows working in multiple places. The innovation capacity of cities also requires more public investments in the IT infrastructure (e.g. the wider opportunities of Internet access).

Furthermore, although the possibilities of intervention are different between organisations and planners, it is important for the latter to be aware of the emerging phenomenon of multi-locality. For instance, referring to future research paths, it would be significant to embed new data that can be relevant to the understanding of multi-locality (e.g. spatial distribution of non-traditional workplaces, statistics on emerging categories of mobile workers, availability of data on second-home rentals for job-related reasons).

Conclusions

The study aimed to investigate planning and organisations' strategies when approaching multi-locality and its spatial implications (e.g. multifunctionality). The policy and planning perspectives still lag behind the new multi-local strategies and practices portrayed by the managers. The study showed that the mono-functional approach to the Helsinki Region and City of Helsinki is still predominant in both policy and planning perspectives, when envisioning new workplaces in the urban structure. The multi-functional perspective is partially addressed by planners within the city boulevards, although it is not guaranteed that people living along

the boulevards will work there if they have a choice (which is essentially what multi-locality is). On the other hand, the managers from both public and private organisations have recognized that multi-locality impacts the built environment and related demand of multi-functional spaces.

The study showed that, in addition to startups and entrepreneurs, traditionally known in literature, the new categories of multi-local workers are the white-collars employed by organisations from both the private and public sectors. It is evident that in this multitude of working and living opportunities described in the study, the concept of multi-locality is clearly evolving. Further studies on multi-local working might also embrace the phenomena of 'co-working holiday' and 'workation' (when travellers visit a location during the holidays, and work in a shared space while they are there).

But how could planning re-think its role and challenge in front of this emerging phenomenon? We can see that the functionalistic tradition in urban planning still holds its grip in several ways. For instance, in its daring vision for 2050, the city of Helsinki still divided its task into seven mainly functional themes, which are: urbanity, housing, work, mobility, recreation, nature and culture, the seaside, and Helsinki in the international and regional context. In contrast, the transition towards more urban and mixed neighbourhoods and centres does not by itself question this implicit functionalism, if it only means having functionally designed urban spaces closer to each other. The picture depicted by the study can be useful when analysing other European cities which still present similar mono and multi-functional approaches. Multi-locality can also increase mobility in the urban region and across several regions; mobility is not determined only by 'the need to travel'.

On the other hand, planning for multifunctionality and multi-locality cannot simply mean flexibility or the lack of land-use control. In the regulative planning system represented in Finland, urban and regional planning is very much based on preventing unwanted and unsustainable development, as well as creating preconditions for good living and working environments. This study can be relevant to those European cities with similar policy and planning approach. Loosening regulative control does not necessarily lead to solutions that support the innovation capacity of cities. However, it is crucial to view the city and region less as a contained functional area inside administrative borders, and rather more as a network of

places that is both attractive and sufficiently flexible to allow appropriation by different users for different purposes.

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References

Barley, S.R., Meyerson, D.E. & Grodal, S. (2011) E-mail as a source and symbol of stress, *Organisation Science*, 22, pp. 887–906

Batty, M., Besussi, E., Maat, K., & Harts, J.J. (2004) Representing Multifunctional Cities: Density and Diversity in Space and Time, *Built Environment* 30(4): pp. 324–337.

Beekman, T. (2011) Fill in the Generation Gap, *Strategic Finance; Montvale*. 93 (3): pp. 15-17.

Bilandzic, M., & Foth, M. (2013) Gelatine: making coworking places gel for better collaboration and social learning. In Proceedings of the 25th Australian Computer-Human Interaction Conference (OzCHI '13). ACM, New York, NY, USA, 427-436.
<https://eprints.qut.edu.au/61844/7/61844a.pdf>

Brown, J. (2017) Curating the “Third Place”? Coworking and the mediation of creativity, *Geoforum*, 82, pp. 112–126

Caldwell, G., Bilandzic, M., and Foth, M. 2012. Towards visualising people's ecology of hybrid personal learning environments. In Proceedings of the 4th Media Architecture Biennale Conference: Participation (MAB '12). ACM, New York, NY, USA, 13-22.

https://eprints.qut.edu.au/54006/1/MAB_G.Caldwell_M.Bilandzic_M.Foth.pdf

Castells M. (2012) *Space of Flows, Space of Places: Materials for a Theory of Urbanism in the Information Age*. In S. Bishwapriya (Ed) *Comparative Planning Cultures*, pp. 45-66.

Ciolfi, L., & Pinatti de Carvalho, A. F. (2014) Work Practices, Nomadicity and the Mediatonal Role of Technology, *Computer Supported Cooperative Work*, 23, pp. 119–136

City of Helsinki (2013), Vision 2050, Urban Plan - The New Helsinki City Plan (2013). <http://www.hel.fi/hel2/ksv/julkaisut/yos_2013-23_en.pdf> Accessed October 3, 2016

City of Helsinki, (2016) Helsinki's new master plan (HELSINGIN YLEISKAAVA Selostus. Helsingin kaupunki KaupunkisuunnitteluvirastoKaupunkikaava - Helsingin uusi yleiskaava) https://www.hel.fi/hel2/ksv/julkaisut/yos_2016-3.pdf

Czarniawska, B. (2014) Nomadic Work as Life-Story Plot, *Computer Supported Cooperative Work*, 23, pp. 205–221.

Di Marino, M., & Lapintie, K. (2015). Libraries as transitory workspaces and spatial incubators. *Library & Information Science Research*, 37(1), 118–129.

Di Marino, M., & Lapintie, K. (2017). Emerging workplaces in the post-functionalist cities. *Journal of Urban Technology*, 4(3), 5–25.

Dittrich-Wesbuer, A., Kramer C., Ene-Lacroix, C.E. D. & Rumpolt, P. (2015) Multi-local living arrangements: approaches to quantification in german language official statistics and surveys, *Tijdschrift voor Economische en Sociale Geografie*, 106 (4), pp. 409–424.

Eurofound (2016) Annual work programme 2016.

https://www.eurofound.europa.eu/sites/default/files/ef_publication/field_ef_document/ef1560en.pdf

Eurofound (2014) Living and working in Europe.

https://www.eurofound.europa.eu/sites/default/files/ef_publication/field_ef_document/ef1514en_5.pdf

Forlano, L. (2011) Building the Open-Source City: Changing Work Environments for Collaboration and Innovation. In: From Social Butterfly to Engaged Citizen: Urban Informatics, Social Media, Ubiquitous Computing, and Mobile Technology to Support Citizen Engagement. Cambridge, MA: MIT Press. ISBN 978-0-262-01651-3.

Foth, M., Forlano, L., & Bilandzic, M. (2016) Mapping New Work Practices in the Smart City. In H. Friese, G. Rebane, M. Nolden & M. Schreiter (Eds.), *Handbuch Soziale Praktiken und Digitale Alltagswelten*. Wiesbaden, Germany: Springer.

Hampton, K.N, O. Livio, and L.S. Goulet. 2010. "The Social Life of Wireless Urban Spaces: Internet Use, Social Networks, and the Public Realm." *Journal of Communication* 60(4): 701-722.

Hampton, K. N., and N. Gupta. 2008. "Community and social interaction in the wireless city: Wi-Fi use in public and semi-public spaces." *New Media & Society* 10(6): 831-850.

Humphry, J. (2014) Officing: Mediating Time and the Professional Self in the Support of Nomadic Work, *Computer Supported Cooperative Work*, 23, pp. 185–204.

Hanson, S. (2005) Perspectives on the geographic stability and mobility of people in cities. *Proceedings of the National Academy of Sciences*, 102, pp 15301–15306.

Hoppenbrouwer Eric & Erik L. (2007) Mixed-use development: Theory and practice in Amsterdam's Eastern Docklands, *European Planning Studies*, 13:7, 967-983,

Heinonen, J., Jalas, M., Juntunen J.K., Ala-Mantila, S. & Junnila, S. (2013) Situated lifestyles: I. How lifestyles change along with the level of urbanization and what the greenhouse gas implications are—a study of Finland, *Environmental Research Letters* 8, 025003 (13), pp.1-13.

Helsinki Uusimaa Regional Council (2014) The Helsinki-Uusimaa Regional Programme. Vision and Strategy 2040, Strategic Priorities 2014–2017. https://www.uudenmaanliitto.fi/files/13281/Helsinki-Uusimaa_Regional_Programme_A31-2014.pdf

Helsinki Uusimaa Region, (2016). Regional land use plan, Maakuntakaava https://www.uudenmaanliitto.fi/en/development_and_planning/regional_land_use_planning

Hermelin, B. & Trygg, K. (2012) New Geographies of Work: A Case Study from Sweden urbaniziv-en-2012-23-supplement-1, pp. 126-134.

Hilti, N. (2009) Here, there and in-between: On the interplay and multilocal living, space and inequality. In: T Ohnmacht , H Maksim and MM Bergman (eds) *Mobilities and Inequalities*. Burlington, USA: Ashgate publishing, pp 145-163.

Hiltunen, M. J. & Rehunen, A., (2014) Second home mobility in Finland: Patterns, practices and relations of leisure oriented mobile lifestyle, *Fennia*, 192 (1), pp. 1–22.

Huning, S., Bens O., & Hüttel, R.F. (2012) Demographic Change beyond the Urban-Rural Divide: Re-Framing Spatial Differentiation in the Context of Migration Flows and Social Networks. *DIE ERDE*, 143 (1-2), pp. 153-172.

Kaufmann, V. (2005) Mobilités et réversibilités: vers des sociétés plus fluides. *Cahiers Internationaux de Sociologie*, CXVIII, pp. 119–135.

Knudsen J. P. (2017) Vicarious habitation – reinterpreting the role of peripheral living in a Nordic context, *European Planning Studies*, 26:2, 279-296.

Kojo, I. & Nenonen, S. (2014) Evolution of co-working places: drivers and possibilities, *Intelligent Buildings International*, 9 (3): 164-175.

Koroma, J., Hyrkkänen, U. & Vartiainen, M. (2014) Looking for people, places and connections: Hindrances when working in multiple locations, *New Technology, Work and Employment*, 29(2), pp. 139-159.

Kessler, S. (2017) IBM, remote-work pioneer, is calling thousands of employees back to the office available at <https://qz.com/924167/ibm-remote-work-pioneer-is-calling-thousands-of-employees-back-to-the-office/>

Laasonen, V. & Kolehmainen Jari (2017) Capabilities in knowledge-based regional development – towards a dynamic framework, *European Planning Studies*, 25(10), pp. 1673-1692.

Liegl, M. (2014) Nomadicity and the Care of Place—on the Aesthetic and Affective Organisation of Space in Freelance Creative Work, *Computer Supported Cooperative Work*, 23, pp. 163-183.

Louw, E. & Bruinsma, F. (2006). From mixed to multiple land use. *Journal of Housing and the Built Environment*, (21): 1 pp 1–13.

McIntyre, N. (2009) Re-thinking amenity migration: integrating mobility, lifestyle and social-ecological systems. *Die Erde*, 140(3), pp. 229–250.

Ministry of Treasury, Government Resolution on State Building Strategies, 2014 (Valtioneuvoston periaatepäätös valtion toimitilastrategiaksi available at http://vm.fi/documents/10623/1256367/VN_periaatepts_toimitilastrategiaksi/

Nadler, R. (2016) Plug and Play places: Subjective Standardization of places in multilocal lifeworlds. In Paola Pucci, Matteo Colleoni (Eds.) *Understanding Mobilities for Designing Contemporary Cities*. Springer: London, pp 109-128.

Oldenburg, R. (2001) *Celebrating the Third Place, Inspiring Stories about the "Great Good Places" at the Heart of Our Communities*. New York, NY: Marlowe & Company.

Paris, C. (2009) Re-positioning Second Homes within Housing Studies: Household Investment, Gentrification, Multiple Residence, Mobility and Hyper-consumption, *Housing, Theory and Society*, 26 (4), pp. 292–310.

Park, Y. & Jex, S.M. (2011) Work-Home Boundary Management Using Communication and Information Technology, *International Journal of Stress Management* 18(2), pp. 133–152.

Perkins, H.C. & Thorns, D.C. (2006) Home Away from Home: the Primary/Second-home Relationship. In McIntyre, Williams & Hugh (eds.) *Multiple Dwelling and Tourism. Negotiating Place, Home and Identity*. CABI : Oxfordshire, pp. 67-81.

Reuschke, D. (2012) Dwelling conditions and preferences in a multilocal way of life for job reasons. *Journal of Housing and the Built Environment*, 27, pp 11–30.

Rinne, J., Paloniemi, R., Tuulentie, S. & Kietäväinen, A. (2014) Participation of second-home users in local planning and decision-making – a study of three cottage-rich locations in Finland. *Journal of Policy Research in Tourism, Leisure and Events*, 7(1), pp 98-114.

Rolshoven, J. (2008) The temptations of the provisional. Multilocality as a way of Life, *Journal of European Ethnology*, 37 (1-2), pp 17-25.

Säynäjoki, E.S, Inkeri, I, Heinonen, J., Junnila S., (2014)

How central business district developments facilitate environmental sustainability – A multiple case study in Finland, *Cities*, 41, pp. 101–113.

Schier, M., Hilti, N., Schad, H., Toppel, C., Dittrich-Wesbuer, A. and Monz, A. (2015) Residential multi-locality studies – the added value for research on families and second homes, *Tijdschrift voor Economische en Sociale Geografie*, 106 (4), pp. 439-452.

Spinuzzi, C., (2012) Working alone together. Co-working as Emergent Collaborative Activity, *Journal of Business and Technical Communication*, 26 (4), pp. 399-441.

Townsend, A., Forlano, L. and Simeti, A. 2011. Breakout! Escape from the Office: Situating Knowledge Work in Sentient Public Spaces. *Sentient City: Ubiquitous Computing, Architecture, and the Future of Urban Space*, edited by M Shepard, Cambridge, MA: MIT Press

Weichart, P. (2015) Residential multi-locality: in search of theoretical frameworks, *Tijdschrift voor Economische en Sociale Geografie*, 106 (4), pp. 378–391.

Weiske, C., Petzold, K. & Schad, H. (2015) Multi-local living – the approaches of rational choice theory, sociology of everyday life and actor-network theory, *Tijdschrift voor Economische en Sociale Geografie*, 6(4), pp. 392–408.