2. Understanding the Origin, Trajectories of Change, and Future Prospects for Large Housing Estates in Europe

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Introduction

It has been nearly fifteen years since a large European Union–funded project called RESTATE explored challenges in housing estates throughout several European countries and served as a clearinghouse for the exchange of ideas for counteracting negative trends in large housing estates (van Kempen et al. 2005). Since that time, a series of riots in the Paris banlieues and in the "Million Homes Programme" suburbs in Stockholm have revealed that many problems remain. Major European newspapers, including *The Guardian*, frequently publish articles about deep social problems in housing estates, the poor image from which they suffer, and dissident groups that reside in them. Families with resources often move away from large housing estates, and housing estates contribute to increasing segregation levels in European cities (Tammaru et al. 2016a). Immigration currently introduces new groups to European cities, and their initial places of settlement are low-cost neighborhoods, often in large housing estates (Wessel 2016). Moreover, new challenges arise, such as the ongoing aging of buildings along with their environments, which necessitates new investments and raises challenges related to sustainability, energy reduction, and aging populations. With many cities operating on austerity budgets and lacking cash to invest in improving housing and neighborhoods, now is a good time to revisit the challenges faced by large housing estates in European cities.

This essay presents the key findings of the book *Housing Estates in Europe: Poverty, Ethnic Segregation and Policy Challenges*, and is structured around ten takeaway messages. These messages convey, on the one hand, that few sub-

stantial changes have occurred in large housing estates in Europe since the RESTATE project, but they also carefully clarify some of the strategies for improvement that might help to secure a solid future for the dwellings and inhabitants of Europe's large housing estates.

Findings from past studies including *High-Rise Housing in Europe* (Turkington et al. 2004) and the RESTATE project (Van Kempen et al. 2005) provide in-depth evidence of the varieties of change in large housing estates in Europe through the mid-2000s. A recent book entitled *Socio-Economic Segregation in European Capital Cities* (Tammaru et al. 2016b) documents growing levels of segregation across Europe, suggesting an increasing overlap of ethnic and social segregation often to be found in large housing estates. Our current book focuses on the formation and later socio-spatial trajectories of large housing estates in Europe. The long-term growth in social inequalities in Europe, a growing number of immigrants in European cities seeking affordable housing, and the physical aging of apartment buildings form key policy challenges related to large housing estates in Europe.

This essay provides comparative city- and metropolitan-level evidence of the origins, trajectories of change, and future prospects of large housing estates. It specifically investigates the actions needed to realistically improve the fortunes of housing estates experiencing downward trends and pathways to enhance life for the residents living in them. This chapter is organized around ten synthesized takeaway messages distilled from the sixteen chapters of the book *Housing Estates in Europe: Poverty, Ethnic Segregation and Policy Challenges.*

Takeaway Messages

Message 1: Although large housing estates are a common phenomenon in Europe, large variations exist between countries, there were wide variations in the initial conditions and contexts of housing estates, and these placed housing estates along different trajectories of change.

The standardized grand structures of housing estates in Europe are the children of post–World War II urban growth, industrialization, and urban renewal. Housing estates often formed a high-density urban-industrial circle around the historic cores of cities (Petsimeris 2018; Lelévrier and Melic 2018) but in some cases they were built to facilitate the redevelopment of inner-city neighborhoods of slum housing (Murie 2018). Many housing estates were

built outside the urban core on peripheral greenfield spaces where land was cheap and where it was easy to reap economies of scale; i.e., to provide a large amount of housing units at a single construction site (Wassenberg 2018). In some cases, the ease of movement of cranes on construction sites determined the way housing estates were planned (Meuser and Zadorin 2016).

Although there are fewer housing estates in some cities—for example, in Athens (Kandylis et al. 2018) or Brussels (Costa and de Valk 2018)—and even if they have been built outside the city's central areas, as in Paris (Lelévrier and Melic 2018), they are still a common characteristic in virtually all European cities. Despite many similarities in form and function, large variations among housing estates exist between European cities. The number of apartment buildings built, as well as the social and physical conditions in housing estates today, relate in part to the welfare regime that was prevalent in the countries at the time the housing estates were established. In some countries—the former Soviet Union, of course, but also the social democratic welfare states of Northern Europe—collective visions prevailed and communal living and egalitarian social conditions were consistent with societal expectations. In other countries—notably in Southern Europe—collective vision promoted private homeownership, even through a period of expansion of social housing and collective housing estates. Both societal visions shaped the formation of housing estates as well as set the tone for their long-term development.

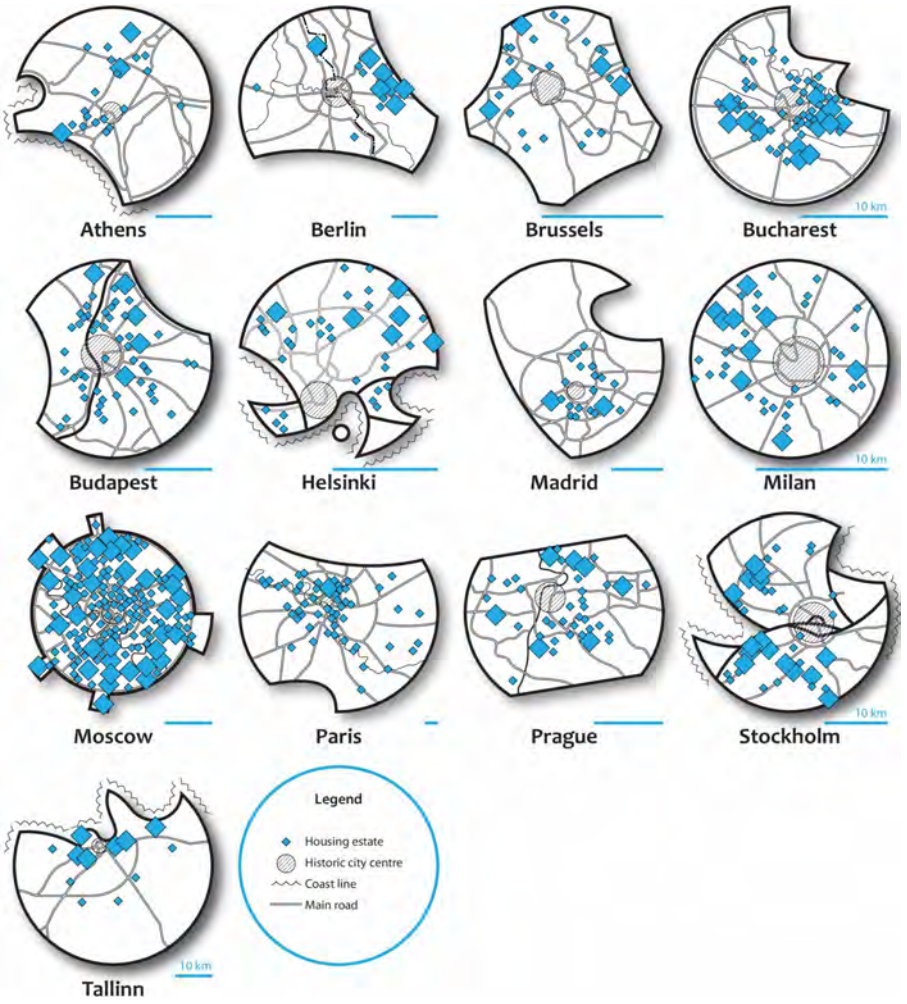
The construction of new high-rise housing estates began decreasing in the 1970s in Western Europe. In the socialist countries of Eastern Europe, their construction increased rather than decreased in the 1970s, and the growth trend continued in many countries until the fall of the Berlin Wall in 1989 and the demise of the Soviet Union in 1991. The provision of free-of-charge public housing was one of the cornerstones of the egalitarian ideology in communist Europe. The ideals of large housing estates were modeled from Northern Europe (rather than from Western Europe) because central planners were inspired by the grand socio-spatial structures of Northern European cities, notably in Sweden. Central planners were less impressed by the public housing–based approaches to housing estate formation that prevailed in Western Europe. They developed various templates for planning the internal spatial structures of modernist neighborhoods. These templates included (a) a surround type where a square inner-courtyard is formed between apartment buildings; (b) a canyon-type formation with grand roads lined along both sides with tall apartment buildings; and (c) a parallel-blades formation featuring long rows of parallel buildings (Marin and Chelcea 2018). The neighborhoods,

which were planned to deliver necessary daily services within walkable reach, became the foci of daily life for people despite the fact that oftentimes not all planned service facilities were actually built.

Message 2: Housing estates are often viewed as universally problematic, but this characterization is too simplistic and there are varieties of trajectories of change, even within the same cities. Some housing estates have downgraded significantly, while others have been more successful in maintaining or even improving their status.

Characteristics and features of housing estates vary not only between countries but also within cities. Construction methods for large housing estates changed over time. The first housing estates were smaller in size, strongly influenced both by modernist housing aims as well as by the ideals of the Garden City concept (Urban 2018). As mass production techniques improved and in order to meet the growing demand for new housing units, apartment buildings became taller and housing estates became denser from the 1960s onward. This change is especially evident in Eastern European cities where the construction of large housing estates lasted longer (until the early 1990s) compared to West European cities (Urban 2018; Marin and Chelcea 2018; Ouředníček et al. 2018).The metropolitan location of new housing estates changed over time as well. The first housing estates were often built either as infill in city centers or close to city centers, while later housing estates were usually built further away, on plots of land still available for large-scale construction. This implies that high densities and spatial isolation are often combined in newer housing estates, making them less attractive in today's housing market compared to older housing estates (Kovács et al. 2018). However, older housing estates face problems too. These problems relate to their older age and consequent higher investment needs, fewer amenities, and, in some cases, the small size of the apartments. In some cities, apartments increased in size and quality over time, better meeting families' needs (Ouředníček et al. 2018; Leal et al. 2018).

Figure 1: Distribution of housing estates in metropolitan space in case study cities.



Source: Figure prepared by Raivo Aunap.

Figure 1 depicts the relative size (measured by current or recent residential population) and spatial arrangement of housing estates as detailed in the chapters in the book. High-density arrangements of housing estates (in Moscow and Bucharest, for example) can be identified, and largely peripheral

locations for housing estates (in Milan and Brussels, for example) can be contrasted with central locations for housing estates (in Paris, for example) and evenly distributed housing estates (in Budapest and Prague, for example). Underlying political contexts at the time of housing estates construction explain the concentration of housing estates in East Berlin (but not West Berlin), and the socialist system explains a fewer number of housing estates that are nonetheless large in size (in Tallinn, for example, and elsewhere in Eastern Europe).

Once established, the built environment is slow to change due to inertia. Initial choices made about the physical characteristics of housing estates—location, size, design, and construction—have had a crucial impact on the long-term trajectory and performance of housing estates, even if social and housing values have changed since then. As a rule of thumb, immense housing estates and those located in more peripheral locations face higher risks for social and physical downgrading than smaller housing estates (Andersson and Bråmå 2018; Kovács et al. 2018; Leetmaa et al. 2018), while smaller building types in housing estates within the urban core tend to perform better over the long run (Kovács et al. 2018; Vaattovaara et al. 2018).

While the absolute location of housing estates cannot be changed once established, their relative location has changed in many cities; where European cities have sprawled further since large housing estates were built, housing estates now often form a middle zone between urban cores and lower density outer rings. Transportation connections have often improved as well (Hess 2018). The relative spatial position of housing estates can be improved more by focusing on improving their integration with opportunities elsewhere in the city through transport networks (Lelévrier and Melic 2018). For example, in Tallinn, some housing estates face the challenge of a lowering social status, but people are not trapped in these neighborhoods thanks to free public transport (Leetmaa et al. 2018; Hess 2017).

Message 3: Interventions that aim to reduce densities and improve the relative location of housing estates—investments in transport infrastructure, including the expansion of subway systems, construction of pathways for pedestrians and cyclists—can substantially improve access to housing estates.

High-density per se is not necessarily a source of problems and dissatisfaction for residents; other related factors may be more detrimental, such as poor en-

vironmental quality, noise, lack of community involvement, or lack of safety (Howley et al. 2009; Andersson and Bråmå 2018). Since gentrification has elevated housing prices in central cities beyond the reach of large numbers of dwellers in many European cities, people seek alternatives in the housing market, and that could gear choice towards housing estates. For this to happen, measures need to be taken to downplay the negative aspects of high-density residential space, to improve the relative location of housing estates in urban housing markets, and to invest in the built environments within housing estates.

There are many aspects of housing estates that contribute to differences in the trajectories of change. Housing estates that are functionally more diverse and provide good jobs, services, and leisure-time activity can be relatively attractive. Functional diversification is an important way to increase the attractiveness of large housing estates. Private ownership of apartments combined with poverty and high shares of minorities may exacerbate the downward spiral of housing estates. The trend towards an overlap of ethnic, social, and spatial disadvantage is growing in Western and Northern European cities, and an increasing share of the housing stock is privatized. Certain risk factors call for caution when it comes to the future of particular housing estates in Eastern Europe as well, since there is some evidence of high-income groups moving away from the less attractive housing estates built in the 1980s (Kovács et al. 2018; Leetmaa et al. 2018). Similar risks also apply to many Southern European housing estates located on urban peripheries, which are characterized by high densities and tall buildings and private ownership combined with mainly low-income groups (Petsimeris 2018; Leal et al. 2018).

An alternative way to intervene is to demolish less attractive housing estates. Demolition of apartment buildings has been undertaken in three of our case study cities: Birmingham, Moscow, and Paris. In Paris, social aims drive housing demolition and renovation schemes (Lelévrier and Melic 2018). There is an ambition to provide one new housing unit for each one demolished and to reduce housing density through the removal of high-rise towers. The opposite takes place in Moscow, where an immense demolition plan of 1960s housing departs from an entrepreneurial way of thinking. Profit-driven developers operate within a rather ruthless real estate market and social considerations are unimportant (Gunko et al. 2018). The demolished area will be significantly densified through the addition of clusters of taller towers. Although their physical configuration thus becomes similar to the most problematic housing estates in South European cities, the social structure would be different since

in Moscow, a respectable income is needed to buy an apartment in new tower blocks to compete in the dynamic housing market with limited choice for new housing.

In short, vital neighborhoods adjust to changing circumstances in complex ways. These may include refurbishments, replacements of housing and people, physical and social upgrading, modernizing the built environment, adding new facilities, changing the housing stock when necessary, and altering individual dwellings (by combining, splitting or enlarging them). There is no single measure that can neatly apply to all countries, cities, and housing estates.

Message 4: The position of housing estates on the housing ladder is unclear. Housing estates could have a better-defined role—for example, either as a final housing destination or as an interim position in a family's housing career—which could make it easier to clarify goals and design concrete interventions.

The original aim of the housing estates program was to provide modern apartments for working-class families. These apartments were often seen as a final destination in the housing career; they were carefully and scientifically designed to meet the expectations of families and then replicated in large numbers. In many European countries, the first residents were middle-class or affluent working-class families (Andersson and Bråmå 2018; Murie 2018); in others, the profile of residents was more diverse and included large shares of immigrants (Lelévrier and Melic 2018; Kandylis et al. 2018). The subsequent trajectory of change—lowering of social status and increase of immigrant population—bears more similarities, although the pace of these changes yet again varies from country to country and from housing estate to housing estate. Families with children have opted for low-rise housing alternatives as well. The lowering of social status, departure of native families, and increase in immigrant population have been most rapid in Western European cities (Andersson and Bråmå 2018; Lelévrier and Melic 2018). Higher income people have left housing estates and for them, this housing segment is either out of the question altogether or considered only for temporary housing; for many low-income groups, housing estates still form a final and permanent housing destination (Lelévrier and Melic 2018).

However, new population groups for whom large housing estates would serve as an attractive option on the housing market are on the rise in European cities. As the second demographic transition evolves, in most countries

the highest growth is predicted for small households (composed of young singles, elderly, divorced people, foreign students, and temporary workers), not families.

The social composition of housing estates has been more stable in Eastern European cities (Leetmaa et al. 2018; Kovács et al. 2018; Ouředníček et al. 2018; Gunko et al. 2018) than other parts of Europe for two main reasons. First, there was little lowering of the social status of housing estates during the socialist period. There was less life cycle related mobility in socialist countries and housing estates aged simultaneously with people who moved into them. Housing allocation was centrally administered; people waited for housing for years or even decades, and once an apartment was received, there were few opportunities for further residential moves. Second, housing estates became a dominant housing segment and they still provide shelter to a significant share of urban dwellers, slowing the pace of social change. However, there is some evidence of the lowering of the social status as well as increasing shares of immigrants in housing estates in Eastern European cities in the last two decades.

To conclude, lower socioeconomic groups and ethnic minorities have become increasingly concentrated in large housing estates and in other areas where social, ethnic, and spatial disadvantage overlaps and intensifies (Hess et al. 2012; Leetmaa et al. 2015; Bolt 2018). In this context, it is critical to better conceptualize the current role of housing estates in urban housing markets, especially in light of the second demographic transition and an increase of mobile people without families. Large housing estates are ideal for many of these groups. However, if the role of housing estates on the housing market is unclear, it is difficult to devise suitable intervention measures. Since the origins, size, location, and current condition of housing estates vary from country to country and housing estate to housing estate (Lelévrier and Melic 2018), it is difficult to universally conceptualize their role in the housing market. Increased marketization makes this complex too. Still, planning interventions could help to influence the choices made by specific population groups like students, families, or older people through planning of public spaces and services. Various innovations—such as setting up the best school in the city, locating a ministry office, establishing a center with diverse and sophisticated services for older people, providing land free of charge for a leisure-time center, and other measures—could potentially shape the main function, social vibe, and population composition in certain housing estates.

Message 5: Privatization of collective space should be handled with care. The function of housing estates, originally built by a central authority and intended for collective ownership, is strained when structural changes cause housing units to be placed in private hands. The often-grandiose physical configuration and social structure of housing estates require thoughtful management of common spaces when individual apartments become privatized.

The construction of large housing estates was usually publicly financed, resulting in publicly owned and publicly managed housing complexes. Public financing occurred to a lesser degree in Southern Europe and especially Athens, where housing estates have always been under private ownership (Kandylis et al. 2018). Governance structures were devised that were regarded as appropriate for public ownership and management. A common contemporary trend across Europe, however, is increased private ownership (Murie 2018; Petsimeris 2018; Lelévrier and Melic 2018) or semi-private ownership (Andersson and Bråmå 2018) of housing units (both in the general housing stock and in large housing estates).

Today, redevelopment of many of the publicly constructed and formerly state-managed housing complexes thus sometimes lies in the hands of private owners. Although private ownership is usually related to better housing maintenance, it does not always work this way in large housing estates for various reasons (Kandylis et al. 2018; Marin and Chelcea 2018). First, private ownership of apartments puts them morally outside the realm and responsibility of local and central governments. Second, owners do not always possess the culture, knowledge, or resources for property management to effectively upgrade housing themselves. Third, area-based coordination and management of common spaces is needed in housing estates. Privatization with no eye on the grand spatial structures, private management of apartments, and management of common spaces can easily lead to eclectic arrangements; individual improvements and care at the apartment level—or even at the building level—do not necessarily contribute to improved overall quality of living environments in housing estates. The selling of properties to large private development companies does not necessarily work, either. For example, Berlin sold 100,000 apartments to international investors; setting high rents for earning high profits tends to be more important for such investors than investing in the quality of the housing units and the built environment (Urban 2018).

Although apartment associations are common in Eastern Europe, the management of renovation programs is often chaotic. In Tallinn (Leetmaa et al. 2018) or Moscow (Gunko et al. 2018), for example, apartment owners who are dissatisfied with apartment association practices often pursue uncoordinated efforts to improve their apartments. The outcome of these improvements often leads to aesthetic compromises in buildings; for example, when windows are replaced by individual owners, every apartment may look different on the building facade. Even more radical developments that fall under the umbrella term of "do-it-yourself urbanism" can be found in less-wealthy post-socialist cities in the form of balcony construction or unregulated building additions (Bouzarovski et al. 2011). Again, the outcome is an eclectic building facade. Better coordination and management does not necessarily mean costly public investments; reasonable-cost renovations have been conducted in France (Lelévrier and Melic 2018). Poland is a good example of a healthy combination of privatization and management, with large housing associations responsible for large numbers of apartment buildings and collecting modest maintenance fees from residents. The outcome is a fully renovated housing stock in large housing estates that is still attractive for socially diverse urban residents without creating burdens for public finances (Szafrańska 2014).

Productive management structures may not help if differential residential mobility has already produced significant population dynamics, leaving low-income groups in large housing estates. As the social status of residents of housing estates downgrades, it may be more difficult to reverse trends (Lelévrier and Melic 2018). Consequently, well-structured management programs in Czechia and Poland are effective since there is still a relatively high social mix in housing estates in those countries. If high- and low-income groups sort into different housing segments, the financial capacity for housing upkeep in low-income housing estates could fall short of investment needs. It follows that management structures should be revised in some countries before it is too late, since the differential sorting of various income groups is in an advanced state (Ouředníček et al. 2018).

To conclude, any action that increases private or semiprivate ownership—and this is a pronounced and growing trend across Europe—in housing estates that are designed as grand macro-structures should be connected to effective systems of area-based urban management. This simple rule seems self-evident but is often violated in everyday life in many European countries; in no other housing segment can the violation of this rule create more harm than in large housing estates.

Message 6: It is critical to improve the perception and elevate the reputation of housing estates. People have a tendency to create images in their mind that may or may not match reality, but a poor reputation for large housing estates can further hurt their future performance.

At the time of the construction of housing estates, people had high hopes for them. There was great excitement, since new apartments in modernist housing estates offered major improvements in living quality. Many of the previous residential units were without running water (or cold water only), without showers or baths, without indoor toilets, and without central heating. This made people enthusiastic about newly constructed housing estates, which offered a modern living style. Since social mixing within housing estates was a common aim of policymakers and planners, both working-class and middle-class families had the chance to live in a new, modern apartment. However, the public perception of housing estates in Western Europe reversed quickly as the negative qualities of housing estates or the high concentration of low-income people were acknowledged. For example, the term "deprivedhoods" was coined in France in 1981, referring to neighborhoods in which large social problems were readily apparent (Lelévrier and Melic 2018).

Large housing estates today tend to house people with lower than average incomes, but this is not always regarded as problematic (Urban 2018). As a rule of thumb, there is more stigma attached to large housing estates in Western European cities (e.g., Costa and de Valk 2018) than in Eastern and Southern European cities. Stereotyping by the media has contributed to the poor reputation of housing estates and has diminished their chances for success. For example, the public tends to have a distorted image of housing estates in Milan, based in part on media coverage of certain negative events. People think that housing estates are overrun with foreigners, but in reality, the share of ethnic minorities there is small (Petsimeris 2018). Likewise, residents of large housing estates find it shocking when media depict them as criminals living in ghettos (Urban 2018). In Paris, large-scale investments have significantly improved the built environments of large housing estates, but their reputation has not increased among middle-class families, especially when riots and delinquency are emphasized in the media (Lelévrier and Melic 2018). Meanwhile, housing estates in Finland are well managed and often beautifully landscaped and fully renovated (Vaattovaara et al. 2018). Hence there is nothing substantially wrong with housing estates in many cities of Western and Northern Europe, and the

negative perception of them, especially among people not living there, does not always fully reflect the objective reality.

A poor reputation for housing estates can certainly jeopardize their success. People often judge various segments of housing in relative terms, and the perception of each individual tends to follow the perceptions of the crowd. For example, the reputation of inner-city neighborhoods is high across Europe today, but not long ago these neighborhoods were sites of poor quality housing and low social status (Hess et al. 2017). This suggests that changes in perception could significantly alter the development trajectories of residential neighborhoods. Policy and planning interventions at all levels—places, people, and connectivity—can help to improve all aspects of housing estates, including their image. The latter is as crucial as the first. Changing the reputation, once damaged, is not an easy task though. It only succeeds when supported with a range of related measures, including real, visible improvements for the residents ("internal image") and newcomers to the city; it is most difficult to change reputation for those living outside housing estates (Wassenberg et al. 2004).

Message 7: Intervention strategies for reversing the fortunes of large housing estates are complex. The focus is usually on area-based interventions, with an aim to improve the physical qualities of neighborhoods, or on access- and connectivity-based interventions, with an aim to link large housing estates originally located in peripheral urban space. However, more attention is needed on people-based improvement strategies.

There is little wrong with large housing estates in many parts of Europe, either because they have never experienced significant physical decline and concomitant lowering of social status or because they have been subject to large-scale renovation. What is problematic is their negative public reputation and relative position at the bottom of the housing ladder. The consequences are, however, unfavorable since social, ethnic and spatial problems are often intermixed in a vicious circle of poverty and segregation (Van Ham et al. 2018; Bolt 2018). This cycle has turned large housing estates into poverty traps where delinquency can readily develop. As a consequence, a lack of safety is one of the major challenges in large housing estates (Wassenberg 2018; Petsimeris 2018). Poor quality of the built environment is another important issue. Many policymakers have clearly understood this, and a majority of investments have consequently been channeled to improving the physical conditions of apartment buildings and surrounding built environments. Political rewards can be tied to physical

improvements. In Eastern Europe, the requirement to comply with European Union energy directives is the most common way of improving large housing estates (Marin and Chelcea 2018; Lihtmaa et al. 2018).

Another important issue—especially in West European cities—pertains to the quality of schools. Since schools often draw their students from surrounding residential districts (and in many countries, children must attend the nearest neighborhood school), when low-income families begin to concentrate in certain areas of cities, higher income parents leave these places (and avoid moving into them in the first place) due to school quality (Bernelius 2013). This may deepen and hasten the lowering of the social status of large housing estates. The lowering of the social status of residents is partly related to changes in the economy in Northern and Western European countries. Middle-class families affected by the loss of jobs due to globalization and deindustrialization often become trapped in the most affordable parts of the housing sector, usually within large housing estates. As middle-income families leave (or avoid) such areas, unemployment levels are high in large housing estates (Lelévrier and Melic 2018; Andersson and Bråmå 2018). Children raised in these social environments often have low motivation to do well in school, lack positive role models, and lack resources for getting good education and jobs; consequently, poverty tends to pass from parents to children (Van Ham et al. 2018).

We identify three types of policy interventions—related to segregation and poverty—that can be pursued in large housing estates: place-based policies, people-based policies, and connectivity-based policies. The place-based policies have been most popular in European cities and they mainly focus on upgrading the physical environments of large housing estates. This is achieved, for example, by demolishing low-quality (social) housing, by building higher quality social housing, by establishing more expensive rental and owner-occupied housing, and by enhancing neighborhood amenities. Such measures have been extensive in the UK (Murie 2018), France (Lelévrier and Melic 2018), and Russia (Gunko et al. 2018). Place-based policies often require enormous investments, but the physical layout can be upgraded by renovating and replacing buildings within a relatively short period of time. Interestingly, though, the physical outcomes of demolition differ—in terms of densities and other factors. In Western European cities, the outcome is often reduced density (e.g. Lelévrier and Melic 2018), while in Eastern Europe, the outcome is often increased density, either as a result of infills as new apartment buildings are inserted among existing ones (Marin and Chelcea 2018) or when existing apart-

ment buildings are replaced with denser and taller housing blocks (Gunko et al. 2018).

While uniformity, repetition, and equality were original guiding principles for large housing estates, diversity, individualism, and choice are important for changing the future fortunes of large housing estates (Wassenberg 2018). Area-based intervention policies can only be successful if more affluent households can be attracted to large housing estates or in-situ social mobility of existing residents occurs, driven by changes in built environments and local services, improved local school quality, and employment opportunities. It is a challenge to keep the socially upward climbers within housing estates; it would require a parallel renewal of dwellings and upgrading of neighborhood facilities and amenities.

While some progress has been made in improving the quality of built environments and services, there has been less success in attracting middle-class families to large housing estates once social decline has advanced to a certain extent or "tipping point" (Lelévrier and Melic 2018). Recent evidence from the Moving to Opportunity project suggests that mixing in situ works better than relocation (to better neighborhoods) for low-income people (Chetty et al. 2016). An important lesson that follows is that it is never too early to intervene in the physical degradation and lowering of the social status of large housing estates, but it may be too late to intervene in an effective way. People-based policies focus on reducing poverty and creating opportunities for residents in the areas of education and employment. People-based policies require a long-term perspective as it might take a generation or longer to reduce (intergenerational) poverty. An important realm that could have important spillover effects in local communities pertains to primary and secondary education. Investing not only in the physical qualities of schools but attracting well-motivated and good teachers in schools and preschools located in large housing estates could be a crucial catalyst for positive change. Especially when a share oft h e residents of large housing estates is of immigrant background, their better integration into European societies hinges on policies that adjust to specific local contexts and day-to-day activities. A large pan-European project shows that across Europe, central governments tend to pursue naive and value-based integration policies that poorly relate to people living in housing estates who experience everyday challenges (Tasan-Kok et al. 2014). More context-sensitive approaches are thus needed. A good example is the halving of class size in French housing estates in order to give more attention to each child.

Place-based policies do not necessarily reduce poverty and inequality, and people-based policies might not have desired local effect. Therefore, a full set of interventions should ideally also focus on connectivity. Interventions to improve connectivity are aimed at reducing spatial separation of poor groups from opportunities, leisure-time facilities, services, suitable jobs, and, in particular, education. For example, segregation levels have risen quickly in Tallinn compared to other European capital cities (Tammaru et al. 2016b), but free public transport in the city helps to overcome the problems of socio-spatial isolation of residents living in large housing estates (Leetmaa et al. 2018; Hess 2017). But the effect also works in the opposite direction. When better connected to the rest of the city, other urban dwellers can have easier access to large housing estates. If private companies are attracted to large housing estates and if some public institutions and jobs are located there, good connectivity is crucial for facilitating inward mobility to large housing estates. In other words, new policies are needed to promote investments that link large housing estates with other parts of cities and wider metropolitan regions. Such linking includes public transport, improving road access (often large estates are poorly accessible by roads, or are easy to avoid), and creating bicycle routes, with each travel mode providing convenient access to the city center.

Place-based policies can also lead to the gentrification of housing estates, similar to events in central cities in which higher socioeconomic groups replace lower socioeconomic groups, or fragmentation of large housing estates into smaller subdistricts where people with different social statuses still live parallel lives. Intervention strategies should thus have an eye on such changes in large housing estates as well.

Message 8: Many ideas about contemporary urban life—including sustainability, ecological footprints, communal life and the sharing economy, and social equity—align well with the underlying principles of housing estates, which offers chances for the future.

The reputation of large housing estates tends to be poor, due to either real or perceived problems related to their physical decline and spiraling social status. The original formation of large housing estates was driven by a need to provide new housing in large quantities, but there was also a belief that modernist housing and urban planning could produce a more equal and fair society (Wassenberg 2018). In Sweden, modernist housing was intended to become

the core element of the welfare state (Andersson and Bråmå 2018) and in the former Soviet Union, large housing estates acted as the spatial manifestations of egalitarian ideology (Leetmaa et al. 2018). Contemporary social and urban discussions also revolve around the topics of equality and justice, especially in light of growing levels of income inequality (World Inequality Report 2018) and residential segregation (Tammaru et al. 2016b).

The problems tend to be larger in the most grandiose housing estates with high densities and tall apartment towers. However, recent studies challenge the assumption that higher densities per se are harmful to community life or to local social interaction, suggesting that the specific urban form of neighborhoods is more important (Arundel and Ronald 2017). In some cities where high-rise housing is almost ubiquitous, high densities are not perceived as a large problem. In Moscow, for example, high urban density is a norm and new urban regeneration programs increase rather than decrease housing densities (Gunko et al. 2018). In cities with a more diverse choice set for housing, that is, with more alternatives to large housing estates, high densities tend to correlate more strongly with poor reputations (Andersson and Bråmå 2018). It is thus important to avoid the formation of stigma toward high-rise buildings and to create a social mix and change within them (Lelévrier and Melic 2018).

Although differences exist in the perception toward high densities in large housing estates that might lead to different intervention strategies, a compact city strategy is not necessarily misguided. It aligns well with contemporary urban ideals that celebrate community life, urban sustainability, and the sharing economy. What has proved to be terribly wrong, rather, was confidence in an assumption that planners and architects know what is good for people, especially the replication of the idea en masse. Design weaknesses of housing estates can be changed to a certain degree—modifying urban densities, diversifying housing through retrofitting, introducing elements of smart cities, and the sharing economy—which can help bring about important change. In housing estates with high shares of elderly people, sharing of out-of-home obligations (like daily errands and shopping) might be useful. Likewise, shared usage of bicycles or electric vehicles might be another option, not to speak of common laundry and leisure facilities. When well-managed and cared for, shared activity spaces and activities might be attractive for younger people who have difficulties entering the labor market and achieving a good starting salary, who care about sustainability, and are comfortable with the idea of resource sharing.

Measures that connect housing estates efficiently to the rest of the city—to jobs, leisure-time activity sites, urban parks, suburban and rural greenery—not only by public transport but also by well-designed pathways for non-motorized travel are also an attractive option for young people who value environmental sustainability and cost efficiency. There are various ways to be creative and to try to match housing estates better to contemporary urban ideals, thinking in a very concrete way about the needs of people living in large housing estates by acknowledging the variety of living contexts, tenure structures, and trajectories of change that they represent in European cities.

Message 9: Reliable, up-to-date, and comparable data are needed about the residents of large housing estates across Europe. We cannot expect city governments and other actors to define effective intervention strategies if they cannot accurately diagnose problems and challenges.

In the current age of information and big data, there is, most surprisingly, little solid, reliable, and comparable data about European housing estates and their residents. The diversity of housing estates and their urban contexts pose challenges to amassing relevant data. However, the problem explicitly relates to the flexibility of using data at fine-grained geographic scale by important population segments (such as ethnic groups) and data that can be longitudinally analyzed over time. Without adequate and fine-grained data that can be flexibly used to fit a variety of definitions, it is difficult to quantify and understand urban problems and, as a consequence, it is challenging to design appropriate interventions addressing confirmed problems. Non-existence of detailed data, making it impossible to accurately delineate housing estates (Marin and Chelcea 2018; Lelévrier and Melic 2018), is the norm. Fortunately, however, relevant detailed data exists in a few places such as Sweden (Andersson and Bråmå 2018). Since there are few problems in many housing estates in Europe and negative public perceptions often emerge from media coverage of specific events, it is also difficult to overcome prejudice and stigma attached to housing estates and to their residents, as evidenced in Milan (Petsimeris 2018). It follows that the reputation of large housing estates in European cities unfortunately hinges more on media reports than on solid scientific evidence.

Message 10: Past mistakes made with large modernist housing estates could help guide the way current and future cities are planned in Europe and beyond. A lesson can be offered from twentieth-century experiences in Europe

with housing estates: the larger, higher density and the more peripherally located housing areas are at higher risk of concentrating poverty and producing and reproducing triple disadvantages—social, ethnic, spatial—through a vicious circle of poverty and segregation.

Housing estates in Europe were established during the post–World War II period of rapid industrialization and urbanization, providing cost-efficient housing for rapidly expanding urban populations. There is a risk, however, in succumbing to short-term thinking in attempts to solve housing crises, because this strategy is attached to long-term societal costs. The sequence of events is as follows for reproducing a vicious cycle of poverty and segregation (Van Ham et al. 2018): lower income people cluster into large housing estates; schools are often neighborhood-based, and thus children in less affluent families living in large housing estates attend the same schools, resulting in the transmission of social and spatial disadvantage from parents to children; these differences are carried on to the labor market and result in income inequalities; the vicious circle of poverty closes when labor-market outcomes shape residential choice. The signs of the formation of segregation cycles are most clear in Northern and Western European cities (Lelévrier and Melic 2018; Andersson and Bråmå 2018) but can also be traced elsewhere (Leetmaa et al. 2018). Focusing on teachers and school outcomes in large housing estates is a potential strategy for breaking the cycle of segregation.

Although the fortunes of housing estates and their residents can be changed, the main lesson is that city leaders should conscientiously avoid the formation of such quickly and cheaply constructed housing areas on inexpensive land in urban peripheries—where migrants, immigrants, guest workers, and low-income people become highly concentrated—since this would most likely produce long-term challenges. While the phase of large-scale industrialization and urbanization in Europe is in the past and will not be repeated, these processes are at their peak today in other places across the globe. The number of people living in cities increased from 0.75 to 3.9 billion between 1950 and 2014, and an additional 2.5 billion people will move to cities worldwide by 2050, a third of them in India, China, and Nigeria (United Nations 2014). To accommodate this contemporary urban population growth, large tower block districts continue to grow.

It is not imperative to completely avoid high population densities in urbanizing countries today since it would be a nearly impossible aim to achieve;

the population size in countries urbanizing today is larger than in Europe and lower population densities would consume a great deal of valuable land. High densities per se are often not a problem in European cities. Problems emanate, however, from (1) the relative position of high-density housing estates at the bottom of the housing hierarchy; (2) a "one-size-fits-all" way of thinking in urban planning, and (3) new housing districts with deleterious features including cost-efficient planning and construction, repetition, spatial isolation, an undeveloped sense of community and place attachment, and a lack of safety. To overcome these issues, planning for new residential areas should instead focus on creating human-scale environments and avoid density-related problems. Eastern European cities demonstrate that large housing estates can be desirable living spaces for many and provide a considerable share of the urban housing stock.

It is undoubtedly tempting for city planners to build cheap mass-produced housing on urban peripheries because the living conditions provided are better (at least at the time of construction) compared to most existing housing units in a city's housing stock. Based on the twentieth-century European experience, however, grandiose cost-efficient housing estates should be avoided in favor of more human-scale urban models. Although more expensive at the time of construction, traditional and human-scale residential environments would last longer and produce fewer social problems for future generations to solve. Moreover, good connectivity, an abundance of neighborhood amenities, and a sustainable social mix supporting interaction across social groups are important for avoiding poverty concentrations in large housing estates like those in Northern and Western European cities.

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