

most affluent strata of the population. Squeezed between new office and commercial developments on one side, and upscale housing projects on the other, many lower and middle income residents find it increasingly difficult to resist displacement. The disappearance of much needed lower level retail and services from the central areas due to commercial gentrification makes their decision to relocate a foregone conclusion. In the process of restructuring the residential market and the subsequent redevelopment of urban districts, the reshuffling of residents directs most of the displaced lower income households from the inner city quarters to the housing estates at the city outskirts (Wiessner, 1999). This exacerbates further the existing problems of these notorious areas exemplifying the legacy of the socialist past.

9.3.2 Socialist housing estates

The conceptual origin of the socialist large housing estates lies in the creative interpretation by Soviet planners of the principles of modern city planning outlined in the Athens Charter of CIAM and explored in the works of Le Corbusier, Ernst May, and other influential protagonists of the modernist movement. In the socialist variant, this model was infused also with ideas borrowed from the Neighborhood Unit concept, advanced by Clarence Perry in the 1930s. In their socialist incarnation, the neighborhood units were called *mikrorayons*, each one of them centered on an elementary school and containing between 5,000 and 15,000 residents. The *mikrorayons* were organized in a system of a nested hierarchy, building up to huge estates, often exceeding 100,000 residents. In theory, each component part of the housing estate was to be provided with services calculated on the basis of its size and place in the established hierarchy (French and Hamilton, 1979). In order to assure equality of living standards, specific norms were developed to determine the type and size of the required services, including schools, playgrounds, libraries, hospitals, etc. In reality, however, only a few of the planned facilities and services were provided (see Chapter 15, this volume), and the housing estates functioned as enormous dormitories at the urban periphery, with virtually no supply of jobs and a limited level of services.

The idea of building large housing estates never gained much traction in Western Europe. It was applied selectively in some Western cities after the end of World War II, but, by the 1960s, the negative aspects of this type of residential development became clear and public support for high-rise construction sharply declined (EAUE, 2000). Today, only 3 to 7 percent of the housing stock in Western European cities is comprised of large housing estates with over 2,500 dwellings (EAUE, 2003). Most of the large cities in the former socialist countries in Central and Eastern Europe, on the other hand, have between 40 and 50 percent of their residential stock in such dwellings, housing over half of their population (see Chapter 11, this volume). This type of residential development was literally viewed as “housing for the masses” during the socialist period. It was imposed on communities by

the central planning authorities according to quotas based on population size, with little concern for the needs or traditions of the local communities. Local governments were involved only in the selection of the sites needed to accommodate the planned number of units (Tosics, 2004).

Several factors are pointed out in attempts to explain the proliferation of the large residential estates as a main form of housing during the socialist period. The central authorities justified their decision to resort exclusively to this type of construction as an effective method to expedite and increase housing production needed to cope with the rapid urbanization following the end of World War II. The population of Warsaw, for instance, grew ten times in size during the span of the socialist era – from 160,000 residents in the early 1950s to 1.6 million in 1990 (EAUE, 2000). The system of pre-fabricated housing presented a crude union of the two processes marking the socialist era – industrialization and urbanization. In view of the social imperative to produce as much housing as fast as possible, the government preferred to construct new buildings on greenfield sites rather than to rehabilitate old neighborhoods. This choice was also determined by the fact that the majority of the buildings in the old urban districts were in private ownership (Häussermann, 1996). It was much easier for the state to construct new housing on large chunks of undeveloped land, where the industrial method of production could be employed at full swing (Szelenyi, 1996), rather than to tinker with piecemeal upgrades of individual dwelling units that were not even property of the state. In that sense, the socialist housing estates represented an embodiment of the socialist political and decision-making system, which placed a great emphasis on centralization (Enyedi, 1996).

The negative consequences of this housing policy are quite visible today. They include a deteriorating urban fabric in the historical inner city areas, due to decades of government neglect, and an equally worsening quality of the built environment in the housing estates as a result of compromises made in the quality of the construction and the provision of services for the sake of increase in total output. Overcoming these problems presents some of the greatest challenges that the post-socialist city has to address. The attempts to accomplish this task are hindered by significant obstacles, summarized in a study by the European Academy for the Urban Environment in two major areas (EAUE, 2003). The first one is related to the lack of coordinated policies for the future development of the socialist housing estates. The various parties involved in the debate – state departments of urban development, municipal governments, district authorities, restituted land owners, investors interested in the development potential of the area, and local residents – do not seem to share a common vision on the sets of actions that need to be taken and the division of responsibilities that follow. The situation is further compounded by the unclear legal status of many properties during the process of land re-privatization. The second area of concern is the lack of funding needed for the upgrade of the rapidly ageing buildings and infrastructure. Leaking flat roofs, corrugating wall joints, exterior walls with poor insulation are some of the most visible signs that the buildings are not aging gracefully. Setting the “boundaries of

responsibility” between the owners and the municipality for the maintenance and upgrade of the structures is another main issue as the pattern of ownership often presents a chaotic mixture of units in private and public hands.

The difficulty of resolving all of these complex issues has suppressed the expectations of many of the residents of these communities. A sizable portion of them have decided to resolve this situation by moving out to better-off neighborhoods not mired by such seemingly insurmountable problems. This outflow of primarily affluent households, coupled with the influx of lower income residents displaced from the inner city areas, has triggered a process of socio-spatial segregation leading some authors to predict an ominous future for the housing estates. This process is particularly visible in Hungary, where the liberalization of the housing market began earlier than in other Central and Eastern European countries (Tosics, 2004), and in Eastern Germany where the long expected stigmatization of the socialist housing estates has led to the exodus of middle-class households from these communities (Nuisssl and Rink, 2003).

Whether the social homogenization of the large housing estates will become a norm for CEE countries remains a subject of debate. In Poland, Romania, and Bulgaria, for instance, while housing values in such communities have not appreciated as much as in other city areas, they have been quite actively traded on the market. In Sofia, new infill development and construction of good quality housing at the edges of the socialist estates is quite popular as investors take advantage of the existing infrastructure in those areas. Given the share of housing in large residential estates, it is difficult to imagine that the post-socialist cities can afford to neglect such enormous accumulation of real estate assets. The large pool of housing concentrated there, the high demand for dwellings, and the relative affordability of the housing units in these communities are good indicators that the housing estates will continue to play an important role for large sections of the population in Central and Eastern European cities in the foreseeable future (Sailer-Fliege, 1999).

In realization of this situation, several former socialist countries have already initiated programs for the renovation and revitalization of these sizeable pieces of the post-socialist urban fabric. Germany has been at the forefront of this effort due to an early recognition of this problem illuminated by the stark contrast in urban form between the East and the West of the country after their reunification. Other factors that played a role in the early involvement of the German government in this issue were the wealth of funding earmarked for completing the process of reunification and reconstruction of the New Laender, and the high share of publicly owned units in the housing estates of East German cities (Wiessner, 1999). Thus, in East Berlin, where two thirds of the city population resided in pre-fabricated apartments, a ten-year comprehensive plan for the regeneration of this housing stock began in 1992. By 2002, 60 percent of the dwelling units in large housing estates had been completely renovated and 25 percent partially renovated. The high renovation expenses (approximately 20,000 EUR per dwelling), which were still a fraction of what the costs of tearing down and rebuilding those areas would have

been, were shared by tenants, housing authorities, and various levels of municipal and state governments (Tosics, 2004).

The results of this massive renovation program, however, have been mixed. By 2002, roughly 1.3 million flats in East Germany were vacant, most of them located in large housing estates, including some renovated buildings where rents were much higher (EAUE, 2003). Not all East German cities received as much attention and funding as Berlin. In Magdeburg and Leipzig, for instance, vacancy rates reached 30 percent, with most of the unoccupied units located in the large housing estates (Hannemann, 2004; Wiessner, 1999). The German government has recently instituted a new program, *Stadtumbau-Ost*, designed to carry out the demolition of over 300,000 vacant dwelling units, largely on housing estates. The main criticisms of the earlier renovation programs have pointed at two flaws of the government approach: the highly centralized, top-down initiative, not backed by analysis of the needs of the local job and housing markets; and the lack of a parallel government policy for controlling residential decentralization. In fact, the German government became a main force behind suburbanization, providing generous subsidies for the construction of single family houses beyond the urban edge (EAUE, 2003). The experience of other CEE countries in the post-socialist era has confirmed what has already become a truism in Western Europe and North America – urban decay and suburbanization are two processes that are intricately related.

9.3.3

Residential development at the urban periphery

Suburbanization has become one of the most visible features of the process of spatial restructuring rearranging the urban patterns of the post-socialist city. While the spread of housing beyond the urban edge was observed in small numbers during the socialist period, today, large expanses of land covered with detached houses have become a typical sight for metropolitan areas throughout Central and Eastern Europe. In Estonia, for example, construction of single family housing increased five times between 1990 and 2002, while the production of other residential types has not even doubled (EAUE, 2003). In Prague, from 1990 to 2003, apartment construction increased six fold while the number of new single family houses placed on the market grew ten times (Index Imoti, 2004). Most of this new construction activity has been directed to the suburban periphery. During the 1990s in Leipzig, for instance, the city government issued development approvals for projects accommodating over 100,000 residents beyond the urban edge (Wiessner, 1999). The fastest growing residential areas of Sofia have been suburban settlements located at its southern periphery (Chapter 11, this volume), and in the outskirts of Prague the intensity of housing construction has been three times higher than the average for the country (Sýkora, 2006).

Besides their general urban form characteristics based on the primacy of the detached single family house in the urban periphery, the post-socialist suburbs bear