

11. Social urban geography of Ljubljana

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Cities are heterogeneous with respect to the social composition of their populations. We take social structure to mean the spatial distribution of particular social groups of the population and the differences arising from it in the social composition of the population of different parts of the city. Uneven spatial distribution of different social groups can also be termed spatial social segregation. Since the basis for the spatial social segregation of the population is the place of residence, we can also refer to residential social segregation; segregation can be seen also in education, employment, and social networks.

The social structure of the city is primarily a reflection of the more general social stratification of society. The social stratification of Slovenian society is, according to the findings of sociologists, comparable to conditions in western European countries. During the time of the economic transition in the 1990s, social differences in the population increased, but nevertheless in the European context Slovenia is ranked among countries with relatively small social differences. This is also shown by the socioeconomic stratification, or the income classes based on the methodology of the Institute for Macroeconomic Analysis and Development (*Socialni razgledi*, 2006, 16). The shares of people in the lower and upper income classes are relatively small, and a large majority of the population, about 85 %, fall in the middle income bracket. The level of risk of poverty was estimated at 10 % for 2003, which gives Slovenia the second lowest risk of poverty in the European Union. Between 1998 and 2002 there was a continued reduction of social inequality, since the level of risk of poverty dropped from 11.8 % to 10.0 %. In this connection it should be stressed that the population under the previous socialist socioeconomic system was also socially stratified. Differences in income among particular occupations and classes of population were limited, but they were in no way negligible. It is clear from an analysis of the social geography of Ljubljana in 1991 that at the end of the “socialist” period there was present a moderate social segregation of the population (Rebernik, 2002).

Table 31: Income distribution in Slovenia in 1998 and 2002.

Income class	1998		2002	
	Persons (%)	Income (%)	Persons (%)	Income (%)
Lower	14.0	6.1	11.9	5.3
Lower middle	54.1	4.1	55.0	38.3
Upper middle	26.9	36.5	28.2	38.3
Higher	5.1	12.2	4.9	11.1

Source: Socialni razgledi 2006, 17.

In this chapter we attempt to provide answers to some basic questions: What are the main characteristics of spatial social segregation in Ljubljana? Which factors influenced the present-day social geography of the city? Is social segregation of the city a reflection of the general social stratification of society? Is the social geography of Ljubljana in keeping with the theoretical underpinnings of urban geography and comparable to condi-

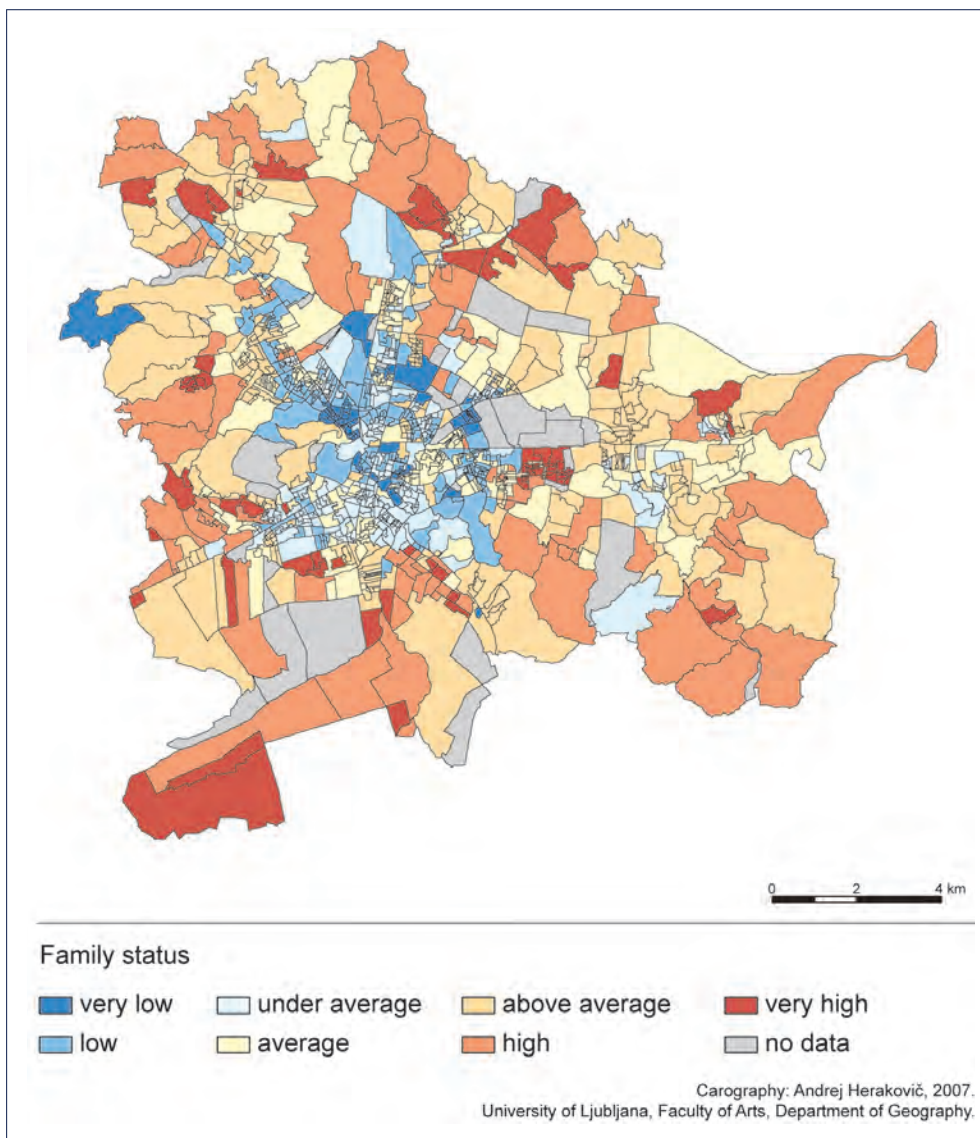
tions in European cities? Is the social geography of Ljubljana undergoing a pronounced transformation, and which processes of social transformation are most important? To what extent do the housing market, national housing policy, and the attitude of the population to the living environment influence the social structure and transformation of the city? Can we identify and spatially delimit characteristic and specific social areas in the case of Ljubljana?

The study of the social composition and transformation of the city is based on an analysis of data from the 2002 population census. The basic method used was an analysis of the educational, income, and age structure of the population in the territory of the Urban Municipality of Ljubljana based on a comparison of the share of selected population groups in the former local communities. Local communities were a form of local self-management that were replaced with neighborhood or district communities with the local self-management reforms. We selected local communities as the basic spatial unit since their size and spatial extent is very well suited to our study. Due to their pronounced non-urban nature the area of the former local communities Besnica and Lipoglav were excluded from the analysis. A comparison of the census data from 1981, 1991 and 2002 enabled an outline of the basic processes of social transformation of the city. The results of a study of the social structure of Ljubljana using factor analysis performed on census data from 1991 (Rebernik, 1999) were also used. The main features of social structure thus obtained are placed in the context of general socioeconomic and spatial processes. In this connection the influences of the operation of the housing market and housing and urban planning policy were highlighted. A categorization of the city into social areas represents a synthesis of the findings from particular phases of the study.

Factor analysis, along with similar methods, has become the preferred and most commonly used approach for measuring urban social spatial differences. It is an inductive procedure for the analysis of a wide specter of social, economic, demographic and housing characteristics of an urban space with the goal of determining a common pattern for the social structure of cities. Factor analysis makes possible the identification of common factors, i.e. new, hybrid variables, which exemplify the complexity of the variability of the originally measured variables. It involves a series of mathematical-statistical procedures which make it possible for a larger number of correlated variables to determine a smaller number of basic variables which explain the correlation. These are called common factors. In the case of studying cities, the original observed variables are data on the social, economic, demographic, and ethnic composition of the urban population according to certain spatial units, usually census districts or areas. The factors are defined in terms of content using factor weights, which are coefficients of the correlation between the original variables and the common factors. The study of the case of Ljubljana (Rebernik, 1999) included variables on the income, occupational, educational, ethnic and age structure of the population and the structure of households and standard of housing. It turned out that a large degree of the variance can be explained by three common factors: the socioeconomic, family and ethnic status of population. The socioeconomic status of the population is determined by the educational and occupational structure and the income of inhabitants. The family status of the population is determined by the age structure of the population and the structure of households. The ethnic status of the population is a reflection of the national and religious structure of the population. The social structure of Ljubljana is thus reflected in the socioeconomic, family or demographic, and ethnic or

national-religious differentiation of the population, and fits in well with the theoretical model of factorial ecology. The spatial distribution also follows the theoretical underpinnings of factor ecology: the socioeconomic position of the population has a sectoral distribution, the family position a concentric one, and the ethnic position a multi-nuclear one. Figure 38 thus shows the family status of population, where low family status corresponds to high share of small and old households and high family status to high share of families with children. Below we present the characteristics of socioeconomic and ethnic segregation of the population in more detail.

Figure 38: Factorial analysis, family status of population, Urban Municipality of Ljubljana, 1991.

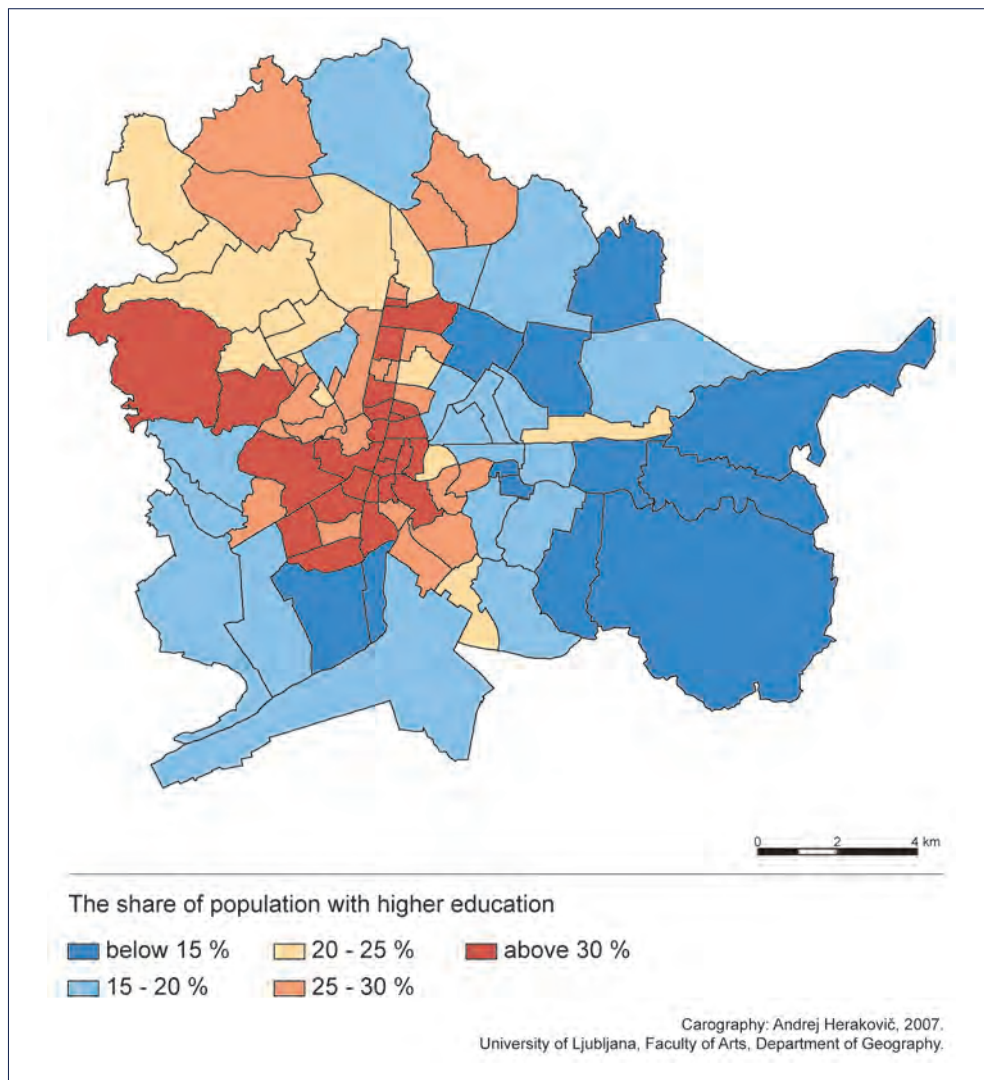


Source: Rebernik, 1999.

11.1. Socioeconomic segregation

Using factor analysis based on census data from 1991 (Rebernik, 2002), the study showed that the greatest part of the variance of the original variables which were included can be explained by the factor socioeconomic status of the population. From this we can conclude that the social structure of Ljubljana is influenced to the largest extent by differences in the socioeconomic position of the population in particular parts of the city. An analysis of socioeconomic segregation of the population based on census data from 2002 showed no major changes compared to the situation in 1991, but that due to the privatization of socially owned housing and the formation of a housing market and accelerated housing construction for the market there was some increase in socioeconomic segregation.

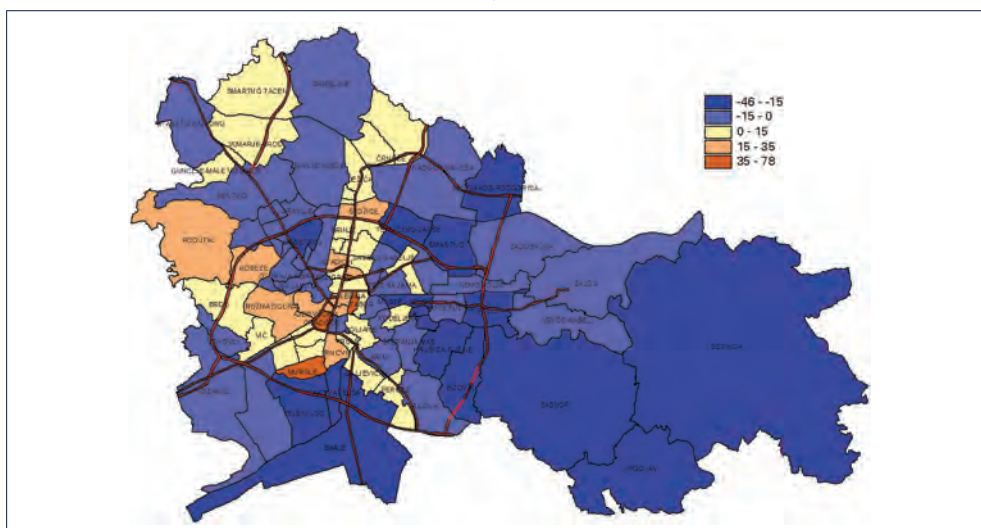
Figure 39: The share of population with higher education, Urban Municipality of Ljubljana, 2002.



Source: 2002 Population Census, Statistical Office of the Republic of Slovenia.

A large part of the city has a relatively average and heterogeneous socioeconomic composition of the population. However, within areas with an average socioeconomic composition, there were characteristic large differences in the socioeconomic status of the population over a small distance, for example between individual apartment buildings. This is, for example, highly characteristic of the old city center and particular neighborhoods of blocks of apartments. These are areas with a highly heterogeneous social composition of the population which is primarily a result of the urban planning, population development of the city over the entire postwar period, and of the low social stratification of the population under the previous socioeconomic system. The operation of the housing market and the spatial mobility of the population within the city were limited up until 1990, which impeded the spatial social differentiation of the city. This was connected with strong state intervention in housing construction and supply, which was expressed in a high share of public housing construction. The phenomenon of spatial social differentiation was considered negative and unacceptable by the values of the socialist social system. Thus in residential neighborhoods a portion of the apartments were intended for sale, and a portion were allocated to people entitled to social housing or so called "solidarity apartments". These were intended for people with low incomes who would not otherwise be able to secure suitable housing for themselves. The result of this was a heterogeneous socioeconomic composition of the population in neighborhoods of apartment blocks. The socioeconomic position of owners of apartments was usually higher than that of those entitled to social housing. The privatization of socially owned housing and the introduction of a market economy at the beginning of the 1990s had an influence on the creation of a real estate market and associated greater spatial mobility of the population. Households with higher incomes frequently moved out of apartment block neighborhoods, in particular to single-family dwellings at the outskirts of the city or into new and higher quality apartments in Ljubljana, which led to a strong concentration of households with below average income in apartment blocks. Figure 40 represents the spatial distribution of average income by former local communities, expressed in income tax base per capita.

Figure 40: Local average income tax base per capita expressed as deviation (in %) from the average income tax base per capita in Urban Municipality of Ljubljana, 1999⁴⁹.



Sources: Tax Administration of the Republic of Slovenia (2001); Krevs (2002).

⁴⁹ Due to new legislation on statistical data publication more recent data are not available

Large areas with a homogeneous socioeconomic composition are the exception. Parts of the city with residents in a very low socioeconomic status, which often overlap with an above average share of the non-Slovene population and a specific family status, stand out. These are primarily some substandard neighborhoods of single-family houses on the city outskirts which came into being through illegal building and which have a high share of non-Slovenes⁵⁰, older working class neighborhoods⁵¹ and some larger neighborhoods of apartment blocks⁵². We could refer to them as socially deprived areas, with a concentration of population of the lowest socioeconomic status, a high rate of unemployment and an above average share of the non-Slovene population. The eastern and southern edges of the city also stand out for the relatively low socioeconomic status of the population.

Areas with good living conditions and a high housing standard and attractive location have an above average socioeconomic status of the population. In this category belong newer and larger neighborhoods of single-family houses with a uniform urban layout and a high quality living environment⁵³, the traditionally elite or “bourgeois” part of the city center between Slovenska Street and Tivoli Park, neighborhoods of villas⁵⁴ and certain newer multi-unit buildings with luxury apartments.⁵⁵ Accelerated new market housing construction in central parts of Ljubljana has caused a concentration of population with above average incomes in previously working class neighborhoods, which has all the characteristics of the phenomenon of gentrification.⁵⁶ Accelerated suburbanization has also created smaller areas with a high socioeconomic status of the population in suburban areas.⁵⁷

We conclude with the finding that Ljubljana is characterized by moderate socioeconomic segregation. An above average socioeconomic status of the population can be found in much of the city center and the western parts of the city, while a below average position is seen in the more industrial and working class eastern part of Ljubljana.

11.2. Ethnic segregation

The ethnic status of the population in Ljubljana is based on its national and religious composition, and indirectly based also on its occupational and educational composition. Thus for areas with a high share of non-Slovene population, there is a characteristic above-average share of lower educated and unskilled labor force employed mainly in manufacturing and services. This is a reflection of the social composition of the immigrant population from regions of the former Yugoslavia. Causes for immigration to Slovenia were primarily economic: economic underdevelopment, rural overpopulation, and a shortage of jobs in less developed regions of Yugoslavia and the demand for unskilled labor in Slovenia (particularly in manufacturing, construction, and services), a relatively favorable solution to the housing problem of immigrants and similar (Pak, 1993). About 10 % of the population living in Slovenia is non-Slovene, and in cities this share is usually

⁵⁰ Rakova jelša, Sibirija and parts of Tomačevo, Galjevica, Zalog, etc.

⁵¹ Vodmat, Moste and Zelena jama.

⁵² Štepanjsko naselje, Nove Jarše and Nove Fužine.

⁵³ Neighborhoods of row and atrium houses in Murgle, Galjevica, Dravlje, Bežigrad.

⁵⁴ Rožna dolina, Mirje, Poljane and others.

⁵⁵ The neighborhoods Mostec, Bežigrajski dvor, Nove Poljane, Kapitelj, Tabor and others.

⁵⁶ The localities of Poljane and Tabor.

⁵⁷ Particularly characteristic for the western and northern suburban areas.

higher. The non-Slovene population moved into urban areas which offered the greatest number of jobs for a labor force with a low level of education and skills. Due to the high share of people who did not specify their nationality in the 2002 Population Census the exact number of ethnic minorities in Ljubljana is impossible to determine. The share of the population who identified themselves as Slovene is thus 74 %. Of the remainder of the population, only half specified their nationality, such that the share of those with unspecified nationality is about 13 %.

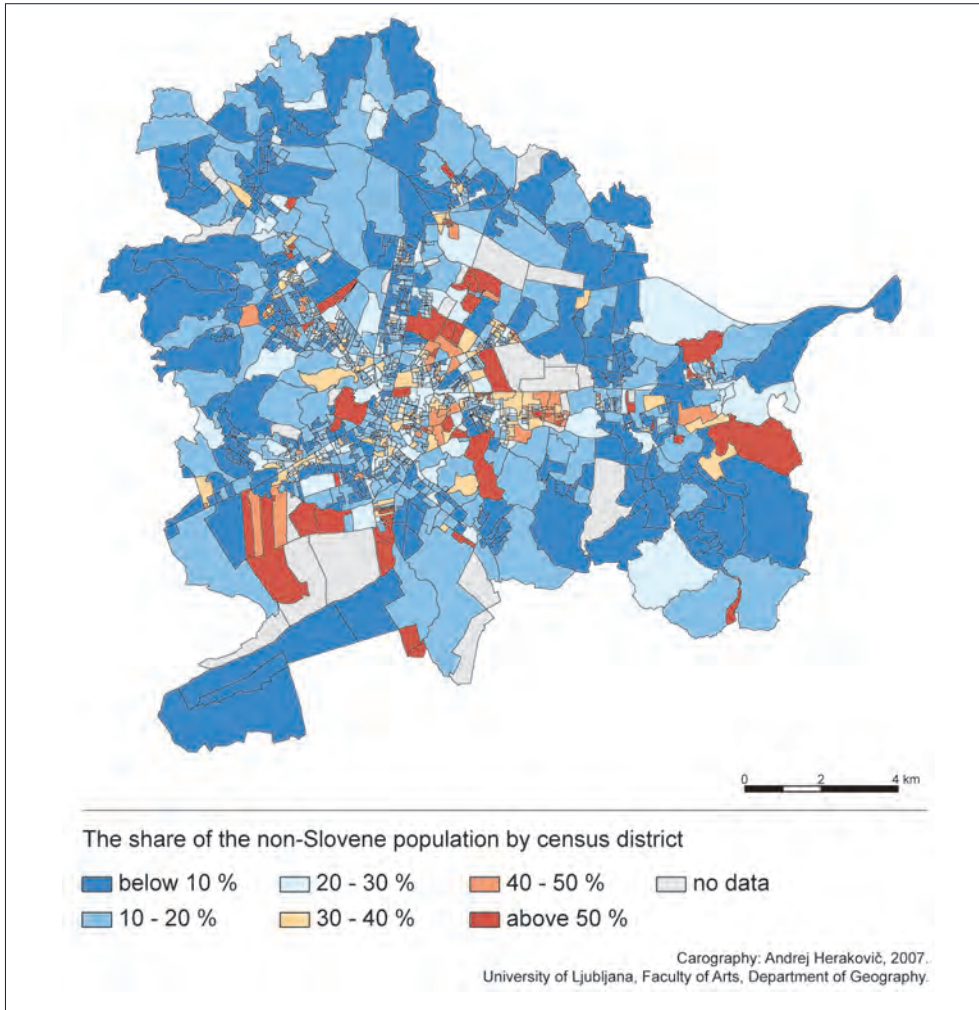
Most of the non-Slovene population moved to Ljubljana in the 1970s and 1980s, in particular between 1975 and 1982 (Repolusk, 2000). After 1991 immigration from regions of the former Yugoslavia contracted sharply; among the more recent immigrants there is a predominance of Albanians from Kosovo and Macedonia. Immigration from parts of the former Yugoslavia, especially from Bosnia and Herzegovina and Serbia, began to increase noticeably again after 2002, such that we can expect an increase in the number of immigrants in the subsequent years. The number of members of ethnic minorities is also growing through natural increase, but there is assimilation, particularly among the second and third generations of immigrants. The substance and meaning of ethnic belonging are the subject of constant examination and reinterpretation at the level of the individual and the community, in accordance with social circumstances. This is also clear from the census data and studies which find that the inhabitants of Ljubljana change their statements regarding nationality, religious faith and even native language (Komac, Medvešek, Roter, 2007, 99). According to the 2002 census data, 15 % of the population of Ljubljana, or about 40.000 people, immigrated there from parts of the former Yugoslavia. These are members of the first generation of immigrants. The number of members of the second and third generations, who are already partially or completely assimilated, cannot be determined from census data.

Ethnic segregation is defined as the uneven spatial distribution of an ethnic group relative to the rest of the urban population. Based on census data from 1991 and 2002 we found that ethnic segregation is also present in Ljubljana. The greatest problem for all immigrants is, in addition to finding employment, finding housing. For this reason new immigrants move in with relatives, friends, and acquaintances, i.e. with people from their home countries, who offer them initial assistance in settling in to the new environment. Due to low incomes they seek the cheapest accommodation and settle in areas with poor living and housing conditions. During the period of the most intensive immigration of the non-Slovene population into Ljubljana, settlements of barrack-type housing arose as well as neighborhoods of illegally and shoddily constructed one-family houses. A very typical form of accommodation are so-called "bachelor dormitories" belonging to various construction and industrial companies which use them to house their workers in minimal accommodation standards. As part of solving the housing problem of immigrants and improving barrack-type and other substandard settlements in Ljubljana, some public housing settlements were built, such as for instance the row houses in Tomačevo, Zgornji Kašelj and Črnuče. Some of the new immigrants have found housing in the older working class areas of the city with substandard accommodation. A large part of the non-Slovene population moved into the newly built apartment blocks of Štepanjsko naselje, Nove Fužine, Dravljje and Črnuče when socially owned apartments were being allocated or due to an improved financial situation. All this influenced the spatial distribution of the non-Slovene population in Ljubljana.

The highest shares of non-Slovene population are found in the following locations:

- substandard neighborhoods of one-family houses of Rakova jelša, Sibirija, Dolgi most, Tomačevo and Zgornji Kašelj,
- areas of bachelor dormitories in Bežigrad between Topniška and Vojkova streets and the apartment blocks of Litostroj in Šiška,
- older working class neighborhoods with substandard housing such as Zgornje Poljane, Stari Vodmat and Zelena jama,
- the apartment block neighborhoods from the seventies and the eighties of Nove Fužine, Spodnje Črnuče, Nove Jarše, Dravlje, Rapova jama, Savsko naselje and Zalog.

Figure 41: The share of the non-Slovene population by census district, Urban Municipality of Ljubljana, 1991.⁵⁸



Source: 1991 Population Census, Statistical Office of the Republic of Slovenia.

⁵⁸ Due to new legislation on statistical data publication more recent data is not available

The share of the non-Slovene population is highest in the substandard neighborhoods of one-family houses, where it exceeds 50 % everywhere, and is as high as 70 % in Rakova jelša. Of the apartment block neighborhoods, the highest share, 40 %, is in Nove Fužine and Črnuče, while it is somewhat lower in Savsko naselje, Nove Jarše, Rapova jama and Dravlje. In the older working class districts it reaches about 30 %. There are large differences in the shares of the non-Slovene population within particular neighborhoods, which is especially characteristic for the large apartment block neighborhoods of Nove Fužine and Dravlje. An above average share of the non-Slovene population (over 20 %) is characteristic for the majority of the other apartment block neighborhoods and for part of the old city center. The share of the non-Slovene population in most of the suburban areas, with the exception of the southern part, and in the majority of the neighborhoods of one-family houses such as Murgle, Podutik, Grba, Bežigrad, Kodeljevo and Vrhovci, is very low, less than 10 %.

The only areas with a majority share of non-Slovene population which could be called ethnic neighborhoods are the areas of substandard one-family dwellings Rakova jelša and Sibirija at the southern edge of Ljubljana. Typical of these substandard neighborhoods of single-family dwellings is illegal construction on plots of land that were not designated for individual housing construction. In the first phase of construction such settlements were without municipal, energy, telecommunications and transportation infrastructure. Gradually inhabitants in cooperation with the city administration addressed the problems of infrastructural hook-ups, and today these houses have access to at least the water supply network and electricity, and some are also hooked up to the municipal sewage system. They are characterized by a general poor quality of public spaces (for example unpaved roads) and untidy and unfinished residential dwellings and surrounding landscaping. Houses frequently have unfinished exteriors and unlandscaped gardens and yards, with heaps of building material waste and old cars. In the 1990s it was possible to observe a gradual cleanup of particular parts of these settlements, with the paving of roads, the fixing up of houses and the construction of individual new buildings. The socioeconomic position of the population in the parts of Ljubljana cited is extremely poor. More than 80 % of the population consists of unskilled and skilled workers employed in industry and services. Due to this occupational structure their incomes are only two thirds of the city average. Also poor is the educational structure of the population: quite a bit more than half have only primary school education or less.

11.3. Alternative approaches to social geographical research of Ljubljana

Several studies extend our social geographical knowledge about Ljubljana by shedding light on different inter-relations between the social-economic characteristics and structures of the population and its living environment. Geographical studies of level-of-living, or quality-of-life in term's wide sense, are among such studies (Krevs, 1998, 1999, 2000, 2002b). Level-of-living is a pragmatic measure of circumstances or conditions of living of the people at a certain area and in a certain period of time. The following "circumstances of living" have been taken into consideration in the study of Ljubljana (Krevs, 2002b): incomes and their distribution, residential conditions, attained level of education, ethnic heterogeneity, supply and accessibility of services, accessibility of basic medical services,

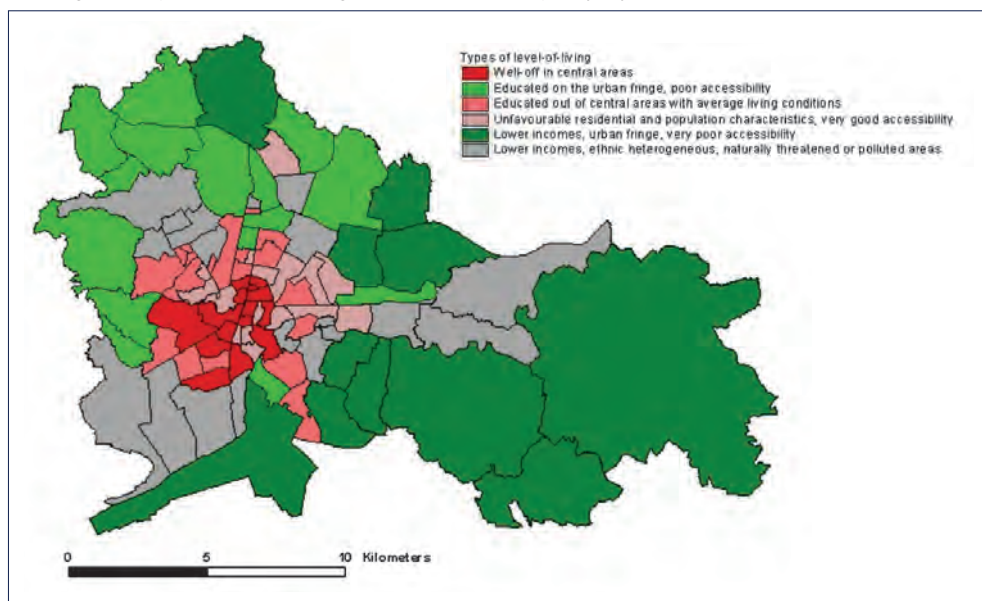
accessibility of recreative and leisure activities, traffic and transportation conditions, natural threats to residential areas and pollution of residential areas. These partial indicators of the level-of-living have been transformed into a single complex indicator. Two methods have been used, resulting in two different complex representations of the level-of-living. The “aggregated index of level-of-living” has been calculated using Bord’s average rank method. The highest values of the index show the biggest concentrations of predominantly favourable living conditions, which tend to be agglomerated around the city centre and in Murgle. The lowest values of the index on the other hand point out the local communities with a concentration of unfavourable living conditions: Rakova jelša, Zeleni log, Tomačevo, Črna vas and Besnica. In general unfavourable living conditions tend to concentrate in eastern and south-western part of the municipality. Another approach to complex representation of the level-of-living has been a classification (typification) of the studied areas into groups of areas with similar combinations of the values of “partial indicators” of level-of-living, in other words, with similar living conditions (table 32, figure 42).

Table 32: Share of population of Urban Municipality of Ljubljana in areas of different types of level-of-living.

Type	Short description of the type	% of population
1	Well-off in central areas	14,4
2	Educated on the urban fringe, poor accessibility	12,3
3	Educated out of central areas with average living conditions	21,2
4	Unfavourable residential and population characteristics, very good accessibility	21,5
5	Lower incomes, urban fringe, very poor accessibility	7,2
6	Lower incomes, ethnic heterogeneous, naturally threatened or polluted areas	23,4

Source: Krevs, 2002b.

Figure 42: Types of level-of-living in Urban Municipality of Ljubljana.



Source: Krevs, 2002b.

Among the aims of geographic research of level-of-living is to point out the occurrences of spatial and social inequality. The differences between the local communities in urban Municipality of Ljubljana prove that both aspects of inequality are quite clearly expressed. The existence of extreme inequalities is socially undesirable, among several reasons also because of its potential contribution to social tensions, especially when considerable differences occur between neighbouring local communities. An example of such spatial contact between local communities with extremely different level-of-living in Urban Municipality of Ljubljana occurs between Murgle, Rakova jelša and Zeleni log.

A study of short-term spatial processes of income differentiation among the local communities in Urban Municipality of Ljubljana (Krevs, 2002a) has shown increasing spatial concentration of the population with low incomes and in the same time a growing area of the population with higher incomes. Although the spatial differences in level-of-living and the intensity of the processes of their change found in Urban Municipality of Ljubljana may be moderate when compared to situations in majority of the capitals in Europe, a permanent attention should be paid to prevent extreme intensification of the spatial and socio-economic differentiation in the municipality.

A subjective reflection of the social segregation and its complex interrelations with other "circumstances of living" in neighborhoods in Ljubljana has been studied in a series of studies of perceptual spatial differentiation within Urban Municipality of Ljubljana (Krevs, 2004; Krevs, 2008; Kodre et al., 2000; Atelšek et al., 2001; Kramar et al. 2007; Žigon et al., 2010). Perception of neighbourhoods is understood as emotional, positive or negative, attachments to neighbourhoods as places, and Tuan's understanding of terms topophilia and topophobia (Tuan, 1974; 1977). An important conceptual spring of such a research is the linking of perception of the "real world" to (potential) spatial behaviour and eventually changing the physical and social environments. A broader aim is to follow changes of perceptual spatial differentiation of Ljubljana in parallel with, and in relation to several contemporary spatial processes going on in the area, like gentrification, changes in public safety, real estate prices, spatial changes in urban functions and social-economic segregation. »Neighbourhoods« have been defined on the basis of combination of two subdivisions of the municipality, city districts (mestne četrti) and former local communities (krajevne skupnosti). Neighbourhoods are characterized by at least some local identity and relative social-economical homogeneity. Sampling of the 1620 respondents⁵⁹ has been carried out. From every of the 27 neighbourhoods a quota sample of adult respondents has been taken, roughly corresponding to local gender and type of housing structures.

Answering to such questionnaires, respondents mix both, attitudes originating from their own experiences, as »insiders« or »outsiders«, of individual neighbourhoods, and »constructed attitudes«, based mostly on external information. The first type of attitude is based mainly on distinctive emotional or rational bonds to individual neighbourhoods or locations within them. The second type of attitudes is basically »constructed for the purpose«, using any information available in respondents memory and to his mind at the moment of answering to the questionnaire. The questions were designed in the following way:

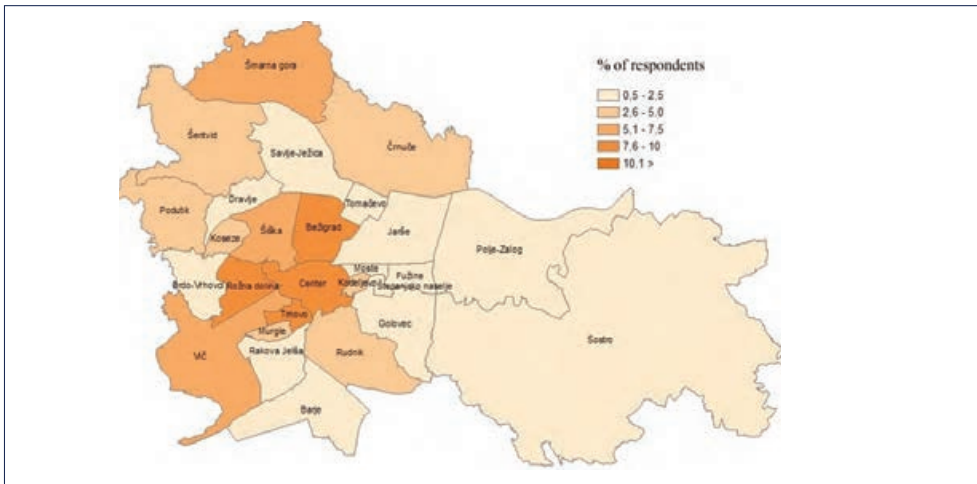
- respondents had to pick three of the neighbourhoods from Municipality of Ljubljana that – by their opinion – suit best to a given characteristic; majority of respondents are supposed to be able to report their perception of several neighbourhoods; picking three of them instead of only one should just make the task easier, as the ranking they use is not so restrictive;

⁵⁹ Number of respondents in the study in 2009; the local samples of residents have been enlarged from 30 per neighbourhood in the study in 2002 to 60 per neighbourhood in 2009.

- only three – by our opinion very unambiguous - aspects of perceptions of neighbourhoods have been studied, demanding respondents to choose the neighbourhoods that are the most attractive for living, the least attractive for living, and the most unsafe; in terms of tophophilia and tophobia, the answers to the first question show “love for a neighbourhood”, answers to the second question “hate of a neighbourhood”, and answers to the third question “fear of a neighbourhood”;
- respondents then presented the arguments supporting their choices of neighbourhoods; this qualitative information is the basis for our interpretation of the perceptions of the neighbourhoods, including the context of these perceptions, and their potential impacts on the spatial processes in the future.

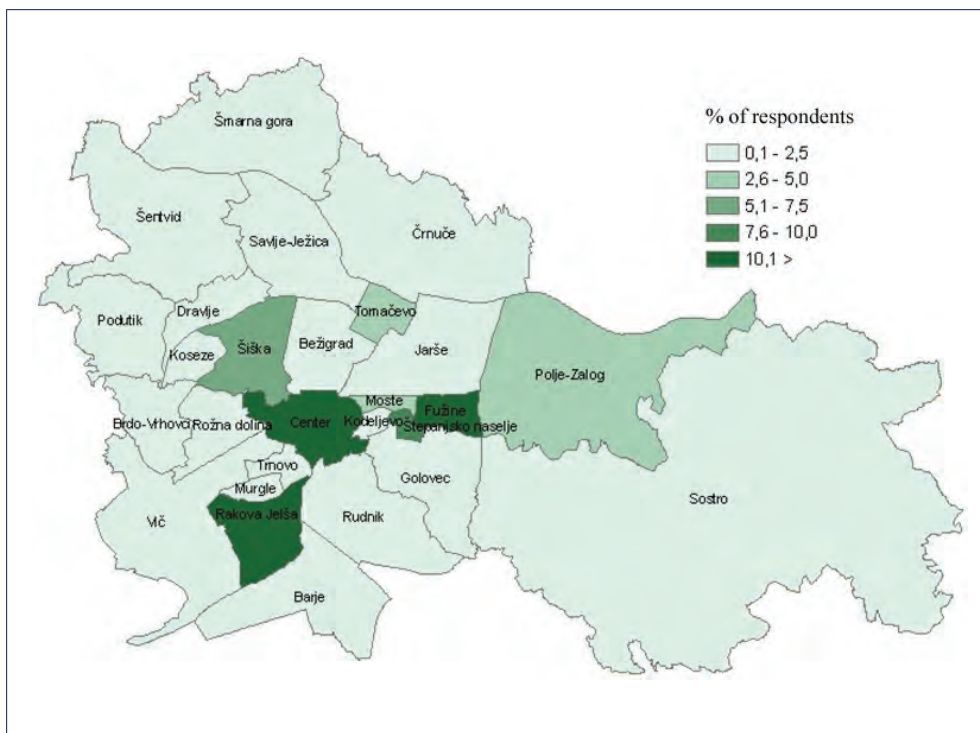
Territorial aggregation of collected responses allows us to study “intensity” of perception, defined by proportion of respondents choosing individual neighbourhoods from a given aspect of perception (Figures 43 and 44). Positive attitudes to neighbourhoods are considerably more evenly spatially distributed, characterized by smaller spatial variability of the intensity of perception, than the negative ones. “Rožna dolina” and “Center”, the most often selected as neighbourhoods attractive for living, were “chosen” by about 20 % of respondents, “Nove Fužine” as the most non-attractive neighbourhood for living by more than 40 % of respondents, and the same neighbourhood as the most unsafe by nearly 70 % of respondents in the study from 2009. At least a partial explanation of this finding could be a wider range of factors influencing positive perceptions, which are probably more often based on respondent’s own experience. On the other hand the negative perceptions may be based on a single (or a small number of) criterion, possibly »borrowed« from general public opinion and clichés. Selecting “the worst” neighbourhoods is practically always “pointing at others”, while all the neighbourhoods, even “the worst” by general opinion, are selected as “attractive for living” at least by some locals. The negative stereotypes about the characteristics of the neighbourhoods tend to be much stronger, spatially more concentrated to certain neighbourhoods than the positive ones. And from the perspective of distance to selected neighbourhoods from “home neighbourhood”, the positive attitudes tend to have more spatially autocorrelated distribution than the negative ones.

Figure 43: The perceived most attractive neighbourhoods for living in Urban Municipality of Ljubljana.



Source: Žigon et al., 2010.

Figure 44: The perceived most unsafe neighbourhoods in Urban Municipality of Ljubljana.



Source: Žigon et al., 2010.

Pearson correlation coefficients are taken as a rough estimate of correlation between “perceptual information” and selected socio-economic characteristics of the neighbourhoods. These estimates help us to generally interpret relations between perceptions or attitudes to neighbourhoods (“perceived neighbourhoods”), and some aspects of “objective circumstances” in the neighbourhoods (“objective neighbourhoods”). Correlation coefficients in general reflect low correlations between the (“subjective”) perceptions and selected “objective” socio-economic characteristics of the neighbourhoods. This in a way supports the behavioural geographical claims of a usually strong distinction between the “objective environment” and the “behavioural environment”, constructed from non-perfect and subjectively filtered information. Moderate correlations (absolute value of $r > 0.5$) are found between the:

- proportion of respondents choosing a neighbourhood as attractive for living, and the size of housing compared to number of residents, and taxable income per capita;
- proportion of respondents choosing a neighbourhood as non-attractive for living, and the proportion of “non-Slovenian” population, and size of housing compared to number of residents;
- proportion of respondents choosing a neighbourhood as unsafe, and the proportion of “non-Slovenian” population.

The limited selection of variables presenting the characteristics of neighbourhoods in the analysis does not allow us to draw general conclusions about the criteria of neighbourhood perception. But we notice a shift from more “materialistic” values behind the positive perceptions towards more “nationalistic” ones behind the perceptions of non-attractive and unsafe neighbourhoods.

A more complex presentation of perceptual spatial differentiation in our study is a typology of neighbourhoods based on all three aspects of neighbourhood perceptions (table 33, figure 45; Krevs, 2004). Only a small part of the studied neighbourhoods are perceived intensively from any of the studied aspects. “Poorly perceived” neighbourhoods (white on the map) are not necessarily “placeless” (term as used by e.g. Entrikin, 1991, Relph, 2002) – missing visual and perceptual identity and particularity. They may simply be perceived as “non-relevant” from the studied aspects by majority of respondents. Three “kinds of types” (of combinations of intensive perceptions) of neighbourhoods are found. Two “kinds” include “pure” types, based on exclusively positive (“love”) or negative perceptions (“hate” and “fear”, “hate” and “some fear”). The only a bit surprising among those is the intensive positive perception of neighbourhood “Šmarna gora”, suburban community with average social-economic structure at the northern outskirts of the municipality, experiencing second highest growth of population in the last decade among the studied neighbourhoods. Other neighbourhoods of these kinds (positively or negatively perceived) are much closer to the city centre. The third kind of perceptual types are based on combinations of positive and negative perceptions. These mixtures clearly demonstrate complexity of human spatial perception, and are by no means surprising. The most extreme case, neighbourhood “Center”, is perceived intensively from all the three studied aspects: “loved”, “hated” and “feared”. The first two are usually not combinable at the level of individual respondents, mostly due to substantial differences in residential preferences, and can only be found on an aggregated level. The other two combinations (“love” and “fear”, or “hate” and “fear”) are quite expected, could be explained “objectively”, and are found also in other neighbourhoods of these “mixed” types (“Bežigrad”, “Tomačevo”, “Polje-Zalog”).

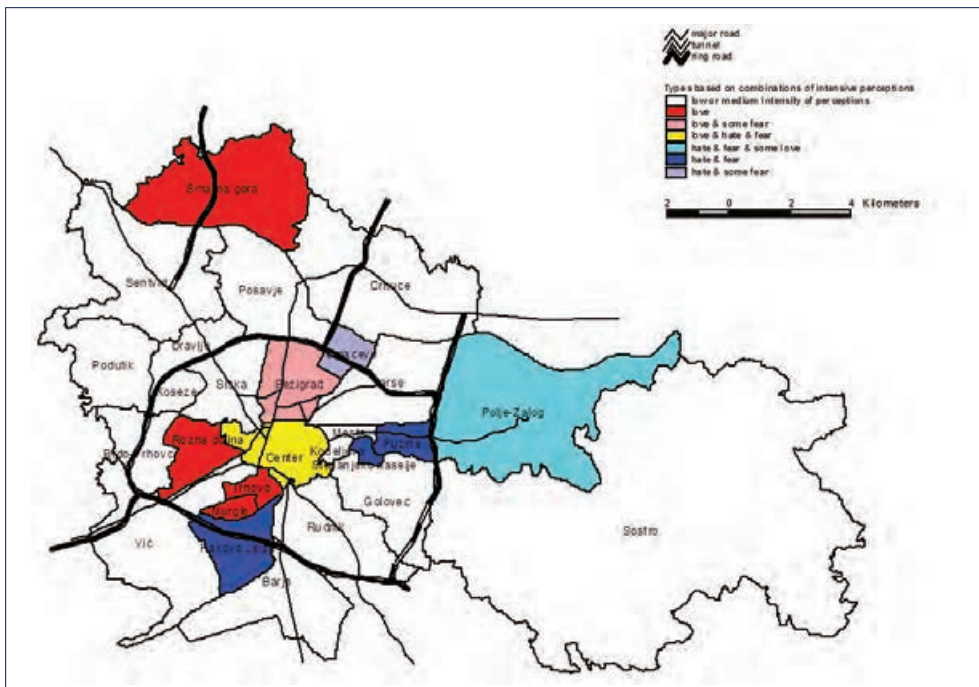
Table 33: Characteristics of complex perceptual types of neighbourhoods based on combinations of intensive perceptions – in terms of topophilia and topophobia.

Perceptual type of neighbourhood	Some characteristics of neighbourhoods of certain type
“love”	different types of »good« social areas close to the centre, and one suburban neighbourhood
“love & some fear”	socially mixed, neighbouring to the city centre
“love & hate & fear”	city centre, mixed but in average “good” social-economic characteristics
“hate & fear & some love”	socially mixed suburban area
“hate & fear”	biggest area of illegal housing and concentration of »non-Slovenians«, and two big multi-family housing neighbourhoods
“hate & some fear”	former rural, now suburban area with relatively poor social structure

Note: all other neighbourhoods are perceived by medium or low intensity from all three studied aspects.

Source: Krevs, 2004.

Figure 45: *Topophilia and topophobia of the neighbourhoods in Urban Municipality of Ljubljana.*



Source: Krevs, 2004.

The continuing longitudinal study of spatial changes of perceptual differentiation of the Municipality of Ljubljana will allow us to follow temporal variability of perceptual as well as social differentiations, together with their sensitivity to certain processes in "objective environment" and in changes of value systems, ways of living, spatial behaviour. Hopefully, the media and the politicians will use the lesson learned from the relations found between the negative perceptions of the neighbourhoods and their origin in stereotypes. They could considerably contribute to gradual replacement of the existing pejorative stereotypes by improvements in the "images of the neighbourhoods", positive local identities, local social cooperation, which could eventually influence even rise of real estate prices.

11.4. Conclusions

Social spatial segregation exists in Ljubljana and is comparable to that of other cities in Central and Western Europe in its main features. The social geographic structure of Ljubljana has undergone considerable changes, which can be seen in some characteristic processes of social transformation. There is a noticeable increase in socioeconomic spatial differentiation, as seen in the formation of elite parts of the city whose residents have a very good socioeconomic status, mainly newer luxury neighborhoods and parts of the city center. At the other extreme are certain parts of the city, particularly older apart-

ment block neighborhoods, where signs of social degradation can be observed. In some socially degraded areas the socioeconomic position of the population is improving; this is characteristic mainly of parts of the old city center and older suburbs and of particular parts of the city's outskirts.

In the future development of the city we can expect a continuation of the trends described in the direction of increased socioeconomic differentiation. The population with higher income and a better socioeconomic status will move into areas with good living conditions and access, especially in suburban areas. At the same time we can expect a continued concentration of people with a high incomes in particular areas of the city center that are attractive places to live, particularly in part of the old city center and certain villa districts. Along with this the social and physical degradation of certain parts of the city, particularly older and larger apartment block neighborhoods, will continue and deepen. Given the general aging of the population of Ljubljana there will also be an increased concentration of elderly people in certain parts of the city.