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# Socio-spatial differentiation and public accessibility of urban spaces in the post-transformational city – case study Saint-Petersburg

KONSTANTIN AXENOV, OLGA VLADIMIROVA PETRI

## Abstract

*In present-day Saint-Petersburg socio-spatial differentiation can be observed in various morphological post-transformational urban zones, but has not yet led to full-fledged special polarization or segregation. At the same time, the extent of socio-spatial differentiation varies in morphologically different urban housing types and can only be understood on the basis of the historical context and residents' preferences. In order to understand their impact on socio-spatial differentiation of various urban areas more concretely, two studies were conducted (one in 2007, another in 2009) with the participation of the authors of the present contribution. The results of these studies, which are based on two different samples of model zones or building types in Saint-Petersburg, showed that residents' preferences were driving socio-spatial differentiation or segregation both on a microscopic (for example, closed staircases in an open court with otherwise open staircases) and macroscopic scale (for example, closed suburban settlements or new high-rise buildings). The degree to which this segregation is spatially implemented depends on the income levels of residents and, of course, strongly correlates with real estate prices. No other significant drivers of socio-spatial differentiation or segregation have been identified, besides a desire by wealthier city residents to increase the security of person and property. No other significant drivers of such tendencies have been identified. For example, no mentionable correlation between the degree of commercial activity and the proportion of closed vs. publicly accessible spaces was discovered. Further research is proposed in order to better understand the impact of recent legislation on socio-spatial differentiation in Saint-Petersburg.*

Russia, St. Petersburg, socio-spatial development and differentiation, housing preferences, segregation

## Zusammenfassung

### Sozialräumliche Differenzierung und öffentliche Zugänglichkeit städtischer Räume in der posttransformativen Stadt – eine Fallstudie Sankt Petersburg

*Im heutigen Sankt Petersburg kann die sozialräumliche Differenzierung in verschiedenen morphologischen posttransformativen städtischen Zonen beobachtet werden, was bisher jedoch nicht zu einer vollständigen speziellen Polarisierung oder Segregation geführt hat. Gleichzeitig unterscheidet sich das Ausmaß der sozialräumlichen Differenzierung in morphologisch unterschiedlichen urbanen Wohnformen und kann nur im historischen Kontext und auf der Grundlage der Präferenzen der Anwohner verstanden werden. Um ihren Einfluss auf die sozialräumliche Differenzierung verschiedener urbaner Gebiete besser verstehen zu können, wurden zwei Studien unter der Mitarbeit der Autoren des vorliegenden Beitrags durchgeführt (die eine 2007, die andere 2009). Das Ergebnis dieser Studien, welche sich auf zwei unterschiedliche Beispiele von Mustergebieten bzw. -gebäudetypen in Sankt Petersburg stützen, zeigt, dass die Antriebskraft für eine sozialräumliche Differenzierung oder Segregation im Mikrokontext einerseits (z. B. geschlossenes Treppenhaus in einem offenen Hof, der sonst offene Treppen hat) und im Makrokontext andererseits (z. B. ein abgeschlossenes urbanes Wohnviertel oder neue Hochhäuser) die Präferenzen der Anwohner waren. Der Grad, in dem diese Segregation räumlich umgesetzt wird, hängt von den Einkommensverhältnissen der Anwohner ab und steht selbstverständlich in engem Zusammenhang mit den Immobilienpreisen. Außer dem Wunsch wohlhabenderer Stadtbewohner, die persönliche Sicherheit und die Sicherheit ihres Eigentums besser zu gewährleisten, konnten keine weiteren nennenswerten Antriebskräfte sozialräumlicher Differenzierung oder Segregation aufgefunden werden. So konnte beispielsweise kein nennenswerter Zusammenhang zwischen dem Grad der Geschäftstätigkeit und dem Verhältnis zwischen abgeschlossenen und öffentlich zugänglichen Räumen ausgemacht werden. Für ein besseres Verständnis der Auswirkungen neuester gesetzgeberischer Vorschriften auf sozialräumliche Differenzierung in Sankt Petersburg werden weitere Untersuchungen diesbezüglich vorgeschlagen.*

Russland, Sankt Petersburg, sozialräumliche Entwicklung und Differenzierung, Präferenzen hinsichtlich des Wohnraums, Segregation

## Introduction

St. Petersburg is a city, which did not evolve naturally from a small settlement to a major metropolis for centuries, but was initially designed and built as the capital of the Russian Empire. St. Petersburg was artificially “integrated” in the geographical landscape. By decrees of Peter I dating back to years 1710, 1711 and 1714, workers, merchants and artisans were ordered to travel to the capital, undergoing major construction works, “from all the towns and villages of the Russian state” (MALINOVSKIJ 2008, p. 45). By around 1725 the city population had reached almost 25 thousand people and the monarch issued a number of decrees defining the exact location, number and size of houses for different segments of the population (VON REIMERS 2007, p. 160). These decrees laid the foundation for the ethnic diversity of the urban environment on the one hand, and a clear socio-spatial structure on the other.

For more than three hundred years of its existence, the role and importance of the city have transformed several times: from the main trading, financial and political center of Russia and the capital of the Russian Empire to one of the main industrial centers of the Soviet Union and, finally, from the beginning of the 1990s into a trade center with limited industrial activity, serving as conduit of imported goods to Moscow, and as home to several leading natural resources companies (AXENOV, BRADE and BONDARCHUK 2006). The socio-spatial structure of the urban environment has evolved accordingly.

The economic transformation from the end of XX century inevitably led to fundamental changes in political and institutional preconditions for urban development in Russia. In the case of St. Petersburg, an important question remains unanswered about the direction and magnitude of the processes of urban spatial development. We assumed that the degree of socio – spatial differentiation varies among morphologically different types of residential environments. An important feature of this differentiation is its relationship to the social stratification

of the population by income, which significantly contributes to the modification of publically available spaces, as well as fundamental changes in neighborhood attractiveness as reflected by residents’ preferences and the housing market, and which are effected not only by income differences, but also by the accumulation of cultural and social capital in certain residential environments.

Spatial changes and transformation, spreading in varying degrees throughout cities in Russia, have significantly changed many parameters of the residential environment of post-socialist cities. Based on the example of two major Russian cities it is possible to conclude that one of the main differences between the processes occurring in the spatial structure of the two cities is related to the fact that in St. Petersburg, unlike Moscow, the processes of social segregation have not yet had any profound effect on the residential environment, studied within the framework of a recent research project<sup>1</sup>. Moreover, according to VENDINA, intensive development of the housing market in Moscow intensified the process of social polarization, which resulted in “a transition from mixed social strata to greater homogeneity among local residents” (VENDINA 2005). Unlike Moscow, in St. Petersburg one can observe the diversity of the social environment not only through city districts, but even among residents living in the apartments along a single staircase.

Privatization processes in the economy, and in particular the privatization of housing, did not lead to any significant changes in the urban landscape prior to the adoption of the new “*Housing Code*” in 2005. This piece of legislation allowed for the acquisition of real estate including not only buildings or apartments as in former times, but the land beneath them as well. Changes associated with the adoption of the new “*Housing Code*”, as well as general improvement in living

standards in recent years, have resulted in a massive process of “privatization” and “collectivization” of residential areas and facilities - the closure of building entrances, courtyards, adjoining areas, and public facilities (squares, playgrounds, etc.). Privatization and development of private entrepreneurship a certain degree of tension between a need of shops and businesses for public accessibility of urban spaces and residents’ desire to secure and localize access to their courtyards, staircases and buildings<sup>2</sup>.

In this particular research contribution, using the example of St. Petersburg, we will try to answer several questions. To what extent has socio-spatial differentiation affected various morphological types of residential developments? In what way did this socio-spatial differentiation exist even before 1990 and what has changed most significantly since then? Is the public accessibility of urban spaces growing or declining? Can we measure these processes quantitatively? Are publicly accessible urban spaces compressing or expanding faster in some places than in others? Are there differences in the spatial effects of these processes and, if so, upon what do they depend?

## Socio-spatial differentiation in the Soviet era

In contrast to the vision of the communist city as being one free of socio-spatial differentiation, in reality the Leningrad of the Soviet era displayed spatial differentiation of various social groups. The formation of socio-spatial differentiation during the Soviet era was driven by a combination of government policy and housing preferences of potential residents<sup>3</sup>. Government policy addressed al-

1 “Social and spatial changes in the residential quarters of Eastern Europe” in collaboration with Leibniz Institute for Regional Geography (Leibniz-Institut für Länderkunde), supported by the German Research Foundation (DFG)

2 For the purposes of this article by the term “compression” we mean the reduction of the physical space occupied by a particular phenomenon or function, and the term “expansion” – its increase.

3 As socio-spatial differentiation we understand the uneven distribution of members of different social groups, which is expressed, in particular, by the formation of markedly different levels of concentration of such groups in various areas. Socio-spatial differentiation can be distinguished from socio-spatial segregation or polarization, which refer not to various degrees of mixture or heterogeneity, but to a socially polarized or even isolated social homogeneity in various areas.

location approaches and forms of ownership. Preferences were attached to such characteristics as building type, location and period of construction. Each of these factors had varying degrees of influence on the concentration of different social groups in various districts.

Several examples may serve to illustrate this interplay of government policy with housing preferences. For example, projects initiated and pursued by the various levels of government administration include elite housing in the form of high-quality new urban construction, or government-allocated suburban villas (provisioning to those favored by the regime, the "nomenclature"), cooperative new construction projects (participation demanded ownership and joint investment), company housing, dormitories.

For example, during Soviet times, socio-spatial differentiation took place in zones (entire city blocks or, individual apartment houses or state suburban villas) occupied by the "Soviet elite" – the party elite, as well as the administrative, military and cultural elite (the representatives of "intellectuals"). One of the largest such areas consisted of several blocks near Smolny – the administrative center of the city. In this case, the allocation policy in regard to specific elite groups in those districts contributed to the formation of socio-spatial differentiation. At least one elite group (the largely overlapping party and administrative elite) got the opportunity to settle near their jobs and was diluted by representatives of other elite groups.

A second example is related to the manner in which the government-regulated the form of ownership, which also contributed to socio-spatial differentiation in the context of cooperative housing projects realized during the 1970s and 80s. By 1990 the share of cooperative housing in Leningrad was 13.5 % (Saint-Petersburg – 2005, PETROSTAT 2006, p. 11). Such projects were made possible by the issuance of the June 1st decree of 1962 of the CPSU Central Committee and USSR Council of Ministers, entitled "On Individual and Cooperative

Housing". The main principles of cooperative housing specified therein meant that cooperative housing residents actually paid for the construction of housing. As a result, residency became available to members of those professions, which had been assigned above-average salaries<sup>4</sup>. Still nowadays, the social structure in these districts differs from the surrounding areas. One of the best examples of such district is the area north of the area around Ploshad' Muzhestva. Obviously, the type of ownership and mode of distribution of housing in this case, played a key role in the formation of residential zones, socially distinct from the rest.

A third example is zones with a high concentration of major industrial enterprises, since in such zones, socio-spatial differentiation began to emerge in the form of company housing being provided to government-assigned workers. Besides housing grants for the less privileged "average citizen" on the basis of the "municipal cue" (ochered')<sup>5</sup>, employees of many industrial and other institutions could expect their employer to construct housing for them. The share of such housing in 1990 was 9.9 % (Saint-Petersburg – 2005, Petrostat 2006, p. 11). In addition, some institutions participated in municipal construction projects, gaining the right to allocate housing in certain city districts. In that way in the 1960s to the 1980s areas with particularly high con-

centrations of employees from certain institutions emerged. The population of these areas consisted mainly of workers and their families who belonged to the lower and middle levels of their respective institutions.

Finally, zones with a high concentration of dormitories emerged. These zones often consisted of campus housing for students and workers without families. Often university campuses were formed not on the basis of proximity to a particular university, but by the principle of socio-spatial clustering - students from different universities of the city could easily live in one and the same campuses. Even clusters of dormitories for workers were created in certain functionally designated development zones, rather than near their respective workplace. In the 1970s, over 300,000 persons lived in such dormitory campuses (MUSIENKO, p. 62).

With reasonable confidence we can assert that socio-spatial disparities created by the interplay of government policy and housing preferences during the Soviet era have lastingly impacted the socio-spatial profile of these and other areas. One indication of the continued existence of such a differentiation are differences in electoral behavior between these types of zones (AXENOV 2008).

Superimposed on policy restricting availability, a certain hierarchy of preferences has remained largely unchanged. Despite the fact that a residential real estate market could not emerge under socialism, the available forms of housing rotation through exchange or centralized distribution formed a fairly stable system of housing type preferences (in ascending order of preference)<sup>6</sup> that is now reflected in the high prices of apartments in zones and buildings formerly occupied by the Soviet "nomenclature" and the relatively low price of zones and buildings constructed by employers for their workers. In this manner, the socio-spatial differentiation initially based on profession, party membership and rank has been re-

4 The styles and methods of development for residential cooperatives varied by regions in the Soviet Union. In Leningrad, for example, a model was introduced, according to which each member of the cooperative paid 40 % up front, and for 60 % of the cost the cooperative received a government credit at a 0.5 % annual interest rate for 10-15 years. Beginning in 1982 the terms of loans to so-called residential construction cooperatives were eased – loans were provided for 70 % of the construction cost and for a term of 25 years. The first payment for a two-room apartment was between 2,200 and 2,700 Rubles, while the average monthly salary was around 100 Rubles. With two employed members of a household, one or both of which may have had a salary slightly higher than the average, this sum was not a major impediment (MUZDIBAEV 2005).

5 All residential real estate, except for cooperative residential spaces, was owned by the government and was assigned on the basis of life-long rentals with the option of the renter of transferring the contract to another person. Those seeking an improvement in residential terms could – provided that they occupied less residential space than the prescribed maximum norm – enter the unified city waiting list for a new apartment. By 1990 this waiting list contained around 460 thousand families in Leningrad.

6 Established on the basis of expert interviews with realty agents as well as surveys conducted during the above-mentioned project.



inforced by a housing market, which prioritized access based on income, wealth and purchasing power.<sup>7</sup>

- workers and student campuses
- large communal apartments mainly in the historic center
- small communal apartments, which have the “upside” of being eventually converted into self-contained apartments in the city center or other districts
- self-contained apartments in panel building, ‘60s (Krushchev-era) “German houses”
- self-contained apartments panel building, ‘70s (Brezhnev-era)
- self-contained apartments in panel building, ‘80s (late Soviet)
- self-contained apartments in brick housing from the late 1970s and 1980s.
- self-contained apartments in cooperative buildings
- self-contained apartments in low-quality or unrestored housing in the historical center
- self-contained apartments in “Stalin-era” housing
- self-contained apartments in high-quality housing the historical center, which has been restored and capitally renovated during the Soviet time in

### Socio-spatial development since 1990

The transformation of every sphere of life in the former Soviet Union beginning from 1990, naturally, had a significant impact on urban development as well. This impact was created on the basis of newly introduced market mechanisms.

The key characteristic of the first 20 years of the existence of a legally functioning market for buying and selling real estate was intensive price growth. This growth was interrupted twice – the first time and most dramatically during the

crisis of 1998, and a second time during the global financial crisis of 2008. The first decline is smoothed on the chart below (see Fig. 1), since it took place at the still low end of the curve and was accompanied by a massive devaluation of the Ruble (in Ruble-denominated prices the decline was significantly more marked). Euro-based prices had reached 452 Euro/m<sup>2</sup> by January 1998, a level to which prices only returned in May of 2002 after a decline in 1998 and 1999 as low 310 Euro/m<sup>2</sup> (Secondary market, Bulletin Nedvizhimosti Sankt-Petersburg). The following 6 years were again characterized by steady price growth, which reached a temporary peak previous to the time of submission of this research contribution in October 2008 at 3,095 Euro/m<sup>2</sup>. After a second decline as low as 1,841 Euro/m<sup>2</sup> in 2009, prices were again rising in 2011 and 2012 up to a level of about 2,271 Euro/m<sup>2</sup>. According to specialists working in this market, these tendencies, to varying degrees, affected all types of Saint-Petersburg real estate, including both commercial and residential objects.

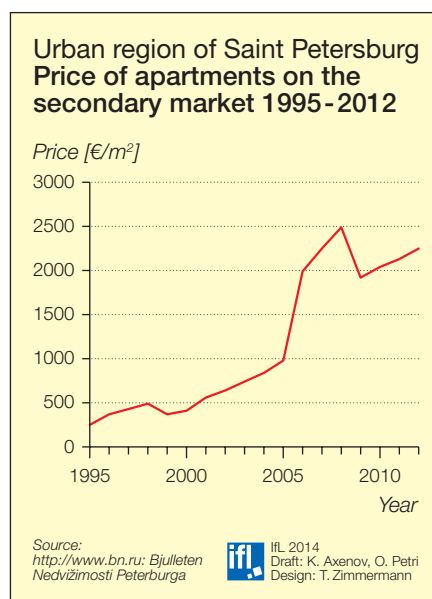


Fig. 1: Price of apartments on the secondary market 1995-2012 in Saint Petersburg

play between liberalized market mechanisms and government policy (including privatization), an increased polarization according to income levels became apparent in the largest Russian cities<sup>8</sup>. This polarization in turn led to the development of different preferences and possibilities for the members of various socio-economic groups. In 2008, for example, the range of prices in Saint-Petersburg was from 1,500 Euro/m<sup>2</sup> to 22,590 Euro/m<sup>2</sup> (www.bn.ru), a range of more than 15x.

These tendencies – underlying price growth and differentiation within the market – are evidence of social, economic and market-based processes in Saint-Petersburg, which have created a new social landscape and new types of residential spaces. In the context of the research mentioned above, we have attempted to describe some aspects of the special manifestations of this new social landscape in terms of several key aspects including building type preferences, their relationship to price differences and, finally, the closure of formerly publicly accessible spaces.

One of the perhaps surprising conclusions was that the hierarchy of building type preferences among building types existing even before 1990 remained more or less unchanged to this day according to survey respondents. In addition to prevailing building types existing before 1990, construction during the post-Socialist period has brought several additional types to new prominence. Most notably, the construction projects of the post-Socialist period have been targeted at creating new high-rise buildings, suburban houses, as well as luxury housing in the historical city center. In that exact sequence these should be added at the top of our list, with the ranking of new high-rise buildings sometimes slipping down a few notches in the case of more distant or low-quality developments.

<sup>7</sup> The possible degree of correlation between formerly privileged and currently wealthy demographic groups in terms of profession, employer segment, educational achievement, etc. has not been examined by the authors as a factor possible contributing to underlying shifts in the characteristics of population groups occupying various residential zones. This would be a topic for further research.

The economic and political upheavals of the first 20 years of the post-Soviet period had irreversible effects on many parameters of the residential landscape of Saint-Petersburg. As a result of the inter-

<sup>8</sup> In 2004 the incomes of the highest-earning 10 % of the Russian population were 14.8 times as high as those of the lowest-earning 10 %. The data specifically for Saint-Petersburg for 2004 is quite inconsistent and the same multiple is shown by various sources as being from 13 to 22 times (MUZDIBAEV 2005).

The vast majority of the newly created or upgraded residential space becoming available post-1990 fits neatly into this hierarchy, consisting of new high-rise buildings in on the city's periphery (often near the panel-building developments mentioned above) and newly renovated apartments in the historical city center. While new high-rise buildings fit in a notch above or one or two notches below "Stalin-era" housing, and newly renovated apartments in the historical city center generally occupy the top of the list, as these offer access not only to quality housing and infrastructure, but also to the cultural capital associated with being near the city's historical sites and living in a historical building.

Notable exceptions to this hierarchy are, however, emerging on a limited scale, but do not form the focus of the present discussion. These warrant separate analysis focused more on emerging housing preferences and will have to include both urban as well as suburban spaces. In the surveys completed in the context of the present study, a marked preference has emerged for suburban "village-type" developments, which share some of the characteristics of a Russian dacha development with those of a closed and guarded community, in which infrastructure is of a high standard and shared only by residents. This type of housing has occupied a place high up in this hierarchy and may point to a desire to achieve not just comfort and security, but also invest in housing-related "social capital", as many of these developments place a marked emphasis on the socio-economic homogeneity of residents. Another emerging housing type and preference is the "club house" or "club kvartal", in which entire buildings or even blocks in the historical center are fundamentally restored or rebuilt in a historical fashion. The developers of these projects advertise and sell apartments at some of the highest prices on the market and appeal to residents in yet another way – they sell a notion of "cultural capital", of feeling in possession of and proximity to the city's history. While closed suburban settlements have been studied in detail,

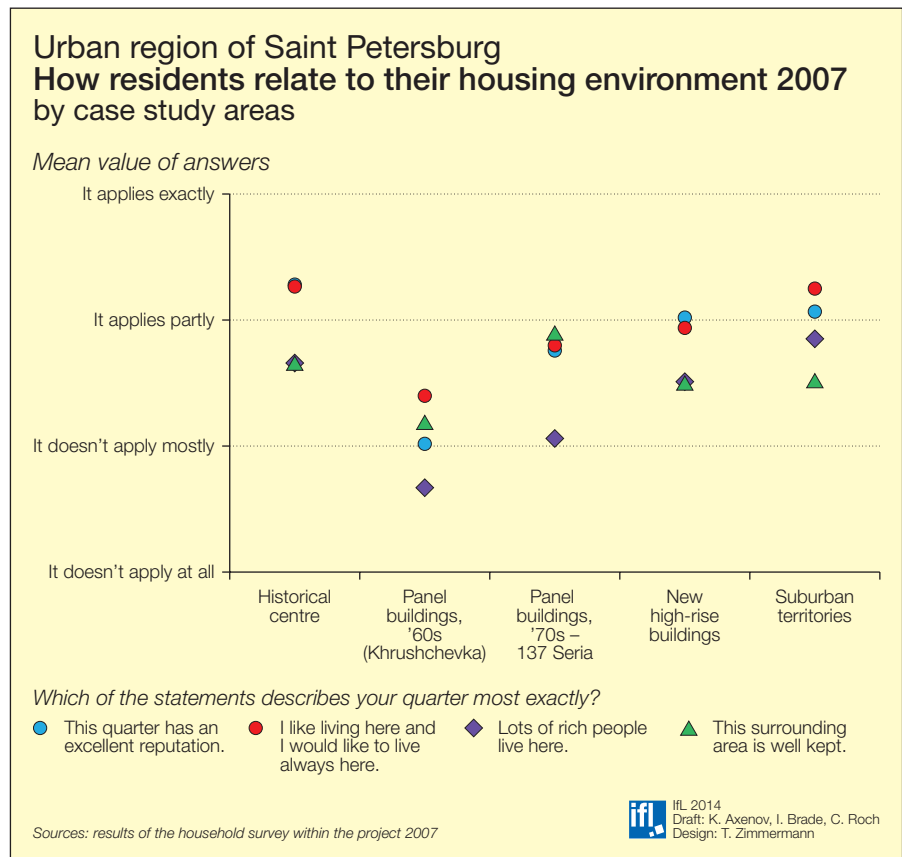


Fig. 2: How residents relate to their housing environment 2007

but are not part of the present discussion, the "club house" has only just emerged, since this type of project requires years of permitting work and an extremely high and non-scalable capital investment. Naturally, the residents of such relatively new housing types are at least economically relatively homogeneous, but on a statistically relevant scale, this has not yet created a trend towards greater homogeneity of certain areas in the city center, since such projects for the time being are few and far between and with the exception of the recently completed "Paradny Kvartal" tend to affect only individual houses and not an entire neighborhood.

While data collected during the study mentioned above confirms the existence of such persistent "symbolic" differentiation between morphologically different housing types, the market price significantly differentiates these housing types, thus creating differential access to new housing types at the top of this hierarchy for members of the emerging socio-economic elite. Thus, in the summer of 2007 a survey was conducted among local resi-

dents in five model zones chosen as a sample in order to answer the following question "to what extent did the social-spatial differentiation reach different morphological housing types?"<sup>9</sup> From the housing types listed in the hierarchy above, sample zones were chosen so as to maximize the contrasts between them. They were chosen from the beginning, middle and end of the list. Sample zones are marked in Figure 3 and listed in Table 1.

Among the housing types represented in Figure 2, "Panel 60s" ("Khrushchevki") stands out – residents of this housing type, which generally enjoys a relatively poor image and has a high concentration of low-income residents, are satisfied with their housing situation, and give high marks on questions relating to their willingness to remain in this building and their surroundings ("lots of rich people live here"), which may indicate a disproportionate amount of "social capital" associated to this housing type. While we have no firm explanation for this anomaly

9 Sample consisted of 150 families

Urban region of Saint Petersburg List of case study areas see Fig. 3		
No. on the map	Construction type	
<b>Survey in 2007</b>		
1	Historical centre	
2	Panel buildings, '60s	
3	Panel buildings, '70s – 137 Seria	
4	New high-rise buildings	
5	Suburban territories	
<b>Survey in 2009</b>		Commercial activity
1	Historical centre	Low
2	Historical centre	High
3	Historical centre	Low
4	Historical centre	High
5	Panel buildings, '60s (Khrushchev-era)	Low
6	Panel buildings, '60s (Khrushchev-era)	High
7	Panel buildings, '70s (Brezhnev-era)	Low
8	Panel buildings, '70s (Brezhnev-era)	High
9	Panel buildings, '80s (late Soviet)	Low
10	Panel buildings, '80s (late Soviet)	High
11	Soviet nomenclature (Stalin-era)	Low
-	Soviet nomenclature (Stalin-era)	High
12	Soviet nomenclature ('70s-'80s – late Soviet)	High
13	New high-rise buildings	Low
14	New high-rise buildings	High

Sources: household survey within the project 2007 and 2009

Tab. 1: List of case study areas

and believe it worthy of further investigation, we believe it most likely relates to the fact that the real estate market evidences high liquidity in this market segment at the low end of the price spectrum, which makes the opinion of one of the real estate experts we interviewed plausible that a disproportionate share of residents in “Panel 60s” buildings recently moved there by choice. The image of the remaining sample zones, however, neatly matches the hierarchy, defined by market experts. The housing types in this hierarchy are spatially clearly separated, which gives this hierarchy the status of another mechanism of social and spatial differentiation.

We assumed that the socio-economic differentiation among the population of these types of housing may be proportional to the “distance” among them in the hierarchy of their market preference. In order to test this assumption in the course of our survey, in addition to other social characteristics of respondents, we also gathered information about household income, the respondent’s profession and

his or her highest attained educational degree. For the sake of comparability, we used a standard scale, frequently used to roughly assess standard of living in various surveys.<sup>10</sup>

<sup>10</sup> Used here and below markings of the social strata by income are based on respondents’ own assessment of their income situation, without regard to their real income situation. Income level names are conditional and are used only for technical purposes of the study.

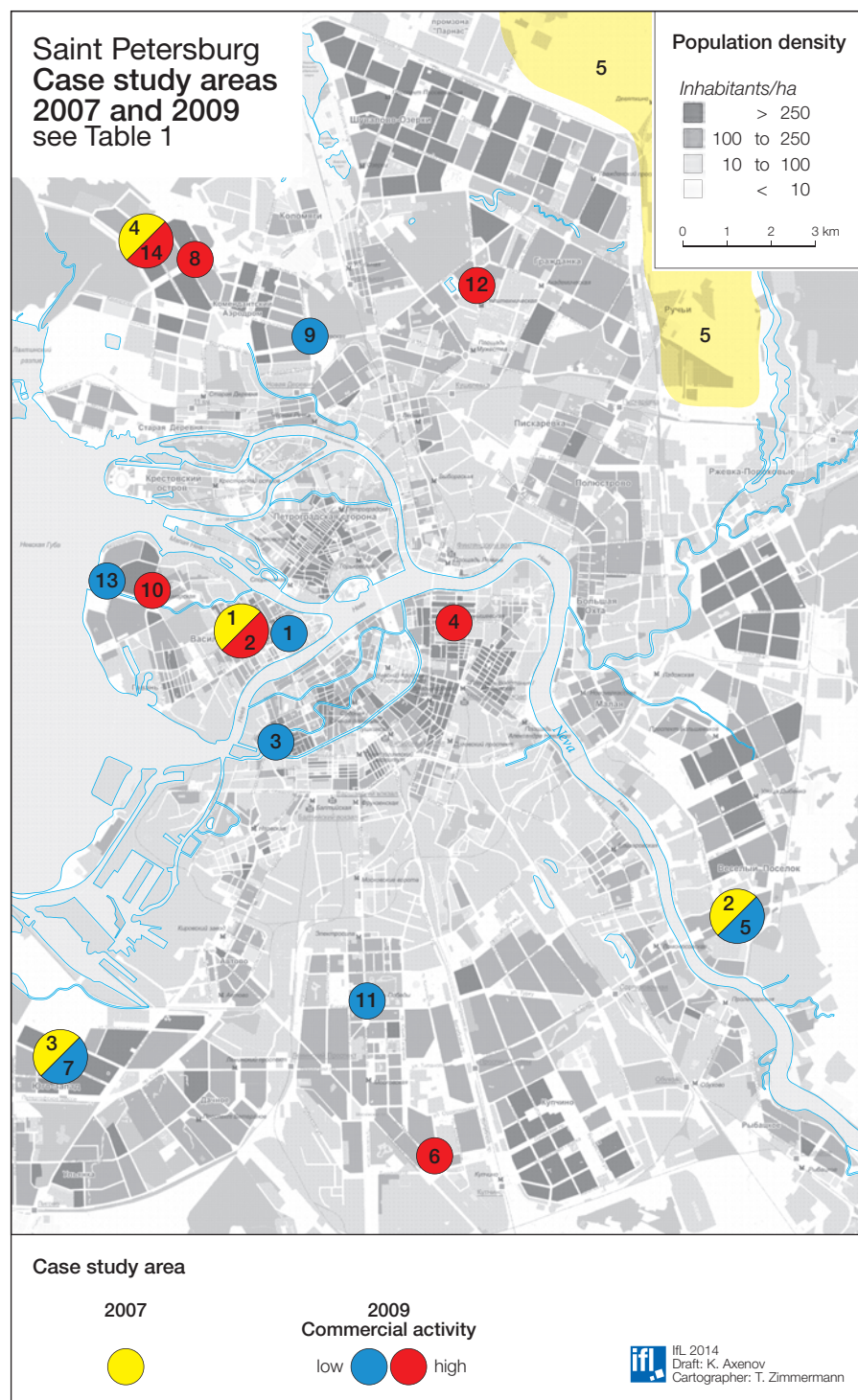


Fig. 3: Case study areas 2007 and 2009



Income level relative marking scale	
'poorest'	There is hardly enough money to buy food.
'poor'	There is enough money to buy food and clothing, but it's difficult to buy long-lasting goods.
'middle class'	Can afford long-lasting goods, but it's difficult to buy a car.
'rich'	Can afford a car, but it's difficult to buy an apartment.
'richest'	We can afford anything we want.

The respondents assessed their financial situation themselves in choosing the categories in the right column. The left column shows the short form of these categories.

Source: household survey within the project 2007

Tab. 2: Income level relative marking scale

It turned out that among the sample zones selected by us, there are obvious differences in the structure of the material conditions of families living there. Moreover, survey results largely confirmed the expected hierarchy of the real estate market. Not surprisingly, the percentage of "rich" increases in proportion to the level of a housing type in the hierarchy set out above. An important exception is the historic city center, where, along with newly renovated apartments and several elite houses there are many large communal apartments, occupied by lower income population mostly, which

creates a low degree of homogeneity in the center, specifically. Aside from this housing type, in the "Panel 60s" zone we encountered the highest proportion of "poorest" and "poor" population (38.6 %). The "Panel 70's - Series 137" sample zone occupies an intermediate position. In new high-rise building and suburban cottages we, expectedly, saw the highest proportion of rich residents (see Fig. 4).

Besides household income, we looked closely at trends relating to other social and demographic attributes, such as age, sex and family composition. The distinguishing feature of newly-built sample zones (New high-rise buildings and Suburban area) is a predominance of families with one child. While this seems to create a second dimension of homogeneity besides income, it may simply be a temporary phenomenon, since families tend to move around the time their first child is born and, thus, not surprisingly show up in disproportionate numbers in new buildings, which in turn constitute a higher proportion of the real estate market than their share of the overall residential space in the city. Thus, this trend may be expected to disappear with time. As for

the other (old building) sample zones, multi-generational families with several children are typical for them. Naturally, there is a connection between the time of construction of these residential territories and the year, since which the majority of respondents has lived in Saint-Petersburg for sample zones Panel 60s, Panel 70s-Series 137 and New high-rise (from 2000). By in large, the majority of respondents of these sample zones have specified that they have lived in their apartment since the approximate time of construction.

Interestingly, "Panel 70's - Series 137" is the most homogeneous with regard to sex and age characteristics (50.7 % women and 47.3 % men). This can be explained mainly by age characteristics: the population of this territory is younger (30 % are people under 30.38 % of population are people of pre-pension age). But in general, analysis of sex and age characteristics has shown that respondents in the majority of sample zones are women in the age category of 30 to the pension age (55).

Our analysis of the highest attained educational degree as well as respondents' profession showed the following tendencies: In the building types constructed during the Soviet era or earlier, ("Historical center", "Panel buildings, 60's", "Panel buildings 70's") we discovered a relatively low share of respondents with a higher academic education (40 %) and a relatively high share of respondents with less prestigious specific professional training education (30 %). In addition, the majority of respondents were employed in the public sector, self-employed or middle-managers at commercial enterprises. In building types of predominantly post-Soviet construction, the share of respondents with a higher academic education was significantly higher (for example, for "Suburban territories" it was 87.8 % and for "New high-rise buildings" 69.9 %), whereas the share of respondents with specific professional training was significantly lower than in building types of pre-Soviet construction (only about 7 % for "Suburban territories", and

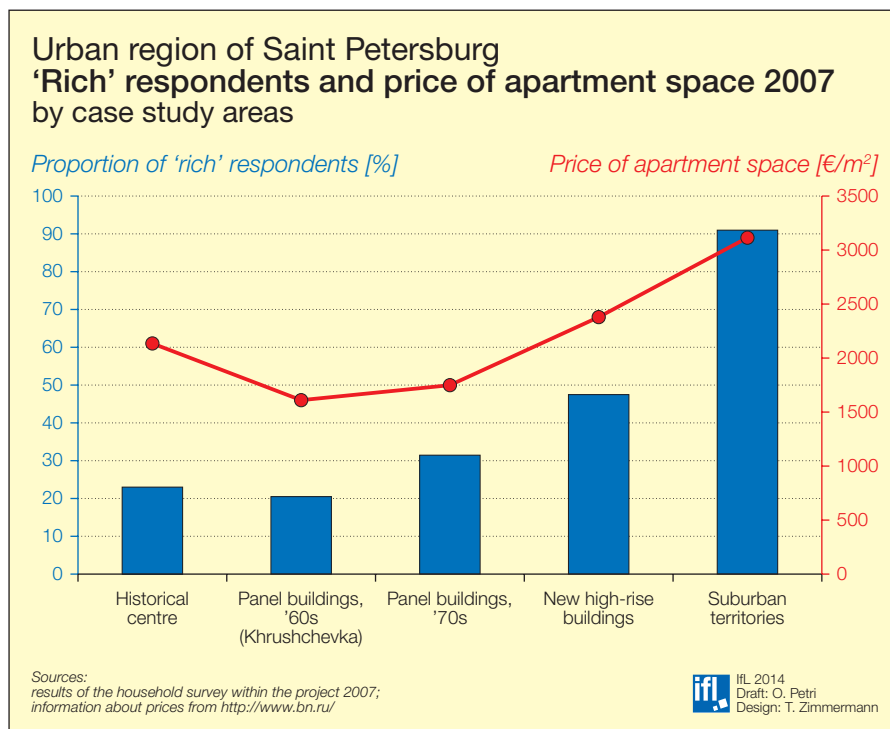


Fig. 4: 'Rich' respondents and price of apartment space 2007



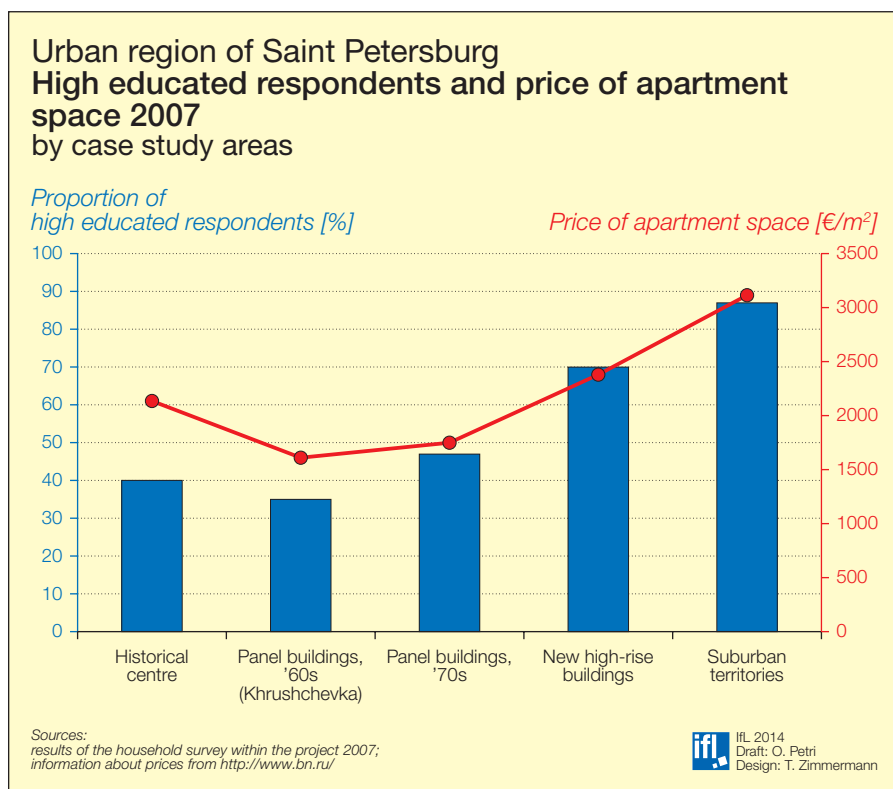


Fig. 5: High educated respondents and price of apartment space 2007

10 % in “New high-rise buildings”). The share of respondents, who classified themselves as top managers, was also much higher in these areas. High incomes, correlating with a high attained educational degree, allow these respondents to live in new buildings and, in some cases, outside of the city, but with good access to the city, both of which are prestigious and expensive privileges. This indicates, that especially in newly constructed housing types, a community with greater socio-economic homogeneity is emerging. Reinforcing this, real estate prices for the building types we analyzed seem to correlate with educational achievement. On the chart below (Fig. 5) the two building types with the highest real estate prices are also those with the highest proportion of university-educated residents in our sample.

To a significant extent, this differentiation was introduced by the “social elevator” working during the last two decades. In response to the question as to whether the financial position and professional status of respondents improved in recent years, the same ranking of housing types appeared once again. The population of

modern high-rise and low-rise housing demonstrated the most positive dynamics of “socio-economic status”, whereas negative self-assessed dynamics were observed among residents of Panel 60s

building. Among residents of the Panel 70’s – Series 137 housing type a more or less steady dynamic was indicated by survey respondents.

We have mentioned various types of preferences of home buyers with regard to our sample zones, as assessed by a real estate professional, whom we interviewed during the project. To what an extent is the expert view consistent with the view of survey respondents, who live in a given zone? To evaluate these differences, respondents were asked a number of questions: “Are you satisfied with your housing as a whole?” “Would you recommend the area to a friend who is moving?”, “If you had the opportunity to freely choose your housing type, which type would you prefer?”

Analysis of satisfaction levels with the housing situation or survey respondents showed that their degree of satisfaction increased proportionally with the cost of housing. Residents of “cheaper” housing are less satisfied and, moreover, would not recommend to their friends moving into the same zone (see Fig. 6).

Survey results not only confirm the existence of different attitudes of residents

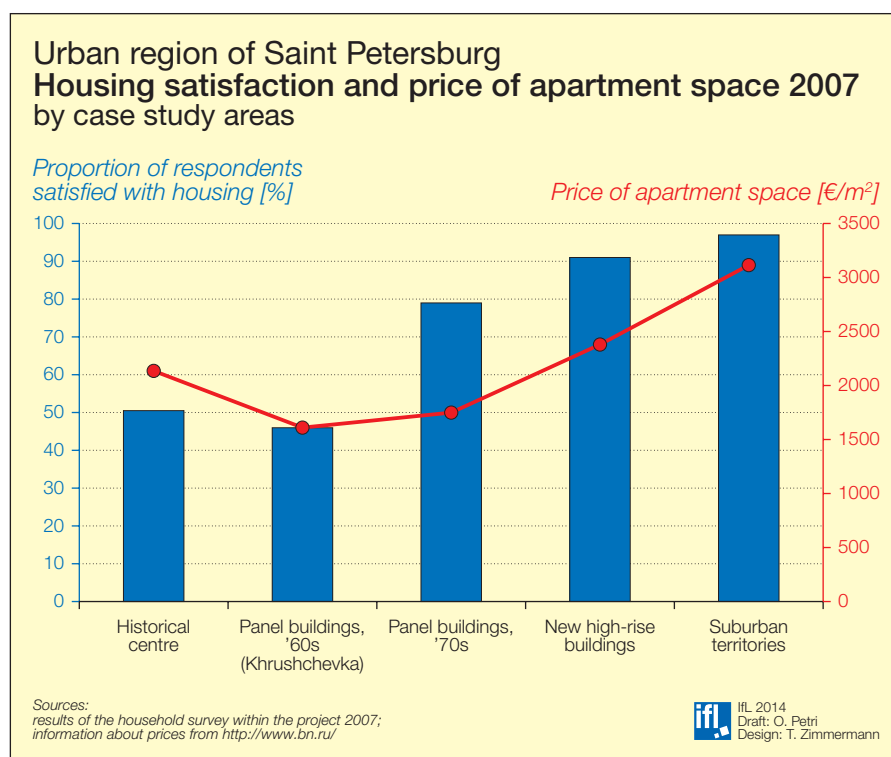


Fig. 6: Housing satisfaction and price of apartment space 2007

towards their zones, but also indirectly emphasize the potential dynamics of these districts' social structures. It can be assumed that the inferior image of some sample zones will repel some apartment seekers with a relatively high socio-economic status when it comes to choosing their flats. Therefore, living in 60's Panel buildings has increasingly come to represent a kind of forced choice for people with lower incomes, while suburban houses and new high-rise buildings attract more affluent and educated families, reinforcing the aspect of social homogeneity, which is one of the appealing characteristics of suburban gated communities. Interestingly, the interplay of preferences, prices and socio-economic status of apartment seekers has created a noticeable trend towards the emergence of socio-economically homogenous communities in newly built housing (new high-rise buildings and new suburban developments), but has not led to a homogenization of the historical center, where above average prices belie the fact that the proportion of high-income and university-educated residents is still low compared to new developments. Structurally, this is most likely related to the fact that more than 60 % of apartments in the historical center are still communal apartments, the residents of which tend to be representatives of what was, in soviet times, considered to be a working class and are unable to adapt to the new economic environment in part due to their above-average age. Thus, in the historical center, a disparity between old, decrepit communal apartments and newly renovated apartments has emerged, which blurs the statistical picture and creates a sharp contrast even within one and the same building or entryway.

Moreover, the vast majority of *all* survey respondents (about 70 %) across all sample zones, responded that if they could choose freely, they would prefer to live in a self-contained family home in a green suburb. In part, this may be a reaction to the fact that the city center has not been gentrified at the pace many had expected in the early 1990's. Thus, at the

top end of the price spectrum, suburban housing competes not with new high-rise buildings, but with renovated or reconstructed apartments in the city center. Since security and prestige are in many cases associated by survey respondents with a perception of socio-economic homogeneity, suburban housing has become a marked preference, since here security and socio-economic homogeneity are considered to be most pronounced. Experts of the real estate market confirm the fact that the demand for low-rise construction in suburban areas is rapidly growing<sup>11</sup>. Such residential complexes are surrounded by a fence and shut of by a guarded entrance and are thus inaccessible to outsiders. This phenomenon reinforces the notion that there may be an ongoing transformation of publicly accessible common spaces into private and inaccessible spaces. Features of this process are considered in the next section of this article.

### Transformation of public accessibility of urban spaces

In Saint-Petersburg and Moscow the literature on public accessibility of urban spaces is less developed and includes, notably, the published research results of C. LENZ. LENZ points out that restrictions of public access to residential spaces have a certain history in these cities dating from the times of the reigning "nomenklatura" during the Soviet era. At the same time, LENZ emphasizes the transformation of residential spaces according to a more "western" model, driven by socio-economic segregation. Notably, his research indicates two specific characteristics of this transformation in Saint-Petersburg and Moscow. First of all, he points out that this phenomenon itself is not widely criticized, even though wealth as such is perceived skeptically. Secondly, he suggests that a need to control and create adequate security infrastructure is a key

driving factor in these cities (LENZ 2006). In addition, several researchers have pointed out that in Saint-Petersburg specifically there exists a discrepancy between the officially declared policy of protecting and expanding publicly accessible spaces, the sheer quantity of which distinguished Russian cities from their western counterparts, and the actual practice of privatizing and closing such spaces.

In Saint-Petersburg, as in other major Russian cities, the preconditions for the transformation of public accessibility of residential spaces were set in the fifteen-year period from 1989 to 2005. The most important legislative events that mark the beginning and end of this period are the start of privatization of residential and commercial real estate in 1989 and the introduction of the latest "*Residential Code*" in 2005, which for the first time allowed for the complete privatization of jointly owned buildings and the land under them. During the first half of this period the rise of commercial enterprise, driving the transformation and dramatic expansion of commercial spaces, was the most visible sign of change, which on the one hand consisted of the opening of formerly residential spaces to commercial (usually retail) use, while on the other hand involving the introduction of guarded office spaces, business centers and even restaurants, clubs and shops. During the second half, the effects of changes in the public accessibility of residential spaces became more apparent. In this context, the changes finally codified and legalized by the current "*Residential Code*" led to the collective privatization and closure of driveways, courtyards, parking spaces and formerly public objects such as small parks and playgrounds. This latter tendency, driven by the privatization of residential spaces, while diverse in degree and execution, is clearly linked to the reduction of publicly accessible spaces. Thus, one might assume, the transformation of public accessibility of city spaces was taking place in two diverging directions simultaneously – on the one hand, the rise of commercial enterprise was transforming for-

<sup>11</sup> Expert interview and media analysis from field research work entitled "The transformation of public accessibility of urban spaces during the post-socialist stage of development of Saint-Petersburg" was conducted in the summer of 2009 in the context of the authors initiative project.

merly residential quarters into retail and commercial zones, while on the other hand privatization was leading to the closure of residential and other types of commercial spaces.

The key question for our research was which of these tendencies prevailed – the expansion of publicly accessible urban spaces driven by the expansion of retail space, or their contraction, driven by the closure of residential and commercial spaces? Can these processes be quantified? Are there distinctions in different parts of the city? If so, upon what do these distinctions depend?

To answer these questions, it is first and foremost essential to establish a definition of publicly accessible spaces. For the purposes of our research we have adopted a definition close to that of P. Atkinson. According to Atkinson, publicly accessible spaces are those spaces, to which any passerby ordinarily has unconstrained physical access. In this sense, property rights, whether public or private are not key to our definition. Rather, a privately owned retail space can be considered public, while a publicly owned library or administrative building, for example, would be considered closed (ATKINSON 2003, p. 183).

Since our research, conducted in the summer of 2009, did not encompass the entire urban territory of Saint-Petersburg, a representative sample of research zones had to be selected. The fundamental principle of this selection was not to create a statistical sample allowing geographical extrapolation to the rest of the city, but rather a diversity of different types of construction and stages of socio-spatial transformation, which would allow us to test the adequacy of our methodology. The sample included 7 types of construction and 2 stages of socio-spatial transformation, classified for the purposes of simplification as having a high or low degree of commercial activity (see Tab. 1).

The methodology applied involved two types of research: Firstly, we conducted a detailed visual mapping of each research zone, in the context of which (a)

all types of constraints on public accessibility of courtyards, entry-ways and surrounding territories were recorded and (b) certain “accessibility coefficients” were calculated for each building complex, based on the proportion of publicly accessible/non-accessible residential entry-ways as well as the proportion of territory occupied by publicly accessible commercial spaces. In calculating the proportion of closed entry-ways and courtyards, the building and surrounding territories were projected onto a two-dimensional floor-plan and marked as publicly accessible or closed and subsequently the proportion of closed courtyard and building territory was calculated as a percentage figure. Secondly, a survey of 240 city residents over the age of 35 was conducted, concerning perceptions and retrospective recollections of socio-spatial transformation of urban spaces with regard to their public accessibility.

The key results of our research can be summarized by the following four theses: the development of Saint-Petersburg since 1990 is characterized by an overwhelming tendency to close off entry-ways and courtyards. At the same time, there is no mentionable correlation

between the degree of commercial activity and the proportion of closed vs. publicly accessible spaces. Furthermore, our research indicates that that the wealth of residents and businesses located in each type of building is the key driver of closing formerly publicly accessible spaces. Finally, survey results show that the actual process of closing formerly publicly accessible spaces is usually initiated by the residents themselves in a quest to increase the security of person and property and to achieve a greater degree of residential comfort and community.

*Closure a large-scale phenomenon:* Closure of entry-ways and courtyards is a large scale phenomenon in the Saint-Petersburg of post-socialist times. Across all 16 zones, 89 % of building spaces and 32 % of courtyard and surrounding spaces were registered as closed. Confirming the general scale of these phenomenon, 95 % of survey respondents indicated that their entryways were closed and 19 % confirmed that their courtyards had been closed. These high averages, however, represent significant differences from zone to zone. The proportion of closed building spaces ranged from 42 % to 100 %, while the proportion of closed

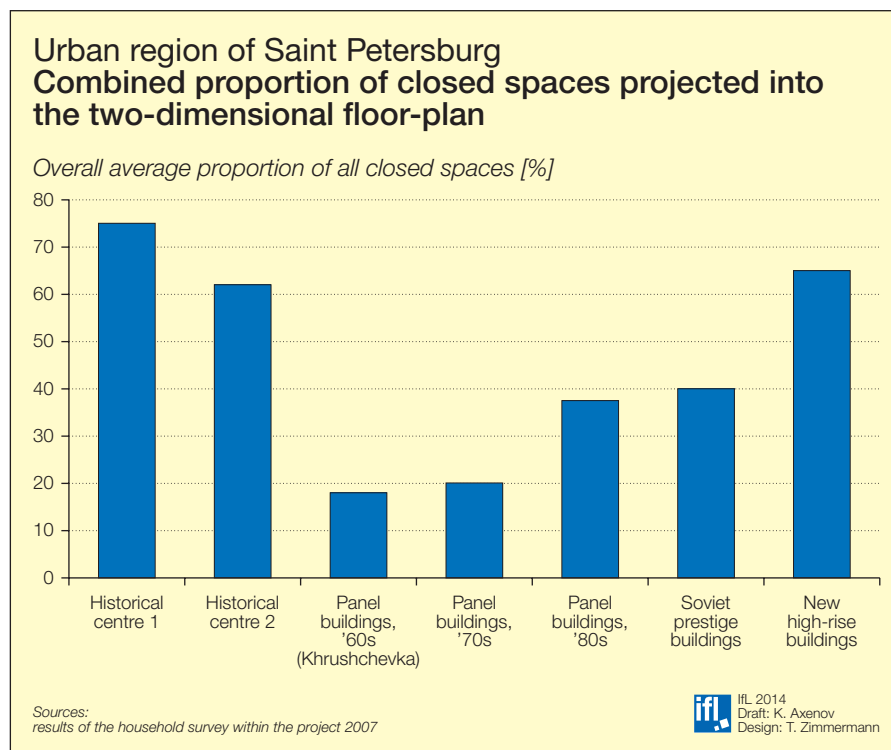


Fig. 7: Combined proportion of closed spaces projected into the two-dimensional floor-plan



courtyard and surrounding spaces ranged from 0 % to 100 %. The combined proportion of closed spaces projected onto the two-dimensional floor-plan ranged from 13 % (Panel building, '60s (Krushschev-era)) to 71 % (Historical center, Vasiljevsky Island) (see Fig. 7).

*No link to degree of commercial activity:* There is no mentionable correlation between the degree of commercial activity and the proportion of closed vs. publicly accessible spaces. The average proportion of closed courtyard spaces for zones with a high degree of business activity was 20.3 %, while that for zones with a low degree of business activity was 26.6 %. The statistical difference between these two averages is driven exclusively by one newly constructed zone, which was originally designed as a closed complex. For 3 out of 7 construction types, zones with a high degree of business activity showed a lower proportion of closed courtyards (see Fig. 8). The average proportion of closed building spaces for zones with a high degree of business activity was 86.2 %, while that for zones with a low degree of business activity was 90.7 %. Here, again, the statistical difference between these two averages is driven exclusively by one zone – the pedestrian area, lined with shops, on Vasiljevsky Island (Historical ctr. 1). For 5 out of 7 construction types, zones with a high degree of business activity showed a lower proportion of closed entryways (see Fig. 9). No statistically relevant conclusions can be drawn from this evidence with regard to a relationship between accessibility of public spaces and commercial activity and the hypothesis that increased commercial activity is linked to a higher degree of public accessibility of building and courtyard spaces cannot be confirmed. Only in one instance was the degree of commercial activity clearly linked to the proportion of closed courtyard spaces: In the prestigious Vasiljevsky Island district of the historical center the 3<sup>rd</sup> and 4<sup>th</sup> lines, which are occupied by prestigious and newly renovated historical residential buildings, had a

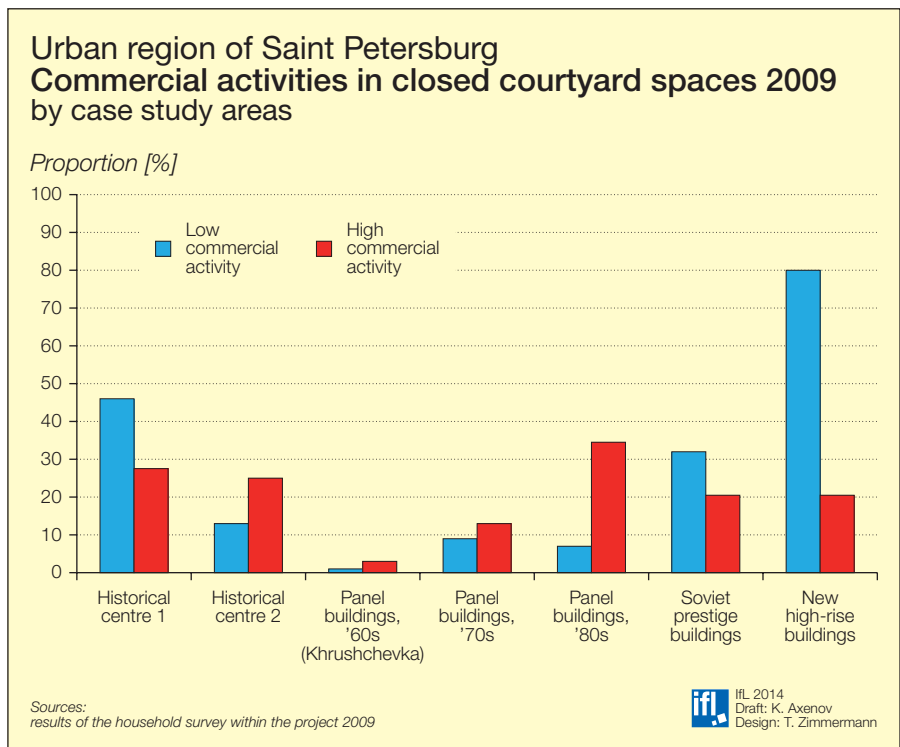


Fig. 8: Commercial activities in closed courtyard spaces 2009

proportion of 87 % closed courtyard spaces, while the pedestrian shopping zones in the neighbouring 7<sup>th</sup> and 8<sup>th</sup> lines had a mere 42 % (the lowest measured in any zone).

*Closure and wealth correlated:* Despite the insufficient statistical relevance of our sample of construction types, a clear and exception-less correlation exists between the price of real estate for a given con-

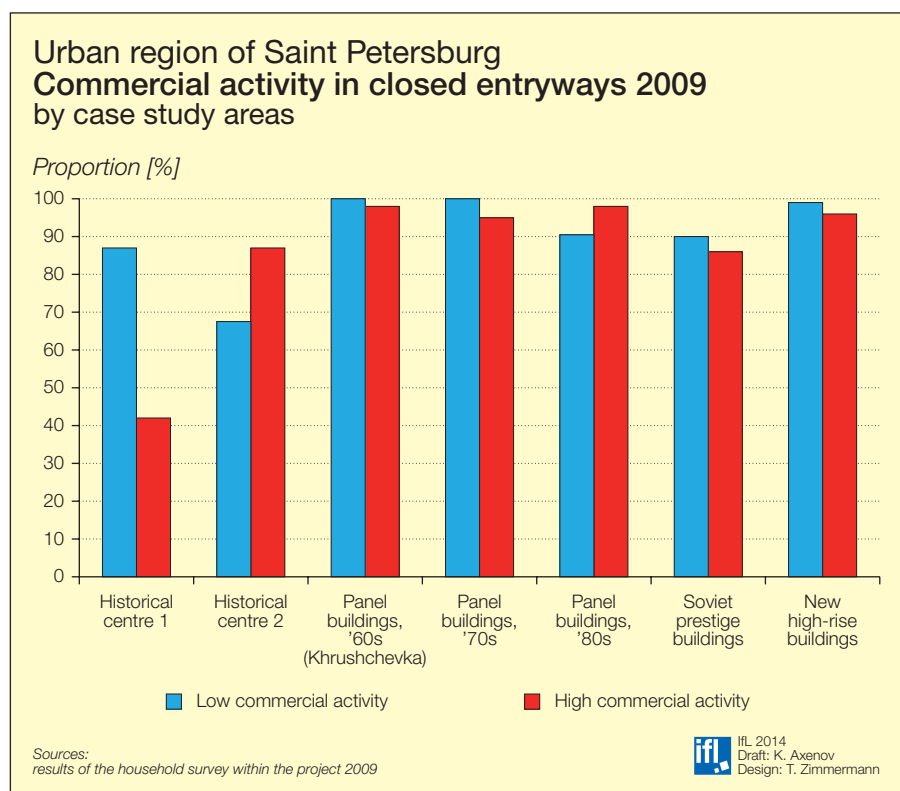


Fig. 9: Commercial activity in closed entryways 2009

struction type and the proportion of closed vs. publicly accessible spaces, indicating that the wealth of residents and businesses located in each type of building is the key driver of closing formerly publicly accessible spaces. In order to understand the drivers behind this phenomenon, it may be worthwhile to look at the proportion of closed entryways and courtyards separately. As Figure 3 shows, with the exception of the pedestrian zone of Historical center 1 (prestigious) and the historically poor (Historical center 2) and collectivized Columna district (Historical center 2 with a low degree of commercial activity), the proportion of closed entryways in the remaining 14 zones varies between 85 and 100 %. The proportion of closed courtyard spaces, however, shows more stark distinctions between regions (see Fig. 10). Remarkably, four of the five zones with the highest proportion of closed courtyards also happened to be the most prestigious and expensive areas covered by our research: The two largely reconstructions and significantly gentrified areas in the historical center (Historical center 1), a prestigious new apartment complex (new highrise with low commercial activity), and finally, the prestigious white brick buildings, formerly occupied by members of the nomenclature, of the Stalin-era. The odd-ball in the group is zone 9 with late Soviet Panel buildings. This latter zone is, although best among all the panel buildings covered by our research, by no means prestigious, but the historical particularity of this area is that buildings located here were governed from the moment of their construction in the 80's by relatively strong residential construction cooperatives, which significantly eased the administrative burden of agreeing upon the closure of the courtyard spaces among residents. The first four, however, are either initially planned as elite and closed building types, or were recently renovated and fully reconstructed by mostly new residents and investors, wishing to invest in the creation of retail spaces, who had to agree upon and invest in the solution of a long list of other issues besides the clo-

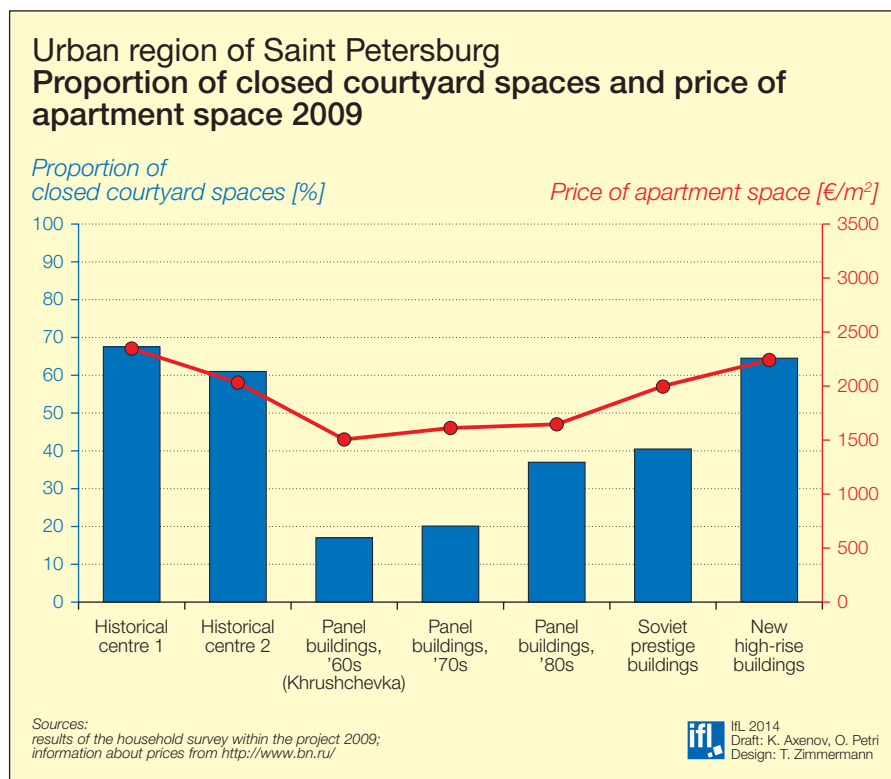


Fig. 10: Proportion of closed courtyard spaces and price of apartment space 2009

sure of their courtyard spaces in order to complete these renovations. Consequently, in the case of these four zones, the closure of courtyard spaces was neither a significant administrative hassle nor a large financial investment, in comparison to the other expenditures borne by constructors, government agencies and investors. On the other hand, the five zones with the highest remaining portion of publicly accessible courtyard spaces are also the five least expensive and prestigious zones covered by our research: The early and low-quality Khrushchev-era panel buildings, the slightly improved Brezhnev-era panel buildings, Historical center 2 with a low degree of commercial activity and, finally, the remote and run-down '80s panel buildings. The conclusion that the proportion of closed courtyard spaces, as the key driver, differentiating the overall degree of closure between zones, is related to the degree of prestige or the real-estate value of each zone does not seem far-fetched. Besides creating a kind of intermediate zone between private and public spaces, the closure of courtyards and entryways was largely explained by survey respondents

in terms of security and seems to correlate significantly with the overall level of wealth of residents. First of all, the residents of these areas are more likely to be concerned for the safety of their car (besides their persons, and other property), and secondly, for residents and investors shaping these spaces, the investment in the security infrastructure required to close their courtyard areas is least significant. For the purpose of illustrating this tendency, and not so much in the hope of establishing what may very well not be a universally applicable correlation even in Saint-Petersburg, we have juxtaposed the proportion of closed courtyard spaces with the average cost of a square meter of apartment space in the 7 building types studied. The results show that the order according to one criterion, without exception matches the order according to the other.

*Closure driven by residents, hoping to protect themselves and their assets:* The actual process of closing formerly publicly accessible spaces is initiated by the residents themselves in the vast majority of cases. The key motive is a desire to increase the security of person and proper-

ty. 64 % of survey respondents selected some form of increased security as the key benefit of the closure of their courtyard and/or entryway. Among these 64 %, 39 % mention the security of their family members and themselves as the key benefit, while 16 % mention the security of their property and 9 % the general security of the building and courtyard spaces (see Fig. 11). Only 6 % found that all previous problems remained or had trouble answering the question. Significantly, 20 % pointed out a general increase in the comfort of residents, possibly relating to the fact that intermediate spaces for a community of neighbors were created by closing off courtyards, in particular. For example, playgrounds, frequently found near new highrise buildings and in courtyards of renovated buildings, become attractive and maintainable, once the courtyard has been

made accessible only to residents.

Thus, these survey results indicate not only that, with rare exceptions, the closure of entryways and courtyard spaces is perceived positively by city residents, but also that the residents perceive the added security this process provides as its key benefit. In conjunction with this conclusion, it is important to note that in most cases the closure of entryways and courtyards is initiated by the residents themselves, hoping to achieve these benefits. A considerable 64 % of closed entryways, according to the responses of residents, were closed by the residents in some form of self-organization. For courtyards, this statistics is even more impressive – 67 % were closed by the residents in some form of self-organization.

### Conclusion and future research prospects

First of all, socio-spatial differentiation can be observed in various morphological post-transformational urban zones, but has not yet led to full-fledged spacial polarization or segregation, except in the case of new high-rise buildings and new, closed suburban settlements. In particular, the historical center is composed of a mix of wealthy residents in individually renovated apartments, businesses and commercial enterprises and run-down communal apartments. A significant concentration of residents identified in the study as wealthy can only be observed in newly created residential areas, specified in our study as “New highrise” and “wealthy suburbs”.

Secondly, the *extent* of socio-spatial differentiation varies in morphologically different urban housing types, generally increasing at the extreme ends of the range of ranked housing preferences. In model zones with otherwise opposite characteristics (“Panel 60s” and “wealthy suburbs”) we observed a particularly large concentration of poor and well-to-do residents, respectively.

Thirdly, income or residents as an indicator of socio-economic status and in clear correlation with educational achievement appeared to create a strong relationships

between the rank of each model zone in terms of general housing preferences and the composition of residents in various model zones, thus contributing to the stratification of the city population in general along two dimensions in particular: access to newly-built generally high-quality housing and, changes the quantity and nature of publicly available spaces securing the periphery of these “islands of wealth” recently created.

Fourthly, the actual process of closing formerly publicly accessible spaces is initiated by the residents themselves in the vast majority of cases. They key motive is a desire to increase the security of person and property.

Finally, there is no mentionable city-wide correlation between the degree of commercial activity and the proportion of closed vs. publicly accessible spaces. The average proportion of closed courtyard spaces for zones with a high degree of business activity was 20.3 %, while that for zones with a low degree of business activity was 26.6 %. The statistical difference between these two averages is driven exclusively by one sample zone.

The first of these conclusions probably requires further investigation. In particular, in most of the model zones (with the exception of “new highrise” and “wealthy suburbs”) we observed a more or less pronounced concentration of different income groups, but by no means of socially polarized big residential quarters. Compact settlement of members of the post-Soviet economic elite could be found only in the form of a few gated communities in the city center or suburban settlements. Most of the residential buildings constructed before 1990 are still socially very heterogeneous. This is the reflection of two major peculiarities of a post-socialist Russian city. One is the heritage of the socialist policy on elimination of socio-spatial disproportions and differences. Much has been written on this issue (see for example BATER, 1980; SMITH, 1996). Another feature is obviously different pace and even direction of the process of transformation of urban space in different cities (see for example AXENOV

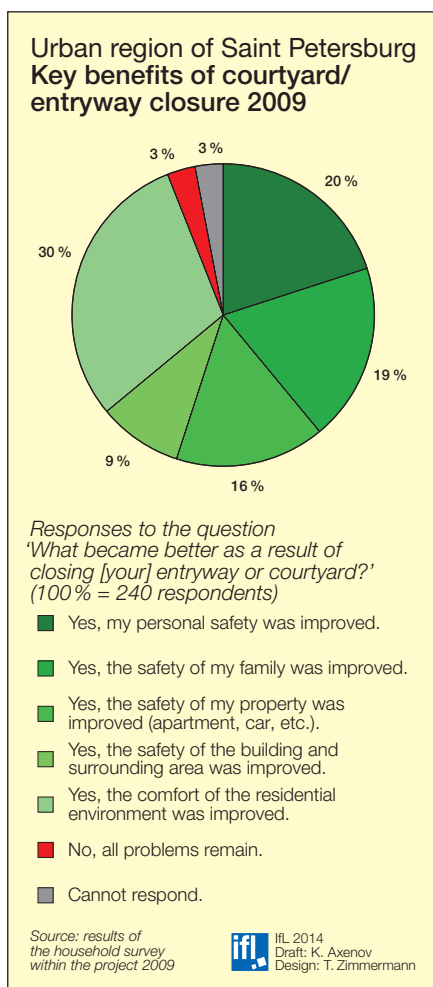


Fig. 11: Key benefits of courtyard/entryway closure 2009



and VENDINA 1999; RUDOLPH 2001). Our expectation, however, is that two model zones in particular, will be subject to significant changes driven, first and foremost, by government policy changes: “historical center” and “panel building 60’s”.

As far as “panel building 60’s” is concerned, the city government has conducted a tender in 2009 and attracted a consortium of investors to tear down so-called “Khrushchevsky” located in 44 clusters in 11 administrative districts of the city and replace them with new highrise buildings. This will lead to the virtual disappearance of “60’s panel buildings” as a class and the emergence of a new statistically significant class of “new highrise” buildings occupied by socially and economically diverse former residents of cheap “60’s panel buildings” apartments. These expectations have not yet been fully reflected in prices of “60’s panel buildings” by real estate markets, since there is significant remaining doubt on the part of potential buyers that this very ambitious program is in fact going to be carried out.

Similarly, government policy is expected to impact the social homogeneity of the “historical city center”, since a government program to provide a financial contribution to qualifying deals to resettle the residents of communal apartments in new alternative apartments has been launched in 2007. The effects of this program have been long forthcoming, since the economic crises of 2008 and 2011 have decreased the number of real estate transactions generally and led to a reduction in funding of the program itself. Nevertheless, this program is expected to lead to an acceleration of the gradual resettlement of residents of the “historical center” to “new highrise” and other building types. This will, of course, make “new highrise” and these other building types socially and economically more diverse. At the same time, this program should facilitate the elitization of particularly attractive areas within the “historical center”.

Furthermore, the adoption of a new “Housing Code” in 2005 now allows for

the private ownership of the land, entryway, courtyard and other “public spaces” surrounding buildings. The adoption of this code is expected to have a gradual effect on the socio-economic differentiation of the “historical center” as joint ownership and development of all the areas surrounding an apartment building will enable upgrades to these areas and reduce both legal, investment and other risks for residents or potential residents of apartments in houses that have been more or less completely homogenized in terms of the socio-economic composition of its residents. This possibility may, in turn, make the creation of homogenous residential clusters more attractive to investors and residents alike than they have been before the adoption of this new legislation. It will also enable the development of zones in the city center and elsewhere that are exclusively managed and owned by their residents through a specially created or selected management company. Since this possibility will have few practical implications for building types created after 1990 (these are already largely socially homogeneous with access actively managed by residents) and requires significant financial investments, the new “Housing Code” is expected to impact socio-spatial differentiation most significantly in those areas, where real estate prices are high and buildings were built before 1990. This is the case, first and foremost, for the historical center. It will be of particular interest, to study the relationship of a possibly emerging trend towards the renovation and reconstruction of entire buildings (as opposed to individual apartments, which is the norm up to now) and the creation of micro-communities in the city center, which can rebuild social and cultural capital lost a century ago.

Thus, we expect some segments within the “historical city center” as opposed to others to become more economically and socially homogeneous – especially in its most attractive parts. At the same time due to the policy of gradually eliminating “60’s panel building” as a type, we expect

to see a declining degree of socio-spatially differentiation in “new highrise buildings” The expected pace of such changes as well as their impact on the socio-spatial development of the city as whole requires further research and investigation, as well as tracking over time.

Finally, we consider it worthwhile to attempt to predict and monitor the impact of additional traffic congestion in the historical center and key arteries accompanied by construction of two new ring roads. These tendencies would probably reduce the amount of time required for a commute from a suburban cottage settlement supporting the development of suburban housing as an alternative to owning a city apartment. Such a trend might be further reinforced by the recent moves of several major government-owned companies to Saint-Petersburg, since several of them also announced plans to create spatially segregated and closed residential complexes (cottage settlements) for their employees.

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## Résumé

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### Différenciation sociospatiale et accessibilité publique des espaces urbains dans la ville au stade de post-transformation – étude du cas de Saint-Pétersbourg

A l'heure actuelle, la différenciation sociospatiale de Saint-Pétersbourg peut être observée dans diverses zones urbaines au stade de la post-transformation morphologique mais n'as pas encore abouti à une polarisation ou ségrégation à part entière. En même temps, l'étendue de la différenciation sociospatiale varie dans des types d'habitat morphologiquement différents et ne peut être appréhendée qu'en partant du contexte historique et des préférences des résidents. Pour permettre de comprendre plus concrètement leur impact sur la différenciation sociospatiale de divers secteurs urbains, deux études ont été réalisées (une en 2007, une autre en 2009) avec la participation des auteurs de la présente contribution. Les résultats de ces études, basées sur différents spécimens de modèles de zones ou de types d'habitat à Saint-Pétersbourg, ont montré que les préférences des résidents entraînaient une différenciation sociospatiale à la fois à l'échelle microscopique (par exemple des cages d'escalier fermées dans une cour ouverte avec des cages d'escalier autrement ouvertes) et macroscopique (par exemple des lotissements de banlieue clos ou de nouveaux gratte-ciel). Le degré de mise en œuvre de cette ségrégation dépend du niveau de revenus des résidents et est bien sûr en forte corrélation avec les prix de l'immobilier. Aucun autre moteur important de différenciation ou ségrégation sociospatiale n'a été identifié, à part le désir des citoyens aisés d'accroître leur sécurité personnelle et celle de leurs biens. Aucun autre moteur important de ces tendances n'a été décelé. Par exemple, on n'a découvert aucune corrélation notable entre le niveau d'activité commerciale et la proportion d'espaces accessibles ou fermés au public. Il est proposé de poursuivre la recherche en vue de mieux comprendre l'impact de la législation récente sur la différenciation sociospatiale à Saint-Pétersbourg.

Russie, Saint-Pétersbourg, développement et différenciation sociospatiaux, préférences d'habitat, ségrégation

## Резюме

КОНСТАНТИН АКСЕНОВ, ОЛЬГА ВЛАДИМИРОВА ПЕТРИ

### Социально-пространственная дифференциация и общественная доступность жилых районов в пост-трансформационном городе на примере Санкт-Петербурга

В современном Санкт-Петербурге можно наблюдать социально-пространственную дифференциацию в различных морфологических посттрансформационных городских зонах, что до сих пор не приводило к полной специфической поляризации или сегрегации. В то же время степень социально-пространственной дифференциации отличается в морфологически различных городских формах жилья и может быть осмыслена лишь в историческом контексте и на основе предпочтений жителей. Для того, чтобы лучше понять их влияние на социально-пространственную дифференциацию различных районов города, авторами данной статьи проведены два исследования (в 2007 и 2009 гг.). Результаты этих исследований, относящихся к двум различным примерам модельных районов и соответственно типам зданий в Санкт-Петербурге, показывают, что движущей силой социально-пространственной дифференциации или сегрегации в микроконтексте, с одной стороны (например, закрытый, изолированный подъезд / лестничная клетка в открытом, общедоступном дворе) и макроконтексте, с другой стороны (например, изолированный городской жилой район или новые высотные здания), были предпочтения жителей. Степень, в какой пространственно реализуется эта сегрегация, зависит от уровня доходов жителей и конечно тесно связана с ценами на недвижимость. Помимо стремления состоятельных горожан лучше обеспечить личную безопасность и безопасность своей собственности, не удаётся обнаружить иных существенных движущих сил социально-пространственной дифференциации или сегрегации. Так, например, не может быть выявлена достаточно заметная связь между развитостью предпринимательства и соотношением между закрытыми, изолированными и общедоступными пространствами. В связи с этим для лучшего понимания влияния новейших законодательных предписаний на социально-пространственную дифференциацию в Санкт-Петербурге предлагается провести дальнейшие исследования.

Россия, Санкт-Петербург, социально-пространственное развитие и дифференциация, жилищные предпочтения, сегрегация