

SPATIAL AND FUNCTIONAL CHANGES IN RECENT URBAN DEVELOPMENT OF ZAGREB

Miroslav Sić

Trg D. Domjanića 7, Sesvete, Zagreb

Izvirni znanstveni članek

COBISS 1.01

Abstract

This article discusses the urban development of Zagreb in the transition period. It analyses four processes which have caused spatial and functional changes in the city's development within its administrative limits. These are: the process of a new CBD establishment, expansion of hypermarkets and commercial centres, housing construction under new conditions and transportation problems and solutions. Under the influence of these processes the spatio-functional structure of the city becomes more and more complex. In this connection the city has started to have more influence on the urban region's development.

Key words: new CBD, hypermarkets and commercial centres, housing construction, traffic infrastructure, Zagreb, Croatia.

PROSTORSKE IN FUNKCIJSKE SPREMEMBE V NOVEJŠEM URBANEM RAZVOJU ZAGREBA

Izvleček

V članku se razpravlja o urbanem razvoju Zagreba v obdobju tranzicije. Analizirajo se štiri procesi, ki so pripeljali do prostorskih in funkcijskih sprememb v razvoju mesta znotraj upravnih meja. To so: proces nastajanja novega centralnega poslovnega središča (CBD, city), širjenje trgovskih središč in hipermarketov, razvoj stanovanjske gradnje v novih pogojih in prometni problemi ter njihove rešitve. Pod vplivom teh procesov je prostorsko-funkcionalna struktura mesta postala bolj kompleksna. V povezavi s tem je mesto še okrepilo svoj vpliv na razvoj celotne urbane regije.

Ključne besede: novo centralno poslovno središče, CBD, city, hipermarket, trgovski center, stanovanjska gradnja, prometna infrastruktura, Zagreb, Hrvaška.

I. INTRODUCTION

In the transition period, especially after 2000, great spatial and functional changes have taken place in the urban development of Zagreb. It is the consequence of transition to a new political and economic system. In Croatia, new conditions have led to a strong development of private enterprise and monetary economy, reconstruction of industrial sector and strengthening of the tertiary one, as well as to the increase of consumption. Such trends were more prominent in Zagreb as a political and most developed economic centre. A great degree of the country's centralisation was favourable to the growth of Zagreb's economic power. In addition, besides our business subjects, the foreign ones got a great role in Zagreb, especially dealing with financial activity and commerce. All this was highly reflected on the urban development of Zagreb. Some characteristic processes became prominent and they started to create a new spatial and functional structure of the city.

We can cite four peculiar processes. First of all, it is a new CBD (city) establishment in the place of old industrial districts around the Main Railway Station. Construction of big commercial establishments, especially hypermarkets and commercial centres mostly built on the outskirts of the city, is equally new and functionally significant. Housing construction is the following factor of the city's recent urban development. Now it takes place in the whole urban area and shows more complex characteristics than in the previous period. As with the previously quoted urbanising processes a new functional structure started to develop, and connected with that, the population mobility increased, transportation problems have come to the foreground. Partial and long-term transportation solutions which, as developmental processes also influence the city's urbanisation, have been approached.

We are going to analyse the mentioned processes and point out their role in the formation of new spatio-functional structure of Zagreb.

2. ESTABLISHMENT OF NEW CENTRAL BUSINESS DISTRICT

Traditional CBD, i. e. the city of Zagreb with the focus on the Josip Ban Jelačić Square, Ilica, Jurišićeva and Vlaška Streets connected with the side-streets and squares towards the Main Railway Station, was formed by the end of the 19th and at the beginning of the 20th century. It was established at the bottom of medieval cores of Zagreb (Grič and Kaptol) in the zone optimally correspondent for functional city connections (Žuljić, 1964:111). Signification of that central business district is pointed to by financial (banks and insurance companies), commercial (department stores and specialised shops) and catering facilities, as well as various agencies, offices and services (Prelogović, 2000:82). Corollary of that functional phenomenon was decrease of the population number, households and flats, which points to the process of citification (Vresk, 1986:53). At the edge of the CBD there are numerous political, administrative, cultural and education institutions. Attraction of the city on the one hand, and of the Main Railway Station on the other, in the period before the First World War, resulted in the construction of the Lower city regular spatial complex, which is included in the centre of the city in wider terms.

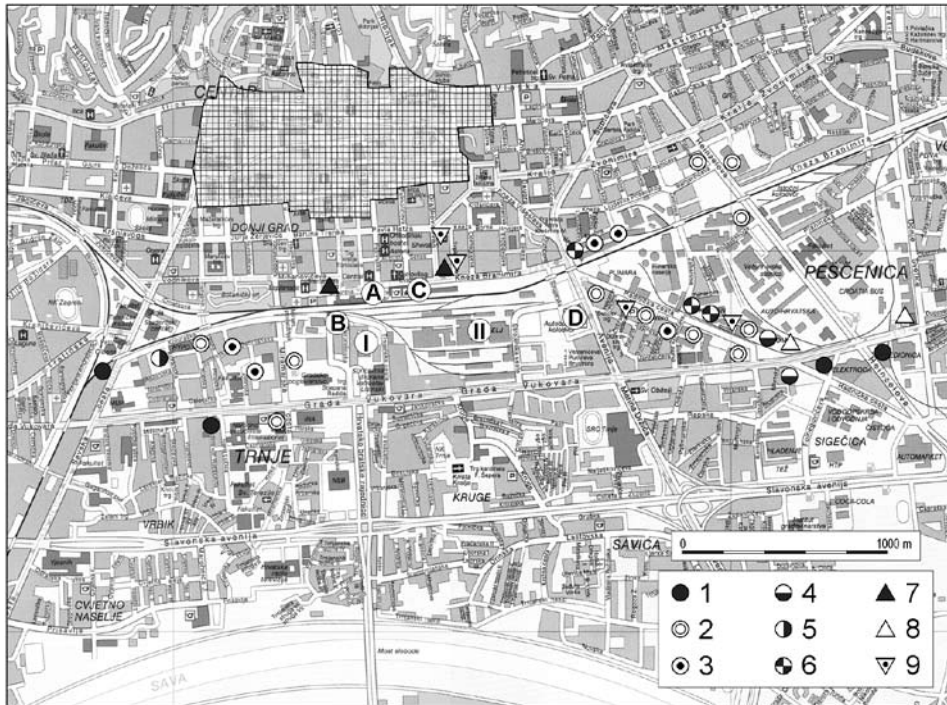
In the period after 1990, there have appeared the trends of that traditional Zagreb CBD expansion. We cite several examples. In wider zone of the Kaptol's historical core, at the place of the previous shoe factory, the commercial-business Kaptol Centre was arranged. Connected with that, attractive catering area of the Tkalčićeva Street was modernised. The construction of the business-housing centre Prebendarski Vrtovi was started in the same zone. In the eastern elongation of the central business district Importantne Galerija was built, with business programmes and elite flats. We can also mention that there are prepared projects of arranging the block bounded by the Petar Preradović Square, Ilica, Gundulićeva and Varšavska Streets, as well as of the free area at the corner of the Cesarčeva and Kurelčeva Streets.

However, the construction of the new CBD is more important than the expansion of the traditional city, which simultaneously points to contemporary trends of renewal, i. e. modernisation of the historical core. CBD is being established, approximately, between the Main Railway Station and the Vukovar Avenue, as well as on the Savska Street - Heinzelova Street stretch. Although the construction of office, public and residential buildings in that zone (City Council, concert hall V. Lisinski, INA business building, hotel Internacional, etc.) was started as early as in the socialist period, only in the transition period the new process has become fully prominent. Transformation of old industrial districts into a new business centre of the city is proceeding before our eyes (Sić, 2004:72). By Brownfields operation, i. e. by demolition of old factories, craftsman workshops and warehouses, as well as of low-quality residential buildings, a new urban structure is being created. The process has been the most prominent in the area of Martinovka and along the Radnička Road, southwards of the Main Railway Station, but particular cases are also visible northwards of it. Similar interventions will soon be realised in the large central complex Paramlin-Factory of railway vehicles.

New business centre stands out for its physiognomy. High buildings and skyscrapers have started to dominate in that part of the city. They are remarkable for their architecture and new construction materials. That departure "to height" and look ("corporation architecture") are accompanied with critical discussions among town planners and architects. Particular foreign and domestic firms or investors hiring out business premises to a larger number of users have built new business buildings for their headquarters. Financial (banks and insurance companies), informatical and mass media, commercial and transportation activities prevail in business buildings, in short, tertiary and quarterly sectors (Fig. 1).

So, in the part of the city which was conceived as future centre of Zagreb in earlier city maps (Knežević, 2003:318), has rapidly started to establish a new central business district of the city, encouraged by new trends, which have begun in the transition period. First of all, it relates to a great increase of building land prices, especially in the central part of the city, as well as to the dynamics of private entrepreneurship in construction industry. New central business district has a better location and is more easily approachable than the traditional one. It is dominated by business activities, and the functional structure is completed by commercial-entertaining centres such as the underground Importantne Centre and Branimir Centre, as well as the hotels northwards of the Main Railway Station, and earlier constructed cultural, education-scientific and political facilities around the City Council. In order to keep its vivacity during the whole day it is important to retain the housing function of this district to an increased extent.

Figure 1: Office buildings constructed after 1990 in the Zagreb new city zone.



The old central business district of the city is marked by hatches; 1) Business tower; 2) Multipurpose office building; 3) Office-residential building; 4) Bank or insurance company; 5) Press house; 6) Other business firms; 7) Commercial-entertaining centre; 8) Hypermarket; 9) Hotel; A. Main Railway Station; B. Bus terminal; C. Post Office Zagreb 2; D. Bus Station; I Previous steam-powered flour mill, II Factory of railway vehicles.

However, the new central business district (i. e. new city) has not been spatially defined yet. New buildings are being built on the large area, the core of which is yet to be formed. It can be expected after the construction on the areas where there are the Factory of railway vehicles and previous steam-powered flour mill, and after modernisation of the Main Railway Station (new levelling of the plant). Connected with that, retail trade, especially specialised one, should develop quicker, which now lacks in new installations.

3. EXPANSION OF HYPERMARKETS AND COMMERCIAL CENTRES

A new characteristic process of the transition period is the construction of big retail shops - hypermarkets, commercial centres and specialised hypermarkets. By the end of 2006, there were over 30 such shops in Zagreb and their number is permanently increasing.

As simultaneously smaller commercial installations are rapidly widening (supermarkets and automobile, as well as furniture showrooms, and similar), we can conclude that there is a great expansion of retail trade and of the tertiary sector in a larger sense. It is the result of objective needs caused by consumption increase, but also of the aspiration to conquer a market, which can be well seen in great representation of foreign commercial chains.

Establishment of new retail shops in Zagreb has been researched in several recent works. They analyse particular installations such as the Kaptol Centre (Lukić, 2002), locations and functions of commercial centres in Zagreb (Lukić, Jakovčić, 2004) and theoretic cognition about retail trade and commercial centres (Lukić, 2003). Regarding the key problems of this paper - the spatio-functional changes in the recent urban development of Zagreb, the location question of large retail shops is undoubtedly of greatest significance.

Hypermarkets, specialised hypermarkets and commercial centres are being built on the outskirts of the city on the one hand, and on the other in the city core. The first case is far more frequent and shows that huge commercial installations are located in the districts of greatest accessibility for car transport, from the city and city region alike. These are main radial communications such as Ljubljanska or Slavonska Avenues or well accessible parts of old industrial zones (Žitnjak, Sesvete, etc.). Proximity of new housing districts has also influenced the location of commercial installations. Northwards and southwards from the Ljubljanska Avenue new housing estates were built successively (Špansko, Malešnica, Vrbanj, Prečko, etc.), so that avenue became attractive for construction of large shops, but also of other business installations (hotels, automobile showrooms and similar). At the same time, more westwards, beside the industrial district in Jankomir and opposite the road junction on the Zagreb tangential road, the greatest concentration of large retail shops was established.

Effects of large commercial installation are significant. It can be noticed on the price increase of the neighbouring building land, on establishing new business and service activities, as well as on the car flow dynamics. Some of them have revealed a regional character, which is a guarantee for a long-term success.

In the city core of Zagreb only several commercial centres have been opened because of limited spatial possibilities. They all represent interpolations into the urban tissue of the wider city's zone and by their structure are more like the plaza type centres than the classic commercial ones. Besides a great number of specialised shops, there are catering, various service and entertaining programmes, and an installation of the hypermarket type is missing. Attractive shops, various entertaining (multiplex cinemas) and catering programmes, as well as underground garages draw numerous visitors, so such centres have become a "pseudo" public area, and by their structure, activities and development directions are similar to city squares (Lukić, 2002:88).

The newest modernisation plan of the urban block in the core of Zagreb bounded by the Ilica, Preradovićeve, Varšavska and Gundulićeve Streets, called the Lifestyle Centre, points to further trends of citification, i. e. arrangement of new CBDs with already strong component of elite residence. The project of arranging the free area at the angle of Vlaška and Kurelčeva Streets in the narrowest city core leads to a similar conclusion.

4. DYNAMICS AND COMPLEX FEATURES OF HOUSING CONSTRUCTION

Different from previous two processes of innovative character - establishment of a new city and expansion of retail installations, housing construction is not a new process, but it has revealed a significant dynamics and very complex characteristics in new conditions. According to the opinion of experts, it has reached its climax since 2000. This can be seen on the construction conjuncture, high prices, constant demand, various investors, location choice and types of buildings. Dynamic construction activity is simultaneously followed by pressure of investors and interest groups, which leads to conflict relations, low-quality and unauthorised building and space devastation. Analysis of functional features and distribution of housing construction is the most significant for comprehension of contemporary changes in urban development of Zagreb, so we shall deal more with these problems.

During the previous socio-political system, from the 1960s on, there dominated a concept of housing estates as a rational and economic form of solving housing problems (Maretić, 1979). Such estates were built mainly on the southern and western outskirts of the city, most consistently in Novi Zagreb with regard to the existence of social standard buildings. That form of construction was also continued after 1990 with some similar, but also new features. New estates are being built as before, in the free area on the outskirts of the city. The basic structure is made by blocks, i. e. multi-apartment buildings, but they are now more condensed and have more stories. Besides, a part of buildings have a mixed, office-residential purpose. Changed way of life influenced the construction of garages, larger parking areas and denser roads, while green areas were lessened. Besides different commercial investors the city government also takes part in construction. It stimulates the construction of social flats.

In the transition period two types of construction have become more prominent in the inner city connected with the changed policy of the municipal land use. These are office-residential and residential installations. They are the result of the construction direction to the renewal and buildup of the existing city districts, which is carried out through interpolation. On vacant and reserve lots, after demolition of old economic buildings (industry and similar) or dilapidated apartment houses, new buildings are built, as a rule multi-storied ones, of large gabarit, with quality and more expensive apartments and garages. Simultaneously, commercial direction has an impact on distribution of business premises.

In more recent housing construction the establishment of residential buildings is especially significant. It is mostly connected with the hilly area of Zagreb and particularly with the urban district Podsljeme. In that naturally attractive area, where already during the 19th century a greater number of summer houses emerged, and between the two world wars, typical residential districts were established (Tuškanac, Prekrižje), intensive construction takes place today. "Urban villas" built around the main roads towards the foothill region (Bukovačka Street, Jordanovac, Sveti Duh, Kustošijanska) first point to the character of that construction. But, residential construction becomes even more prominent in old foothill settlements. As centrally placed settlements - Šestine, Kraljevec, Gračani are already saturated in building, the new process is more expanding towards the neighbouring areas. A good example is transformation of Remete. Multi-storied buildings interpolate into the existing urban structure

with prevalingly older family houses, and elite residences or complexes of urban villas spring up. Similar process takes place in the settlements of Mikulići, Borčec, Perjavica, etc.

Dynamic residential construction is the consequence of greater and greater social differentiation and aspiration of richer population to find accommodation in the attractive zone at the foot of the mountainous massif of Medvednica. Besides, connected with contemporary functions of Zagreb, a number of foreigners (diplomatic employees, managers, free professions) interested in building or renting of elite residences has increased. This additionally influenced commercial construction. But newly established residential districts are not without problems. Concentrated construction has somewhere had an essential impact on quality of life. As the consequence of that, the eco-standard buildings are more frequently promoted. Inadequate roads and under-representation of retail shops make a special problem.

In the observed period, private family construction has also been widely represented in Zagreb. What is more, we can say that it was the most intensive. It mostly developed on the outskirts of the city, especially in the east, in the city district of Sesvete and in the southwest, in the city district of Brezovica. The city territory includes the under-constructed agrarian areas, so the construction conditions were favourable. Lower price of building land had an impact on increased interest, and wider zones of planned, but also of illegal building, arose around the cores of older settlements. Somewhere they represent an expansion of the city's suburban area. That construction was most influenced by in-migrations from various regions of Croatia, as well as by immigrations from Bosnia and Herzegovina, but it was also stimulated by commuting from the central parts of the city motivated by employment, economic and family reasons.

5. TRANSPORTATION PROBLEMS AND SOLUTIONS

With previously mentioned urbanisation processes which have led to a great growth of car number and increased mobility of population in the city, transportation problems came to the foreground. So far, they have been prevalingly solved by individual interventions, which completed the existing transformation system of the city. In recent years, faced with growing problems, the creators of the Zagreb transportation policy have paid more attention to big transportation infrastructure, i. e. to the arrangement of a new transportation system. It is the prerequisite of public transportation solution, better connection of the city with the outer parts of the urban region and further evaluation of the Zagreb traffic junction.

Partial decisions, which have been carried out so far, unlevelled some big city cross-roads, widened and prolonged particular roads and constructed public garages completed with obligatory garage places in business buildings. But that did not solve the problem of the city congestion with passenger cars. At the same time, public transportation was subjected only to smaller innovations by widening of the tram network and introducing a new generation of low-floor trams, as well as by reconstruction and better equipment of bus transportation. Consequently, the existing transportation system, under the conditions when the central city has reached almost 800,000 inhabitants, and the urban region (City of Zagreb and the County of Zagreb) around 1.2 million inhabitants, as well as when the population mobility has significantly increased, is not able to meet the transportation demand.

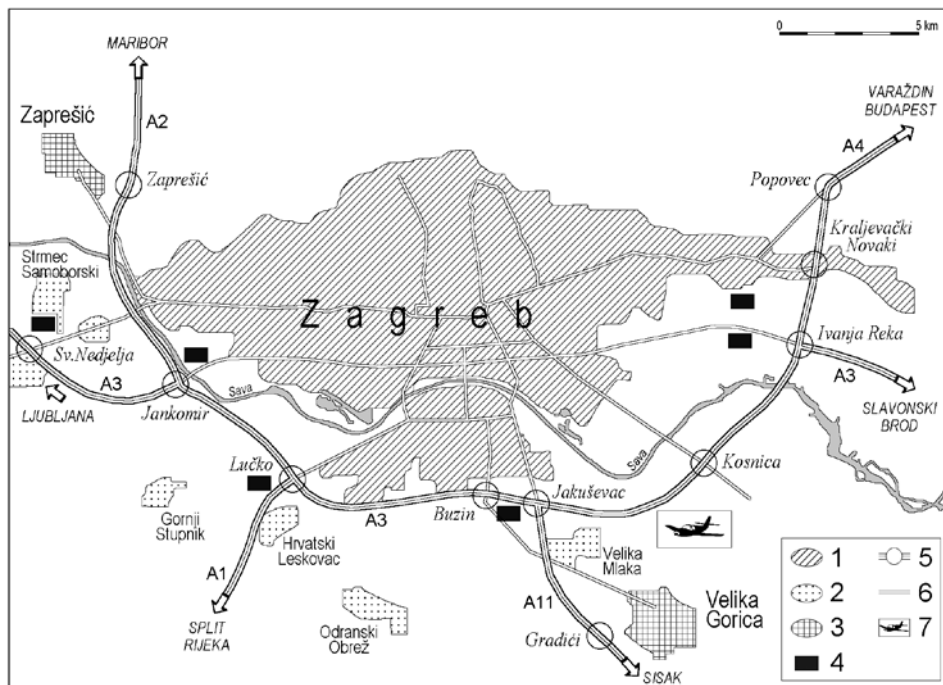
Evidently, new transportation solutions are necessary, in other words, the construction of new infrastructure is imperative, and it is primarily assigned to the public city transportation. Previous discussions pointed out the necessity of introducing the public transportation of greater capacity, but there still exists the question of such transportation type. First plans supported an expensive classic metro, the later ones were more directed to the construction of a light metro with a combination of the aboveground and underground traces. It should be, together with tram and bus networks, the third network of public city transportation. However, as a final solution, we should not neglect the possibility of arranging the halfmetro/premetro system, by establishing tram under the ground in the central parts of the city, because it is even a cheaper variant.

Connections of Zagreb with its surroundings also influence the new transportation system arrangement. On the one hand, they are based on the railway transportation, and on the other on the road one (cars and buses). Some thirty years ago, commuter railway traffic started to develop by opening of the line Dugo Selo-Zagreb-Savski Marof. Besides a suburban connection that line played an important role in the intra-city connections. Permanent growth of the transported passenger number and the line's profitability point to the perspective of such connections. Unfortunately, such transportation is being slowly introduced on the remaining commuter railways, and the plans of constructing new ones towards the satellite centres of Zagreb (e. g. towards Samobor) are being slowly realised, as well.

Slow modernisation of railway traffic has even more singled out the role of automobile traffic in connecting Zagreb with its suburban area. Urban sections of motorways got the key significance. Since the 1980s, Zagreb has developed into a huge motorway junction. Six big motorway directions lead from Zagreb, and the seventh one is being built, Zagreb-Sisak. Central function in that system of urban motorways belongs to the Zagreb tangential road - a collector and divide of the traffic flows and urbanisation factor of the outskirts of Zagreb (Fig. 2).

In its policy of spatial development Zagreb has relatively late recognised the role of urban motorways, especially of the Zagreb tangential road, as well as the necessity of connecting the city with them by radial directions as well as possible. After 1990, junctions on the tangential road have started to influence more and more development of business (entrepreneurial) districts, suburbs and satellites. Best examples of such districts are Stupnik-Lučko and Buzin. Besides for production functions, they are also characteristic for various tertiary and housing functions. By opening a new junction Kosnica on the crossroads of the radial direction Radnička Road - Domovinski Most (bridge) and Zagreb tangential road, similar and even greater location effects can be expected, because the mentioned radial connection opens the approach to a new terminal of the Airport of Zagreb (Pleso). Realisation of two more similar projects is in progress: direction Sarajevska Street - junction Jakuševac - motorway Zagreb-Sisak makes easier the entrance into the eastern part of Zagreb, and the junction Lučko, Jadranska Avenue and the bridge Jarun to the western part of the city.

Figure 2: Influence of the Zagreb tangential road and other urban motorways on the development of business districts, suburban settlements and satellite centres in the Zagreb urban region.



- 1) Continuously constructed Zagreb city area; 2) Larger areas of suburban settlements; 3) Satellite centre; 4) Business district; 5) Motorway with junction; 6) City road; 7) Aerodrom Zagreb (Pleso).

6. CONCLUSION

Four characteristic processes have marked the transition period of Zagreb urbanisation. First of all it is the establishment of a new CBD, which is happening through transformation of old industrial districts around the Main Railway Station. Simultaneously, the expansion of huge retail trade buildings is proceeding (trade centres, hypermarkets, etc.), mostly on the outskirts of the city, less in the city core, as a form of old block modernisation. New period had an impact on the housing construction conjuncture. Besides traditional types of housing construction, new ones appeared. With greater population mobility and a big growth of automobile number, traffic problems came to the foreground. There is a growing need for the organisation of the new public city transportation network, as well as for big infrastructure road installations which should make easier the intra-city connections and those with the urban region.

Under the influence of the quoted processes concentration of the city arose and a more complex spatio-functional structure of Zagreb was established. The revealed processes are similar to those in other big cities of transition countries. In that process, greater attention has been drawn by the establishment of the new city and building of residential city zones. At the same time, numerous problems arose: besides transportation, there is a problem of the city core development strategy and protection of historical monuments, ecological balance and especially illegal construction.

References

- Jakovčić, M., 2006.; Business Functions and Problem of Closure of Commercial Premises in Ilica Street in Zagreb, *Hrvatski geografski glasnik*, 68(1), 27-50.
- Knežević, S., 2003.; Zagrebu u središtu, Barbat, Zagreb
- Lukić, A., 2002.; Socijalne funkcije trgovačko poslovno središta: primjer centra Kaptol u Zagrebu, *Hrvatski geografski glasnik* 64, 73-94.
- Lukić, A.; Jakovčić, M., 2004.; Location and functions of hypermarkets and shopping centres in Zagreb, *Dela* 22, 39-54
- Maretić, M., 1970.; Izgradnja stambenih naselja u Zagrebu, *Arhitektura* 107-108, 48-59
- Prelogović, V., 2000.; Gradski trgovi u prostornoj strukturi Zagreba, *Hrvatski geografski glasnik* 62, 81-92
- Sić, M., 2004.; Role of the Railway-Station Zones in the Spatio-Functional Development of Zagreb, *Dela* 22, 67-76
- Vresk, M., 1986.; Neki pokazatelji funkcionalno-prostorne strukture Zagreba, *Radovi Žuljić, S., 1965.; Zagreb i okolica. Geografski glasnik* 25, 65-182

PROSTORSKE IN FUNKCIJSKE SPREMEMBE V NOVEJŠEM URBANEM RAZVOJU ZAGREBA

Povzetek

V obdobju tranzicije, še posebno po letu 2000, so se v urbanem razvoju Zagreba dogodile velike prostorske in funkcijske spremembe. To je posledica prehoda na novi politični in ekonomski sistem. Hrvaškem je v novih pogojih prišlo do močnega razvoja zasebnega podjetništva in tržnega gospodarstva, do zmanjševanja industrijskega in krepitev terciarnega sektorja ter rasti potrošnje. Takšne tendence so bile še posebno izrazite v Zagrebu kot političnem in najbolj razvitem gospodarskem središču. Visoka stopnja centralizacije je pogojujla rast gospodarske moči Zagreba. Poleg tega so v njem, poleg domačih, pomembno vlogo dobili tudi tuji poslovni subjekti, še zlasti v finančnih dejavnostih in trgovini. Vse to je vplivalo na krepitev nekaterih urbanih procesov, ki so začeli oblikovati novo prostorsko in funkcionalno strukturo mesta.

Najprej je predstavljen proces nastajanja novega centralnega poslovnega središča mesta (CBD, city). S krepitevijo tradicionalnega centralnega poslovnega središča se je okrepijo tudi

nastajanje novega poslovnega središča, ki poteka s preobrazbo starih industrijskih območij v bližini železniške postaje. Na mestu opuščenih industrijskih objektov rastejo večnadstropne zgradbe in nebotičniki, ki so prvenstveno namenjeni poslovnim dejavnostim. V njih se nahajajo sedeži in podružnice bank in zavarovalnic ter trgovskih, marketinških in medijskih podjetij. Proces je najbolj očiten v območju Martinove in Radničke ceste, predvideva se tudi prenova prostorov nekdanje Tovarne železniških vozil. Na ta način se oblikuje novo poslovno središče, v katerem so poleg poslovnih, tudi trgovski, hotelski, univerzitetni in drugi objekti (mestna skupščina, koncertne dvorane, sodišče).

Naslednji proces je izgradnja velikih maloprodajnih trgovskih objektov, hipermarketov in trgovskih središč. Poleg njih se odpirajo tudi številne manjše trgovine (supermarketi) in specializirane trgovine. Večina teh trgovin, v lasti tujih trgovskih verig, je locirana na obrobju mesta, kar je vplivalo na njihovo privlačnost in močnejšo urbanizacijo. Podobna trgovska središča v osrednjem delu mesta imajo izrazitejšo poslovne in zabavne funkcije in na ta način odražajo proces modernizacije starejših mestnih četrti.

V tranzicijskem obdobju je stanovanjska gradnja postala bolj dinamična in kompleksna. To je posledica zasebne iniciative, konjunktne gradbeništvu, spremenjene urbanistične politike in povečane socialne diferenciacije. Nadaljuje se izgradnja stanovanjskih sosesk kot racionalna in ekonomsko ugodna oblika reševanja stanovanjskih problemov in individualna (družinska) gradnja, ki postaja še bolj dinamična in pogosto nelegalna. Težišče obeh oblik stanovanjske gradnje je na obrobju mesta.

Navedeni urbanizacijski procesi, ki so povzročili velik porast števila osebnih avtomobilov in povečano prostorsko mobilnost prebivalstva, so zaostri tudi prometne probleme. V nasprotju z dosedanjimi parcialnimi rešitvami se vse bolj načrtuje in izgrajuje obsežna prometna infrastruktura. V tem okviru se postavljata dve ključni zahtevi : izgradnja novega omrežja javnega mestnega prometa velike zmogljivosti (verjetno počasna podzemna železnica) in boljše povezovanje mesta z mestno regijo z funkcionalnim vključevanjem novih urbanih delov avtocest v novi urbani prometni sistem.