BUCHAREST. GEOGRAPHICAL AND GEOPOLITICAL CONSIDERATIONS¹

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Abstract. The capital determines a specific organisation of the state territory, as materialised in a certain pattern of communication routes and a specific layout of the other urban nuclei with macro-territorial functions. Bucharest has relatively recently acquired (in 1862) the status of capital of the Romanian Principalities. The city's demographic, socio-economic and technicalconstructional evolution has rapidly surged as against the second-in-rank town, coming to represent psychologically a national symbol. On a macroterritorial scale, it shaped a characteristic periurban structure, hindering the development of some strong regional metropoles in its vicinity engaged in redistributing demographic and economic fluxes, outlining instead a deeply rural area marked by dire poverty, and cultural backwardness. Bucharest's peripheral position within the national territory calls for the decentralisation of its functions concomitantly with remote regional metropoles (Iasi, Timisoara and Cluj-Napoca) becoming more important as spatial structuring nuclei. Bucharest's high degree of hypertrophy as against the second city in the urban hierarchy, together with its distinct position within the Romanian urban system, asked for a distinctive organisation of its built-in area as early as the beginning of the 20-th century. Thus, following Hoyt's districtual model (1933), the number of districts set up over the time varied as follows: 4 (1929-1950), 8 (1950-1968 and 1968-1979) and 6 at present, the demographic size of each of them being comparable to the second-in-rank town. The model is quite heterogeneous, each district including both central and peripheral quarters, differing from the urban texture as a whole and also from the viewpoint of utilities and specific social problems. Therefore, the idea is to have Bucharest reorganised according to the multiple nuclei model (Harris, Ullman, 1945) based on the association of 2-3 limitrophe residential quarters that show relatively homogeneous features. Advantages of this model: in the first place, a more efficient implementation of some specific local development polities by proceeding from the particular needs of local communities.

Keywords: capital-city, territorial-planning, regional metropoles, macroterritorial functions, urban texture, Bucharest.

I. The capital of Romania and the spatial organisation at macroterritorial level

The larger a state's territory, the more heterogeneous it is. Romania's surface – area of 238,391 km² and a population of nearly 21.7 million inhabitants places it into the category of relatively large European countries, occupying position 11 by surface-area and position 8 by demographic potential². In the Central and Eastern parts of the Continent it is only Ukraine and Poland

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² With the exception of the Russian Federation and the Republic of Turkey

that hold better positions. Romania is one of the ethnically homogeneous European countries. The state was formed by the unification of some territories which, in the course of time, had been under foreign rule. The March 18, 2002 Census data show that 89.5% of the population are of Romanian nationality.

The hypertrophy index and the particularities of some European capitals

Table 1

			Table 1
Capital	Hyper- trophy index	Proportion of total population (%)	Observations
PARIS	7.38	16.3	Old capital of France, the symbol of a
			centralised state
ROME	2.63	5	Capital of Italy (1871) designated by political decision
LONDON	2.58	14.3*	Old capital of England, the symbol of the centralised state
BERLIN	1.93	4.1	Capital of Germany (1871, 1990), designated by political decision
MOSCOW	1.79	6	Old capital of Russia, whose function had been discontinued and taken over by Sankt Petersburg
VIENNA	6.61	19.5	Old imperial capital of Austro-Hungary, turned into federal capital (1918)
BERN	0.36**	4.35	Federal capital of Switzerland designated by consesus on the boundary between the Francophone cantons and the Germanophone cantons (1848)
MADRID	1.83	7.8	Capital dating to the Mediaeval times (1561) when Spain was a regional state
HELSINKI	5.72	19.7	Recently declared capital of Finland (1821, 1919)
AMSTERDAM	1	6.9	Decentralised capital of the Netherlands beside The Hague
ATHENS	4.29	29.5	Old capital of Greece, the symbol of a centralised state
BUDAPEST	9.43	19.45	New capital (1872) of Hungary, the symbol of a centralised state
COPENHAGEN	5.06	25.9	Capital of Danmark dating from the Mediaeval times, the symbol of a centralised state
WARSAW	1.95	4.3	Capital of Poland dating from the Mediaeval times (1576), the symbol of a centralised state
BUCHAREST	5.9	9.1	New Capital of Romania (1862), the symbol of a centralised state

The capital of Romania, Bucharest, reflects these particularities. The city is situated in the south of the country, which has a compact Romanian population, hence the specific organisation of the territory reflected by the pattern of communication routes and the location of other regional metropolises. The gap existing within the urban system between the capital and the second town in the hierarchy has determined the expansion of Bucharest's influence zone, there by preventing the development of some strong regional metropolises in its vecinity

^{*} Percent from England's population. ** The capital is the fourth town in terms of size.

through which the economic and demographic fluxes are distributed. The influence zone surrounding Bucharest, particularly that in the south of the city, is deeply rural and marked by poverty and a low cultural level (little education, high infantile mortality and deficitary technical-urbanistic endowments). Although certain local polarisation centres situated near the city were granted a town status (Buftea in 1968; Budeşti, Mihăileşti, Bolintin-Vale, Fundulea, Lehliu-Gară in 1989; Otopeni in 2000; Popeşti-Leordeni and Voluntari in 2004), get Bucharest's polarisation area goes far beyond the administrative boundaries of the Ilfov County³ also including the western limits of the Ialomiţa and the Călăraşi counties, the communes from the southern part of the Prahova and the Dâmboviţa counties (north of the town of Titu), coming very clase to the Danube in the south.

There is an obvious macroterritorial disparity at the top of the urban hierarchy between Bucharest and other four regional metropolises (Iaşi, Cluj-Napoca, Braşov, and Constanța) that occupied the second rank in the urban hierarchy after 1950. Although Bucharest became the capital of the two Romanian Principalities (Moldavia and Wallachia) only in the latter half of the 19th century (1862), it used to discharge almost the same function as some old European capitals surrounded by strong centralised states, whose capitals represented a symbol and had indisputable priority before any other large urban centre (Table 1).

Choosing Bucharest the capital of Wallachia, instead of Iasi the capital of Moldavia, to be the capital of the two United Principalities, was based on political considerations, firstly because it held a more central geographical position within the new state territory; secondly, because it offered a better control over the Danube line where from any potential conflict threatening the state unity was thought to occur and thirdly, because it had a better demographic potential given the almost equal population record of the two cities in the early half of the 19th century. Bucharest had a significant advance over the 1831-1859 period due primarily to some urbanistic developments (which improved the living standard and reduced infantile mortality) rather than to natural or migratory increases. So, as shown by the hypertrophy index, the demographic gap between the two cities became wider, from 1.21 in 1831 to 1.85 in 1859. Besides, 35% of Wallachia's population lived in Bucharest. That political decision had a major importance on the evolution of the city, its population growing by 8.5 times in less than a century (1859-1948), and the difference against Iași increasing from 1.85 to 11.07 (Table 2).

A comparative view of demographic evolutions between Bucharest the capital of Wallachia and Iaşi the capital of Moldavia (1831-1948)

Table 2

				Table 2
Reference year	Bucharest	Iaşi	Hypertrophy index	Observations
1831	58,794	48,514	1.21	Natural increase
1859	121,734	65,745	1.85	Urbanistic developments
1899	282,078	77,598	3.63	CAPITAL – 1862
1912	341,321	75,875	4.50	Migratory fluxes
1930	639,040	102,872	6.21	Idem
1948	1014,807	94,075	11.07	Idem

³ The polarisation area was assessed based on the migratory fluxes attracted to the Capital.

That was the time when Bucharest was clearly ahead of any other Romanian urban centre, a position it has constantly maintained to the present day. On the macroterritorial level, the old capitals of the Romanian historical provinces (Iași, Cluj-Napoca, Craiova and Timișoara) and later Brașov, Galați and Constanta, which discharge industrial and industrial and port functions (the last two cities) represent regional polarision centres. However, they all hold the same demographic rank which is by some 6-7 lower than Bucharest's. The competition among these regional centres makes it impossible for any of them to become a strong regional metropolis and strike a balance between the Capital and the rest of the urban system. This situation will presumably be corrected by future evolutions. Let's look at the east of Romania where two large countycapitals - Galați and Brăila, are situated at a very small distance between them.In view of prospective development trends, they are expected to form the first bipolar conurbation in Romania, with an estimated population of some 600.000 – 700.000 inhabitants within the subsidence area between the Danube, the mouths of the Siret and the Prut rivers. This will represent the second largest urban agglomeration in this country liable to creating an equilibrium between Bucharest and the other regional metropolises.

Another debated solution for rehabilitating the upper ranks of the urban system is to move the country's capital to another city. The main arguments in favour of this solution are that Bucharest is an over-agglomerated place and besides has a peripheral location in the country's territory. The argument upholding this solution is distance: Bucharest-Oradea 592 km, Oradea–Budapest 259 km; Cluj Napoca–Bucharest 440 km; Cluj Napoca–Budapest 410 km; Timişoara- Bucharest 562 km; Timişoara-Belgrade 180 km; Reşiţa–Bucharest 500 km; Reşiţa–Belgrade 268 km. The situation is similar in the case of Arad, Satu Mare, Baia Mare, Carei and other towns, which tend to gravitate rather towards the capitals of neighbouring states to which they stand closer in space.

Proposals to change the Capital had been made also in the past, the targeted towns being Târgoviste, the old capital of Wallachia, or the Transylvanian towns of Alba Iulia, Cluj-Napoca and Brasov. The choice of Alba Iulia and Cluj-Napoca was based on history and tradition, while centrality was an asset for Cluj and Braşov. Târgovişte lies only 78 km away from Bucharest, on a secondary thoroughfare which makes it a very poor alternative for Bucharest's peripheral location. In terms of location, the other three towns seem more appealing, but their economic and demographic potential falls short of Bucharest's. Moreover, the experience of highly centralised states like France, or of federal states like Germany, Austria and Belgium shows that they all have preferred to have the largest city as capital and make it a symbol of the whole country. An exception is Switzerland, one of the oldest states in Europe (1291), which chose its capital as late as the mid-19th century, and opted for the bilingual canton of Bern, the symbol of the unity between the two main linguistic communities. This model, which is characteristic of the North-American continent (see Washington and Ottawa)4 has been exported worldwide, with the

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⁴ Granting some towns a capital status was meant to be a symbol of the reconciliation between two spaces with distinct characteristics: the site for the construction of the new US capital was chosen by Congress (July 16, 1760) in an area edging the north-east of the US dominated by small landowners with liberal views and the south featuring large slave plantations. The Canadian capital (1858) was placed at the contact between the French-speaking Quebec and the English-speaking part of the country, as a symbole of the unity between these two large linguistic communities.

exception of Europe. Taking up this model now and implement it in Romania where Bucharest has been its capital for the last 140 years is not only a costly enterprise but also a very disturbing move for the functions of this city, for its ways of communication and the infrastructure, generally and no less so for its socio-economic components. Moving the capital, as some suggest, to one of the two poverty pokets (north-eastern Moldavia – especially Botoşani and Vaslui, and the Romanian Plain) might benefit the rural south and attenuate regional imbalances, but it might as well enhance these imbalances. We consider that in the present socio-economic conditions, moving the Capital elsewhere would be a very costly and unrealistic step.

On the other hand, decentralising some of Bucharest's functions and transferring some subsidiaries of the national institutions to certain regional metropolises (Cluj-Napoca, Iaşi, Galaţi-Brăila) would be a good and necessary decision, bridging the gap between the capital and the second town in the urban hierarchy. Such a development is expected to have positive effects on the structuring of the macroterritorial space.

II. The capital and the spatial organisation at medium territorial level. Bucharest's metropolitan zone

The distinctive position held by the city of Bucharest within the national and the regional urban systems has created the largest urban polarisation area in Romania, overlapping the Ilfov County, most of the Giurgiu County, the western half of the Ialomita and the Călărași counties and the south of the Dâmbovița and the Prahova counties. However, with the exception of the Bucharest limitrophe ring, this is a highly rural zone, but since the price of land is lower than in the city, a number of urban functions have developed here, e.g. small industries, commercial and storage spaces and residential sites. Therefore, Bucharest's metropolitan zone displays all the characteristics of a polarised rural space, the urban settlements existing there (Budeşti, Mihăileşti, Fundulea, Bolintin-Vale, Buftea and Otopeni) being unable to act as space polarisation nuclei. Tracing the boundary of the capital's metropolitan zone was a matter of debate between geographers and politicians. A first delimitation, which was based on a high polarisation area, resulted in the formation of 88 local administrative units (81 communes) within 5 counties: Ilfov (34), Călărași (25), Giurgiu (23), Dâmbovita (5) and Ialomita (1) (Ianos et al., 1998-1999).

This territory, which falls into Bucharest's urban influence zone, is far wider than the city's periurban area (Iordan, 1973).

Another possible delimitation of Bucharest–polarised administrative structure (Iordan, 2003) suggests the formation of a Bucharest District scheduled to encompass, beside the city proper, a number of 9 sub-urban areas⁵, 8 towns (of which six are currently communes to be granted town status)⁶ and 30 communes (3 of which – Bălăceanca, Copăceni and Sinteşti – will have a new administrative structure)⁷. This organisation model is frequently found in states with a federal or regional structure in which the capital

⁶ Buftea and Otopeni (currently towns); Bragadiru, Brăneşti, Copăcenii de Sus, (1 Decembrie), Măgurele, Popeşti-Leordeni and Snagov (currently communes proposed to the grantead town status).

⁵ Cățelu, Chitila, Dobroești, Dudu, Fundeni, Jilava, Roșu and Voluntari.

Afumați, Baloteşti, Bălăceanca, Berceni, Cernica, Chiajna, Ciolpani, Ciorogârla, Clinceni, Copăceni, Corbeanca, Cornetu, Crevedia, Dascălu, Dărăşti-Ilfov, Domneşti, Dragomireşti, Găneasa, Glina, Grădiştea, Gruiu, Moara Vlăsiei, Mogoșoaia, Periş, Petrăchioaia, Sinteşti, Ştefăneşti, Tunari and Vidra.

represents a symbol of the country's political unification (Australian Capital Territory, Districto Federal in Brasil or Mexico, Brussels Region in Belgium, Comunidad Madrid in Spain, District of Columbia in the US).

The Ilfov Agricultural District⁸, which falls into the administration of Bucharest's limitrophe zone, was initially conceived to become the city's proximal supplier with farming products and be subordinated to it⁹. In 1997 the District turned into a county (Law No. 50) with the Municipality of Bucharest its seat. That decision was unconstitutional because the county-seat was situated outside the city's administrative territory proper (Popescu, 1999).

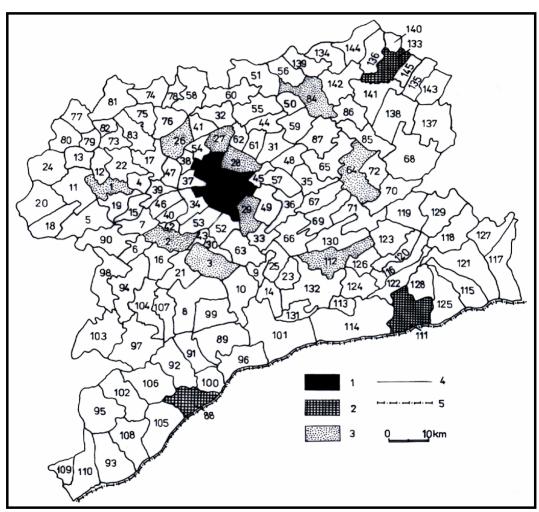


Fig. 1 A proposed structure for the Bucharest Metropolitan Zone 1. The administrative territory of the Municipality of Bucharest,

Administrative territories of local polarisation nuclei, 3. Urban administrative territories,
 Boundaries of localities, 5. The state frontier.

⁸ The Ilfov Agricultural District, together with the Călărași and the Giurgiu counties was formed by the administrative reorganisation of the Ialomița and the Ilfov counties, a reshufling that affected also the administrative subordination of some communes from the Dâmbovița and the Teleorman counties.

⁹ Law No. 2/1968, Article 8, Paragraph 2.

Moreover, its asymmetrical expansion (much more developed northwards) does not correspond to Bucharest's agricultural supply area, nor to its periurban zone which is by far larger (Iordan, 1973). The Ilfov Agricultural District was created by amputating the former Ilfov County (from 8,225 km² in 1968 to 1,593 km² at present) and the formation of two new counties: Giurgiu and Călărași. In the beginning the District had 26 communes (with 70 villages), which means a deficit of 7 communes compared to the smallest county (Covasna). Subsequently, it received another 9 communes from the Giurgiu County (Berceni, Ciorogârla, Clinceni, Cornetu, Dărăști-Ilfov, 1 Decembrie, Domnești, Dragomirești-Vale and Vidra) and 3 communes from the Ialomița County (Grădiștea, Nuci and Petrăchioaia) so that at present it numbers 1 town, 38 communes and 100 villages. When given county status (Law No. 50/1997) the Ilfov Agricultural District was to include 2 towns, 37 communes and 103 villages.

The draft-law of Romania's Capital in the future attaches the Ilfov County to the Bucharest Metropolitan Zone formed after the model of Rome (Italy), from a metropolitan centre (the present city of Bucharest) and the pre-metropolitan zones (the communes and towns located in the Ilfov County) headed by a governor in the rank of a Prime-Ministre and by a general administrator of the metropolitan zone.

Each locality is to maintain its present administrative structure, development programmes and projects which shall be implemented in a unitary manner throughout the metropolitan zone. This zone is to cover about 2,050 km², of which 1,800 km² in the rural area and 250 km² in the urban area. Bucharest's great polarising capacity is highlighted by the structure of its population (nearly 2 million, as against 400,000 in the pre-metropolitan zones) and especially by the striking socio-economic and technical-urbanistic disparities between the two components of the proposed Metropolitan Zone.

The optimisation model suggested by us as an alternative to the above proposal proceeds from the idea that a general conceptual review of the present administrative-territorial organisation is necessary, bearing in mind the relationships existing between the human settlements themselves in Bucharest's influence area (Figure 1).

The great majority of the rural settlements in the Ilfov County¹⁰, together with some from the Giurgiu, Călăraşi, Dâmbovița, Ialomița and Teleorman counties, lie in the area of direct influence of the Capital. Its area of indirect influence includes the settlements located at greater distances, which gravitate towards Bucharest through the intermediacy of some local convergence centres (Giurgiu, Oltenița and Urziceni). Proceeding from these centres, three underdepartment administrative units (similar to the small rural districts of the interwar period), encompassing the settlements from the present counties of Ialomița, Giurgiu, Călăraşi and Teleorman, are outlined. In this way, a macrocounty (Ilfov) will emerge containing four under-department units (of the interwar rural district-type), and 145 local administrative units (towns and communes). This macro-county is to include 455 human settlements that overlap Bucharest's metropolitan zone and are even comprised into its polarisation zone (Table 3).

With the exception of Ciolpani and Nuci communes situated in the northern extremity of the county and thus coming much nearer to the city of Ploiesti.

A proposed structure for the Bucharest Metropolitan Zone (The numbers in the Table correspond to the numbers in Figure 1)

Table 3

	COUNTY	LOCALITIES
		1 Bolintin-Vale, 2 Mihăileşti, 3 Adunații-Copăceni,
	Giurgiu	4 Bolintin-Deal, 5 Bucşani, 6 Bulbucata, 7 Buturugeni, 8 Călugăreni, 9 Colibaşi, 10 Comana, 11 Crevedia Mare, 12 Florești-Stoenești, 13 Găiseni, 14 Gostinari, 15 Grădinari, 16 Iepurești, 17 Joița, 18 Mârşa, 19 Ogrezeni, 20 Roata de Jos, 21 Singureni, 22 Ulmi, 23 Valea Dragului, 24 Vânătorii Mici, 25 Vărăști.
A. Proximal polarisation zone	Ilfov	26 Buftea, 27 Otopeni, 28 Voluntari, 29 Popeşti-Leordeni,30 1 Decembrie 31 Afumați, 32 Balotești, 33 Berceni, 34 Bragadiru, 35 Brănești, 36 Cernica, 37 Chiajna, 38 Chitila, 39 Ciorogârla, 40 Clinceni, 41 Corbeanca, 42 Cornetu, 43 Dărăști-Ilfov, 44 Dascălu, 45 Dobroești, 46 Domnești, 47 Dragomirești-Vale, 48 Găneasa, 49 Glina, 50 Grădiștea, 51 Gruiu, 52 Jilava, 53 Măgurele, 54 Mogoșoaia, 55 Moara Vlăsiei, 56 Nuci, 57 Pantelimon, 58 Periș, 59 Petrăchioaia, 60 Snagov, 61 Ștefăneștii de Jos, 62 Tunari, 63 Vidra
	Călărași	64 Fundulea, 65 Belciugatele, 66 Frumuşani, 67 Fundeni, 68 Ileana, 69 Plătăreşti, 70 Săruleşti, 71 Sohatu, 72 Tămădău Mare.
	Dâmboviţa	73 Brezoaiele, 74 Butimanu, 75 Ciocăneşti, 76 Crevedia, 77 Lunguleţu, 78 Niculeşti, 79 Poiana, 80 Potlogi, 81 Răcari, 82 Slobozia-Moară, 83 Tărtăşeşti
	Ialomiţa	84 Fierbinți-Târg, 85 Drăgoești, 86 Movilița, 87 Sinești
	POLARISED BY GIURGIU	
	Giurgiu	88 Giurgiu, 89 Băneasa, 90 Clejani, 91 Daia, 92 Frățești, 93 Găujani, 94 Ghimpați, 95 Gogoșari, 96 Gostinu, 97 Izvoarele, 98 Letca Nouă, 99 Mihai Bravu, 100 Oinacu, 101 Prundu, 102 Putineiu, 103 Răsuceni, 104 Schitu, 105 Slobozia, 106 Stănești, 107 Stoenești, 108 Vedea
	Teleorman	109 Bujoru, 110 Pietroşani
В.	POLARISED BY OLTENITA	
Remote polarisation zone	Călărași	111 Olteniţa, 112 Budeşti, 113 Căscioarele, 114 Chirnogi, 115 Chiselet, 116 Curcani, 117 Dorobanţu, 118 Frăsinet, 119 Gurbăneşti, 120 Luica, 121 Mănăstirea, 122 Mitreni, 123 Nana, 124 Radovanu, 125 Spanţov, 126 Şoldanu, 127 Ulmu, 128 Ulmeni, 129 Valea Argovei, 130 Vasilaţi
	Giurgiu	131 Greaca, 132 Hotarele
	POLARISED BY URZICENI	
	Ialomiţa	133 Urziceni, 134 Adâncata, 135 Alexeni, 136 Armăşeşti, 137 Axintele, 138 Bărcăneşti, 139 Brazii, 140 Ciocârlia, 141 Coşereni, 142 Dridu, 143 Ion Roată, 144 Jilavele, 145 Mănăsia

III. The position of the capital within the Romanian urban system and the organisation of its built-up area

A major characteristic of the Romanian urban system is an oversized Capital in comparison with the second ranking city in the hierarchy. The difference of 6.0 (March 18,2000 census figure) is surpassed only by Hungary in Central Europe (Budapest versus Debrecen: 9.43).

The great discrepancy between the size of Bucharest and of the other components of the urban system, together with a low population density in its built-up zone, imposed limitations to the enlargement of the city. Thus, as early as 1798, Voivode Constantin Hangerli issued a decree empowering the Minister of the Interior to review the city bounds and prevent the building of houses beyound them. Other dispositions to this effect followed in December 1816, requesting measures to be taken in order to delimit Bucharest's expansion and establish the width of its streets; April 29, 1831, there came the Regulations for the Bucharest Police Corps concerning the health condition of the population and public order, outlining urbanistic rules, taken over from previous regulations, and stipulating that in "Bucharest which is by far more extended than the number of its population, any structure or building raised outside the present perimetre of the town shall as from now be stopped"; it also defined with precision the limits of the built-up area. On June 2, 1893, a bill was passed for the Foundation of a House of Constructions in the city of Bucharest. The aim of another Law (May 14, 1895) was to halt the chaotic enlargement of the city by preventing or making it more difficult to parcel terrain at the periphery, an area distinguished "District IV"11.

The built-up area in the city of Bucharest (1894-1934) (Processed after the Master Plan of Bucharest Systematisation, 1934)

Table 4

Period	Original area	Final area	Growing by	Growth rate	Causes
1894-1911 (17 years)	2,714 ha	2,802 ha	88 ha	5.2 ha/year	Slow-going growth after enforcement of the <i>Town Expansion Law</i> (1865)
1911-1926 (16 years)	2,802 ha	3,741 ha	933 ha	58.3 ha/year	Marked expansion after World War I when flows of migrants came to the Capital
1927-1935 (8 years)	3,741 ha	3,860 ha	119 ha	17.0 ha/year	Slower growth rate after enforcement of the Law of Organisation of the City of Bucharest (1926)

¹¹ Article 6 stipulates that cutting a street in District IV is permitted on condition that:

⁻ The owner of the place in which the street is to be cut makes a written petition to obtain the respective authorisation;

⁻ Beside the petition, a plan of the place, with the neighbouring streets, shall be annexed; the street to be cut should be marked on that plan;

⁻ When the Communal Council deems it useful, the authorisation will be granted provided that:

a). the street and the sidewalks should be paved according to the Communal Council indications;

b). tree species should be planted as specified in the street cutting authorisation;

c). provisional decision of aligning either side of street by fencing is issued;

d). street electricity should be installed at the expense of the petitioner in the conditions set by the Communal Council;

e). a sewarage canal should be dug, if such a canal exists in any of the streets linked to the street in question;

⁻ As regards the other districts, the conditions in which private persons are permitted to cut streets shall be established by communal regulations.

Another method suggested to limit the enlargement of the built-up area was to plant a 200-300 m – wide belt around the town. This project did not materialise because the necessary funds could not be raised (in 1915, 1928 and 1933). And yet, the built-up area kept steadily enlarging (Table 4), which made the local authorities extend the city bounds according to the situation on the ground.

IV. The administrative-territorial organisation of Bucharest in the first half of the 20th century

Under the laws of Bucharest organisation (1926¹² and 1929¹³) the city was divided into four sectors (Figure 2), each of them granted a juristic person status¹⁴. Their delimitation followed Hoyt's sectoral model (1933):

Sector I, extended in the north of the city, between Calea Moşilor road and General Lambru Blvd. (Şoseaua Colentina highway, today) in the east, and Calea Victoriei road and Şoseaua Mihail Ghica highway (Ion Mihalache Blvd. today) in the west. It covered 1,562 ha (25.7% of the overall built-up area) and had 12,052 buildings with 32,709 apartments;

The situation of buildings in Bucharest (1934) (Processed after the Master Plan of Bucharest Systematisation, 1934)

Table 5

	Sector I	Sector II	Sector III	Sector IV	Buildings Total/type
Buildings with one apartment	4,826	6,342	6,583	4,479	22,230
Buildings with two apartments	2,940	3,937	3,865	3,276	14,018
Buildings with three apartments	1,675	2,310	2,177	1,998	8,160
Buildings with four apartments	1,010	1,307	1,216	280	3,813
Buildings with five apartments	1,390	2,011	1,768	1,751	6,920
Buildings with five-to-ten apartments	211	326	298	241	1,076
Buildngs with over ten apartments	12,052	16,233	15,907	12,025	56,217

Sector II, included the east of the city, east of the alignment formed of General Lambru Blvd. – Calea Moşilor road – Splaiul Unirii Blvd. – Calea Văcăreşti road. It covered 1,527 ha (12.2% of the overall built-up area) and had the greatest number of buildings in Bucharest: 16,233 (28% from the total), with 46,005 apartments, of which 89.8% were occupied;

Sector III, covered the south of the city. It was bounded in the north by Splaiul Unirii and Splaiul Independenței Blvds, Regina Elisabeta Blvd., Mihail Kogălniceanu Blvd. and Regele Carol al II-lea Blvd. (Eroilor Sanitari Blvd. today). It was the largest district (1,727 ha, i.e. 28.5% of the overall built-up area) with

¹² Law for the Organisation of the Communal Administration of the City of Bucharest.

¹³ Law for the Organisation of the Administration of the City of Bucharest.

¹⁴ The former sections (administrative sub-divisions of towns sanctioned by the Law of Urban Communities, July, 31, 1894) were defined as sectors in the Law of 1925, but did not receive the juristic person status. Under the Law of 1929 communal sectors were granted that status, the law ruling that the sectors were to be the administrative sub-divisions of all urban communes.

15,907 buildings and 42,871 apartments of which 91.5% were occupied;

Sector IV, extended in the west of the city, between Sectors II and I, that is between Regina Elisabeta Blvd., Carol al II-lea Blvd. and I.G. Duca Blvd. (Soseaua Cotroceni highway today), which separated it from the Cotroceni Monastery located in the south and the highway heading to the north-west of the city (towards the town of Piteşti). It covered the smallest area (1,249.2 ha, 20.6% of the built-up surface), with 12,025 buildings and 37,661 apartments (Table 5).

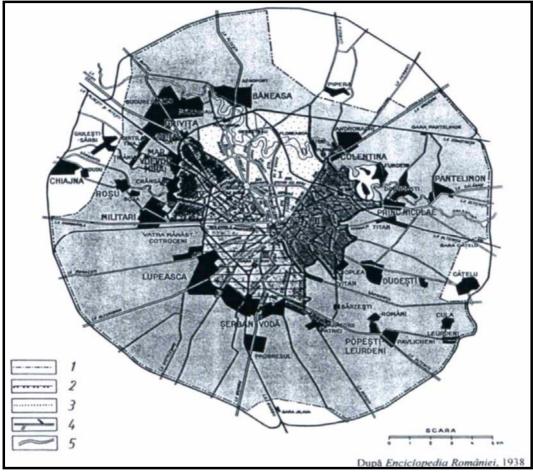


Fig. 2 Bucharest. Administrative-territorial organisation (1929-1948).

- 1, Boundary-line between Bucharest Municipium and Ilfov County;
- 2, boundary-line between the built-in area and the suburban zone;
- 3, boundary-line between the city districts; 4, main access roads; 5, waterways. **Source:** Enciclopedia României, II, 1938.

The remaining territory of the city of Bucharest (24,934 ha – 80.43% of the total) included the suburban communes, many of them encompassed now within its built-up area (Colentina, Pantelimon, Dudeşti, Popeşti-Leodeni, Şerban-Vodă, Lupeasca, Militari, Griviţa, Băneasa etc.)¹⁵.

¹⁵ The territory of the Capital was divided into an urban and a suburban region (Law for the Organisation of the City of Bucharest, March 4, 1939, Oroveanu, 1986).

The population of Bucharest in 1934 was of over 630,000 inhabitants, nearly twice the number registered at the beginning of the 20th century (Table 6). The city was 6.21 times more hypertrophic than the second ranking town (Iaşi). Hence the necessity for a strict sectoral organisation of its built-up perimetre. The Law for the Organisation of Bucharest Administration divided the urban zone (as far the forts line) into two parts:

- construction zones: commercial, industrial, residential, etc.
- construction-free zones: agricultural terrains, parks, play-and-sports grounds, beaches, forests, etc.

The population of Bucharest (1831-2002)

Table 6

Reference year	Population	Increase rate (inh./year)	Hypertrophic grade (rank 2 town)
1831	58,794		
1859	121,734	2,247.8	
1878	177,646	1,942.7	
1889	184,488	622	
1899	282,078	9,759	
1912*	341,321	4,557.1	4.27 (Iaşi)
1918	382,853	6,922	
1930*	639,040	21,348.9	6.21 (Iaşi)
1941	992,539	32,136	
1948*	1,041,807	7,038.7	8.83 (Cluj Napoca)
1956*	1,236,608	24,350.1	7.61 (Cluj Napoca)
1966*	1,451,942	21,553.4	7.36 (Cluj Napoca)
1977*	1,858,418	33,873	6.67 (Iaşi)
1984	1,978,654	24,515.7	
1986	1,989,823	5,584.5	5.7 (Braşov)
1989	2,036,894	15,690.3	5.8 (Braşov)
1992*	2,067,545	10,217	5.89 (Constanța)
1995	2,054,079	- 4,488.7	5.89 (Constanța)
1998	2,016,131	- 12,649.3	5.79 (Iaşi)
2002*	1,926,334	- 22,449.25	6.00 (Iaşi)

^{*} Censuses. Data calculed on the basis of censuses and statistical yearbooks.

Apart from these zones, the Plan for the Systematisation of the City was to delineate networks of communication routes, streets, markets, railroads, railway stations, canals, airports, etc., and possible amalgamation of properties in order to obtain regular-shaped zones for the construction of dwelling-houses or industrial units (Oroveanu, 1986).

Ten years later, on March 4, 1939, the Bill for the Organisation of the City of Bucharest was passed into law. It regulated urbanism and planning matters, also outlining five types of zones within Bucharest's administrative territory: rural, green spaces, residential, commercial, industrial and public institutions. On the basis of that law, they elaborated Regulations for Constructions and Alignments in the City of Bucharest, which established the following zones: I, rural; II, residential; III, mixed (residential, commercial, healthy industries); IV, commercial; and V, industrial.

In the 1930s the Capital acquired a new and modern urbanistic aspect – residential districts and boulevards were commissioned, the string of lakes on the Colentina River and the Herăstrău Park were managed for recreation and the

Village Museum opened its gates to the public. The earthquake of November 10, 1940 and the bombardments of April 4 and July-August, 1944 produced huge material damage and casualties. They had a serious impact on the city's demographic evolution, the average increase rate over 1941-1948 was of only 7,038.7 inhabitants/year, compared to 32,136 inhabitants/year in the 1930-1941 period. Even so, right after the Second World War, the hypertrophy index registered the highest 20th- century value (8.83) (Janos, Tălângă, 1994).

V. The administrative-territorial organisation of Bucharest under a centralised regime

A first change in the 1929 organisation scheme took place in 1948, when the Capital was divided into regions (urban and suburban). The regions, which somehow overlapped the former sectors, included 38 circumscriptions (Figure 3).

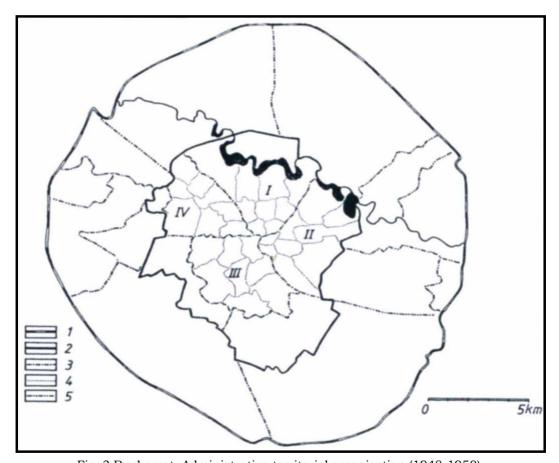


Fig. 3 Bucharest. Administrative-territorial organisation (1948-1950).

- 1, Centure railways; 2, boundary-line between Bucharest Municipium and the suburban zone;
- 3, boundary-line between the city districts; 4, boundary-line between the city circonscriptions; 5, boundary-line between suburban settlements.

Source: Giurescu, 1979.

Under the administrative-territorial organisation of 1950, Bucharest, together with other 7 major cities (Braşov, Cluj, Iaşi, Constanța, Galați, Ploiești and Timișoara) fell into the category of the so-called republican towns,

subordinated directly to the central state bodies ¹⁶. Its administrative territory was reorganised into eight sectors (Rom. *raion*): Nicolae Bălcescu, Gheorghe Gheorghiu-Dej, Grivița Roşie, V.I. Lenin, I.V. Stalin, Tudor Vladimirescu, 1 Mai and 23 August (Figure 4). They were delimited according to the principle of circular sectors, with the "base" in the peripheral districts, englobing some suburban communes, too. From a demographic viewpoint they were pretty well balanced, between 180,272 inhabitants (15.3% of the total population of the city – Sector "1 Mai") and 113,708 inhabitants (9.65% in "Grivița Roșie" Sector) (Table 7).

Bucharest and its districts over 1950-1968. Demographic size by settings (Febr. 21, 1956) (Processed from the Statistical Year-book of Bucharest City, Central Direction of Statistics, 1959)

Table 7 Population of Total Urban Sectors Suburban population by population by suburban ("Raions") Communes sector (inh.) sector (inh.) communes (inh.) I.V. Stalin 149,632 145,031 Otopeni 4,601 Cetate 1 Mai 180,272 173,643 6,629 Voluntărească Fundeni-Dobroesti 3,720 23 August 140,002 130,172 Pantelimon 6,110 Tudor 3,318 169,257 165,939 Cățelu Vladimirescu Nicolae Popesti-Leodeni 6.700 152,356 139,604 6,052 Bălcescu Jilava Măgurele 2,616 V.I. Lenin 198,122 192,802 2,704 Bragadiru 5,295 Gh. Chiajna 133,559 124,765 Dragomirești Gheorghiu-Dej 3,499 Chitila 5.613 Grivita Rosie 105.705 113,708 Mogosoaia 2.390

This organisation was in place until 1968, when the "raions" were replaced (Law No. 2) by eight administrative sectors outlined by the same principles (Figure 5). Under that law, a number of 14 suburban communes, subsequently reduced to 12^{17} (by Decision of the Council of Ministers No.1,127/August 1, 1968) were singled out. The Capital was conceived to function as a "mixed urban-rural complex" similar to a county and having the same regime ¹⁸.

A new administrative-territorial organisation took place in 1979, when from 8 sectors Bucharest remained with 6 (Figure 6). In 1981, the Ilfov Agricultural Sector fell into its administration. These sectors are actually "towns within towns", the demographic size of some surpassing that of the second-rank town in the urban hierarchy (Iaşi, 348,070 inhabitants) (Table 8). It is therefore necessary to reduce some of their size in order make their administration more

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¹⁶ This legal provision lasted only two years. Under the Decree No. 331/1952, the seven towns fell into regional subordination, Bucharest remaining the only republican town.

¹⁷ Bucharest's suburban communes and component villages: Bragadiru (Bragadiru); Chiajna (Chiajna, Dudu, Roşu); Chitila (Chitila, Rudeni); Dobroeşti (Dobroeşti, Fundeni); Glina (Glina, Cățelu, Manolache); Jilava (Jilava); Măgurele (Măgurele, Afumați, Dumitrana, Pruni, Vârteju); Mogoșoaia (Mogoșoaia); Otopeni (Otopeni, Odăile); Pantelimon (Pantelimon); Popeşti-Leordeni (Popeşti-Leordeni) şi Voluntari (Voluntari).

¹⁸ The Bucharest residential complex covered 1,521 km², representing 0.64% of Romania's surfacearea and a 10% of its population (Oroveanu, 1986).

efficient to the benefit of citizens. According to the law, sectoral authorities are subordinated to the municipal authorities (Vida, 1994), but this relation of subordination is relative, as cooperation relations are established between them because the sectoral authorities themselves are chosen by direct universal ballot.

Population number and density by sectors (March 18, 2002) (Data calculated on the basis of the Census of the Population and Dwellings, March 18, 2002, National Statistics Institute, Bucharest)

7	`a'	b]	le	8

Sector	Population (inh.)	Area (km²)	Density (inh/km ²)
I	231,437	67.55	3,426.16
II	360,680	30.23	11,931.19
III	391,235	32.77	11,938.81
IV	294,247	32.25	9,123.94
V	272,305	28.47	9,564.63
VI	376,430	36.90	10,201.35
Bucharest	1,926,334	228.17	8,442.54

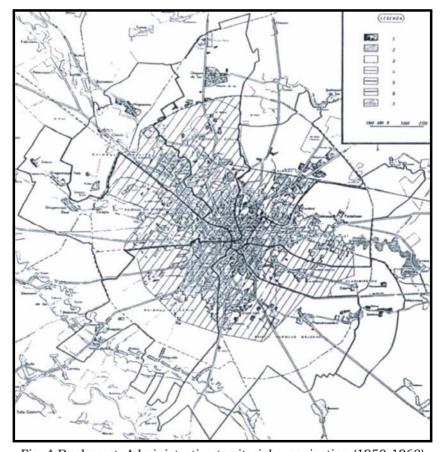


Fig. 4 Bucharest. Administrative-territorial organisation (1950-1968)
1, Built-in area and Bucharest's administrative territory; 2, built-in area outside Bucharest's administrative territory; 3, built-in perimeter; 4, boundary-line between the city districts;
5, boundary-line between Bucharest Municipium and its suburban zones; 6, railways; 7, waterways.

Source: Statistical Year-book of Bucharest City, 1950.

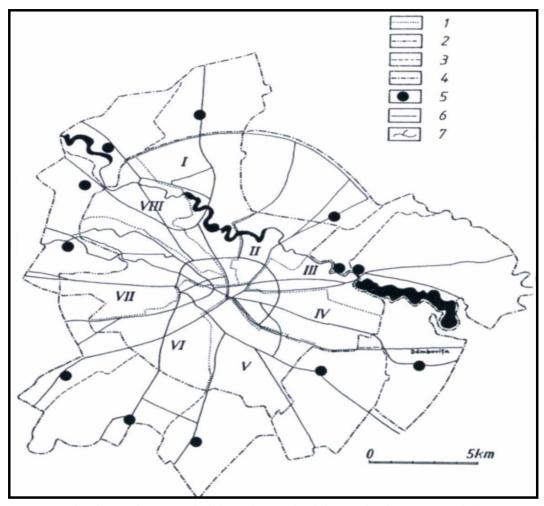


Fig. 5 – Bucharest. Administrative-territorial organisation (1968-1979)
1, Boundary-line between the city districts; 2, boundary-line of Bucharest city; 3, boundary-line between suburban communes; 4, boundary-line between Bucharest Municipium and its suburban communes; 5, suburban communes; 6, main access roads; 7, waterways.

Source: Iordan et al., 1974.

VI. Dysfunctions of the transition period and optimisation proposals

The heterogeneous size and the features of the present sectors (which encompass both the central and the peripheral areas), the range of problems confronting them lead to the fragmentation of their general development framework. Besides, the present inter-sectoral boundaries divide just that which is homogeneous, namely the central space, while the decline of some peripheral industrial zones made a number of polarising nuclei of the new residential quartiers which disappear. Moreover, the scarcity of services at the periphery directs fluxes of people towards the central zone, thus creating severe transport problems, at rush hours in particular. Therefore, we would suggest to have the Capital divided according to a multiple nuclei model 19 residential districts

¹⁹ This model was substantiated by Ch. Harris and E. D. Ullman (1945) given that the terrain of large cities is organised around several nuclei (Ianos, 1987).

centres liable to attract these fluxes, moreover, the problems specific to each district are far more homogeneous and may create a much more coherent framework²⁰.

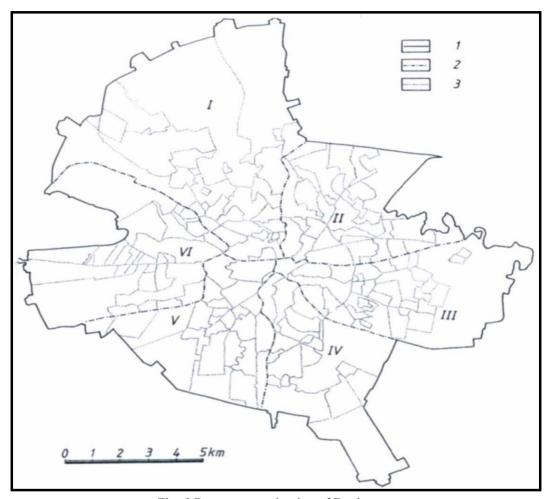


Fig. 6 Present organisation of Bucharest

1, Boundary-line of Bucharest Municipium; 2, boundary-line between city districts; 3, boundary-line between electoral circumscriptions.

At present, Bucharest's 32 residential districts²¹ are not clearly delimited. They are far too numerous to form lower-rank local territorial communities by themselves, but they can associate (about 3-4) and form homogeneous sectors in terms of the categories of urban tissue they include, namely, residential quartiers with apartment-blocks, villas, one-storey dwelling—houses, districts

²⁰ This model of administrative organisation of the built-up area has been successfully implemented in other European capitals (Paris, Brussels, Warsaw, etc.).

²¹ Residential districts in Bucharest: Balta Albă, Băneasa (Aviației), Berceni, Bucureștii Noi, Chitila, Colentina, Cotroceni, Crângași, Dămăroaia, Domenii, Drumul Taberei, Dudești, Ferentari, Filantropia, Floreasca, Ghencea, Giulești, Grivița, 1 Mai, Militari, Pajura, Panduri, Pantelimon, Pipera, Progresul, Rahova, 13 Septembrie, Tei, Titan, Uranus, Vatra Luminoasă, Vitan (Ghinea, I, 1996).

with special social problems, others dominated by industrial or services zones.

Devising an optimisation model of Bucharest's administrative-territorial organisation could start from the present electoral circumscriptions, from the numerous areas of discontinuity left in the built-up perimetre²² by the massive demolishing campaigns of the 1970s-1980s, and set up 12 sectors: four internal (central) and eight external (peripheral) (Figure 7):

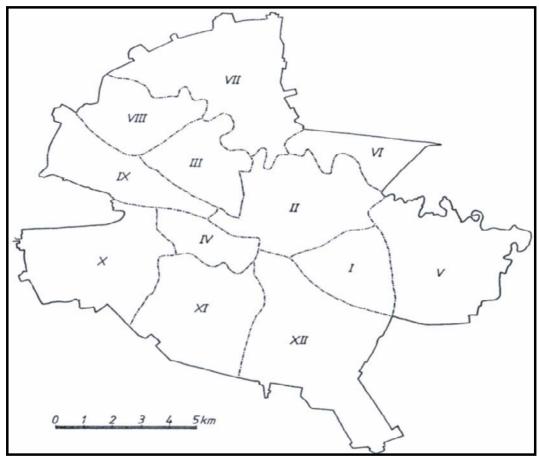


Fig. 7 The Municipality of Bucharest. Optimisation programme of administrative-territorial organisation.

Sector I - between Splaiul Unirii and Splaiul Dudescu in the south, the Unirii, Decebal and Muncii Blyds in the north up to the vast discontinuity zone represented by Titan Park and the empty terrains between it and the Dâmboviţa River in the east:

Sector II - the largest in terms of area and number of inhabitants could be located in the central-north of the city, between Unirea, Decebal and Muncii Blvds., the National Stadium, the railway line starting from Obor Station (in the east) and Regie-Orhideelor streets, North Station zone (Calea Grivitei - Buzesti

²² Let's look at the Dâmbovița River axis. Whereas in other European capitals (Paris, London, Prague, Vienna, and Bratislava) waterways represent social polarisation nuclei, the Bucharest river is an axis of urban segregation.

streets), Kiseleff Avenue and Herăstrău Park in the west. The northern and southern bounds could be the Colentina and the Dâmbovița rivers, respectively;

Sector III – Grivița–1 Mai perimetre, situated between the western boundary of Sector II and the North Station – Urziceni town railway line;

Sector IV – the last to encompass Bucharest's central districts, would be situated in Cotroceni – the Parliament Palace, between Libertății Blvd., Calea 13 Septembrie road, Şoseaua Panduri highway and Iuliu Maniu Blvd. up to the discontinuity zone of the Polytechnic University, with the Dâmbovița River representing the northern limit.

The external sectors (V-XII), listed counterclockwise, are limited by the built-up line of the city of Bucharest:

Sector V – could extend in the eastern extremity of the city, between the Dâmboviţa River (the eastern limit of Sector I) and the Colentina River;

Sectors VI and **VII** – both north of the Colentina River, separated by the present boundary between Sectors I and II;

Sector VIII – including the residential districts of Pajura, Dămăroaia and Bucureștii Noi and bounded by railway line to the towns of Ploiești and Urziceni;

Sector IX – between Regie-Orhidee streets and the Dâmboviţa River (Ciurel Lake);

Sector X – south of the Ciurel Lake might encompass the greatest part of Militari, Drumul Taberei and Ghencea districts. This sector would extend west of the Polytechnic University, and Lujerul and Braşov streets;

Sector XI – with Rahova and Ferentari districts situated between the eastern boundary of $Sector\ X$ - the southern boundary of Sector IV and Piaţa George Coşbuc square, the discontinuity zone being represented by Carol I and Tineretului parks and Şoseaua Giurgiului in the east;

Sector XII – including most of Berceni district east of Sector XI.

These delimitations would make it easier to elaborate clear-cut unitary urban development policies required by the problems, specificity and functioning capacity of each zone in the built-up space.

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