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B U D A P E S T

Guide

by

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B U D A P E S T

Hungary may be characterized by three basic geographical problems:

- 1/ Being a country of small area, poor in raw materials, among which only bauxite resources are of international significance, Hungary is forced to engage in active foreign trade. Under present conditions of rising raw material prices, this represents a source of increasing concern.
- 2/ Population is denser than the European average /112 inhabitants/km²/. The growth of the population had been slow for a long time, although during recent years it showed a tendency to improve. Between the last two censuses, taken in 1960 /9 961 000/ and 1970 /10 315 000/, i. e. during one decade, an increase of not more than 355 000 was experienced. Accordingly, the yearly growth amounts to 3,6%, which is very low on a world scale.
- 3/ Economy is disproportionately distributed over the regions of Hungary. The capital is much too large within the country. Its socio-economic predominance is comparable to that of only a few European capitals such as Paris, Copenhagen and Vienna. The over-developed capital distorts the spatial structure of the country. As many as 18,8% of the population, 20% of the total number of flats, 33% of industrial employees, 39% of trade, and 52,8% of students attending universities or colleges

became concentrated in Budapest, a city taking up altogether 0,6% of the total area of Hungary. Intellectual activity is also mostly confined to the capital. This is well illustrated by the fact that 85% of the staff of research and development institutes and 4/5 of scientists and lecturers in possession of higher university degrees work in Budapest. Of the 131 research institutes and 34 theatres of Hungary, 105 and 19 are found in the capital respectively. The "hypertrophic" capital represents one of the gravest regional problems of Hungary.

Budapest is in the heart of the Carpathian Basin, Central Europe, in the northern latitude of 47° and eastern longitude of 19° . The area of the country is small /93 000 km²/, taking the 18th place among the nations of Europa. The number of inhabitants is 10,4 million, which is the 13th largest in the continent. In contrast to this, Budapest had a population of 2 040 000 in 1973, or 2 400 000 including those living in the agglomeration. With the former figure it takes the 10th place after such large European cities as Paris, Moscow, London, Leningrad, Berlin, Madrid, Rome, Athens and Istanbul. But if we take into account the population of agglomerations as well, then Milan, Manchester and Birmingham will come before it too, in addition to those mentioned above. From another point of view, considering the 600 thousand industrial employees of the Budapest agglomeration, the city stands fourth in the continent after Moscow, London and Paris. The nearest densely populated large city is Berlin, lying at a distance of about 700 km. These facts will undoubtedly demonstrate the importance of Budapest in Central Europe. The area of the city as an administrative unit is comparatively large /525 km²/.

In this brief description, we shall confine our attention to the temporal and spatial analysis of Budapest. One naturally poses the following questions in this context: What are the causes of this excessive concentration? Where is the root of the "Budapest problem"? What are the most urgent questions pending? How can one outline the future of the Budapest agglomeration up to the turn of the century?

1. FOUNDATION AND HISTORICAL DEVELOPMENT OF THE CITY

Budapest was founded and has grown into a big city in the heart of a natural basin, at the junction of continental thoroughfares converging towards crossing-places. Its position at the join of four large natural regions is potential. The first settlement was built at a place where the Danube, after cutting through the Hungarian Central Mountain from the west and making a 90° change of direction, emerges in the Great Hungarian Plain. The potential of this geographical area is well demonstrated by the fact that the political and economic control of Hungary has always been exercised from some town within a circle of 40 km radius centred in Budapest. Such towns were Esztergom in the 10th century, Székesfehérvár in the 11th century, Visegrád in the 12th-13th centuries, and Buda and Pest from 1686, when the Turks had been driven out. The crossing-place of the Danube in the capital has long been an important junction of converging and diverging continental thoroughfares. For example, this was the place where the Levantine road coming from the west /Vienna/ along the Danube and proceeding to the Balkans /Byzantium/ branched off towards Eastern Europe /Kiev/ and met the road from Mediterranean lands to Baltic countries.

Many are the towns the names of which record the favourable natural conditions - i. e. potentialities - that originally attracted people there. That is how it is with Budapest. The name of the oldest settlement, called AQUINCUM by the Romans, derives from the Celtic AK-INK, meaning abundant water. This refers to numerous thermal springs found in the capital which have rendered Budapest an important city of spas. Slav philologists believe that the name Buda might have come from the Old Slav word for water /vod/. Others think of it as a word of Turkish origin, and derive it from the personal name Buda which was still frequently used in Hungary as late as the Middle Ages. The quarters of Bléda /Buda/, brother of Attila, the Hun ruler, is alleged to have been pitched at the present site of the city. As for the name PEST, opinions also seem to vary. In 2nd century B. C., Ptolemy mentions a Sarmatian settlement beyond the Roman limes /Danube/ as Pession. According to Old Slav etymology, however, Pest means a lime-kiln. This appears to be supported by the German name of Buda, i. e. Ofen, meaning kiln. It is a fact, though, that the diverse, easy-to-spall building stones and abundant thermal springs were those potential factors that helped man settle in Budapest. The river's dual function - that of separating and connecting - has changed in the course of history. Along an approximately 20 km long flat valley section of the Danube, falling within the area of the capital between Szentendre Island and Csepel Island, the meandering river was forced to withdraw into a single branch by unflooded terraces. A ferry established at a convenient point helped crossing and attracted roads.

The Danube is 300 to 600 m wide along its section in Budapest, which has now been embanked. At the beginning of historical times, however, the meandering river covered a spacious inundation area with its innumerable loops, tending to separate the townlets Óbuda, Buda and Pest along its banks. The capital of today sprang up around these three nearly two thousand year old settlement cores. Their union, however, was accomplished only during the last century. The broad river could only be crossed during particular periods of the year, forcing trading caravans to stop at flood times. These interruptions necessitated the storing of goods, and furnished an opportunity for exchanging them. The importance of undisturbed crossing as a prerequisite of progress will soon be appreciated if we consider that expansion into a large city was only made possible after the construction of the first permanent bridge in 1849. The potential position of the present-day capital had also been apparent in the Middle Ages when most of the national functions had been concentrated in this area. The King's seat in Buda, the Queen's seat in Óbuda, the Archsee in Esztergom, the Episcopal See in Vác, and the University in Óbuda, all fell within a circle of 25 km radius. Although these "parent towns" were close to each other, their growth was comparatively independent.

Being a Roman limes, the Danube served as a defence line against Barbarians in ancient times. Later, in the Middle Ages, ferry services were established, a protective castle was built, and the settlement became a market town. Its function as a centre of trade and transport, however, could only develop after the Turks had been driven out, and the conveyance of lowland crops to Vienna was commenced. In this

regard the potential position of Budapest means that the town lies at the junction of the Danube obstacle line and the Hungarian Central Mountain, in the north-western corner of the wheat-growing Great Hungarian Plain. Thinking on a European scale, this is the place where the western most extension of the plains of South-Eastern Europe, capable of exporting its surplus agricultural produce, is not only closest to Western Europe, needing the importation of such produce, but also most conveniently situated for transporting goods along the cheap water way of the Danube. It was only after the commencement of steamship navigation in the first third of the 19th century, however, that Budapest became really important as a trading centre.

The expansion of the city is most authentically illustrated by the growing number of inhabitants. The settlement group of ancient Aquincum had a population of some 50 to 60 thousand, including both garrison and civic towns, during its days of glory, in 2nd-3rd centuries A.D. In 5th-9th centuries, during the migration period, these settlements declined. At the end of the Middle Ages, around 1500, the total population of the three "core towns", i.e. Óbuda, Buda and Pest is believed to have been about 30 000. As early as the beginning of the 15th century, a pontoon bridge was built at the ferry of Pest. During the Turkish occupation /1541-1686/, the town became the centre of a vilayet, and was forced to assume an eastern appearance. After the Turks had been driven out and the Mohammedan population had fled, altogether 6 to 7 thousand inhabitants remained.

The present-day network of Hungarian towns began to take its shape after Turkish rule had ended, in an age when trade was expanding under feudal conditions. As a result, industrial development got under way at a slow pace. At the end of the 18th century /1784-1487/, the largest towns within present-day Hungary, with populations exceeding 20 000, were Debrecen /30 000/, Buda /23 900/, Kecskemét /22 700/, Szeged /20 900/ and Pest /20 700/. The potential position of present-day Budapest became evident already at that time. The city included not only two "big towns" but also a third one in the immediate vicinity of them, called Óbuda, whose number of inhabitants reached 5 000. In those times a town of such dimensions was not regarded as a small one. In 1800 the three towns supported a total population of almost 50 000, but they took only the 42nd place among European cities.

From the end of the 18th century, the city became the government centre of Hungary within the Monarchy. Political control was transferred to Buda, confronting the spheres of Vienna in Austria and Pozsony /now Bratislava/. Pest developed into a prominent centre of trade. Both Buda and Pest had a great number of trade guilds the craftsmen of which supplied a comparatively large market with their goods also beyond the town limits.

During the Napoleonic wars, when trade between Central Europe and the Levant flourished, the commercial importance of Pest further increased on account of its position in the intersection of thoroughfares communicating to and from the Balkans. At the same time, favourable conditions also promoted manufacturing industry. By the middle of the

19th century, the first large factories of machine industry also appeared. The 384 m long Chain Bridge which finally provided the first permanent link between the two fraternal cities, was constructed in the period 1842-1849.

Just as it had been the focal point of radial roads during the Middle Ages, the city also became the centre of Hungarian railway lines constructed after the bourgeois revolution. This concentration of through traffic is clearly demonstrated, even at present, by the location of bridges over the Danube: along the 410 km long Hungarian section of the river, two bridges bearing traffic to Czechoslovakia were built north-west of Budapest, two south of the city, and as many as eight public and railway bridges in the capital itself, along a stretch of 15 km. The commencement of steamship navigation in the Danube had a great deal to do with Budapest becoming one of the largest harbours in the Carpathian Basin. During the last third of the 19th century, the city was regarded as a major centre of trade and money marketing. Crops grown in the Great Hungarian Plain were transported to Ferencváros, a district of the city where the largest milling industry in contemporaneous Europe was developed to process the grains. The large city created a significant labour power and consumers' market. Being in the intersection of eight trunk lines, the city also favoured the establishment of iron and metal industry which was complemented by the manufacturing of vehicles. The compromise of 1867, concluded between Austria and Hungary, prepared the way towards the development of our national capital, and created the political conditions of uniting the two towns Buda and Pest.

Growth of the population /in thousands/ in the three "core towns" between the cessation of Turkish rule and the union of the towns. /1686-1873/.

<u>Year</u>	<u>Óbuda and Buda</u>	<u>Pest</u>	<u>Total</u>
1720	9,6	2,6	12,2
1786	24,8	22,9	47,7
1851	50,1	127,9	178,0
1869	70,0	200,4	270,4

After the union in 1872-73, Budapest became not only the most densely populated city of Hungary but also a competitive rival of Vienna within the Austro-Hungarian Monarchy, owing to its much more favourable position. A consciously applied national policy again promoted the expansion of the capital. It took hardly half a century for the city's population to increase fourfold. Thus, Budapest became one of the most rapidly developing large cities of Europe. At the time of the union, the capital stood only 17th among the large towns of Europe with its 280 000 inhabitants, but by the turn of the century the city advanced to the 8th place on account of its population increasing to more than $3/4$ of a million. The expansion of Budapest into a large city may therefore be attributed to the progress of Hungarian capitalism during the last third of the 19th century. This accounts for its becoming such a Central European large city that still bears the favourable and unfavourable marks of its period of rapid growth. For that was the time when Budapest became not only

the most important industrial and communication centre of Hungary but also a focus of cultural and intellectual functions. By the turn of the century, the previously agricultural settlements around the city grew into industrial outskirts numbering several ten thousands inhabitants /e.g. Ujpest and Kispest/.

Before the First World War, the weight of the capital within the Carpathian Basin could still be regarded as appropriate in comparison to the area governed. Following the loss of the war and the Peace Treaty of Trianon, however, boundary alterations came into effect, diminishing the country to one third of its previous size, and the capital became disproportionately large. The "Budapest problem", in its acute form may be dated from 1920. Between the two World Wars, - although the growth of the population lessened - no essential measures were taken to keep under control the expansion of this "hypertropic" capital.

Administrative changes effected after the Second World War and the annexation of workmen's outskirts in 1950 further increased the unhealthy predominance of the city. As a result, Hungary, in spite of its small area, became one of those countries that exhibited the greatest territorial disproportions in Europe.

Some demographic data on Budapest

Year	Area /km ² /	Population /in thou- sands/	Density of population /Inhab./ km ² /	Population of Budapest as percent- age of total population	Total popula- tion of the five prevail- ing, most den- sely popul. cities in com- parison to that of the capital Budapest = 100 %
1872	194	280,0	1,440	2,0%	95
1910	194	946,5	4,860	4,8%	52
1930	206	1095,0	5,300	12,5%	45
1950	525	1590,0	3,004	17,3%	28
1970	525	1940,0	3,680	18,8%	35

It follows from the historical development described above that although Hungary is more densely populated /112/km²/ than the European average and the proportion of town dwellers is medium, the country is still poorly urbanized. Out of every five town dwellers, two live in the capital. Disregarding Budapest, only one third of the population are town dwellers. Of the more than eighty Hungarian towns, none can be classed as a real large city on a European scale. The poor state of urbanization outside the capital is adequately illustrated by the fact that in 1974 the total population of the five "large cities", whose number

of inhabitants exceeded 100 thousand - i. e., Miskolc /192 472/, Debrecen /175 162/, Pécs /158 478/, Szeged /134 254/ and Győr /111 838/ - was merely 771 404, amounting to a round one third of that of the capital. This proportion is unique in Europe.

Although attempts have already been made to alleviate the unhealthy disproportion of the capital, the "Budapest problem" is still one of the most pressing geographical, social and economic question of the country. Actually, much has been done recently to decrease the number of employees in the manufacturing industry of Budapest by a purposeful industrial policy, decentralization of industry as well as selective and intensive industrial development. Nevertheless, through the concentration of so-called "quality" industries, value creation in the capital is still exaggerated.

Migration to Budapest has been reduced by such measures as restriction of settling and prohibition of real estate purchases. However, this led to the rapid swelling of "agglomerations" beyond the limits of Greater Budapest, the area of which had already been far too large. In our opinion the "Budapest problem" has not been solved, rather it has spread over additional areas, becoming a regional matter. Today, we may rightly speak of a Budapest agglomeration which is closely linked, in its existence, with the capital. The limitation of these parts could be argued about, and indeed many discussions have been held on the topic. Officially, 44 settlements around the capital have been listed in this connection since 1971.

If we consider the territorial dynamics of changes in the number of inhabitants, the national situation is unfavourable. Between the last two censuses /1960-1970/, the capital's population growth was 7,5%, and its share within the country increased from 18,1% to 18,8%. This is relatively modest. However, the growth of 135 000 amounted to 36% /1/ of the total population increase recorded during the above decade in Hungary, a country of weak demographic vitality, and it was exclusively afforded by migration. If we add to this, moreover, an extensive agglomeration zone, the population of which is growing exceedingly rapidly also because of migration /70 000 in one decade/, then we may state that here, in the heart of Hungary, taking up altogether 1,8% of the country's total area, accumulated 57.5% of population growth during one decade!

2. THE FACE OF BUDAPEST TODAY

CITYSCAPE. CITY PHENOMENA. LAND USE AND STRUCTURE

a/ Outlines of city structure and the development of cityscape

As we have mentioned above, Budapest grew into a large city during the emergence of Hungarian capitalism /1870-1920/, as a result of frequently anarchic development. The characteristic features of the development of spatial structure will be summarized below. The city had a large administrative area already at the time of the union. We may form an authentic picture of the situation if we compare Budapest with contemporaneous Paris - as delimited

by Haussman - the most thickly built up and most densely populated large city of the then Europe.

Comparison of Budapest and Paris

	Area /km ² /	Population /in thousands/	Density of population /inhab./km ² /
Budapest /1872/	194	280	1440
Paris /1860/	78	1538	19943

In those times, industrial outskirts inhabited by workers were pretty closely built to the administrative boundaries of contemporaneous Paris, the city being already congested with buildings and overpopulated, Paris and its outskirts, constituting a functional unit, merged already at that time, although administratively they are still independent, even today. At the time of the union, within the administrative boundaries of Budapest forests, vineyards, orchards, fields and pastures also occurred in addition. to built up areas. The comparatively more generously delimited administrative area of Budapest resulted in a twofold consequence which still influences the city's present-day structure and land use. In one respect, the outskirt zone /Ujpest, Kispest, Pesterzsébet and Csepel/ which closely adhered to the administrative boundaries of the capital owing to land speculation, sprang up at a distance from the city's built-up areas.

A greater part of open spaces falling between the residential and industrial areas of the city and outskirts were mostly built up only after the Second World War, in

1950, when union into Greater Budapest was achieved. The other peculiar consequence was that the crowded inner city, densely covered with several-storied houses, had a relatively small area in comparison to the whole of Budapest, It occupied only 1/6 /1/ of the administrative area, cramming 4/6 of the population. This is well illustrated by data obtained between the two World Wars /1930/.

Comparison of downtown districts and
outskirts in Budapest

	Area /km ² /	Population /in thousands/	Density of population /inhab./km ² /
Downtown districts	32	714	22 312
Outskirts	174	381	2 353
Total	206	1095	5 300

Thus, the administrative area of the capital showed trouble zone characteristics before the Second World War. Between the zones of thickly built-up downtown districts and open agricultural lands, industrial works and stores alternated, along railway lines, with loosely covered settlements of frequently village-like appearance, consisting of an unchanging pattern of separate houses and gardens. It was almost unique among the large cities of Europe with populations exceeding one million that within the administrative area proper of the capital the majority of dwelling houses /55.6%/ were still single-storied. The sprawling of such

residential quarters greatly magnified the problems of communication and infrastructure, and still represents a source of much concern,

Due to adverse housing conditions in the capital, a great many people moving to the city from rural areas could find only employment there. As for accommodation, they had to be satisfied with some settlement in the outskirts zone, and commuted daily to their place of employment in Budapest. The capital and its environs constituted a closely linked functional unit already at that time. Nevertheless, the annexation of the workmen's "red zone" to the capital was opposed by the city council.

After 1945, political conditions were ripe for uniting Budapest and its environs which had already formed an integral whole in economy. The union affected demographic data as follows:

The development of Greater Budapest as reflected by major indices

/ 1950 /

	Area /km ² /	Population /in thousands/	Density of population inhab./km ² /	Number of districts
Budapest before 1950	206	1 057	5 131	14
Zone of outskirts	319	532	1 667	8
Greater Budapest	525	1 590	3 004	22

By this Greater Budapest still remained one of the large cities of the continent on a European scale, taking the 8th place in 1950 and the 10th in 1974. Moreover, it became the largest industrial city of Central Europe. On the other hand, its predominance within the country has assumed incommensurate proportions.

From the point of view of urbanism, the importance of the union lies in facilitating uniform control, planning and development. Yet, the larger area entailed additional problems. These presented themselves mostly in the varying inadequacy of infrastructure and communal services in former Smaller Budapest and one-time outskirts /now peripheral districts/. Some of the problems still exist at present.

During the fifties, one of the most urgent economic objectives of the country was to create a heavy industry capable of manufacturing producing equipment. In those days little money could be allotted to housing and communal investments. However, the larger capital attracted more people from rural areas. During the fifties, expanding industry and building industry almost unrestrictedly snatched up all manpower migrating to the capital. But the availability of almost innumerable employment opportunities could only be supported by very modest housing conditions. To check the army of job-seekers thronging to the capital, certain sanctions had to be applied, such as prohibition of settling and restriction of real estate purchases. Consequently, one could observe a process similar to that taking place at the beginning of the century - but under different socio-economic circumstances. A significant part of people arriving in the

capital and finding employment there were compelled to remain beyond the administrative boundaries, which led to a rapid population swell in the agglomeration zone around the city. This has already been numerically illustrated in this paper. The Budapest problem has been not solved, rather it has spread over larger areas. Having described the above phenomena, we shall now attempt to outline the functional division of the capital.

b/ The functional division of Budapest

Similarly to other large European cities, the spatial separation of residential and working districts, i. e. the functional division of the city, can be clearly observed in Budapest. The natural axis of city structure is the Danube. On the left-bank plain, the growth of sprawling Pest was not hindered by natural obstacles and the city freely extended in the direction of radially diverging communication arteries at a rapid pace, forming concentric zones of newly conquered areas. Here one can perceive a zone-like pattern of residential and working districts.

The functional structure of Buda, built on the varied relief of the right bank, has been distorted and imperfectly developed.

The heart of the city is District V. on the Pest side.

This contains a historical core bounded by Small Boulevard on the east and a government centre to the north /Parliament, Ministries/ in which great commercial offices and banking houses functioned at one time. Between these two parts one finds the city of Pest. The area just described represents

the first working zone. Under Hungarian conditions, one cannot speak of a city in a sense one would when thinking of London, the corresponding area of Budapest being much smaller and more modestly developed. A series of specialized elegant shops have also found place here. We may state, though, that District V. houses the most important offices of public administration, economics, trade and tourism in the country. City characteristics are well demonstrated by a steady fall in population which numbered 67 000 in 1960 and 58 300 in 1973. Also, in spite of the densely built-up area, the density of population /22 500/km²/ is comparatively lower than that in surrounding parts. Very high is the percentage of people employed in tertiary branches /85%/. In the city area of 2,6 km², approximately 120-130 thousand people work in about 1600 institutes and 2000 shops. Some 500 warehouses and 200 workshops have been established in the area, the number of which is thought to be relatively high. An average of 300-350 thousand people visit the city daily, including employees, people attending to their business in the various offices, shoppers, tourists and men of leisure. The average daytime population is half-a-million. The small-trading part of the city penetrates, along the main through roads /Rákóczi ut, Népköztársaság utja, Lenin körút/, like feelers, into the thickly built-up first residential zone.

The centre of the originally excentrically situated capital spread across the broad Danube from the left bank to the right, and in this way the functionally already closely linked Castle Quarters /District I./ of Buda became a complement of the city. This district has now lost its former function of being the centre of government, the

King's Seat having been ceased and the ministries transferred to Pest. The residential quarters of the Castle have been reconstructed in their original beauty. Its monuments, sights, restaurants and night clubs attract many visitors, rendering the district one of the most spectacular sites of tourism in Budapest. The Castle, which served as the King's residence in olden days, has been completely renovated, and now houses a cultural centre, library, art gallery, museum and various scientific institutes. Although the residential character of the district has been preserved, a fall in the number of inhabitants has begun in recent years /1970: 45 100; 1973: 44 100/. The density of population /13 300/km²/ is much lower than that in the inner parts of Pest.

In Pest the first working zone is encircled by the first residential zone. In contrast to this, the corresponding section of Buda is followed by a long strip of the first residential area, stretching along the Danube for quite a distance. Between the union of the city and First World War, when large-scale building operations were made possible by booming capitalism, these residential zones consisted of densely built tenement houses, interrupted only by a few stylish avenues such as Népköztársaság útja and Nagy-körut. On the Pest side, Districts VI., VII. and VIII. as well as the inner parts of Districts IX. and XIII. are included in this zone. The density of population is very high, amounting to more than 30 000/km² on the average and exceeding 50 000/km² in the most densely populated District VII. In these valuable inner areas, next to public buildings of prominent importance, one finds the "grey zone" of dwelling houses which have been dilapidated for nearly a hundred years.

Being well on the way to becoming slums, these areas represent blemishes in the townscape and an object of grave concern for town councillors whose plans have already included their elimination and rebuilding. Some of these areas are quite sharply defined on the Pest side, near the outskirts. For example, one finds a succession of tenement houses on the inner side of Háman Kató Road and Mező Imre Road and a series of factories, workshops and railway areas on the opposite side.

On the Buda side, such areas may be distinguished around the Castle, at a considerable elevation, extending by and large up to Buda Boulevard. Here the first residential zone merges directly, without any noticeable border line, into the second one consisting of elegant suburban villas perching on the hill side. Residential quarters in need of rebuilding also occur in Óbuda.

Proceeding from the first residential zone in an outward direction, one encounters the second working zone including establishments necessitating the use of large spaces, such as factories, store houses, railway termini, hospitals, cemeteries, etc. A characteristic feature of this zone is that its components are rather scattered, and it does not constitute, even in Pest, a completely closed ring following the regular circle of the previous zone. Parts of it penetrate into the belt of former outskirts in many places. This industrial zone is incomplete on the Buda side, extending only in a northern and southern direction, with sporadically occurring industrial works. In the capital the following main industrial areas - wedged in between residential districts in many places - and dominant industrial branches may be

distinguished:

- | | |
|--------------------|--|
| I. Northern Buda | Óbuda /building material, machine industry/ |
| II. Southern Buda | Kelenföld /textile industry/; Lágymányos /machine industry/; Budafok /miscellaneous/ |
| III. Northern Pest | Angyalföld /machine industry/; Ujpest /textile and leather industries/ |
| IV. Eastern Pest | Józsefváros /machine industry/; Kőbánya /machine, food and building material industries/; Kispest /textile and machine industries/ |
| V. Southern Pest | Ferencváros /food and machine industries/; Soroksár /machine industry/ |
| VI. Csepel Island | Metallurgy, machine industry |

The second residential zone wedges in between large industrial establishments on the one hand, and incorporates the residential quarters of peripheral districts on the other. Being consistent with previous findings, one again can state that housing function extends far beyond the boundaries of Greater Budapest, into the agglomeration belt. As distance increases from the capital, the residential sections of those who daily commute to the city split into islands of houses. At still greater distances, single houses or flats in far-away villages or towns indicate the homes of commuters. One of the guiding principles applied in the delimitation of the Budapest agglomeration was the estimation of the proportion of commuters as compared to those working locally.

The second residential zone includes a great variety of built-up areas. Most frequent are the loosely covered parts,

consisting of suburban houses with gardens, the inhabitants of which often practise two kinds of occupations /e.g. the Rákos districts/. Occasionally the zone incorporates the centres of more developed suburbs with several-storied buildings, presenting the appearance of a city /e.g. Újpest/. In many places the picture of an annexed former village has been preserved /e.g. Soroksár, Budafok/. It was mostly the open spaces of this zone, unbuilt for a long time, that provided room for new housing estates in the middle of the 1960s. Such new residential areas in Zugló, Újpalota, Kelenföld and Órmező played a decisive part in transforming the townscape during the past decade.

3. QUESTIONS OF THE DEVELOPMENT OF THE BUDAPEST AGGLOMERATION

A. The concept and delimitation of the Budapest agglomeration

The Budapest agglomeration, consisting of the capital and its surrounding 44 settlements, was approved by the Government as a planning-development area in 1971. Its delimitation is still a knotty problem, giving rise to many a debate between both followers and opponents.

We have already mentioned the size, predominance and attractive force of Budapest, undoubtedly exerting an influence on the whole country. The "hypertrophic" capital also affects the pattern of settlements and the order of magnitude of towns. As distance increases from Budapest so its attraction diminishes, and the number of inhabitants of towns increases proportionately. Due to the predominance of the capital, real large cities - designated as such by

a European scale - with populations exceeding 500 000 could not emerge in Hungary. The Hungarian "large cities", which have been forced to settle near the frontier regions of the country, have populations of 100-200 thousands. Receding from the capital, the towns constitute three zones as follows:

- a/ The immediate vicinity of the capital, covering an area of 30 km radius, is characterized by small towns, none of which have populations exceeding 30 000 /e.g. Vác, Szentendre, Gödöllő and Százhalombatta/.
- b/ At distances of 60 to 100 km, a medium town zone is situated, with predominantly "medium towns" numbering 50-75 thousand inhabitants /e.g. Tatabánya, Székesfehérvár, Dunaujváros, Kecskemét, Szolnok, Salgótarján/.
- c/ The "large cities", such as Miskolc, Debrecen, Szeged, Pécs and Győr, with populations of 100 to 200 thousand, are in an outer zone, in the frontier regions, at distances of more than 100 km from the centre.

Due to the attraction of the capital, which extends over the whole country, all efforts directed to the unambiguous delimitation of the "Budapest region" have failed, for every method presented had its vulnerable spot. It is also beyond argument that the central part of the country exhibits much too complex spatial structure to allow its consideration within the simple scheme of Budapest and its area of attraction. The regional organization of central parts lying out-

side Budapest calls for the development of a zone of suitable medium towns from the present-day inadequate inner ring of towns. Thus, the expansion of Monor, Dabas, Ráckeve and Bicske into larger towns, in addition to those already mentioned, is deemed to be highly desirable.

A significant part of the area falling between Budapest and the inner ring of towns just mentioned forms a very closely linked unit with the capital as regards geographical position, population, employment, health service, education and cultural institutions. Development can only be envisaged in coordination with that of the capital. The 1960 general regional development plan assigned as many as 64 settlements to the agglomeration. The "General Town Planning Program of Budapest and its Environs", approved in 1971, delimited the agglomeration to 44 settlements, relying upon detailed geographical, economic, demographic, etc. analyses. This program furnishes a basis for present and long range development alike.

B. Organization of space in the Budapest agglomeration

Geographical space may be reduced to the elements of abstract space. The components of three-dimensional geometrical space are two dimensional planes, one-dimensional lines and zero-dimensional points. Applying the analogy, one may state that real geographical space is also composed of concrete elements which can be derived from those described above. These elements may be both natural features and social phenomena. For example, the potential centres of attraction, such as residential areas, places of employment and thermal springs,

appear as points. The lines of force connecting these points, e. g. communication or river systems, represent the linear elements of geographical space. Finally, the areas of various use, e. g. cultivated lands or sections covered with original vegetation, residential or industrial districts, illustrate areal elements.

The interaction of such jointly functioning basic elements forms a static spatial structure at a certain fixed point of time. Their temporal change, on the other hand, gives rise to a constantly developing dynamic spatial structure.

In this context, regional planning is nothing else but the optimum coordination of these elements, with due consideration paid to both economic and ecologic conditions. In the following description we shall outline the principle problems of the development of such elements in connection with the Budapest agglomeration as defined by the 1971 program.

a. / The poles of development

The development of the capital and that of its environs were pursued practically separately until 1970. The development plan of Budapest was worked out by the Budapest Town Planning Company. Up to 1970, the capital consisted of a city core which has become overcrowded during spontaneous historical development, exhibiting all the characteristics of a large town, and a ring of peripheral districts in which services were frequently inadequate. The development plans of those 44 settlements that surround the capital were prepared by another planning institute.

Only two of these environmental villages have attained the status of a town so far: Szentendre, a place of historical atmosphere, and Százhalombatta, one of our newest socialist towns.

The city core, which had been formed in the course of historical development, was quite suitable to fulfil its function of central control for a long time, similarly to other large European cities. Efficiency in this respect was largely due to the foresight of our predecessors who, in preparing the first development plan of Budapest a hundred years ago, had envisaged a large city numbering two million inhabitants in the long range, and organized basic equipment, infrastructure and communication network accordingly. The day-time population of the capital reached that number by the 1960s. By then the city was so "filled up" that disorders became a common occurrence in its daily functions. The effects of overcrowding showed at several levels:

- a/ To keep abreast with general economic development, the establishment of new institutions and over-all enlargement of old ones could not be deferred any longer.
- b/ The growing number of inhabitants and rising standards of living have entailed a significant development in tertiary branches.
- c/ The narrow streets of the city core, built to accommodate "horse-drawn vehicles", have now naturally proved to be inadequate for modern motor car traffic and parking facilities.

d/ In this swollen agglomeration, distances between residential areas and places of employment have increased to a considerable extent, which has led to a breakdown in public transport and congested traffic between the centre and suburbs.

Budapest is a city of characteristically monocentric structure. Central administration, trade, education, cultural functions, entertainment and tourism have all been decisively concentrated in the city core. In order to solve the problems, the inner part of the city must be decentralized. Previously those suggestions prevailed that aimed at "proportionately" developing all peripheral districts to counterbalance the enormous city core. But this idea failed because its implementation would have involved the frittering and dispersion of financial resources.

Efforts made in this connection since the liberation, such as the establishment of decentralized institutions, extension of public transport, foundation of new housing estates and building of suburban department stores, have not proved efficient enough to call into being urban centres in outer districts. Consequently, suburban people had to travel to the centre, even to avail themselves of secondary services. The situation was still worse in the environmental settlements where, owing to increased migration, elementary supplies for the population were much more inadequate than those in country settlements of the same rank, having identical number of inhabitants.

The complicated task of relieving city centres is well known in all large cities throughout the world but solutions may

differ, depending on local conditions. In Hungary the Budapest Town Planning Company worked out uniform plans for a more even distribution of services. According to the specialists, there are three possible ways of realizing these plans:

- 1/ Modernization of the city centre;
- 2/ Extension of the city centre to the detriment of neighbouring areas; and
- 3/ Establishment of local centres in the suburbs

1/ Modernization of the city centre

In 1968 plans were made for the reconstruction of the Inner City. These aimed at intensively developing the national centre. One of the main tasks, included in the plan, was to reorganize incapacitated public transport /construction of a vehioular tunnel under the Danube, transformation of the Pest bank into a two-way speed road vehicular axis, formation of a longitudinal north-to-south traffic-collecting road along the backbone of the area, and building of several-storied parking stations and pedestrian subways at busy junctions/. The existing Metro line and two new ones planned, all three meeting under the Inner City, will render public transport to and from the suburbs uninterrupted. A minimum of seven Metro stations will be built in the Inner City, ensuring quick and comfortable access to any part of the city centre from all possible directions. Extant vacant lots will be used for building administrative centres, offices, commercial establishments, and institutions of higher education. From the point of view of trade, a pedestrian passage system in the Inner City, and a series of hotels

planned along the Danube for tourism, promise to be profitable. New flats are not planned. The preservation and possible extension of green areas have always been taken into consideration in the plans as far as possible.

2/ Extension of the city centre

Although the reconstruction of the city centre is likely to bring good results, it cannot fully tackle increased tasks. Therefore, the extensive way of development, i.e. extension of the city centre to neighbouring districts, is unavoidable. The general long range town planning program marks out for this purpose a thickly built-up, near-slum section between Small and Great Boulevards, including Districts VI., VII. and VIII. /Madách Avenue; loosening of green areas/.

3/ Establishment of a system of suburban centres

The most efficient method of easing the burdens of our monocentric city centre is the transformation of the surrounding agglomeration structure into a polycentric configuration. This would involve the decentralization of central functions through the establishment of relieving local centres. To carry out the scheme in the capital and its environs, the formation and intensive development of division centres have been planned in parts of the town surrounding the city core /the delineation of which does not follow the boundaries of Districts/, and the establishment of similar centres have been authorized for groups of settlements in the agglomeration zone.

Such divisions in Budapest are those more or less autonomous, partly independent functional units that have a few hundred thousand inhabitants and extend over several Districts. As experiences during the past two decades have shown, existing Districts have proven to be too small, and their development too confined, to allow the implementation of a suitable decentralization in the town structure. The division centres incorporating several Districts are Ujpest, Zugló and Kispest on the Pest side, and Óbuda, Moscow Square and Lágymányos on the Buda side.

The 44 settlements of the surrounding agglomeration zone have been divided into nine groups. These are regarded as separate units from the point of view of planning, and are intended to be controlled from assigned settlement group centres. Within the agglomeration zone the following nine settlements have been selected as centres of surrounding areas /with corresponding numbers in brackets/: Érd /I./, Solyvár /II./, Szentendre /III./, on the Buda side, and Dunakeszi /IV./, Kistarcsa /V./, Maglód /VI./, Vecsés /VII./, Dunaharaszti /VIII./ and Szigetszentmiklós /IX./ on the Pest side. The available resources have been dedicated to the urban development of these centres.

b/ Axes /lines of force/ of development

The possible lines of force of future development are essentially determined by the hierarchic system of centres to be established within the agglomeration area, the Budapest-centric communication network which came into being in the course of historical development, and the conditions of geographical environment.

These lines will connect centres falling in the direction of most dynamic growth, and by this practically open up the closed structure of the agglomeration. In future these axes of development will not only indicate lines of communication but also strips of land in which housing and industrial building up may, and indeed, - arising from the process of dynamic expansion - must overstep administrative boundaries. This will actually ensure the further inner structural development of the agglomeration and the joint expansion of the capital and environmental settlements. A revised plan approved last year accepted five main directions of development and a few alternatives as follows:

Southern Buda: Lágymányos-Őrmező-Budaörs /the line pointing towards the west and Lake Balaton/

Northern Buda: Óbuda-Békásmegyer-Szentendre-Dunakanyar /holiday ground/

Northern Pest: Ujpest-Dunakeszi-Vác /industrial character/

Eastern Pest: Zugló-Kistarcsa-Gödöllő

Southern Pest: Kispest-Gyál-Monor or Dunaharaszti-Ráckeve

Csepel Island: Csepel-Szigetszentmiklós

c/ Land use

Long range land use policy has also been defined by the detailed town planning program. In it social requirements and environmental potentials were carefully considered.

Demographic predictions indicate that the population of the agglomeration will increase from present-day 2,4 million to abt. 2,8 million by the turn of the millenary. Within this the proportion of people of working age will decrease, and the number of industrial employees will be essentially fewer. Despite of this, considerable area requirements will have to be reckoned with in future as compared to present conditions. This may be explained by the rising standards of living, increasing ecologic demands, and supporting technical development.

From the standpoints of both technology and labour hygiene, modern industry will require much larger spaces than today, not to mention the fact that a great many industrial works in Budapest are already overcrowded, even under present circumstances. Living space per inhabitant will also significantly increase, chiefly through a qualitative improvement in flats /resulting in better lighting, airing/, and also because of additional external services linked with flats /e.g. parking places, open spaces/. Motor car traffic is expected to spread at a rapid pace, and it will probably arouse a desire in people to build their own homes with spacious gardens. The population's demand for recreation areas will also increase manyfold. By significantly extending green area and forest surfaces, a carefully planned pattern of unbroken wide green belts will have to be created in order to provide recreation ground for the population and a means of protection for the environment. All these area requirements can only be met either to the detriment of agricultural lands found in the agglomeration or by a systematic exploitation of vacant lots in loosely built-up areas.

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Fig. 1.



Fig. 2.

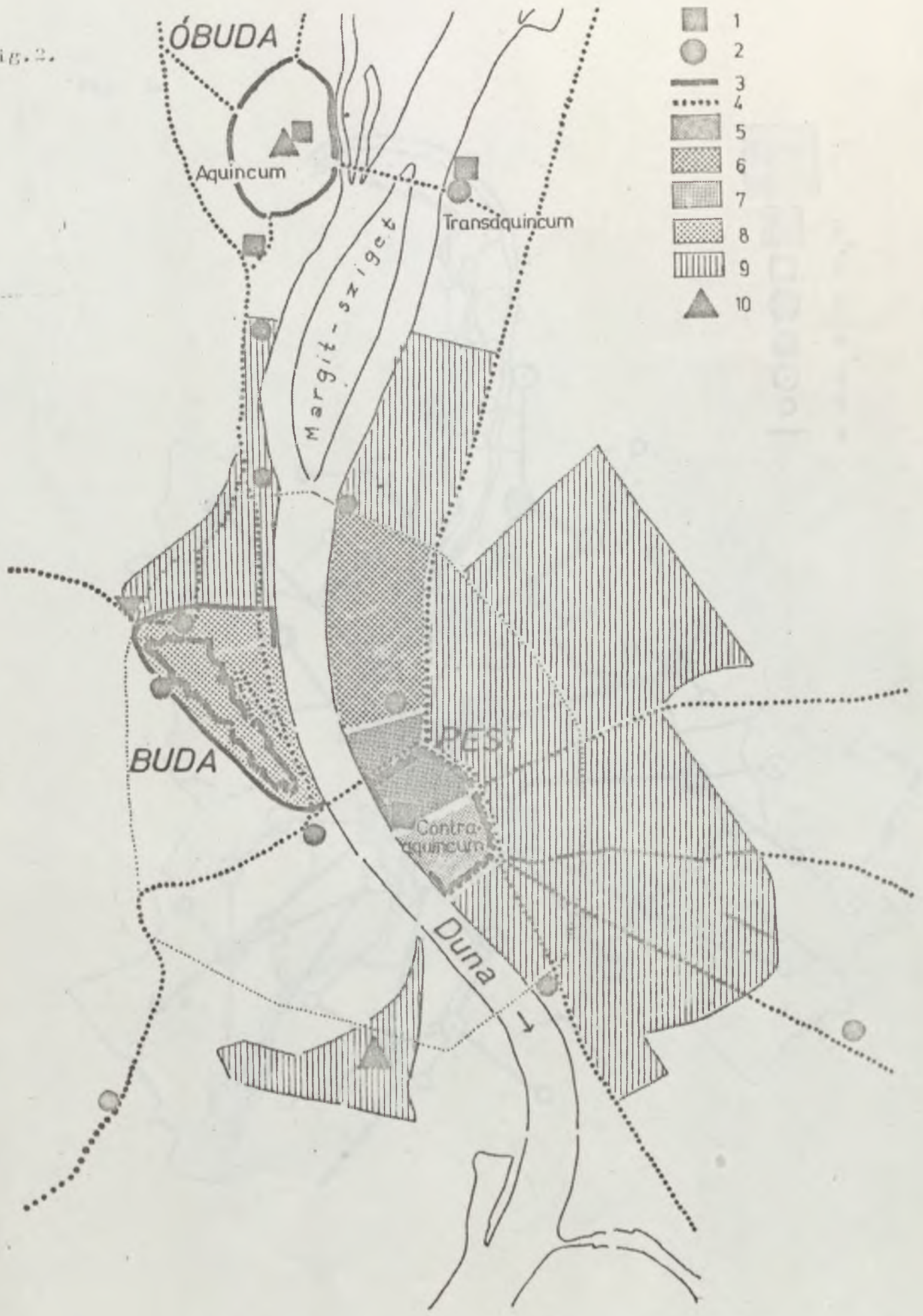


Fig. 3.

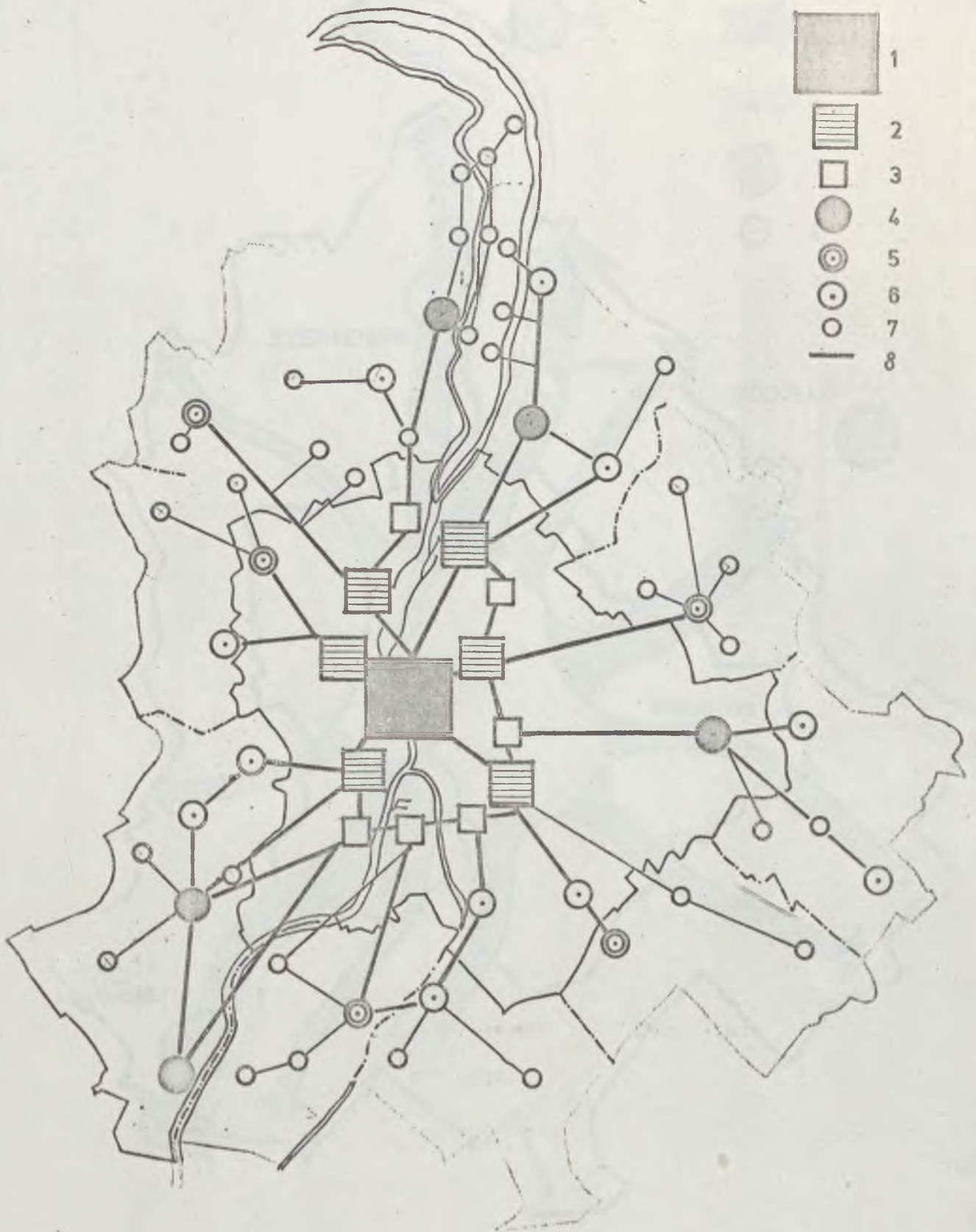


Fig. 4.

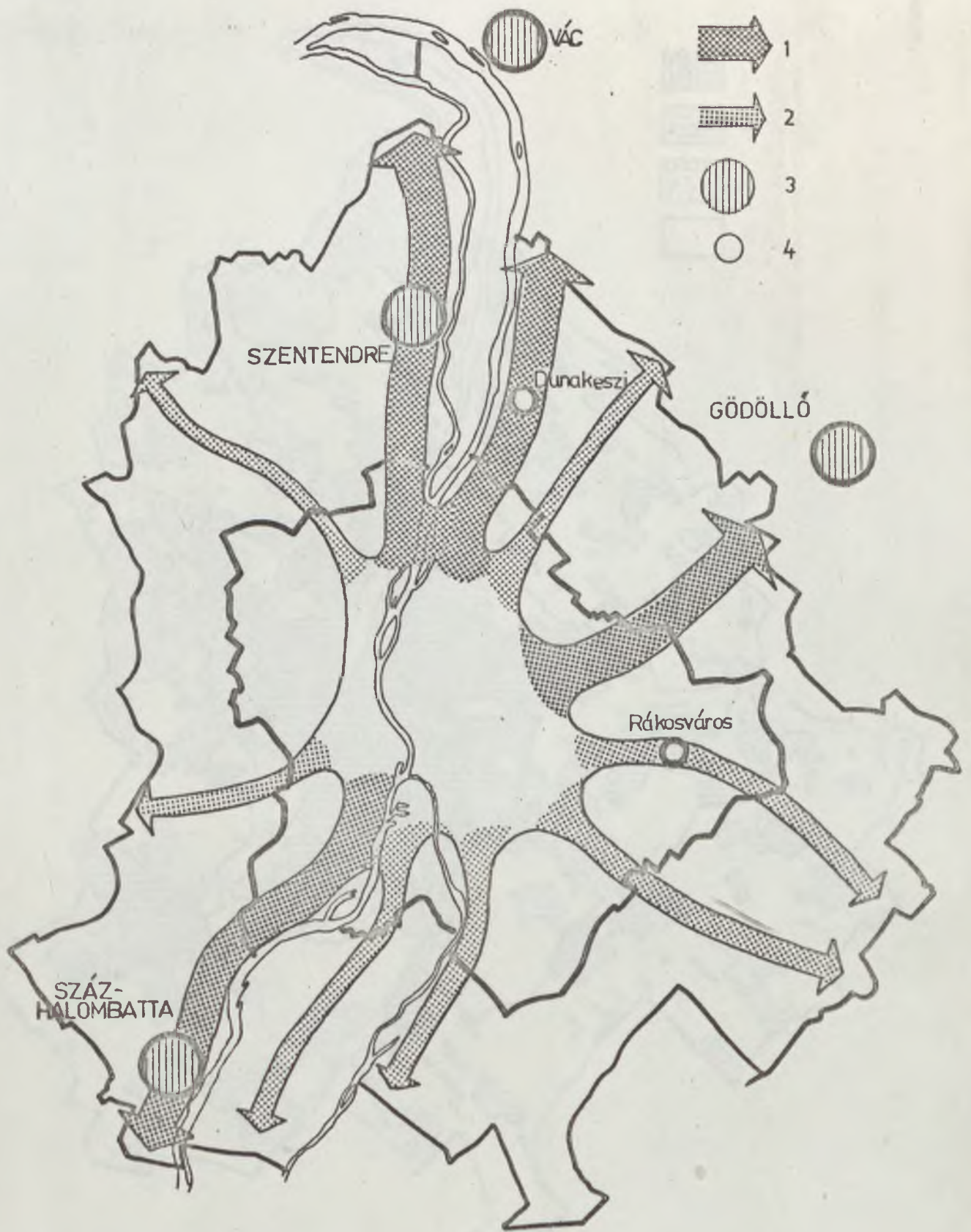


Fig. 5.

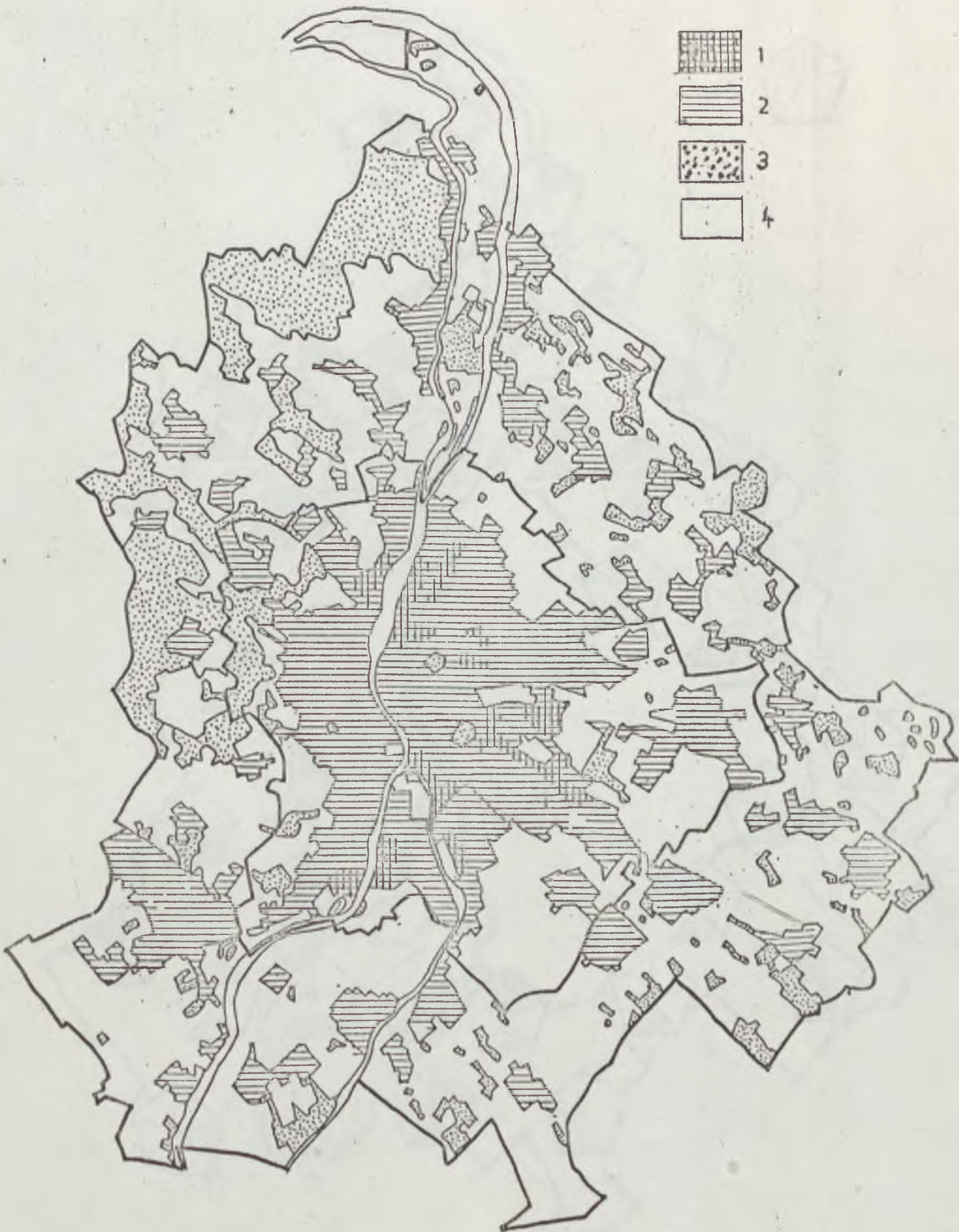


Fig. 6.

