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**PLANNING AND ENVIRONMENT
IN THE ŁÓDŹ REGION**

Tadeusz MARSZAŁ, Wojciech MICHALSKI [eds]

ZESZYT 1/93

Zarząd Miasta Łodzi
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Tadeusz MARSZAŁ, Wojciech MICHALSKI (eds)

ŁÓDŹ 1993

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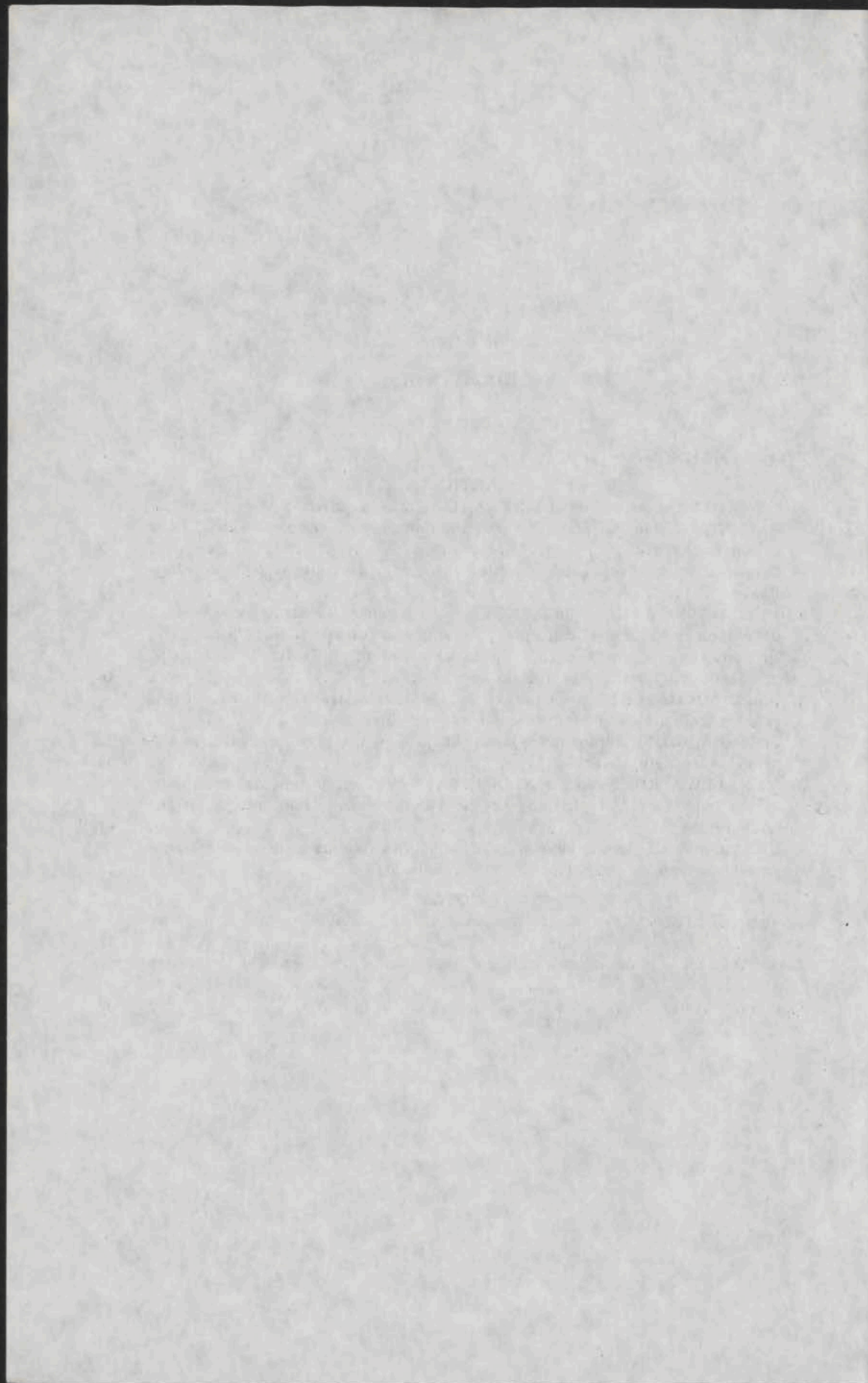
1993

Wydanie I. Nakład 700 + 50 egz.
Ark. wyd. 6,4. Ark. druk. 6,125+1 wkl.
Papier offset. 80 g

Oficyna Drukarska — Łódź, ul. Zielona 50

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INTRODUCTION

Łódź, the second largest Polish city, one of the biggest in Central Europe, centre of urban region inhabited by 1,2 million people. The city, the history of which reaches back to 1423, when the municipal charter was issued by King Jagiełło, although its real development starts only after 1820 when Łódź was declared an industrial town. The city, being the most important centre of textile manufacturing in Poland and one of the biggest in Europe. The city with seven schools for higher education (about 30 thousand students), seat of archdiocese, and Poland's main centre of film industry. The town of factories and tenement houses, but also of magnificent palaces and monuments including the 19th century classical and eclectic buildings, as well as of historical urban structure.

Apart from all its merits Łódź is not as known as Warsaw with its capital functions, Cracow with its splendid heritage of the past, or Gdańsk with its "idea of Solidarity". But, having its own set of assets, Łódź can be found very attractive for those who will give the city a closer look.

There is a growing number of visitors eager to learn about its history, contemporary social and economic structures as well as existing challenges and future developments. In spite of numerous difficulties faced by the city and surrounding region in the period of transition to the market economy and democracy it can be noticed that its more active role as a scientific, cultural, economic and fair centre results in increasing demand for information containing solid analysis of the phenomenon called Łódź.

The VII AESOP Congress, being an important event for the local community as well as academics interested in spatial research and policy, has created an opportunity to publish this book presenting different aspects of spatial development of Łódź City and its region.

What is the AESOP? The Association of European Schools of Planning was established in 1987 at the initiative of scientists, representing universities from some West-European countries, who felt, in view of the forthcoming European range of planning, that it was necessary to join forces beyond national boundaries. Next years were very successful

for this organization as membership continued to grow rapidly and annual congresses became a regular part of the schedule for scientists from all parts of Europe (as well as sometimes from further afield) involved in planning research and education. At the beginning of 1993 AESOP has some 131 members from thirty one countries (104 are universities and other planning schools, while the rest consists of individual and affiliate members). It should be mentioned that it is not a homogenous organization, but rather a kind of association of people and schools devoted to the idea of planning meaning shaping reasonable spatial organization of human activities. It incorporates scientists from different cultural background, representing different scientific disciplines including architects, geographers, economists, historians and sociologists.

The objectives of the AESOP, laid down in its Charter, among others assume to provide a European forum for the identification and discussion of issues and development in planning education and research. Congresses organized every year in different European towns aim at the realization of this task. The successive meetings attended by hundreds of participants were held in Amsterdam — Netherlands (1989), Dortmund — Germany (1988), Tours — France (1989), Reggio Calabria — Italy (1990), Oxford — the United Kingdom (1991) joint congress with the American Association of Collegiate Schools of Planning with 600 hundred participants) and Stockholm — Sweden (1992).

The changing geopolitical context of Europe created possibilities for greater participation of Central and East European countries in the AESOP activities. The turn has come to organize the VII Congress in Poland in 1993. This, being the reflection of spreading the AESOP idea, seems also to be the answer to the challenges resulting from unprecedented political, social and economic changes occurring in Central and Eastern Europe. Poland was the first country which initiated the transition from the communist system to a market economy, and the Polish universities were the first planning schools from this part of our continent involved in the AESOP activities, so entrusting the University of Łódź with the task of organizing the VII Congress was its logical consequence.

Planning and environment in transforming Europe is the designated theme for the VII AESOP Congress. It is an excellent opportunity for scientists involved in spatial research and policy to discuss and contribute to deeper understanding of the process set in motion by the encounter of fast development of European integration and appearance of new economic and political situation in the eastern part of the continent. This is one of the most important planning meetings ever held in Poland, which offers scientists interested in spatial issues the

ideal forum to reflect environmental challenges in Europe, taking into account all their natural, economic and human aspects. The other aim of the Congress is to exchange experiences and acquire new skills in the field of planning education by comparing national curricula and analysing attempts to formulate transeuropean standards of training and education. The Congress also promotes international research activities by creating new possibilities of developing cooperation between scientists from Central, Eastern and Western Europe, outlines new orientations for research, and enhances the understanding of the role of planning in market economy, especially important for transforming Central and Eastern Europe.

Participants representing at the VII Congress in Łódź almost all European and some overseas countries have the opportunity of acquainting themselves with "new" Poland, its history and present social and economic transformations promoting integration processes with the European Community. But special efforts are made to present the Łódź region, its heritage, present challenges and prospects. And this is the main aim of this volume containing several papers prepared by specialists analyzing different aspects of the Łódź region development as well as some achievements in the field of spatial research and education.

This publication aims at giving a solid and comprehensive picture of the Łódź region at the beginning of the nineties. The volume seems also to be important because of shortage on the market of such scientific publications prepared in English. I do hope that scientists, students and all persons interested in planning and environmental issues will find this book useful in understanding the processes of the spatial organization of human activities in the Łódź region.

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The publication of this volume, as well as organization of the VII AESOP Congress in Łódź, was possible thanks to a great support from different sides. The Congress organized by the University of the Łódź obtained substantial assistance from the City of Łódź Authorities, and the Voivodship of Łódź Authorities. Among the numerous sponsors let us mention: Polish Development Bank Co. in Warsaw, Fannie Mae Co. in Washington, Powszechny Bank Gospodarczy Co. in Łódź, Agency of Regional Development in Łódź and Bank Przemysłowy Co. in Łódź.

Preparation of this special issue of "Chronicle of the City of Łódź" was possible thanks to goodwill of the Municipality of Łódź. As the co-editor of this volume and chairman of the VII AESOP Congress Organizing Committee I would like to express my gratitude to all benefactors.

Tadeusz MARSZAŁ

ARTICLES

*Marek Koter, Stanisław Liszewski
Tadeusz Marszał, Stanisław Pączka*

MAN, ENVIRONMENT AND PLANNING IN THE DEVELOPMENT OF ŁÓDŹ URBAN REGION

Basic factors dynamizing the development of towns and regions are: man and his economic activity, natural environment and planning, as well as political and legal situation and ownership structure, and other factors of secondary importance.

Man - population number, demographic features, social and spatial behaviour, economic activity, entrepreneurship, etc. are of primary importance for the size of a town and its status, functional and social structure, as well as its specific atmosphere and individuality.

Economic environment, creating particular barriers or exceptionally favourable development conditions, determines the geographical position of a city and spatial directions of its growth, affects the urban landscape and economic development of the city and its neighbourhood.

Finally, planning in the broad sense has a major effect on the functionality of urban arrangement, shaping the inner structure and the outer appearance (so called physiognomy) of a city. The system of planning ensures the conformity of urban form with the function of a town (particularly at the moment of its formation), influences the efficiency of its transportation system and the aesthetic value of urban compositions and architectural forms. Moreover, region-shaping planning ensures proper territorial development of the zone surrounding the town in terms of its future needs concerning communication links, expansion and recreation.

Having assumed that the above factors (man, environment, planning) are the most essential for the development of a town and its whole region, the authors undertake the verification of a hypothesis stating that there is a close correlation between the development and effectiveness of planning and the extent and nature of transformations in the

natural environment. This correlation determines living conditions of city dwellers.

The verification of this hypothesis has been carried out by means of analysing a 200 years long history of the industrial development in Poland's second largest city, that is Łódź. For the sake of such an analysis the history of Łódź has been divided into 5 major periods, marked by important political events, essential as it turned out for the problems discussed in this study.

PRE-INDUSTRIAL PERIOD

Today's Łódź region was in the period of early Middle Ages a specific area. Though situated in the very heart of contemporary Poland, it was in fact a marginal region, which should be attributed to the watershed dividing vertically the Vistula and Odra (Poland's two biggest rivers) basins. The watershed functioned as a natural frontier between the tribes inhabiting Wielkopolska, Mazowsze and Małopolska. The most densely populated areas of intensive farming were then valleys of the rivers being now boundaries of the region, i.e. Warta, Ner, Bzura, Rawka and Pilica. The centre of the region was in those times sparsely populated and predominantly covered by forests.

The difference in the level of development between these two areas is testified by the fact that whereas in the bordering valleys were founded many old towns and monasteries, in the central part developed only a few small towns with very poor architecture, dating from not earlier than the Renaissance period at best, and mostly from XVII—XVIII century.

The first elements of planning in the spatial organisation of the region appeared in XIII—XV century, when after the Mongolian invasion was carried out a new settlement action consisting in setting up new villages and later new locational towns. Villages established according to the new law were built along a street and had a three-field system, whereas the newly-founded towns were designed according to Gothic principles in the shape of a rectangle with a chessboard arrangement. Rich towns in the border zone were often surrounded with defensive walls; poor towns in the central part of the region were designed as open settlements. The origin of Łódź should probably be linked with this great colonizing operation. First, in XIV century (first mention from 1332) appeared a small village called Łodzia. Next, in 1423, in its vicinity was founded a small town of Łódź. Its spatial arrangement reflected a mixture of elements resulting from conscious planning

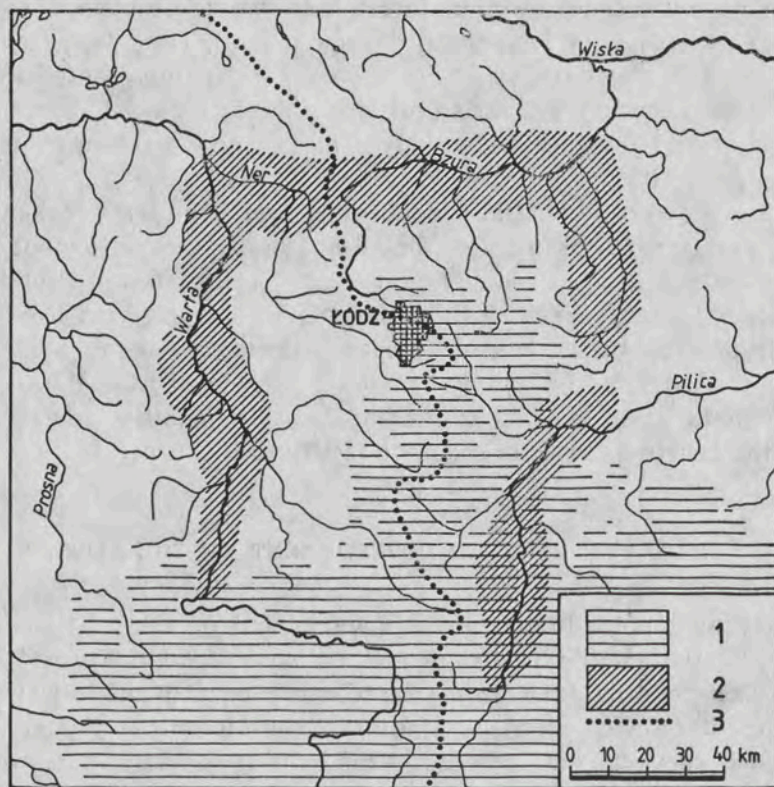


Fig. 1. Location of Łódź

- 1 — Uplands (over 200 m above sea level), 2 — Areas of intensive medieval settlement, 3 — Line of watershed between the Odra and Wisła river-basins

decisions and remains of the older pattern of fields and roads determined by local components of the natural environment.

The watershed zone in which grew Łódź was an area of weak economic activity, so trade and handicraft had little chance of development, and despite the fact that the city had been granted municipal rights, it remained a predominantly farming settlement. In accordance with the needs determined by this function, the town, not exceeding 20 hectares in built-up area, received over 800 hectares of farmland and over 400 hectares of forest. Łódź retained the character of a sleepy, agricultural small town until the beginning of XX century. Earlier, starting from the 1780s, a new settlement operation was carried out, namely the so-called Dutch settlement. It followed Dutch patterns, though the population was predominantly Polish. On soaked and

previously inaccessible deserted forest land were established irregular farming colonies paying land annuity (ground rent). They were frequently accompanied by the building of glass-works, which represented the first in this area forms of industrial settlement. Local glacial sands served as raw material for the production of glass, and vast forests provided firewood for melting.

After 1793, when Poland lost independence, and the Łódź region belonged to the territory of so-called New East Prussia, the settlement action was continued by the Prussian government. The Dutch and Prussian colonization initiated a great influx of settlers to this region, so that on formerly deserted forest land developed a thick network of settlements, whereas the surrounding valleys remained unchanged from the medieval period. The fact that over 5% of present-day settlements were established during the last two centuries seems to testify to this process.

PERIOD OF PLANNED DEVELOPMENT OF THE CITY

The turning point in the urban development of Łódź falls on years 1815—1830, that is the period of the Polish Kingdom. Formed at the Vienne Congress in 1815 from the central part of historical Polish territories, it enjoyed at the beginning a considerable autonomy. The enlightened government of the Kingdom took advantage of this opportunity to create proper infrastructure and promote the urbanization and industrialization of the country. They believed that owing to economic growth Poland would regain full independence.

During only 15 years, that is from 1815 till 1830 when the Kingdom lost its autonomy as a result of an unsuccessful anti-Russian uprising, its government undertook investments on unprecedented scale. A famous Polish town planner, Waclaw Ostrowski, called this period "the prime time of Polish planning". Among numerous investments realised at that time was creating a large textile industrial district with Łódź as its centre.

The choice of Łódź and its environs for a textile centre was largely determined by natural environmental conditions. The textile industry organized according to traditional methods used falling water as a source of power. Łódź and the surrounding areas situated on the watershed had sufficient resources of energy generated by water. It was here that numerous small rivers and streams rose from springs and flew violently down, providing clear water retained by vast forests. Those forests were also an important locational factor, supplying material for the construction of houses and manufactories, and later providing firewood for first

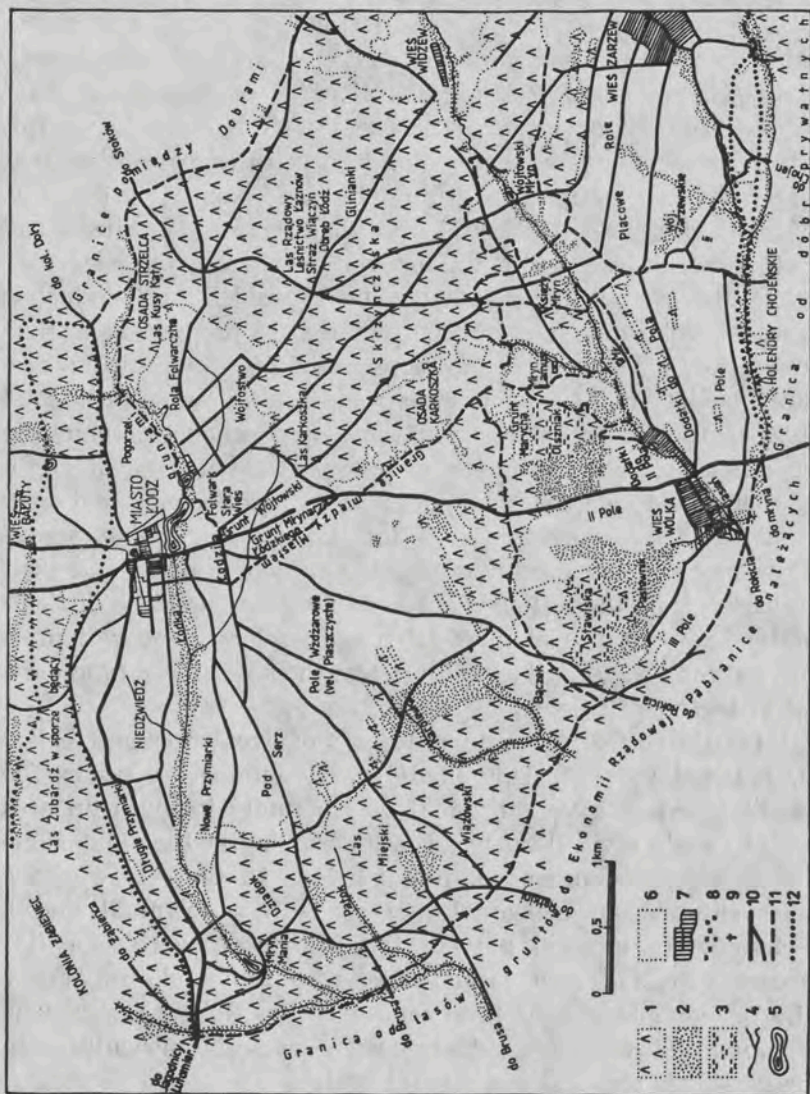


Fig. 2. Spatial organization of the area of Łódź around 1820

1 — forest, 2 — meadows, 3 — swamps, 4 — rivers and streams, 5 — ponds, 6 — arable land, 7 — building lots and gardens, 8 — buildings, 9 — churches, 10 — roads, 11 — boundaries of the city and of neighbouring villages, 12 — boundaries of litigious grounds

steam engines. So it happened that the same elements of the natural environment which formed barriers to the development of agricultural settlement, were very favourable to industrial settlement and growth.

Łódź is sometimes called Polish Manchester, which seems to be a poor comparison. Unlike Manchester, which was a big city already in the pre-industrial period and later developed spontaneously as a result of many initiatives undertaken by numerous merchants and entrepreneurs, industrial Łódź emerged suddenly as a result of a consciously planned action conducted by the government of the Polish Kingdom. In this respect Łódź is unique on a global scale. It was the government that brought the settlers-immigrants from German countries (Saxony, Thuringia, Meklemburg), Czech, and old Polish territories — Silesia and Wielkopolska. They arrived willingly, for in their home countries they were ruined by the competitiveness of the mechanized English industry, whereas here the government secured home textile production against such a competition by means of protective tariffs. They were also attracted by the fact that the government built for new settlers solid houses, churches for different denominations, and schools teaching in their native languages. Moreover, the government granted them credit for getting households going, the purchase of workshops and raw materials, and to those with initiative - for the construction of manufactories. They received tax exemption for the first few years, and their sons were released from the military service. Indeed it would be difficult to find a better example of a planned all-round settlement operation.

Still more impressive, as well as unique, was the spatial and functional arrangement of these settlements.

The first textile settlement was a colony of wool weavers called New Town, founded in 1823. This small colony numbering up to 200 families was designed in a very original way, namely its built-up area constituted a rectangle divided by two streets crossing at the right angle into four urban blocks comprised of building lots. In the centre of the rectangle was situated an octagonal market with a townhall and a Protestant church. An integral part of the settlement were so called "textile gardens" divided into large plots, meant for cloth-makers, following the fashionable at that time conception by Robert Owen, who propagated combining work in industry with work in agriculture in order to preserve both physical and mental health.

In the years 1824—1828 a linen settlement called Łódka was set up south of New Town along the main route. It consisted of three colonies of linen spinners, a colony of weavers and industrial premises (manufactories). According to the government's conception linen spinners were obliged to produce linen yarn from flax which they grew by themselves.

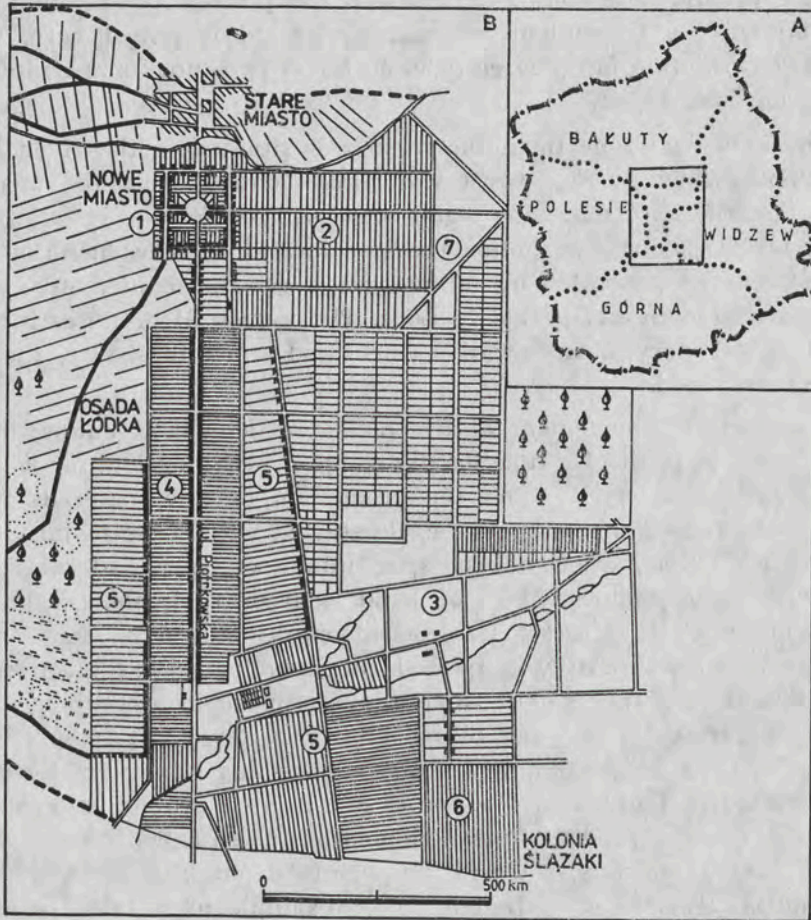


Fig. 3. Spatial arrangement of industrial Łódź around the half of the 19th century
 A. Comparison of "industrial Łódź" with the 1987 city boundaries; B. "Industrial Łódź" around 1840: 1 — clothiers settlement New Town, 2 — New Town gardens, 3 — manufactory premises, 4 — linen and cotton weavers colony, 5 — linen spinners colony, 6 — linen-drapers colony, 7 — squares and gardens of "New District"

For this purpose in spinning colonies were marked out large plots measuring 1,7 hectares, resembling plough-fields. Wooden houses for spinners were built in the front of the plots along three streets.

The colony of weavers consisting of bigger and more presentable houses was set up on both sides of the main route to Piotrków (today the main street of the city — Piotrkowska Street), giving it the character of a street. Weavers produced linen cloth in their homes in special workrooms. They did not have to grow flax, so their lots were smaller,

and the colony more compact. However, the principle of combining industrial work with outdoor occupations was also applied here, which resulted in allotting fairly large (0,56 hectares) two-functional building — gardening lots.

The industrial zone (manufactories) was situated in the river Jasioł valley, on which were several water-mills dating from the medieval times. Facilities for damming water were utilized for the installation of water wheels keeping in motion the machines in the new manufactories, because energy generated by falling water was the main motive power in the early industrial period in Łódź. The industrial premises included a fullery, croppery, bleachery, dye-works and a printing-house, and later also a cotton mill.

The spatial arrangement of the Łódka settlement is unique on the global scale in point of a functionally comprehensive design, for it covers a full production cycle, from the production of raw materials to the selling of finished products. The cycle started with the growing of flax on spinners' plots, where it was spun into linen yarn and sold to the weavers. Those produced linen on hand looms in their homes, and later also cotton cloth. Coarse, unbleached cloth was next sent to the manufactories where it was treated successively: it was given proper compactness in a fulling-mill, next it was cropped in a cropping-mill to remove all irregularities, in a bleachery it was retted in tubs with water and then dried in the sun, which had a bleaching effect; finally it was dyed various colours in a dye-house and printed proper patterns with hand stamps. The production cycle ended on the so called Linen Market, where the final was sold to merchants from Russia, China and Manchuria. It is hard to find a better example of a fully functional arrangement of a production cycle. That period was indeed an excellent page in the history of Polish town planning.

The early stage of industrial Łódź was characterized by a very methodical activities on the part of the central government implementing a comprehensive plan of territorial development and laying economic foundation for this "new" city. This activity followed the principle of active co-existence and interrelation between man and his natural environment, consisting in natural determinism on the one hand (the need for motive power provided by water, good water for the production process, or timber), exploitation of natural resources (a section of the forest) on the other, as well as adaptation of the natural environment according to needs.

Conscious planning decisions underlying the industrial development of Łódź, and resulting changes in the natural environment did not have

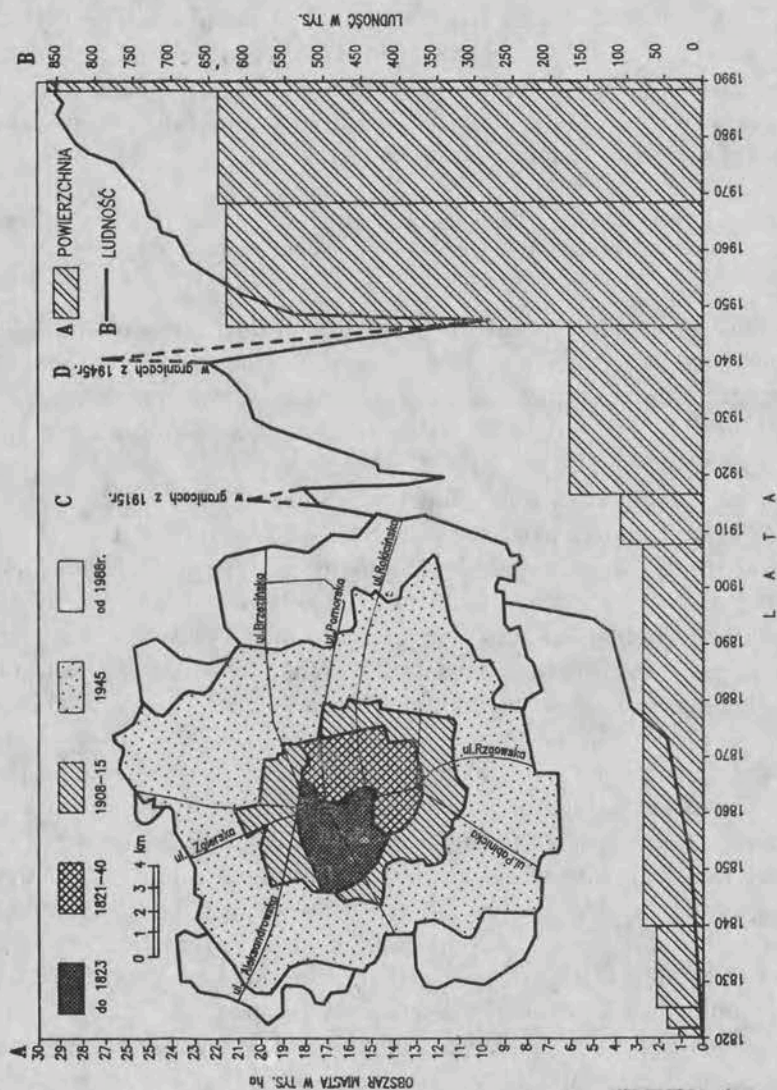


Fig. 4. Territorial and population development of Łódź in 1820—1990
 A — city area in thousands of hectares, B — population in the city in thousands, C — city population within the 1915 boundaries, D — city boundaries within the 1945 boundaries

in those times a negative impact on the living conditions of the local population.

The stage of planned development of the Łódź textile district with Łódź as its centre came to a close with the loss of Polish Kingdom's autonomy, however limited, but essential for Polish economy. The last manifestation of town-planning in Łódź occurred in 1840, when so called New District was incorporated to the city. This event closed for half a century the planning of territorial development of Łódź. The city as in 1840 was planned for 14—15 thousand dwellers, and fair living conditions were guaranteed for such a number.

PERIOD OF SPONTANEOUS DEVELOPMENT OF THE CITY

After the stage of carefully controlled territorial development marked by fairly good coexistence of man and his environment came a period of intensive degradation and wasteful exploitation of the environment, coinciding with total loss of Poland's political independence and disorderly, unrestrained growth of Łódź.

This stage, in the classification adopted for the needs of this study, began about 1840 and ended with the outbreak of World War I in 1914. It was a period of the most rapid development in the prior history of the city. During nearly 75 years a small textile settlement was transformed into a large industrial city (agglomeration), and its natural environment became irrationally devastated. What reasons lay behind this uncontrolled growth and development, and what were its consequences?

The dynamic development of Łódź resulted from several coinciding reasons, the most essential being: political conditions, skillful application of new technologies, and social changes taking place at that time.

Among the political factors two played a major role. After the unsuccessful uprising in 1830 the Polish government lost its autonomous power over the territory relevant for this study. From then on the region was ruled by officials performing their functions on behalf of the Emperor of Russia, and Piotrków Trybunalski became the seat of the guberniya to which Łódź belonged. Loss of political independence meant the end of rational territorial and economic development based on planning; unrestrained law of the market prevailed.

The other economic factor which had a great impact upon the development of the city was of geopolitical nature and was connected with the consequences of the War of Secession in the United States and the blockade of overseas cotton supplies to Europe. It meant the necessity

of seeking other areas supplying cotton, which was basic raw material for contemporary Łódź. The development of cottongrowing in Russia and large supplies of cheap Russian cotton in conjunction with an access to a vast and absorptive Russian market created exceptionally favourable conditions for quick growth of Łódź industry.

Moreover, such additional factors as readiness to employ technological innovations from the developed countries of Europe on the part of Łódź industrialists, as well as high flexibility in the assortment of goods and volume of output were conducive to dynamic industrial development. After the early stage in the industrial development of Łódź based on wool and linen production, came the period of greatest prosperity which is connected with the cotton industry. As early as in 1839 was installed the first steam spinning machine of 60 HP, which enabled its owner, L. Geyer, to start the first fully mechanized cotton spinning mill. Next cotton mills were launched in Łódź successively by: T. Grohman (1846), P. Lande (1850), K. Scheibler (1855), K. Moess (1856) and others. Quick mechanization of Łódź cotton industry resulted in making this city not only the greatest textile centre in the Kingdom (in the 1805 s about 68% of all Kingdom's spindles were concentrated in Łódź), but also a highly competitive exporter of textiles to Russian and Far-East markets. One of the turning points of that period is the year 1866, when Łódź was incorporated into the European railway system. The importance of this event cannot be overestimated.

The tendency to adopting new technologies from Western countries persisted throughout the following years of the period in question, though to a smaller extent. Eg. in 1873 the telephone was first introduced in Łódź, and in 1898 — the first electric trams in the Polish Kingdom.

The third group of reasons underlying the industrial boom in the city were social changes in the second half of the 19th century. The most important among them was the enfranchisement of peasants, which took place in 1864 and provided an unlimited supply of cheap labour for the Łódź labour market.

Three major groups of causes outlined here in a short time brought about enormous growth of the city resulting in irreversible consequences for the natural environment. Numerous numerical and cartographical analyses illustrate the scale of these changes. In 1840, after the annexation of New District, Łódź extended over the area of 2739 hectares and was inhabited by about 15,5 thousand people, which gave a fairly low density of population, i.e. about 56 inh./km. In 1905 the same area was inhabited by 344 thousand people, and the density increased to an unheard-of then figure of 12.460 inh./km.

The position of Łódź, however, was connected mainly with the volume

of industrial production. In 1897—1913 the industrial production of this city accounted respectively for 27,9%—30,1% of total output in the whole Kingdom, and the Łódź industry employed from 16,6% in 1879 to 25% in 1913 of total industrial labour force in the Polish Kingdom.

Unrestrained economic and population growth within unchanged administrative boundaries accompanied by lack of town-planning resulted in completely chaotic spatial arrangement and heavy speculation in land. Standard functional arrangement worked out in the previous period was obliterated. The development of manufactories and later the rise of factory industry brought about the emergence of enormous and compact production-dwelling blocks on the one hand (Poznański, Scheibler, Kunitzer), and on the other — uncontrolled spreading of the industry over the whole area of the contemporary city. Fairly scattered and low building of old spinning and weaving settlements became soon replaced by 2—3-storey tenement-houses. The density of building reached at that time an inconceivable degree, and the utilization of building lots came up to 70% and later 80% of total building area, finding dreary expression in well-like courtyards.

The development and spreading of industry resulted in confusion of functions in the urban space (industrial building mixed with dwelling houses), which caused spatial chaos, all the more so as industrial premises covered 1/4 of Łódź's total area. What were the consequences of this excessive growth of industry for the environment and its inhabitants?

Change in the range of products (shift from woolen and linen cloth to cotton) and in production technology (steam and electricity) removed local industry's dependence on local raw materials (flax, water) formerly necessitating rational exploitation of natural resources. The rivers of the region, being the reason for the choice of this location for the new industrial settlement, became factory sewers. The introduction of steam machines and concentration of production in a relatively small area built up very compactly caused unprecedented air pollution. Vast forests surrounding the city were largely cut down and devastated. Comparing the area covered by forests in the Łódź district during the period of industrial boom gives an idea of the extent of damage caused by man to the natural vegetation. In 1820, i.e. at the beginning of the period, forests grew over 69,7% of the territory, whereas at the end of the period in question they covered only 7,7% of this area.

The stage of unrestrained development of Łódź was a period of rapid deterioration of the city dwellers' living conditions. All activity and ingeniousness of a narrow circle of rich business men was aimed solely at "making big money", and everything was subordinated to this purpose.

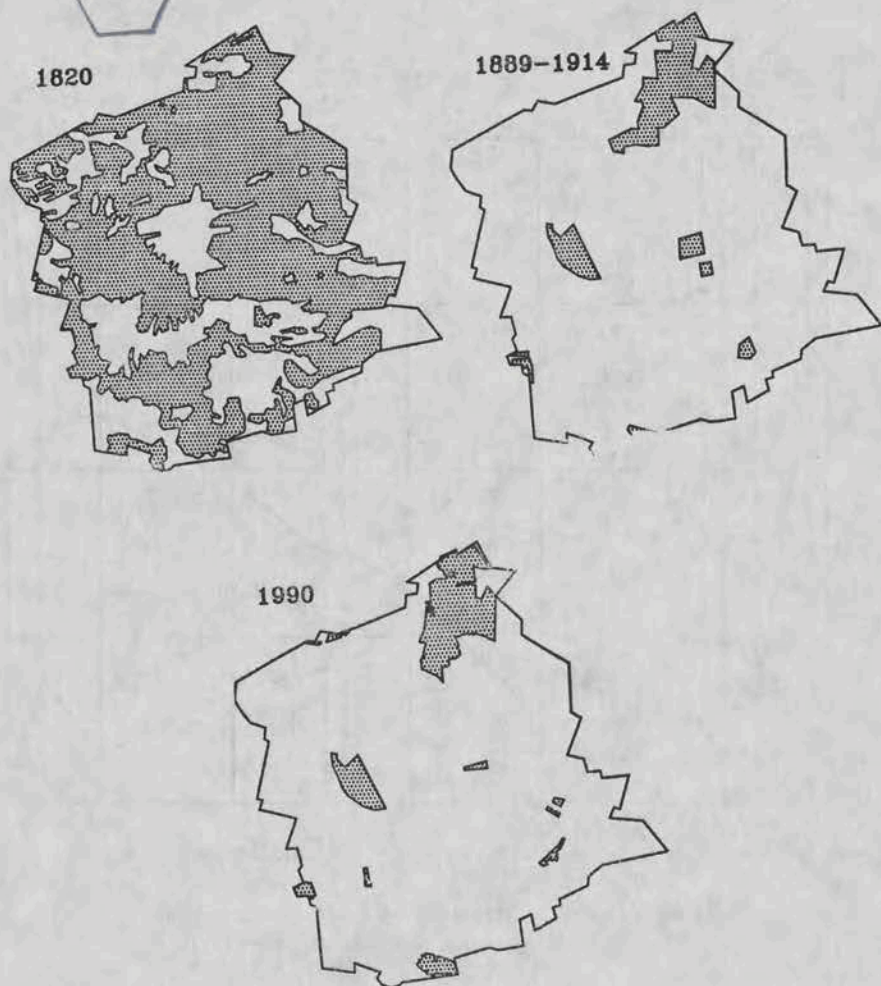


Fig. 5. Changes in the afforestation of the present Łódź area in 1820—1990

It resulted in complete neglect of communal facilities in the city which, numbering several hundred thousand inhabitants, had no sewage system or water-supply service. The first plan of construction of these basic facilities was worked out not earlier than in 1903, 1910, and only partly realized in the interwar period.

As regards other municipal facilities, the situation was none the better. Piotrkowska street was first paved in the 1870s. The gas-plant was built in 1864 in the immediate neighbourhood of the city centre, and the power-station — in 1907. It was symptomatic of the prevailing attitude and policy of making quick money that private factory power

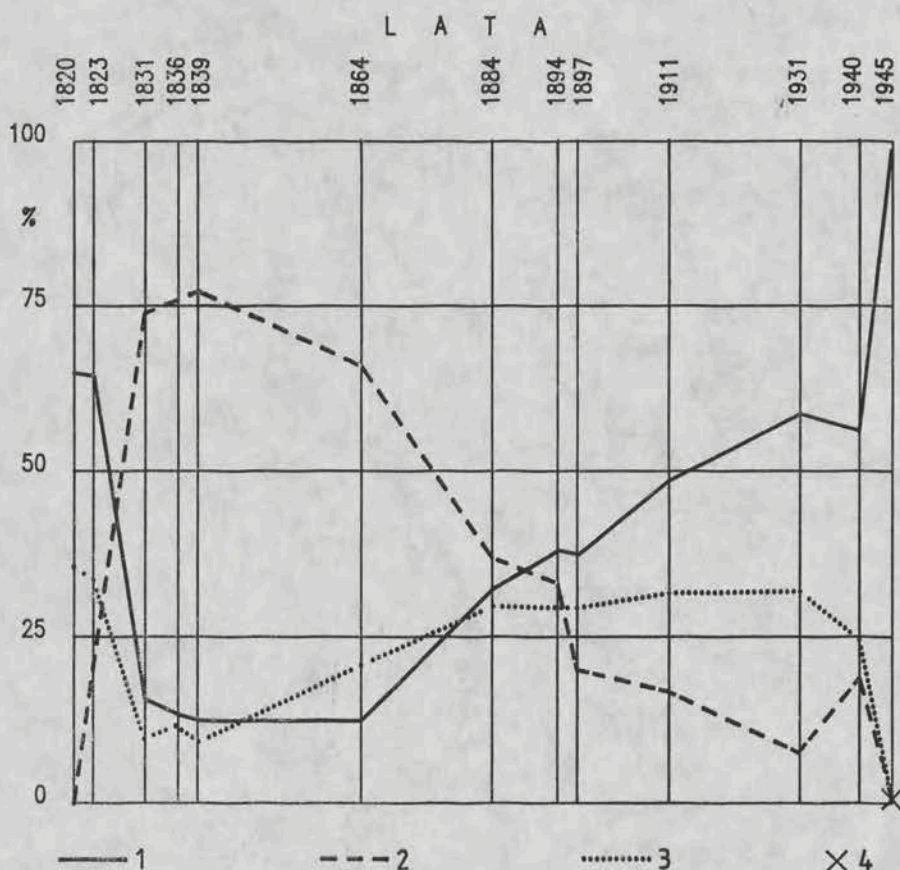


Fig. 6. Nationality structure of Łódź in 1820—1945
 1 — Poles, 2 — Germans, 3 — Jews, 4 — Others

plants were built much earlier, i.e. already in 1888 (K. Steinert) and 1889 (H. Grohman), supplying energy to their owners' enterprises. In 1892 a small power plant was built for the needs of the system of municipal trams under construction at that time.

These facts corroborate the statement that in that period great investments were made, but only in such ventures that yielded quick return. Labour was cheap and need not be sought after.

The stage of rapid urban development occurred in a political situation in which any form of local government was banned, so territorial development proceeded without any organizing principle and regardless of any planning norms. It was a period of economic prosperity of the city, connected with taking advantage of contemporary political condi-

tions and new technologies, which resulted in the emergence of a monofunctional textile centre, mainly cotton, supplying to vast and absorptive eastern markets. A small group of Łódź bourgeoisie mainly of German and Jewish origin was among the richest people in the Polish Kingdom, whereas enormous masses of the city inhabitants derived mainly from impoverished peasants, who came to this "promised land" in search of bread, belonged to the poorest group of the working class. These contrasts were evident in all aspects of life, and were the most striking characteristic of that period apart from degradation of natural and urban environment.

INTERWAR PERIOD

World War I closed the period of rapid economic growth and industrialization of the the city and resultant spatial and functional chaos in urban structure. When the war ended, the Łódź region found itself in a new, quite different political, economic and social situation.

For the first time since the beginning of its industrial career Łódź was within the territory of independent Poland, but also for the first time it was separated from eastern markets not only by the customs frontier, but also by the state frontier. This fact together with the decreased home demand for textiles and generally unfavourable business conditions affected the economic situation of the city throughout the interwar decades.

New political situation in which Łódź found itself after the war brought about certain decisions providing new stimuli for the development of the city. On 2 August 1919 was formed Łódź Voivodship with Łódź as its capital, and on 19 December 1920 was established Łódź Diocese of the Roman — Catholic Church. The administrative area of Łódź also increased (5875 hectares).

After World War I the economic situation of Łódź was largely determined by severe war damage, which affected unfavourably the textile industry, being formerly the motive power of the city's and region's growth and development. War damage consisting in the loss of over 40% of the city's population, a considerable part of its stock of machinery, and eastern areas of supply and trading, undermined the dynamics of Łódź's development.

The social situation of the city was no less tragic. Łódź entered the new stage in its development without essential elements of technical (lack of sewage system and water-supply service) and social (shortage of schools and public buildings) infrastructure, and with disastrous

sanitary conditions. It is attested by the fact that in 1919 about 90% of inhabitants lived in one or two-room flats, 33% in 1930 of flats had no installations or facilities.

The extent of shortcomings in Poland's second largest city pointed out above made working out the spatial and municipal policies and improving the dwellers' living conditions in effect an issue of primary importance.

Efforts made by the city authorities aiming at meeting this challenge resulted in establishing in Łódź in 1931 the Regional Planning Office for the regulation of the spatial and functional arrangement of the urban space. Three territorial development projects were prepared at that time.

In 1927 prof. W. Michalski worked out "Outline of the Spatial Regulation of the City of Łódź"; in 1930 "General Plan of Urban Development" was prepared under the supervision of prof. T. Tolwiński; in 1935 City Regulation Department put forward subsequent "General Plan of the City of Łódź Development".

The first two projects regulated only general principles of urban space organization, and despite a number of interesting proposals they have never been implemented due to strong opposition from real estate owners and businessmen. It was only the next version prepared in 1935 (being a compromise respecting particular private interests and largely limiting the scope of earlier restructuring proposals) that after the approval by the city authorities became a formal basis for controlled urban restructuring and development. Regrettably the implementation of this basic project, revised and worked out in detail in succeeding years, was interrupted by the outbreak of World War II.

The 1935 plan represents a considerable achievement of the planning thought of that time and a presentation of contemporary views on shaping the spatial structure of Łódź. Its underlying principle was retaining the existing basic elements of the urban structure which should be regulated and rationally organized for the future growth of the city. The planners estimated that the number of inhabitants would grow to 1,2 mln. The plan outlines main directions of the development of building areas (eg. new districts of high buildings in Koziny, Chojny and Radiostacja), industrial zones (new areas by the circular railway line in Dąbrowa and near the Łódź Kaliska Station), service centres (along Piotrkowska Street, in Barlicki Square and Independence Square, and around the Łódź Fabryczna Station), urban greens (among others river valleys and green zones separating living quarters from industrial areas), and transport (to relieve the downtown area).

Despite the difficulties connected with working out such a version of a territorial development plan that would be acceptable for all parties

concerned, the city government had to make decisions ensuring proper functioning of the city.

The implementation of the restructuring project and the scale of proposed changes in the urban space was adversely affected by outside political and economic situation, i.e. war with the Soviet Russia ended in 1921, worldwide economic crisis in 1929—1933, and war preparations carried on after 1933.

The internal barrier to the implementation of plans and projects was, apart from money constraints, the previously-mentioned opposition from landowners. Thus a majority of undertaken projects was realized on municipal grounds and in the area of parcelled out suburban granges.

A number of restructuring undertakings were accomplished during the interwar period. Among them was the realization of the first stage of the water-supply and sewage system construction: 3 Artesian wells were built, as well as a pumping and filter station, a retarding reservoir, and 59 km of water-lines. Part of the rivers flowing through the city was turned into gutters, covered in built-up areas, and a collector for the sewage-treatment plant and over 100 km of sewers were built.

Several new dwelling quarters were built according to new architectural conceptions (Polesie Konstantynowskie, TOR District, and such detached-buildings housing estates as Radiostacja, Julianów, Marysińska Street), as well as a network of schools for the realization of the newly introduced universal compulsory education. Many service facilities and public utilities were also set up, making possible the development of the newly acquired egzogenic functions.

New recreation grounds, especially a vast Community Park, were organized within the city boundaries, and on the outskirts were set up several new recreational estates, according to original designs following earlier conceptions of E. Howard (Sokolniki, Tuszyń-Las, Grotniki, Wiśniowa Góra and Łagiewniki).

The interwar period was not a time of basic rearrangements in the spatial structure of Łódź. However, the natural environment degradation and its significance for further development of the city was recognized, and the process of urban space organization started, which resulted in a slight improvement in living conditions of its inhabitants.

ŁÓDŹ AFTER WORLD WAR II

The postwar period was the beginning of planned spatial and functional restructuring of Łódź. This phase, twice as long as the interwar period, had quite different political, social and economic conditions.

Social and economic planning had to be done according to new principles imposed by the former USSR, based on the command system.

Territorial development planning was affected by the fascination with industrial growth, particularly growth of heavy industry, characteristic of the whole communist system based on collective ownership. The prevailing planning system enabled political and administrative authorities to take arbitrary decisions without regard to local communities initiatives.

The price of land was of no importance in the imposed socialist system and no notice was taken of landowners. Such a situation facilitated the introduction of changes in the economy.

As regards the spatial and industrial restructuring, according to the planning strategy successive deglomeration of the Łódź industry concentrated in the downtown area was to take place. The new objects replacing the old ones were located on new grounds, designed for industrial and storage quarters (Dąbrowa, Teofilów, Nowe Sady, Brzezińska Street). It relieved the concentration of industrial premises and factory buildings along the main axis of the city — Piotrkowska Street. The transformation consisted then in liquidating old enterprises and setting up new ones, as well as changing the function of industrial premises and buildings. They were adapted for the purposes of the service sector and health service, and especially for educational, research, cultural and administrative purposes, for wholesale warehouses, etc. In the postwar period Łódź was transformed from a monofunctional (industrial) city to a multifunctional one. In the downtown area, formerly occupied by industry, developed other municipal functions. Studies carried out in this field (J. Kotlicka) show that at the end of the 1980s within Łódź boundaries were 227 ha of post-industrial grounds. 16% of those were used for housing purposes, 26% for public services (mainly education, municipal and on-the-job health service), 26% for the greens, 8% for the transport, 6% for administrative purposes, and the remaining 18% for other purposes.

The spatial and functional restructuring processes outlined above were the result of the implementation of numerous city and region development projects. Planners endeavoured to comply with the resolutions of the Athens Charter, at the same time acting within the obligatory at that time Soviet planning principles.

In 1946 the Town Planning Office designed the first project of the city development within the Łódź boundaries of 1945. It was essential for the restructuring of the city after the German occupation. It included large scale development of building grounds (dwelling houses) and the greens, and improvements in the transport service. New economic and

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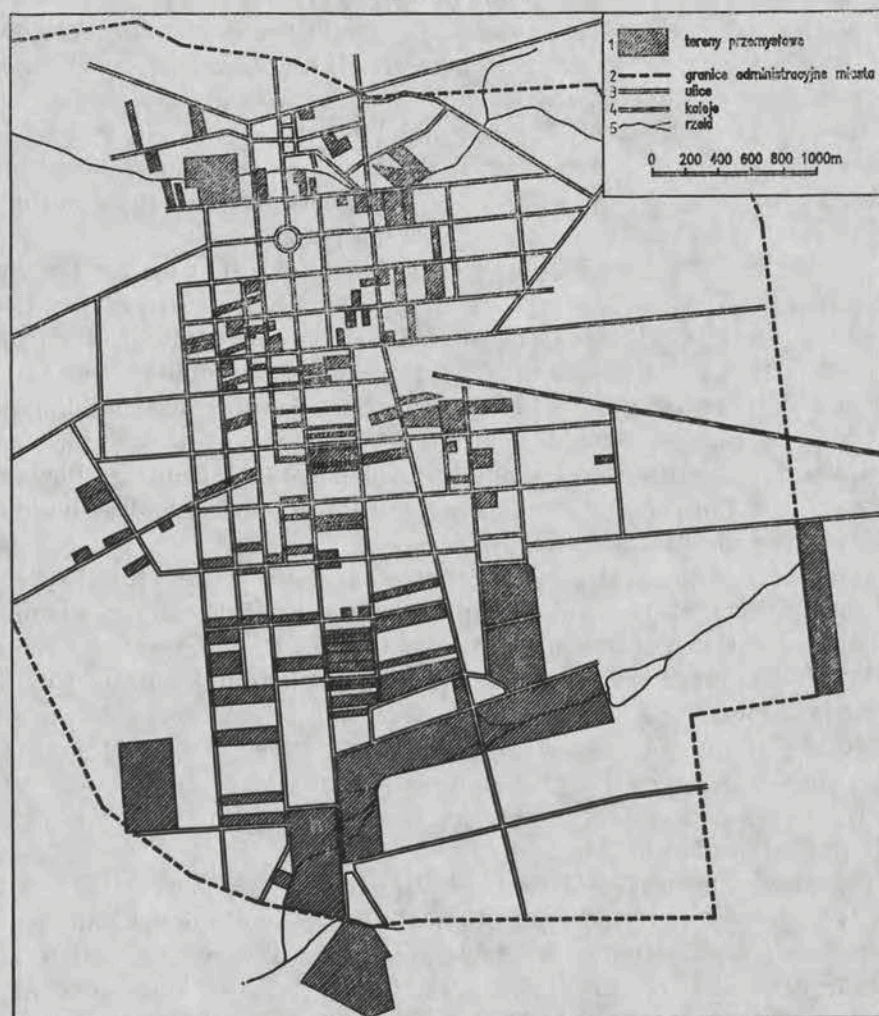


Fig. 7. Industrial grounds distribution in Łódź in 1889 (by J. Kotlicka)
 1 — industrial grounds, 2 — administrative borders of the city, 3 — streets,
 4 — railway lines, 5 — rivers

political conditions made it possible to open to the public the post-factory parklands in the downtown area, as well as creating new parks and green belts.

Successive space development plants of 1945, 1956 and 1961 provided for removing old and badly located plants from the city centre and

relieving the population density there. The implementation of these projects resulted in the appearance of new industrial and storage grounds and housing quarters — Nowe Rokicie, Doły, Dąbrowa, Zarzew, Widzew-Zachód, Retkinia, Teofilów and others. All these urban development projects planned for territorial expansion. Tram and bus service was expanded and modernized. In 1963 and 1965 the water-line Pilica-Łódź was built. This growth necessitated the development of new, neglected building sites. The authors of these new projects were involved not only in town-planning, but also in region-shaping planning.

In 1954 the Regional Planning Office in Łódź came up for the first time with the General Conception of the Spatial Structure of the Łódź Industrial District. Planners anticipated then a slow growth of population, but at the same time a marked decrease in the employment in the textile industry and growth in the electromechanical and building industry. The plans provided for the development of the service and administrative sector, and university-level personnel training. Planners aimed also at improving the city's water-supply service, and at building new flats in the vicinity of work-places.

The 1960s witnessed great activity on the part of the Regional Planning Office at the Voivodship Commission of Economic Planning in Łódź and the Voivodship Planning Office. They prepared detailed regional plans for the Bełchatów Industrial Region, and a project of the development of the Sulejów storage reservoir on the Pilica River and the Jeziorsko storage reservoir on the Warta River and their environs. These projects were designed not only as water supply for Łódź („Sulejów”), but also with a view to creating recreation grounds for the Łódź Agglomeration inhabitants.

The Resolution of the Council of Ministers of 29 October 1971 made it possible to advance the realization of the economic development and modernization programme for Łódź (including the reconstruction and modernization) of the downtown area. In 1972 a new long-range plan, being a consequence of earlier studies, was accepted. It proposed expanding the city area by about 12%. The plan assumed that Łódź would remain the centre of the agglomeration and the whole region. It considered changes in the functional and spatial arrangement of the city and provided a basis for detailed studies and projects for setting up further residential quarters such as: Radogoszcz-Wschód, Widzew-Wschód and Central Housing Estate. These quarters were to be built mainly in the outer zone of the city, outside the circular railway line, which called for large investments in these areas. It should be mentioned that in the 1970s occurred noticeable improvements in the water-supply and heating service, sewerage, and gas and electricity supply system, which resulted

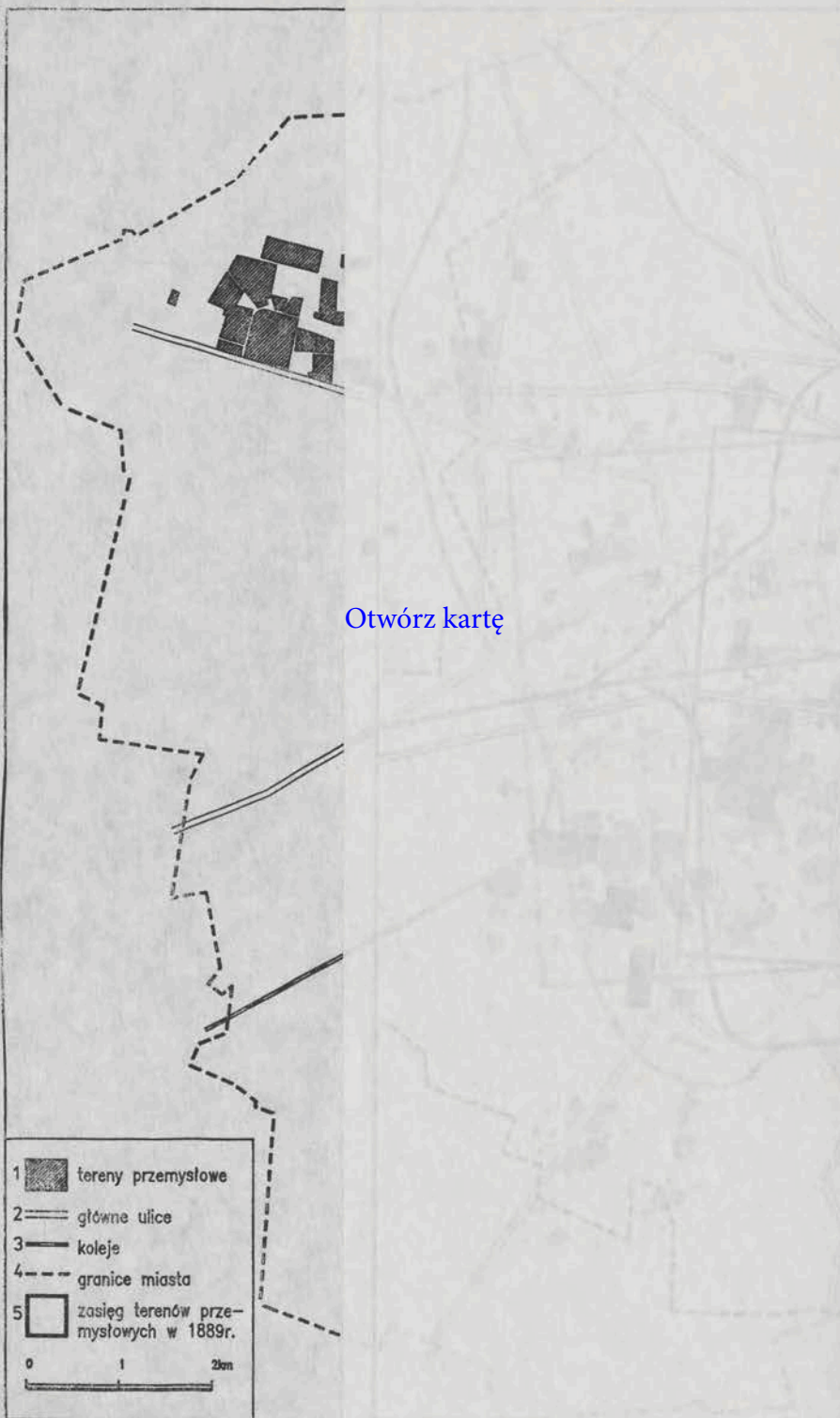


Fig. 8

1 — industrial grounds, 2



1. The drawing is a plan view of a road network.
2. The drawing shows a network of roads and paths.
3. The drawing is a technical drawing of a road network.

from previously started building of power-plants and municipal water-lines. Following the new administrative division of the country the Łódź Development Planning Office prepared in 1977 a new project for spatial development of the Łódź Voivodship. The plan delimited the urban zone embracing all towns of the Łódź Urban Region. The central part of this region was the area of Łódź situated inside the circular railway line. The project recognized the need for intensifying the modernization and reconstruction of the outdated municipal technical infrastructure. Besides it recommended the development of the service trade and the administrative centre in Łódź as a priority. Simultaneously the environment protection strategy was being worked out. The municipal traffic structure rebuilding programme was launched at that time with the expansion of the main communication route along the axis East-West, i.e. Al. Mickiewicza — Al. Piłsudskiego.

The attempts to create a proper spatial arrangement of the city led to the first after 40 years incorporation of suburban areas. In consequence in 1988 Łódź, its administrative area being 295 km, had direct territorial connection with surrounding towns: Aleksandrów, Konstantynów, Pabianice and Zgierz, forming the Łódź Urban Region totalling 3 million inhabitants. The largest towns of this complex, Pabianice and Zgierz, became in 1991 the seats of regional offices within the Łódź Voivodship.

The period of central planning and command economy, which ended in 1989 with the collapse of the communist system, was in the history of our city a phase of full-scale rearrangement and regulation of the urban space, and supplementing its monofunctional, industrial structure with public utilities and the service sector. It can be said that at that time Łódź began to turn from a large industrial city into a multibranch metropolis. The quality of life, especially the dwelling conditions, were greatly improved, although the ecological threat level was not diminished.

It is difficult to assess fairly the achievements in the field of reconstruction of the urban space in view of the imposed at that time principles, requirements and directives, which deprived the spatial structure of individual features characteristic of open planning.

The new period in the history of Łódź, initiated by taking over local control by local government, will be a new phase in the struggle for the development of the city and improvement of its economic situation and living conditions.

CONCLUSION

The above analysis, however short due to technical constraints, of the history of Łódź, including factors determining its development, allows to draw two general conclusions. The first one explains the reasons for its economic ups and downs, the second one shows the relationship between town planning and its effectiveness, and the extent and nature of changes in the natural environment which has considerable impact upon the living conditions of its inhabitants.

Łódź owes its enormous economic and industrial growth in the XIX century and frequent difficulties facing it in the XX century to its geographical position in this particular place in Europe. It is a place where two worlds come together: the world of advanced technical civilization of the West, and the world of backward economy of the East-European countries. Coming into existence and growing on the border-line of these two worlds, Łódź attempted to take advantage of both, adopting technological achievements of the West in order to increase the competitive power of its products, thus winning access to vast and absorptive Eastern markets. This mechanism functioned very effectively in the 19th century, forming the basis for an exceptional career of this city.

Political changes brought about in Europe by World War I and II and recently the break-down of the communist system, are clearly visible on the diagram outlining the economic development of Łódź. Every successive loss of Eastern markets initiated economic regression of the city. The economic future of Łódź depends now on the strategic decision whether and how to make use of the specific location of this city.

The second conclusion drawn from the analysis carried out here points to close interrelation between the political situation in which the development of the city took place, the type of planning, and the attitude towards the natural environment. Leaving out the pre-industrial period four main phases of such relationship may be identified.

A. Łódź, a future centre of the textile region, appeared in the period of limited but vital for the economy independence during the Polish Kingdom.

It was founded as a result of the central government's decision, and its spatial and functional design was also carefully planned. The natural assets of the region were very sensibly taken advantage of, the result being a complete dwelling-production settlement ensuring quite satisfactory living conditions.

B. Period of rapid economic growth of Łódź occurred at the time when Poland lost its independence and self-government, which meant

forsaking any town-planning activities. It was reflected in the city's uncontrolled and chaotic development, and resulting destruction of the well-ordered spatial and functional structure, as well as total degradation of the natural environment. Living conditions of the city dwellers deteriorated noticeably, and apart from a narrow circle of affluent citizens were definitely below the standard.

C. Regaining independence by Poland after World War I created a possibility of establishing municipal self-government and independent planning of the city's development. This period brought a number of rather unsuccessful attempts to reconstruct the city according to a uniform plan, though several successful efforts aimed at making improvements and bringing in some mechanism preventing further degradation of nature were made. The downward tendency of living standard in the city was stopped, and prospects for the future were good.

D. The last closed stage in the development of Łódź falls at the time of the Communist rule. Central planning in both the economy and territorial development was characteristic of this period. For Łódź it was a time of a thorough and methodical reconstruction (except for the city centre) of its spatial and functional structure. Dwelling and sanitary conditions were also much improved. Visible amelioration of life in the city did not regrettably include the recovery of the devastated natural environment.

The turn of the 1980s and 1990s brought not only a change of the political and economic system in Poland, but also a comeback to local self-government. Łódź has now been governed for 3 years by local authorities elected by the inhabitants. It has been too short a period to assess the achievements in urban planning and revalorization of the natural environment, and ensuing amelioration of living conditions.

The industrial history of Łódź reveals a regularity consisting in coincidence between periods of central planning (Polish Kingdom, Communist government) and harmonious spatial and functional development of the city, as contrasted with spatial and functional chaos, irrational growth and damage caused to the ecology accompanying total lack of central control.

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CZŁOWIEK, ŚRODOWISKO I PLANOWANIE W ROZWOJU ŁÓDZKIEGO REGIONU MIEJSKIEGO

Streszczenie

Przeprowadzona, z konieczności skrótowo, analiza historii Łodzi z uwzględnieniem głównych czynników decydujących o jej rozwoju pozwala na wyciągnięcie dwóch wniosków generalnych. Pierwszy z nich tłumaczy genezę wzlotów i upadków gospodarczych Łodzi, drugi wyjaśnia zależności między planowaniem miasta i jego skutecznością a stopniem i charakterem przekształceń środowiska przyrodniczego, które w znacznym stopniu rzutuje na warunki życia mieszkańców.

Wyjątkowy rozwój gospodarczy Łodzi przemysłowej w XIX w. oraz częste kłopoty, jakie to miasto przeżywa w wieku XX zawdzięcza Łódź swojemu położeniu w tym miejscu Europy. Jest to bowiem miasto pogranicza gospodarczego dwóch światów, świata przodującej cywilizacji technicznej na zachodzie Europy oraz opóźnionej cywilizacji gospodarczej, jaka charakteryzuje obszary Europy wschodniej. Łódź, powstając na zetknięciu tych dwóch światów, starała się wykorzystywać zdobycze techniczne krajów zachodnich, co umożliwiało jej łatwiejsze zdobywanie chłonnych rynków wschodnich. Mechanizm ten z niewielkimi zakłóceniami funkcjonował sprawnie w wieku XIX, będąc podstawą wyjątkowej kariery tego miasta.

Zmiany polityczne, jakie przynosiły Europie I i II wojna światowa, a ostatnio upadek komunizmu, są bardzo czytelne na wykresie rozwoju gospodarczego Łodzi, na którym każdorazowa utrata wschodnich rynków zbytu odznacza się regresem gospodarczym miasta. Przyszłość gospodarcza Łodzi leży obecnie w decyzji strategicznej czy i jak wykorzystywać funkcję położenia pogranicznego tego miasta.

Drugi z wniosków wynikających z przeprowadzonej analizy wskazuje na bardzo wyraźne korelacje między sytuacją polityczno-ustrojową, w jakiej rozwijało się miasto, charakterem planowania, a stosunkiem do środowiska przyrodniczego. Pomijając okres przedprzemysłowy można wskazać na wyraźne cztery etapy tych zależności.

A. Łódź jako centrum przyszłego okręgu przemysłu włókienniczego powstała w okresie ograniczonej ale gospodarczo znacznej autonomii konstytucyjnej Królestwa Kongresowego. Powstała jako wynik decyzji władzy centralnej, tak też została zorganizowana przestrzennie i funkcjonalnie. Ówczesny planista wykorzystał racjonalnie istniejące tu walory środowiska przyrodniczego tworząc zamknięty układ osadniczo-produkcyjny stwarzający znośne warunki życia mieszkańców.

B. Okres największego rozwoju gospodarczego Łodzi łączy się z utratą wszelkiej samodzielności zarówno państwowej, jak i samorządowej, co znajduje swoje odbicie w zaniechaniu wszelkich prac planistycznych. Efektem tego jest żywiołowy i chaotyczny rozwój miasta, który doprowadził nie tylko do zniszczenia uporządkowanej

struktury przestrzenno-funkcjonalnej, ale również do zupełnej degradacji środowiska przyrodniczego. Warunki życia mieszkańców Łodzi w tym okresie, z wyjątkiem niewielkiej grupy ludności zamożnej, stały się substandardowe.

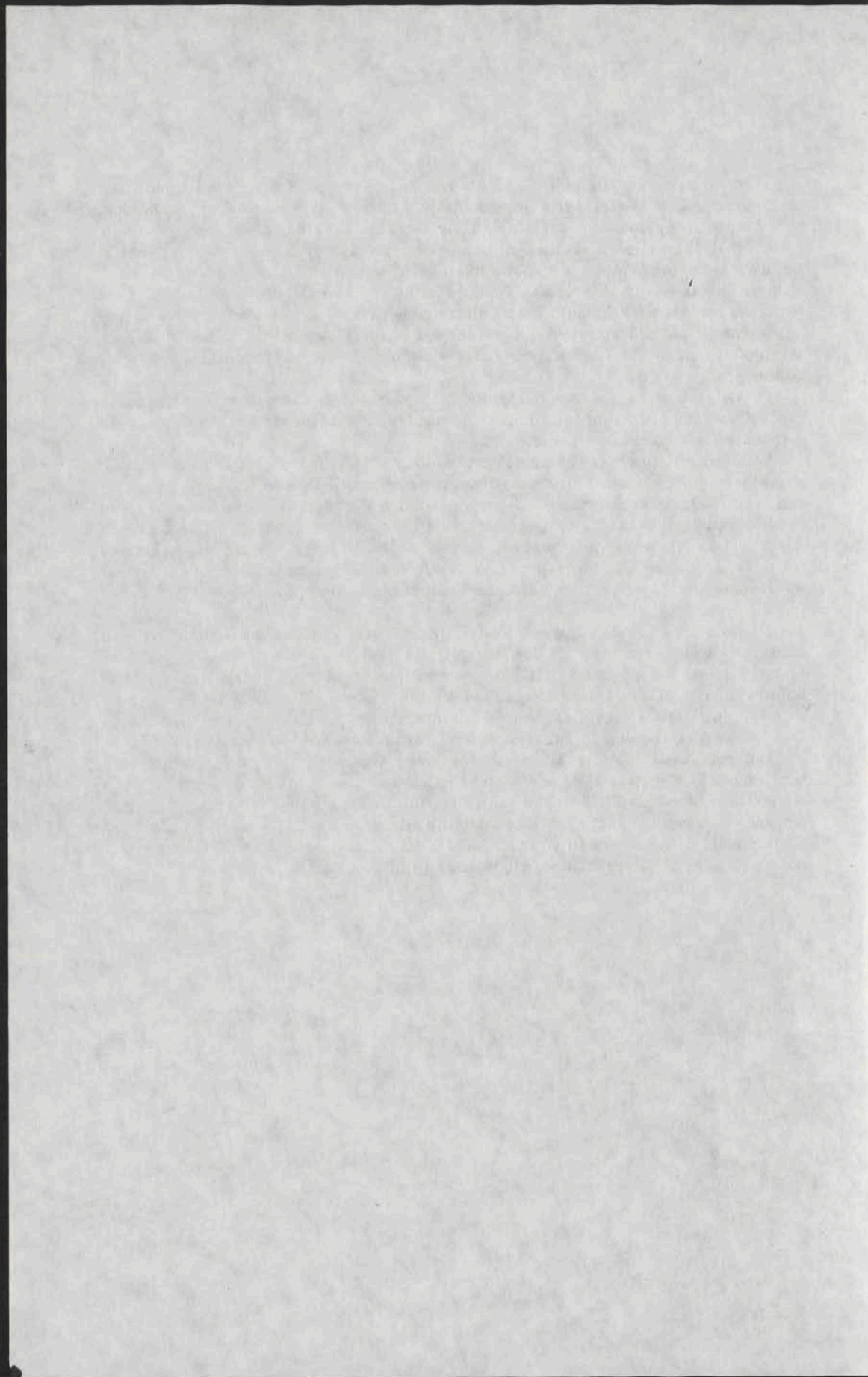
C. Odzyskanie przez Polskę niepodległości po I wojnie światowej stworzyło możliwość samorządowego decydowania o losach miasta. Okres ten odznacza się kilkoma mało udanymi próbami rozwoju miasta według jednolitego planu, choć tworzone mechanizmy hamują dalszą degradację, w tym również środowiska, a podejmowane działania starają się porządkować zastany stan z poprzedniego okresu. Warunki życia w mieście w tym okresie stabilizują się z tendencją do pewnej poprawy.

D. Ostatni, w całości zamknięty już etap w rozwoju Łodzi przypada na czasy rządów komunistycznych i odznacza się centralizmem nie tylko w zarządzaniu gospodarką, ale również w planowaniu.

W Łodzi jest to okres generalnej przebudowy miasta (z wyjątkiem Śródmieścia), porządkowania jego struktury przestrzenno-funkcjonalnej oraz wyraźnej poprawy warunków życia, zwłaszcza w sferze mieszkaniowej. Jednocześnie jest to okres daleko posuniętej standaryzacji planistycznej upodabniającej Łódź do wielu innych miast Polski. Podejmowane w tym okresie działania doprowadziły do wyraźnej poprawy warunków sanitarnych miasta, w niewielkim jednak stopniu miały wpływ na rewaloryzację wciąż zdegradowanego środowiska przyrodniczego w tej części Polski.

Przełom lat osiemdziesiątych i dziewięćdziesiątych to nie tylko zmiana systemu polityczno-gospodarczego w Polsce, ale również powrót do samorządności lokalnej. Łódź od trzech lat rządzona jest przez władze samorządowe wybrane przez mieszkańców miasta. Trzy lata to okres zbyt krótki, aby ocenić osiągnięcia w zakresie planowania miasta i jego efektywności nie mówiąc już o rewaloryzacji zniszczonego środowiska przyrodniczego oraz poprawie warunków życia mieszkańców.

Dotychczasowa historia Łodzi przemysłowej wskazuje, iż rozwój planistyczny tego miasta następował zawsze w okresie planowania centralnego (okres Królestwa Kongresowego, okres PRL), malar natomiast lub wręcz zanikał w sytuacjach krańcowych, to znaczy pełnej samorządności lub utraty wszelkiej władzy państwowej. Konkludując stwierdzoną tu prawidłowość z zainteresowaniem należy obserwować nową sytuację, w jakiej znalazło się obecnie to miasto.



Tadeusz Markowski, Janusz Kot

PLANNING FOR STRATEGIC ECONOMIC DEVELOPMENT OF ŁÓDŹ — CONCEPTS, PROBLEMS AND FUTURE VISION OF A CITY

INTRODUCTION

The whole economic development of Łódź in the 19th and 20th century was connected with the textile industry. It is a city, which used to be called the Polish Manchester. Its growth and prosperity were always determined by an access to the Eastern markets. In the postwar period, it was the textile-clothing industry of Łódź, which financed, to a great extent, Poland's economic development. The socio-political system imposed upon Poland and its membership in the bloc of communist countries were a major obstacle to Poland's participation in the international division of labour. The Polish economy was cut off, to a significant degree, from the civilizational and technological progress.

The international competition and the intensification of world economy influenced on the economies of the Eastern bloc countries with a considerable delay. Especially the production of textile industry was not exposed to any bigger competition since the early seventies. It was still at the beginning of the seventies that many textile enterprises were using looms fifty or even more years old. That was, among others, caused by the fact that the specific Soviet market was imposing mass production on the local industry without any quality requirements.

The economic structure of Łódź began changing when Poland was partly opened to Western Europe starting from 1971. That opening to the West and foreign credits extended to Poland found expression in a decision made by the Government to modernize the textile industry. Simultaneously, due to a water-absorbing character of this industry and a growing water deficit in the city some investments were also made in less water-absorbing industries (e.g. electrical engineering, electronic).

It is not our aim to present the economic history of Łódź, still we would like to express that the seventies meant, for this city, a gradual

departure from the textile industry domination in its production structure. However, at the time the communist system collapsed the textile-clothing sector was still employing over 50% of the entire local labour force.

It was Łódź which was the most severely affected by the fall of communist system and the rapid deterioration of economic situation in Russia, as well as the opening of Poland to international competition. A restricted access to the Eastern markets, an aggressive entry of Asian goods into the Polish market, and a dumping price competition applied by other developed countries undermined the financial standing of large state-owned enterprise unprepared for the new competitive conditions. It was, among others, for these reasons that the local self-government was forced to start thinking about comprehensive aspects of the city's economic restructuring relatively soon. An additional reason was the fact that expectations of the local authorities regarding an active protective policy of the Government towards the collapsing textile industry and endeavours to obtain financial assistance for the city proved to be futile.

We shall not inquire here into such issues as whether such assistance on the part of the new, non-communist Government was possible at all or the reasons accounting for the fact why the Government does not pursue a firm industrial policy. They could be an object of a separate major study.

PLANNING OF ECONOMIC DEVELOPMENT IN ŁÓDŹ

The assumption of power by the Solidarity-led Government in 1989 and the introduction of self-governing economy at the local level in May 1990 released a common euphoria among the new power elites regarding possibilities of rapid economic development. There was a general conviction that market economy mechanisms are the best means of regulating and restructuring the economy. Still in the autumn of 1990 anybody who spoke about preparing plans and programmes of restructuring of the city's economy could be easily accused of attempts to restore a compromised planned economy. The term "planning" itself had undesirable connotations, as planning meant communism while a free market was treated to by synonymous with capitalism and prosperity. However, that extremely simplified view began to undergo changes under an influence of deepening recession.

When it appeared that within the new system economic entities are to be independent of the central and local government there appeared

a problem: how to plan and stimulate economic growth in the situation when command-type instruments had been abandoned as obsolete and ineffective? The old methods of central planning and patterns of thinking connected with them proved to be useless in the new economic conditions.

A practical knowledge about the local planning of economic development in Poland is in fact much worse than that of central planning. First, the local self-government did not exist till 1989. Second, the policy and the development belonged to prerogatives of the Centre while the local government was performing mainly the role of a docile executor of tasks and a transmission system for collecting data and information. Thus, it is a completely new problem for self-governments. The Polish literature of the subject which could be used for the training of new self-government employees, councillors and experts was still missing even at the beginning of the nineties.

An important role in the field of developing the methodology of planning and stimulating regional development in Poland is played by The European Institute of Regional and Local Development at the Warsaw University. Owing to endeavours of professors: A. Kukliński, B. Jałowiecki and G. Gorzelak resources were secured for the financing of studies in the field of regional and local studies, while Polish researchers dealing with this problem could be partly integrated. In the *Regional and Local Studies* issued by this Institute there, a number of publications of the Polish regionalists with an extensive international experience can be found. The Polish science dealing with local and regional development is concentrated in just a few university centres. Apart from Warsaw and Łódź, these are, first of all, Poznań, Katowice, Wrocław.

The Department of Urban Economics at the Łódź University has made a significant contribution in the area of disseminating the methodology of local development. In the years 1990—1992 T. Markowski published three articles on this subject, out of which one in the *Regional and Local Studies* issued by the of Warsaw University and two in a specialist journal for local self-governments (*"Territorial Self-Government"* edited monthly).

The above mentioned Institute published also a book entitled *"Commune, Entrepreneurship, Promotion"* in 1992, in which there were translated fragments of books and papers of the best Western specialists in the field of local development including bigger fragments of E. Blakely's book *"Planning Local Economic Development"*. We are mentioning here the Polish translations of E. Blakely's book, because its American edition provided a basis for the Łódź research team elaborating a conception of the local strategy of economic development.

However, due to specific characteristics of the period of transformations in the Polish economy it was necessary to make some modifications.

DETERMINANTS OF SYSTEM TRANSFORMATION AND ADOPTED METHODOLOGY

At the time the first attempts were made to restructure the Łódź industry, the main attention was focused on drafting restructuring programmes, commonly known as "rescue programmes", for the industry in the city of Łódź and its region, with a special emphasis put on light industries, i.e. industries affected most adversely by the economic crisis and creating the biggest number of jobless people. The Government of the Łódź Province, in accordance with the valid system of law, is the so-called "founding organ" for many state-owned enterprises. These branch programmes of restructuring were omitting, however, highly significant social effects of restructuring processes and ignoring the problems accompanying a comprehensive restructuring of the city's entire economy.

In 1991 the research team from the Department of Urban Economics submitted an offer for elaborating a strategy of the city's economic development. It was our assumption to start here a continuous process of planning oriented at the local economic development in new conditions of market economy. In this project, the Department of Urban Economics was to cooperate with the Bureau of Privatization and Foreign Investments. It is an agency of the local self-government, whose statutory tasks apart from promotion of the city include also the issue of the city's economic development.

While adopting the conception of strategic planning of local development, the main instrument for determining the directions of economic development and goals conditioning this development was a commonly known method of SWOT analysis (Strengths, Weaknesses, Opportunities, Threats).

Our method assumed permanent participation of representatives of the city authorities, councillors, persons professionally dealing with politics, representatives of different professional milieus and groups of entrepreneurs in the formulating of strategy and in analyzing strengths and weaknesses of the local economy. Despite many formal declarations of readiness to cooperate we have been unable to accomplish fully the accepted goals of integrating local business groups for this programme. The procedure of elaborating a development strategy was divided into several stages. Each completed stage was consulted with the above

mentioned persons and organizations. Stage One consisted of determining potentialities, opportunities, weaknesses and threats existing in this city on the basis of statistical data, information and judgements, sometimes subjective, collected from persons and institutions operating in Łódź. That stage was ended with a seminar, during which the authors had possibility of introducing corrections and alterations in accordance with the remarks made both by practitioners and by officials and politicians.

Stage Two involved determining the strategic goals of the city's economic development, which were also consulted as before. Stage Three allowed to prepare a final document containing a description of strategic goals, ways of attaining them, and recommendations regarding actions to be undertaken by the city authorities in a short- and long-term in relation to the city's internal and external systems. Moreover, there was designed a data base system with information useful for external investors and those embarking upon new types of economic activity in this city. It is worth mentioning that each stage was evaluated by a group of independent experts appointed by the Municipal Office, and their opinions were always taken into consideration and incorporated in the programme by its authors.

Within the framework of the third stage in elaborating the economic development programme there was performed a two-directional analysis of interrelationships between the defined goals. The authors applied here the brainstorming method determining two-directional relationships in three categories, i.e. important, very important, and the most important for the city's economic development and its restructuring. That method allowed to define an internal hierarchy of formulated goals on the basis of SWOT analysis.

During the whole period when the strategy of the city's economic development was being elaborated it was accompanied by an immense interest shown by mass media and the society. Still, it would happen quite often that unfamiliarity with the problems and misunderstanding of the role and importance of strategic planning by journalists led to erroneous information provided for the local society and an improper interpretation of the authors' intentions. It was also some kind of an impediment. It could be said, however, that along with the progress made in work on the programme the idea of preparing such strategy and its main formulations were gaining more and more supporters. (The list of goals sought by this strategy can be found in an appendix to this article).

The submitted programme of economic development strategy will be a basis for launching the next decision-making and planning programme strictly connected with the strategic planning of local economic develop-

ment. This stage will involve selecting organizational activities and investment projects, whose implementation gives a chance for commencing restructuring processes in the directions outlined in this document.

Decisions about chosen investment activities in accordance with assumptions of the methodology of strategic planning should precede further comprehensive economic-financial analysis including generally known elements of such analysis, that is a feasibility study, a business plan, a period needed for completion of an investment project, or rate of return. Such projects prepared in a great detail according to standards typical for a market economy may and should be a basis for a search for sources of financing also outside the local system, in this abroad.

Within the framework of prepared programme of restructuring and economic development of Łódź the research team outlined also a target vision of the city. The basis for its formulating were also the results of SWOT analysis.

VISION OF ŁÓDŹ

Both universal laws and traditions, as well as heritage from past periods were taken into account when defining the vision of Łódź. This vision discounts advantages resulting from the city history, while simultaneously it points at opportunities and directions of development reflecting the requirements of modern economy. The history of Łódź shows exactly, clearly that it developed as an industrial city. Consequently, it has both manufacturing and industrial traditions and an appropriate infrastructure for performing such function.

An obvious conclusion is that there should be tapped industrial traditions of Łódź and preserved its functions of an industrial city. A separate issue is the structure of industries in Łódź. A diversification of the city's industrial structure proposed in the enclosed list of goals certainly does not mean the severing of ties with the city's traditions as a centre of textile industry. However, there should be sought the enriching of the city by industries being carriers of modern technology.

In accordance with the above remarks and analysis of potentialities existing in Łódź it can be said that the pole of growth can be strengthening the role of Łódź as a centre of fairs, exhibitions and trade for the area of Central Europe acting also as a middleman in East-West trade. Such opportunity is afforded by the location of Łódź and certain traditions existing in this city as regards organization of international fairs and availability of specialists in this field.

Moreover, attempts should be made to create here a centre of fashions.

Our suggestion is a more effective tapping of the light industry potential (particularly clothing and leather industries) along with modern directions in designing developed in the Academy of Arts in Łódź. For this goal to be accomplished it would be necessary to establish and expand new forms of cooperation between the industry and art schools. They should allow all partners to reap benefits and discount both their world-wide reputation and possibilities remaining at their disposal.

The next element of the city's future development should become its health care facilities. What is meant here are not only the role of Łódź as a research-didactic centre of a centre of medical care with unique specializations on the national scale but also the existing possibilities of developing industries producing equipment for modern health care, which could be both used locally and exported.

Another important element of a comprehensive vision of the city is strengthening the role of Łódź as a centre of research and education. This element fits into the city's development as an industrial centre, as the existing facilities could promote both technological development and other areas of research and sciences (in this economic sciences), modern organization and management, environment protection, etc.

One of the elements of the future vision of this city will be its present position as a centre of culture and arts of international significance. That should pave the way for enhancing attractiveness of the city and altering a popular opinion that Łódź is exclusively an industrial city in the 19th century meaning of this term. Moreover, there is a potential in Łódź allowing to put such vision in to force.

The last element that should be considered is changing Łódź into an ecologically healthy and clean city. It does not mean that Łódź should become a resort but rather a modern city of the end of the 20th century, which should meet minimum requirements in this field.

All activities, which will be undertaken when realizing the vision of this city outlined in such way, should be accompanied by awareness of the role of national centre performed by Łódź on the map of Poland. Our city, apart from its function of a regional service centre, is also a centre of national significance, and this fact should be reckoned with and also confirmed by a vision to be realized in the future.

We are aware that any attempt to create a vision of a city will always have traits of some kind of a visionary disposition. Without it, however, no progress is possible. This which seems impossible today may prove to be possible tomorrow when there are a determination to act and a clearly defined goal. It is also our hope. Still, such visionary disposition must be reinforced by a familiarity with laws governing a market economy at the end of the 20th century and with local conditions.

That was also the mission of the authors proposing the above mentioned main directions of final transformations.

PROBLEMS AND THREATS IN ELABORATING AND IMPLEMENTING THE STRATEGY

Due to a specific nature of the transition period and limited financial resources for drafting a comprehensive project it became necessary to accept the existing constraints. One of major problems was unavailability of appropriate data concerning economic aspects of the city. Most statistical materials were too aggregated or they simply referred to the entire administrative province of Łódź. The system transformation, the growing role of private sector, changes in collecting national statistics, etc. caused that whole data series referring to the local economy were no longer accessible. Thus, a complete diagnosis of the existing situation and an identification of occurring transformation processes was considered as impossible. On the other hand, the authors entertained some doubts as to whether additional empirical studies undertaken on a large scale would reveal many new significant elements at the time when it was necessary to determine desirable directions as soon as possible.

Such partly intuitive "method" is justified by the revolutionary nature of changes occurring at the present time, a big degree of uncertainty with regard to future directions of transformations and their prediction on the basis of only emerging processes, and a negative experience connected with the restructuring programme of Wałbrzych — a traditional city in a coal-mining region, in the case of which very labour-intensive diagnostic studies virtually blocked any chance of elaborating guidelines for the provincial and local authorities.

In our opinion, the greatest obstacle in supporting effectively market-oriented behaviours of economic entities is absence of a desirable institutional-organizational infrastructure supporting the market. That is why our project at the stage discussed here was oriented primarily at preparing the city for investment processes, creating a climate of entrepreneurship and cooperation between the city authorities and the economic sector.

The promotional activity of the local authorities and other institutions assisting the economic sphere meets here numerous obstacles in the form of an inability of local economic systems to benefit from the existing chance of establishing economic cooperation with Polish and foreign partners.

We believe that one of fundamental barriers is the lack of cooperation between "actors" of the local economy, which weakens the attained

effects and disperses scarce resources. Therefore, when taking measures aimed at promoting local economic development a principle should be a critical self-assessment of entities to be included in this process and a skillful drawing of conclusions that might enhance the efficiency of decision-making and organizational processes (what is meant here is elaboration of routine techniques allowing to draw conclusions from mistakes made and shortcomings in order to guarantee a continuous upgrading of organization and management techniques). It will be necessary for the city authorities and other local actors to abandon reactive attitudes (that is, let us do something, because somebody shows an interest in us or submits some offer) to proactive attitudes (this is our offer and we want such and no other investor).

The biggest threat for implementing the adopted strategy of economic development will be human and organizational factors. This is to say, the success will depend not so much on a quality of a document submitted to the city authorities but rather on qualifications of persons responsible for economic development. These qualifications should include a skill of cooperating harmoniously and interpreting jointly and clearly the sought goals. They will be also required, which is extremely important, to understand well the laws governing a local and regional economy in the situation of its internationalization, accelerated and uncontrolled restructuring and privatization, as well as a higher economic risk ensuing, first of all, from unstable legislation and unclear economic policy of the Government.

A threat for a consistent long-term implementation of economic strategy may also be excessively high expectations and a search for a fast and easy success. Many decision makers (similarly to numerous groups of opponents) do not take into account an objective phenomenon, i.e. an inertia of economic systems, which intensifies particularly at the time of recession (not to mention the causes of such inertia resulting from deep processes of system transformations). It means that desirable processes are as a rule released with a long delay. Without this awareness the launching of restructuring activities in particular regions must be a failure involving wastage of outlays made.

The regional and local restructuring in many developed countries showed that only a consistent and long-term policy of assistance in transformations yields desirable effects, which are often higher than those assumed, and sometimes completely different qualitatively. The time during which outlays are returned reaches 10 to 15 years in many cases. It is in such time horizon that we look at the process of planning economic development of the city of Łódź.

A specific feature of regional and local restructuring programmes in Poland will be, particularly during the initial period of their intensive introduction, rather their revolutionary than evolutionary character. Hence, there should be expected rapidly emerging destructive social, institutional and organizational barriers connected with the old way of thinking, petrified system of values and inclinations to preserve pathological structures yielding short-term benefits to those interested in retaining them. This remark fully refers to Łódź as well.

In our method of introducing a local economic strategy we proposed to the city authorities that there should be appointed a professional applications team. We also pointed at the necessity of developing a system monitoring economic processes in Łódź as soon as possible, which would allow to verify the programme of restructuring when new socio-political, economic and legal circumstances — both internal and external (national and international) appeared.

Such applications team should deal with a further verification of goals and ways of activity both at an operational and strategic levels. It would be also responsible for finding further unconventional ways of activity allowing to accomplish the planned goals. After all, many new ideas and initiatives may appear at the time of introducing the local economic development strategy. In many activities, allowances will have to be made for a "hybrid" situation of the local economy being both a heritage of former economic and legal systems as well as still defective market mechanisms and underdevelopment of promarket institutions. These unconventional solutions will be a response to a specific nature of the period of transformations. It will be often impossible to transfer the experience of other countries in its unchanged form, especially in the case of short-term activities.

GOALS PROPOSED IN THE PROGRAMME OF THE CITY'S ECONOMIC DEVELOPMENT STRATEGY

The goals of economic development strategy were divided into three groups. The first group consists of two goals. These are:

1. Creating a balanced and differentiated structure of manufacturing and service activity.
2. Strengthening and expanding income-earning base of the city.

These goals are closely interrelated. Their choice as supreme goals seems to be obvious and it does not require any additional comments.

The second group is composed of five goals carrying consecutive numbers from 3 to 7. These are:

3. Creating a fashion centre in Łódź on the basis of available textile-clothing, designing and artistic potential.
4. Tapping the existing medical potential (research and didactic centres, hospitals, specialist clinics).
5. Strengthening the function of a national and regional centre of services — economic, cultural, scientific (capital of the region).
6. Strengthening and further development of the city's function as a centre of fairs and exhibitions.
7. Strengthening and benefiting from the role of Łódź as a centre of research and higher education.

The goals belonging to this group obviously pave the way for accomplishing the goals belonging to the first group. They are connected with strengthening and developing these functions of the city which may become leading and town-formative functions in the immediate future. The choice of these functions and the definition of goals in such and no other form is, of course, a result of a diagnosis performed earlier. These goals ensue from potentials identified in various fields of activity undertaken in this city.

The third group includes further 23 goals numbered from 8 to 30. These are:

8. Accelerating privatization processes and regulating ownership relations on areas of decisive importance for the city's development.
9. Creating favourable conditions releasing local economic initiatives.
10. Mobilizing the local capital.
11. Controlling actively the labour market with regard to goals of the region's restructuring.
12. Stimulating a territorial solidarity among local economic units.
13. Intensifying and strengthening ties between science and local economy.
14. Tapping potential opportunities afforded by the location of Łódź in the centre of Poland and Europe.
15. Upgrading the city's spatial development and transport systems important from the viewpoint of assisting and intensifying development processes.
16. Promoting the development of ties and cooperation between the public sector and the private sector in the field of joint investment undertakings.
17. Establishing good cooperation ties with neighbouring administrative districts in the sphere of joint undertakings.
18. Seeking to attract to Łódź the seats of government organizations, international associations and foundations, etc. operating in supralocal systems.

19. Tapping and stimulating the interest of Polish and foreign investors in Łódź.
20. Gearing polarization processes of the society into social economic initiatives.
21. Creating a positive image of the functioning of the local self-government on a local, regional, and also international scale.
22. Seeking support in the Parliament and the government administration for the city's development goals through representatives from Łódź.
23. Winning support of mass media for promotion of the city's development.
24. Benefitting from a close proximity of Łódź to the capital city of Warsaw.
25. Using nearby airports (Lublinek, Łask).
26. Using a container station located at Olechow.
27. Improving the state of the city's environment, especially in its central zone.
28. Using council housing to mobilize market processes and stimulate housing construction.
29. Creating conditions for a development of a cheap hotel-boarding house facilities reaching the European standards.
30. Tapping nature resources (Łagiewniki Forest, Jana Ponds, Stefański Ponds, Zdrowie Park) to expand tourist-recreational activity.

The division of above goals into three groups is a gradual transition from the most general and universal goals from the viewpoint of local economic development to goals-solutions connected with specific characteristics of the city.

Source: Strategy for Economic Development of Łódź 1992 (T. Markowski, A. Jewtuchowicz, P. Bury, J. Kot, H. Rouba, D. Stawasz).

Tadeusz Markowski, Janusz Kot

PROPONOWANIE STRATEGICZNEGO ROZWOJU EKONOMICZNEGO ŁÓDZI — KONCEPCJE, PROBLEMY, PRZYSZŁA WIZJA MIASTA

Streszczenie

W 1991 r. Zespół Zakładu Ekonomiki Rozwoju Miast złożył ofertę opracowania kierunkowej strategii rozwoju gospodarczego miasta. Założeniem naszym było rozpoczęcie w Łodzi trwałego procesu planowania na rzecz lokalnego rozwoju gospodarczego w nowych warunkach gospodarki rynkowej. Do współpracy z zespołem włączone zostało Biuro Prywatyzacji i Inwestycji Zagranicznych. Jest ono

agendą łódzkiej władzy samorządowej, której statutowym zadaniem oprócz promocji miasta jest właśnie sprawa rozwoju gospodarczego miasta.

Przyjmując koncepcję planowania strategicznego na rzecz rozwoju lokalnego podstawowym narzędziem dla określenia kierunkowych celów rozwoju gospodarczego oraz celów warunkujących ten rozwój była metoda analizy SWOT (siły, słabości, szans i zagrożeń).

Formułowanie strategii i analizowanie siły i słabości lokalnej gospodarki zakładało stałą partycypację przedstawicieli władz miasta, radnych, osób zawodowo zajmujących się polityką, przedstawicieli różnych środowisk zawodowych oraz grup przedsiębiorców.

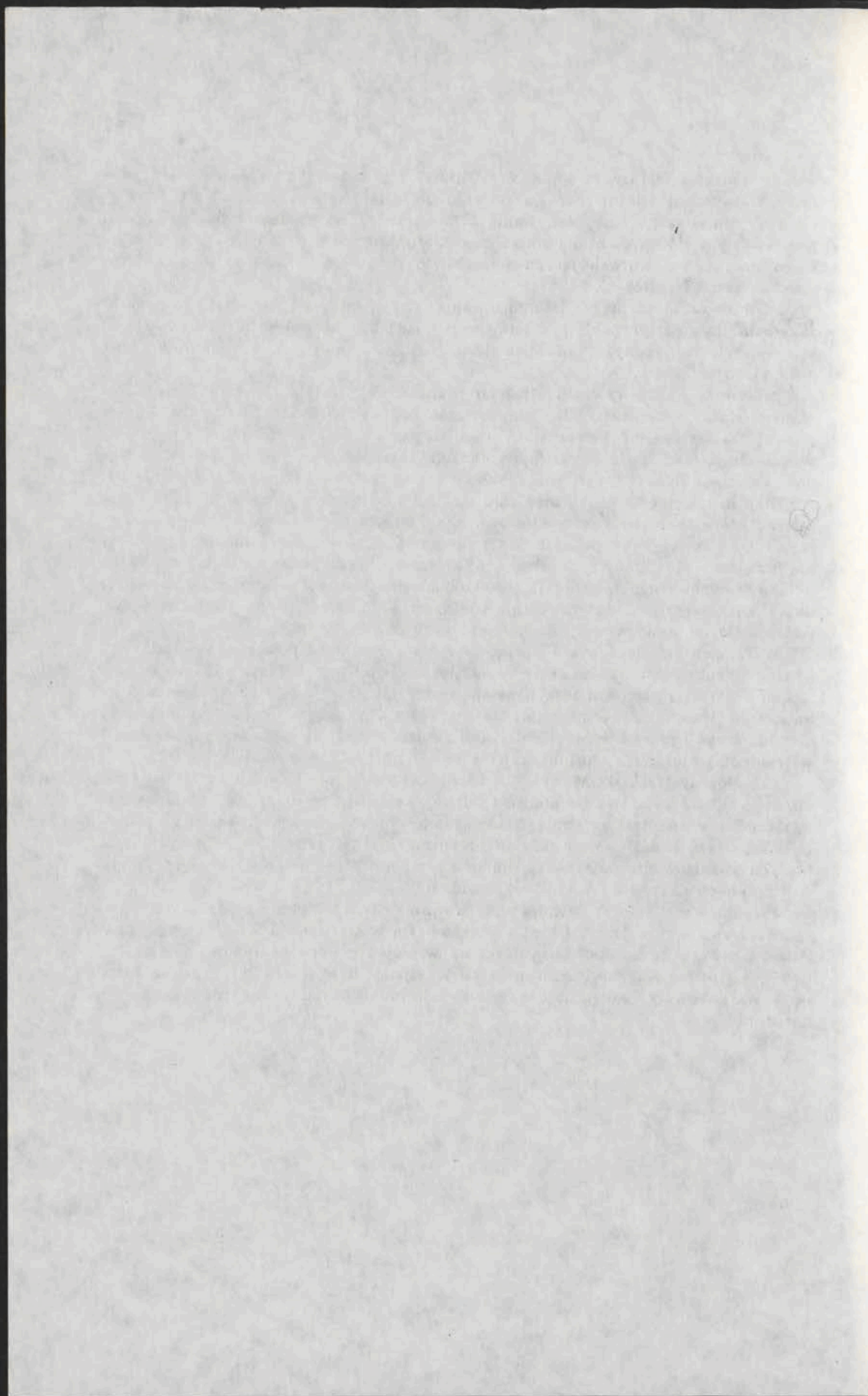
Procedura opracowywania strategii kierunkowej została podzielona na kilka etapów. Każdy zakończony etap opracowania poddawany był konsultacjom. Etap I polegał na określeniu potencjałów, możliwości, słabości i zagrożeń istniejących w mieście na podstawie posiadanych danych statystycznych, jak i informacji i sądów, czasami subiektywnych, zebranych od osób i instytucji działających w mieście.

Etap drugi polegał na wyznaczeniu strategicznych celów rozwoju gospodarczego miasta, które także były konsultowane. Etap trzeci to dokument końcowy zawierający opis celów strategicznych jak i sposobów ich osiągnięcia oraz rekomendacje dla działań władz miasta w długim i krótkim okresie czasu, w odniesieniu do układu wewnętrznego miasta jak i układu zewnętrznego. Ponadto zaprojektowano układ bazy danych z informacjami istotnymi dla zewnętrznych inwestorów lub podejmujących nowy rodzaj działalności gospodarczej w mieście.

W ramach trzeciego etapu opracowywania rozwoju gospodarczego została wykonana dwukierunkowa analiza współzależności między zdefiniowanymi celami. Zespół autorski zastosował tutaj „metodę burzy mózgów” ustalając dwukierunkowe związki w trzech kategoriach: „ważne, bardzo ważne, najważniejsze” dla rozwoju gospodarczego i procesów restrukturyzacji miasta. Metoda ta pozwoliła na określenie wewnętrznej hierarchii sformułowanych celów na podstawie analizy SWOT.

Przedłożony WŁADZOM MIASTA kierunkowy program strategii rozwoju gospodarczego będzie podstawą do podjęcia dalszej, kolejnej fazy decyzyjno-planistycznej związanej immanentnie ze strategicznym planowaniem lokalnego rozwoju gospodarczego. Tą fazą będzie wybór działań organizacyjnych i projektów inwestycyjnych, których zrealizowanie daje szansę na uruchomienie procesów restrukturyzacyjnych w kierunkach nakreślonych tym dokumentem.

Prezentowany referat zawiera opis uwarunkowań społeczno-politycznych i gospodarczych rozwoju Łodzi. Określa wizję miasta w warunkach wzrastającej globalizacji i otwartości polskiej gospodarki na współpracę międzynarodową. Szczególną uwagę zwrócono na zaprezentowanie barier społecznych i organizacyjnych, które będą warunkowały skuteczność osiągnięcia sformułowanych celów rozwoju gospodarczego.



Wojciech Michalski

CHANGES IN THE ADMINISTRATIVE DIVISION OF THE COUNTRY AND PLANNING; THE EXAMPLE OF ŁÓDŹ REGION

CHANGES IN THE ADMINISTRATIVE DIVISION AFTER THE SECOND WORLD WAR

The Second World War introduced crucial political, territorial and administrative changes in Poland. The structure of administrative division of the country was one of the domains involved in those processes. Initially 14 counties (voivodeships) of different size and origin were created. Some of them reverted to a shape of historical provinces (Wielkopolska, Pomorze Zachodnie), the other ones to the voivodeships of the inter-war Poland (Kraków v.), and yet the others had chance scopes (Kielce). In 1954, the territorial reform was introduced, that created three new v. and changed the boundaries of many others. New regions emerged in West Pomerania, Wielkopolska and Silesia, dividing the areas of old historical provinces. Corrections of the boundaries, often substantial ones (e.g. Częstochowa moved from Kielce v. to Katowice v.), also contributed to the obliteration of historical frontiers with an exception of the partitions' boundary after the Vienna Congress.

The division of 1954, survived for quite a long as for Polish conditions time, until 1975. The successive reform, of a typical political character (deconcentration of the regions in order to concentrate the central power), did not refer to any rational factors. It fully erased the historical boundaries of the provinces, the partitions and old administrative division, both on the level of a v. and the lower level as well (fig 1). 49 newly created v. had no functional support as, from one side, the little towns of a local scope became the capitals of the regions (e.g. Suwałki, Sieradz, Tarnobrzeg), on the other side, the largest urban agglomerations have been recognised as the urban v. The same limited drastically their areas when compared with the real zones of activity (Warsaw, Łódź, Kraków).

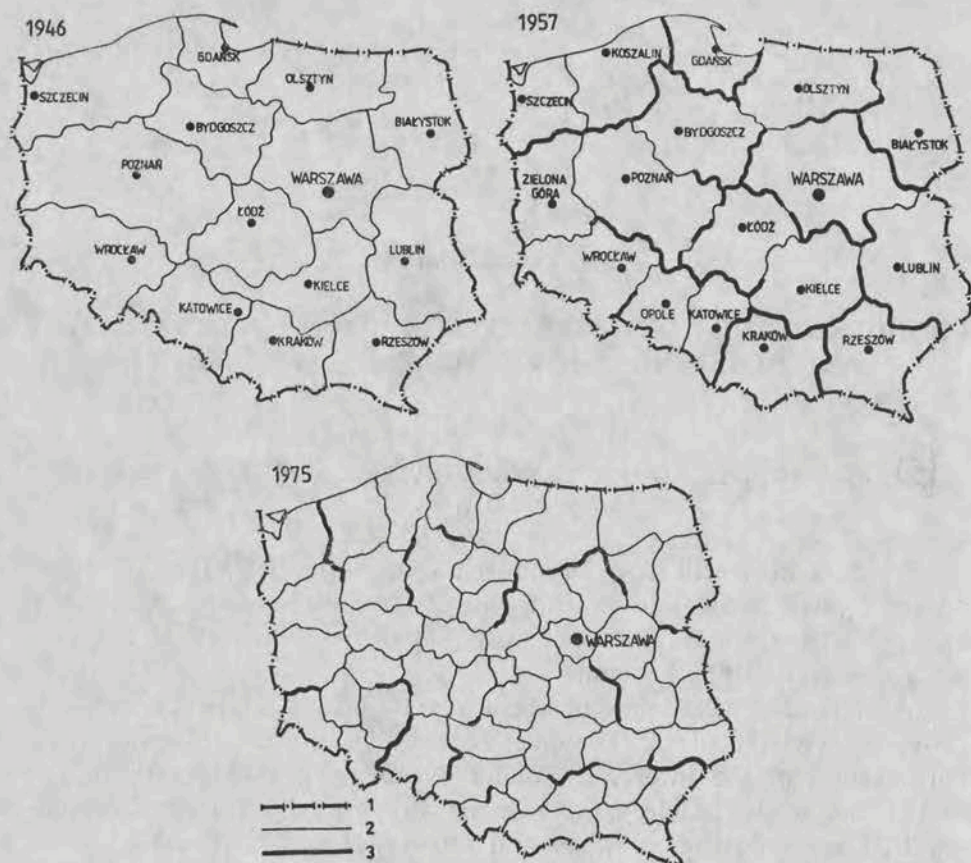


Fig. 1. Changes in the boundaries of counties after the II World War
 1 — state boundary, 2 — the boundaries of counties being changed, 3 — the boundaries of counties not changed in comparison with previous division

A characteristic feature was that the boundaries of the v. from 1975 hardly reverted to the boundaries of previous units except Opole v. and the frontier between Szczecin and Koszalin v. It is very likely that one of main targets of this reform was spatial erasure of old administrative divisions.

Similarly to the v. — regional administrative level, the divisions of lower levels were unstable, too. A district level which adopted to a certain extent the boundaries from before the war (starostwa) in so-called, Old Lands, was substantially modified in 1956, by establishment of a few dozens of new small districts (in the region of Łódź — there were the districts of Poddębice, Belchatów and Pajęczno).

In spite of the changes, they existed in a basic form until the mid-seventies, when the level of administrative division of the country was given up. Its competence, in the assumptions, was to be taken over by the communes or, to a lower extent, by the v. Different factors, such as a staff weakness in the communes, caused that those proportions have been reversed. Concentration of many administrative tasks in the v. and a lack of links between the state and departmental administration created a complex and mutually incoherent network of so-called special divisions, i.e. the formal areas of activity of different institutions (courts, banks, police, health service, education, etc.). In 1984, an attempt to regulate the above structure was undertaken. It aimed at the concentration of the institutions' seats in former district towns and at the unification of the borderlines under their influence. This was an indirect way to restore the district's level of administration. Advancement of this task's realization was strongly differentiated in particular v.

A successive attempt to create the districts was undertaken in 1990, when the regions of state administration were established. Their competences comprised supervision of some domains of the communes' activity and performing a specialized administrative role, e.g.: an expropriation of immovables, etc.

The number, seats and boundaries of the regions were fixed by central authorities and passed over to an accepting knowledge of the v. self-governed councils. In agricultural areas, the distribution of regions within the boundaries of existing v., largely reverts to the district's shape from before their liquidation. On the other hand, their organizational structure in urban agglomerations is concordant with functional historical divisions, and even with common sense (e.g. in Łódź v., the region of Łódź comprises the town itself and 3 communes, the region of Pabianice comprises 4 units, while the region of Zgierz, with the lowest number of population, comprises as many as 10 units).

Such a reformatory activity has also influenced the lowest level of local administration. The communes, recreated after the war: in 1950 (competences), and in 1954 (spatial structure) were changed into more numerous, small and almost powerless districts. Their number and boundaries were changing to a very limited extent. The radical reform of 1972, created again, although in different limits, the big communes with a great deal more power. Their number and boundaries were also partly changed (until 1989 — some 10 per cent). The successive reform, now changing a form of government, took place in 1990, when the communes were transformed from the units of state administration into self-governed ones. The latter obtained administrative, personal and financial independence, while the economic sphere remained under central

control. It should be mentioned that, from the legal point of view, the last reform has completely abolished the differences between rural communes and even largest towns.

FUNCTION OF THE UNITS OF ADMINISTRATIVE DIVISION IN PLANNING

The role of economic and spatial planning in communist system of central command depended on the administrative divisions. Similar situation referred to the planning importance, the ability to take locational decisions by the authorities of central bodies of the local administration. Economic planning was initiated by establishment of the Central Office for Planning, decreed on 10th November, 1945. During the entire post-war period, the national plan was dominating. Starting from 1947, also the socio-economic plans for the v. were prepared and, from the beginning of 1950's, also for the districts (powiaty).

A system of such hierarchic, administratively linked plans, was binding, in spite of frequently changing legal rules (14 legal acts and resolutions), until 1980.

The long-term plans were executed by yearly socio-economic plans set for the country, v. and districts. After the administrative changes in the first half of the 1970's, a district was replaced in this domain by a commune.

Together with advancing crisis in the state system, the role of planning contracted. In the 80's, only the national plan and plans of v. with a changing time limit were obligatory. The turn of decade brought the abolition of the law of socio-economic planning. The national plan and its offshoots have been replaced by the Parliament's obligation to produce the annual assumptions of socio-economic policy. The assumptions referred to national scale, while the regional policy, partly executed by the former v. plans, were practically deprived of any legal or institutional support.

The spatial planning was undergoing even deeper evolution than economic planning. It began in 1928, after the establishment of Warsaw Restoration Planning Board. After the war, the elaboration of the plan of spatial management of the country and regions as well as the local plans, was decreed in April, 1945.

The regional head-quarters of spatial planning emerged in the v., while in the districts there were local offices of a similar type. The same signified institutional supremacy of spatial planning over economic one.

Unfortunately, a scope of new location in that period was rather

narrow. It was mainly restricted to restoration of the production and infrastructure objects destroyed or stopped because of the war. Together with the accelerated socialistic industrialization which began in the 50's, the role of spatial planning severely diminished. Although the offices of regional planning still worked in the v., but their plans were realized in a fragmentary scope only. A question of spatial planning was solved again, practically for the first time for good, by the law of 1961. It strengthened the division of plans into national, regional and local ones and their condescension to a level of district and commune. In practice, the 1975 reform was supplemented by successive versions of regional plans elaborated in the v. Due to their central investments resulting from the national plans, they constituted important tool of spatial policy at the regional level.

Establishment of new v. caused a closing down of former institutions of regional planning. A part of this task was taken over by the v. spatial planning offices, e.g. the Office of Łódź Development Prognoses and Planning in Łódź v.; the Piotrków Bureau of Spatial Planning of Piotrków, Sieradz and Skierniewice v. with a seat in Łódź.

The case of central Macroregion proves that new, small regions were unable to create their own offices, mainly because of a staff shortage that had diminished the role of such a planning. In new regions only the boards of economic planning were established in obligatory manner. The liquidation of districts led to liquidation of plans of this class.

Theoretically, the new big communes were obliged to prepare the plans of socio-economic development. In practice, such plans were being prepared for many years, without necessary updating and rather schematically.

In 1975, the areas of regional planning in macroregions were established (final version). However, as they took over the tasks of former, large v., they have never had any decisive power.

A change in the law of spatial planning of 1984 did not cause any essential transformation. Only the regional plans were clearly identified as the v. plans or, the plans of functional areas. The change related mainly to the names of central institutions dealing with planning.

In the end of the 80's, a long-range plan up to the year 2000, was developed (including II part of the "Spatial Management of the Country"). The advancement levels of such plans were different in particular v., e.g. the regional plans were produced for Piotrków, Sieradz and Skierniewice v., the plans' assumptions were prepared for Łódź v., while no action was taken in Płock. It may be ascertained that the change in principles and rank of spatial planning had little to do with transforming the units of the country's administrative division. On the other

hand, frequent changes in the latter ones undeniably influenced the weakening of real importance of prepared plans.

The change in political system was accompanied by an attempt to change the law of spatial management in order to raise the role of the private ownership of land in planning. However, these attempts have not been accomplished until today. At the same time one may affirm that, in spite of some legal obstruction, spatial planning, at least local one, but also a part of economic planning, have not declined so far. The Plan of Spatial Management of Łódź and the Strategy of Economic Development of the Łódź City, prepared by Łódź commune, may serve as a good example of the same.

First work represents a modern, general plan overlooking the rule of the reality creation for the benefit of determining the areas of chances and the limits of development. Second one contains a list of targets and the methods of their realization in order to create differentiated and balanced structure of the production and services in Łódź. A novelty here is the fact that both spatial and economic projects were produced by individual professionals instead of official planning institutions.

CONCEPTION OF CHANGE IN ADMINISTRATIVE DIVISION OF CENTRAL MACROREGION

Since the beginning of political changes in Poland in 1989, there has been a discussion on spatial shape and competences of the new units and levels of administrative division (W. Michalski, in press).

This results in a creation of different, often very subjective conceptions of regional divisions, which is caused by a lack of decisions on the legal and formal competences of new regions (W. Michalski, W. Musiał, A. Śliwczyński, 1991).

The official government's conception has not been published yet (February, 1993), although the experts in the subject are permanently working on it.

The date of introduction of new administrative division was postponed several times, today it is said to be 1st January, 1995. There is likelihood that the second, district's administrative level of self-governmental character will be re-established. Simultaneously, 14 to 17 regions — v. will be created, reverting in a shape to the v. from before 1975. It should be added, however, that each of the government teams being changed within the last three years, have had different ideas on the same and have employed different experts.

In this context, the Regional Planning Office in Łódź undertook a task

of proposing to self-governed communes the division of Central Macro-region into districts (February, 1993).

Two options have been proposed, both reverting to the district's lay-out from before 1972 and taking into account the present boundaries of the regions of state administration (S. Jaroszczak, 1992). It is worth pointing out that the return to a district's structure (3 administrative levels) is not possible without the profound and simultaneous reform of the v. This results from the fact that the boundaries of present v. fully ignore the borderlines of old districts (e.g. Piotrków v. originated from 11 districts belonging to 2 v., W. Michalski, 1992).

Both options divide the Macroregion between two large, Łódź and Warsaw v. The boundary between them should be roughly adjusted to the old boundary of these regions from before 1975.

Option I assumes creation of 23 relatively small districts, including 18 in Łódź v. (fig. 2a). Two of them should have a character of city districts, i.e. to comprise Łódź and Plock. The districts of this level should, simultaneously, perform a function of land districts, as a separation of big cities from their natural hinterland is discordant to elementary bases of shaping the settlement network. There is also a problem of competences between new land district (and especially the city district) and a self-governed commune. In the first case the district's rights should carry a part of the country's competences. In the second one, a district could, in parallel with these rights, substitute for a present urban commune.

The proposed option takes into account the greatest amount of centres designed to perform the role of a district (centres which have ever been districts after the war). In this respect, granting such position to Zduńska Wola is an interesting novelty. In the former divisions this centre was a separate urban district and its lands belonged mainly to Łask district. The above change results from the fact that population of Zduńska Wola is twice as numerous as Łask's population. Moreover, it is better equipped and the local leaders of self-governments are more involved in the creation of new administrative structures.

Option II prefers more extensive districts, with well equipped and managed centres (fig. 2b). This option ignores the weakest district's centres of the first option, i.e. Gostynin (Warsaw v.), and Pajęczno, Poddębice, Brzeziny (Łódź v.).

A part of communes from Brzeziny district would be included into large Łódź district (Brzeziny, Koluszki, Rokiciny), while the remaining ones to Skierniewice district. Liquidation of Poddębice district, the foundation of which could be justified only by its vastness, without any larger town o more than 10.000 people, is involving a necessity of joining



Fig. 2a. Conception of the division of Central Macroregion into counties; Option I

the majority of its communes into Łęczyca district and moving the communes of this district to the south (an inclusion of Daszyna and Witonia communes into Kutno district). In Option II the communes included before into Pajęczno district were divided between zones



Fig. 2b. Conception of the division of Central Macroregion into counties; Option II
 1 — the boundaries of counties, 2 — the boundaries of districts, 3 — the boundaries
 of communes, 4 — the seats of districts

subordinated to Wieluń and Radomsko. According to this version, Macroregion would comprise 19 districts, still with 2 city districts, 15 in Łódź and 4 in Warsaw v., respectively.

In recapitulation one can ascertain that a lack of clear legal regulations, both spatial (a reform of territorial division) and programmatic (a law of spatial planning) essentially influence the effectiveness and application of regional policies in Poland.

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Wojciech Michalski

ZMIANY PODZIAŁU ADMINISTRACYJNEGO KRAJU I ICH WPŁYW NA PLANOWANIE; PRZYKŁAD REGIONU ŁÓDZKIEGO

Streszczenie

Druga wojna światowa przyniosła Polsce zasadnicze zmiany polityczne, terytorialne i administracyjne. Początkowo utworzono 14 województw różnej wielkości i pochodzenia. W 1954 r. dokonano reformy terytorialnej tworząc 3 nowe województwa i zmieniając granice wielu innych (ryc. 1). Podział z tego roku przetrwał, jak na warunki polskie długo, bowiem aż do roku 1975. Kolejna reforma, o zdecydowanie politycznych celach, tworząc 49 województw, nie nawiązywała do żadnych czynników racjonalnych. Zacierała dokładnie granice historycznych prowincji i zaborów oraz dawnych podziałów administracyjnych rangi wojewódzkiej i powiatowej.

Podobnie do wojewódzkiego szczebla administracji niestabilne były podziały niższego rzędu. Powiaty przenoszące w pewnym stopniu granice sprzed wojny (starostwa) zostały istotnie zmodyfikowane w 1956 r. poprzez utworzenie kilkudziesięciu nowych, małych jednostek. Istniały one do połowy lat siedemdziesiątych, kiedy to zrezygnowano z tego stopnia podziału administracyjnego kraju. Jego kompetencje miała przejąć gmina, jednakże w większości pozostały one w różniących się przestrzennie, tworzonych przez poszczególne resorty jednostkach podziałów specjalnych — rejonach administracji.

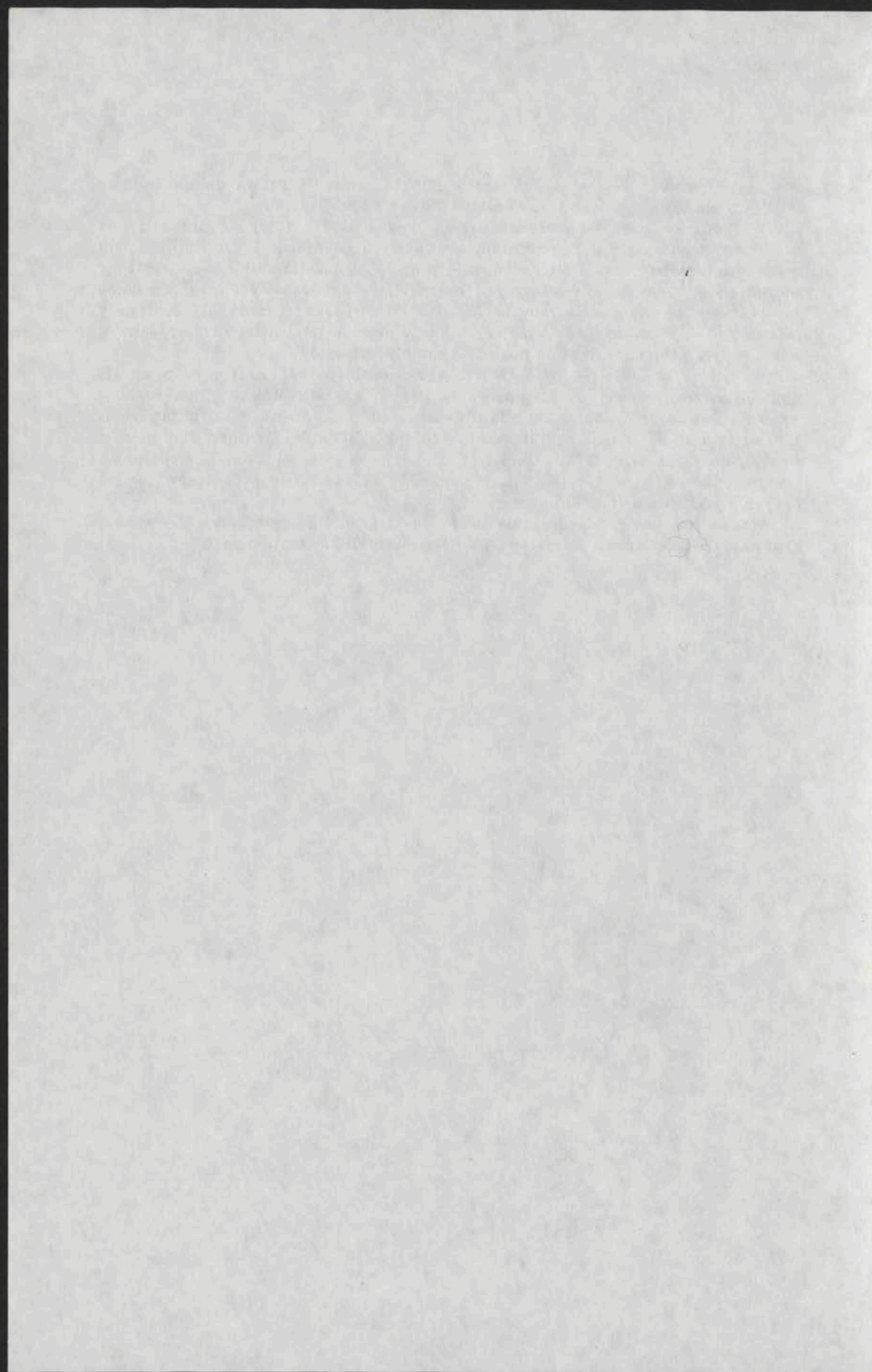
Twórczości reformatorskiej władz nie oparł się także najniższy szczebel administracji terenowej. Odtworzone po wojnie gminy w latach 1950—1951 zamieniono na małe i prawie pozbawione kompetencji gromady. Ich liczba i granice w ograniczonym stopniu zmieniały się. Gruntowną reformę przeprowadzono w 1972 r. tworząc ponownie, choć w innych granicach, duże gminy. Również ich liczba i granice były częściowo zmieniane. Kolejna reforma ustrojowa nastąpiła w 1990 r. wraz z przekształceniem gmin z jednostek administracji państwowej w samorządo-

we. Należy nadmienić, iż ta reforma z punktu widzenia prawa zniosła różnice pomiędzy gminami wiejskimi a miastami nawet największymi.

W Polsce od początku przemian ustrojowych w 1989 r. toczy się dyskusja nad kształtem przestrzennym i kompetencjami nowych jednostek i szczebli podziału administracyjnego. Wydaje się najbardziej prawdopodobne, iż zostanie przywrócony powiatowy szczebel administracyjny o charakterze samorządowym oraz powstanie 14—17 regionów nawiązujących do kształtu województw sprzed 1975 r. Należy jednak dodać, iż każda ze zmieniających się w ciągu ostatnich lat ekip rządowych miała w tym zakresie odmienne poglądy i zespoły ekspertów.

W tym kontekście Biuro Planowania Regionalnego w Łodzi zaproponowało gminom samorządowym do zaopiniowania podział obszaru Makroregionu Środkowego na powiaty. Wariant I zakłada utworzenie stosunkowo niewielkich 23 powiatów, w tym 18 na terenie przyszłego woj. łódzkiego (ryc. 2a). Wariant II preferuje powiaty większe obszarowo, których siedzibami są ośrodki dobrze wyposażone i zagospodarowane. W tym wariantcie pominięte są najsłabsze z ośrodków powiatowych z wariantu I (ryc. 2b).

Wyniki konsultacji wskazują, iż samorzady terytorialne opowiadają się w zdecydowanej większości za powiatami mniejszymi, czyli za wariantem I.



Jacek Nalewajko, Tomasz Malinowski

**THE ENVIRONMENTAL CONDITIONS
AS THE BASIC FACTOR OF PLANING THE LAND DEVELOPMENT;
THE EXAMPLE OF THE ŁÓDŹ REGION**

The way in which the natural environment in Poland was treated until recently has led to the appearance of many ecologically endangered areas, the Łódź voivodeship being one of the most alarming examples. The former economic system was largely responsible for the present environmental degradation, which severely hampers further social and economic development of the country.

The aim of this paper, apart from presenting the condition of selected elements of the Łódź region's natural environment, is to promote the awareness of the absolute necessity of incorporating the "new philosophy" of sustainable development into the process of local and regional plans formation. Social and economic development must be harmonised with environmental conditions and requirements. Spatial development plans must include long-range strategies of restoring the ecological balance. There are three basic directions of activities in this sphere: restoration (and regeneration), protection, and activation, the first direction being the most important in the Łódź agglomeration. It involves meeting three major challenges of the region: decreasing the atmospheric pollution, substantial reduction of communal and industrial sewage discharged into the surface waters without proper purification, and reasonable industrial and communal wastes management.

The facts presented in the paper point to the conclusion that regional planning forms the basis of spatial planning. It is the regional level that permits a realistic and comprehensive diagnosis of the situation. It should be supplemented with more detailed local plans. It is essential that there is close cooperation and feedback between these two levels.

ŁÓDŹ VOIVODESHIP

Łódź voivodeship is the smallest in the country with an area of 1523 sq kilometres, which is 0,5% of the area of Poland. It is one of the most densely populated voivodeships, the density of population is 746

person per sq kilometre that is six times the national average. It is also the most urbanised Polish voivodeship with 92% urban population.

The voivodeship, situated in the centre of Poland, is crossed by a fragment of the first-division watershed between the Vistula and the Oder. It is also the area of spring sections of many rivers. The location, as well as the historical factors have a decisive influence on the state of environment in the voivodeship. The notion of "natural environment" has been deliberately omitted here, because it is hard to call this devastated ecologically area a "natural" one.

The reflection of the living conditions in Łódź region is the statistical data characterising the state of health of population there. Since 1986, in the Łódź city since 1985, a negative birth — rate has been observed. The index of babies' death is the highest in the voivodeship and surpasses 21 deaths per 1000 live births. In comparison with 49 Polish voivodeships, this of Łódź achieves the following positions:

- 49-th place in respect of rate of deaths caused by circulatory system diseases;
- 49-th place in respect of rate of deaths by malignant tumours;
- 49-th place in respect of rate of women's deaths caused by injuries and intoxication;
- 49-th place in respect of a number of deaths by digestive system diseases;
- 49-th place in respect of sick-rate of malignant tumours;
- 36-th place in respect of the rate of women's deaths caused by respiratory system diseases;
- 35-th place in respect of tuberculosis sick-rate;
- 35-th place in respect of number of disabled persons.

Another characteristic of the voivodeship is very high over-mortality of men of a productive age. Almost the whole area of Łódź voivodeship has been recognised as the one of the ecological disaster. The reasons for that were: surpassing of the acceptable air pollution, shortage of water, lack of treatment plants and insolvable problem of communal and industrial sewage. This is why we are going to present in brief the state of environment in the voivodeship of Łódź.

STATE OF ENVIRONMENT IN THE VOIVODESHIP OF ŁÓDŹ

The emitted pollution to the atmospheric air in Łódź voivodeship results approximately in the following data:

- sulfur dioxide 68 000 t/year
- nitric oxides 19 000 t/year

— carbon monoxide	8 000 t/year
— dust	51 000 t/year
— equivalent emission	271 000 t/year

The equipment limiting pollution emission in the voivodeship is old and exploited to a great extent. The most efficient are electrical precipitators in EC-IV in Łódź and Power Station in Dyestuff Factory "Boruta" in Zgierz. In EC-II, working almost in the centre of Łódź, the efficiency of electrostatic precipitators did not surpass 80%. In 1992 the work connected with the change of filters was begun (fig. 1).

The air pollution in the area of Łódź voivodeship is caused mainly by:

- 1) power industry,
- 2) local boiler-rooms and home furnaces — so called: low emission,
- 3) motor-car engines.

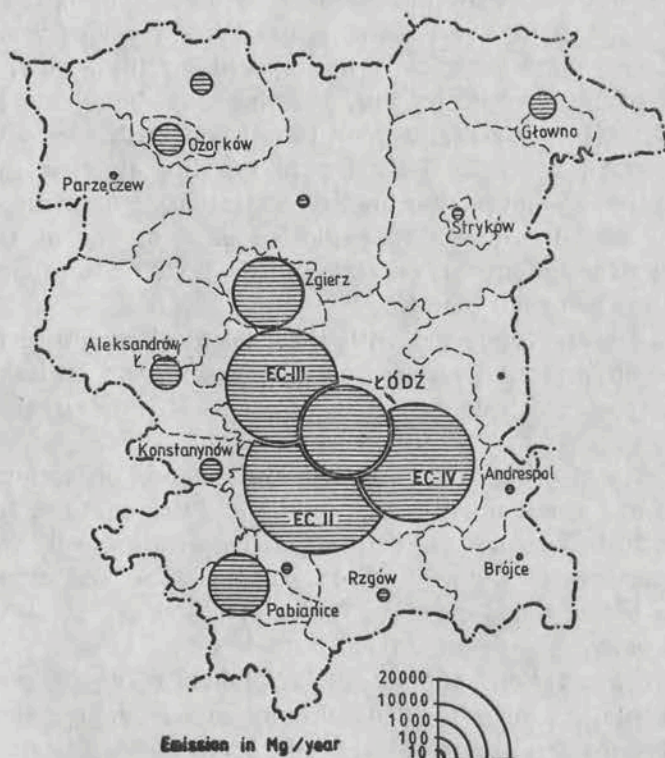


Fig. 1. Emission of air pollution in the cities and communes of the voivodeship of Łódź

In three main cities of the voivodeship the surpassing of acceptable dust fall value (200 t/sq. km per year) can be noticed. Totally, this area covers about 40 sq. kilometres which is 18.5% of whole area of Łódź, 7% of the area of Pabianice and 4% of the area of Zgierz. The concentration of suspended dust surpasses the acceptable standards in the area covering about 50 sq. kilometres. The area where the acceptable concentrations of sulfur dioxide are surpassed, is even bigger, about 60 sq. kilometres.

Noise is also one of the greatest problem for the inhabitants of the voivodeship. On working day the allowable level of sound in Łódź and other towns is surpassed approximately 27.7 dB(A).

During one year about 1 250 000 cubic meters and over 560 t of municipal waste originate in the area of Łódź voivodeship. All the waste are brought to city dumps or stored on industrial dumps (it refers to toxic waste). No utilisation is conducted. Now, there are nine municipal waste dumps and five industrial waste dumps being exploited. All of them below the standard required. The best illustrating it, is the city dump in Łódź, Kasprowicza Street, where waste started to be stored in a place completely unprepared for that. Now, the dump is filled and partly covered by soil, and the gases being the product of fermentation migrate into the ground (sand) and infiltrate to the cellars of nearby houses, which is a danger to the life of their inhabitants. There were cases of stating the low concentration of methane in cellars, in November 1992 there was an explosion of it in one of the houses. In spite of understanding the necessity to do that, no appropriate place for a new dump has been found.

The obstacles are connected with the geological structure (danger to the purity of underground waters), as well as with the attitudes of local communities protesting against the creation of new dumps on the adjoining areas.

There is an old proverb saying that Łódź stands on water. It might have applied to a small town in the middle of 19-th century. In the first years of the 20-th century the drilling of deep-water wells was started because the amount of water in rivers was shrinking and subsoil waters were getting exhausted. Nowadays, the major amount of water for the need of the voivodeship comes from outside of its area.

General consumption of water for Łódź voivodeship surpasses 450 000 cubic meters, including 350 000 cubic meters for the city of Łódź, Surface water intakes supply 51% needs of the voivodeship. Here are the intakes (fig. 2):

— on the Pilica river in Brzustówka over 80 000 m³/d

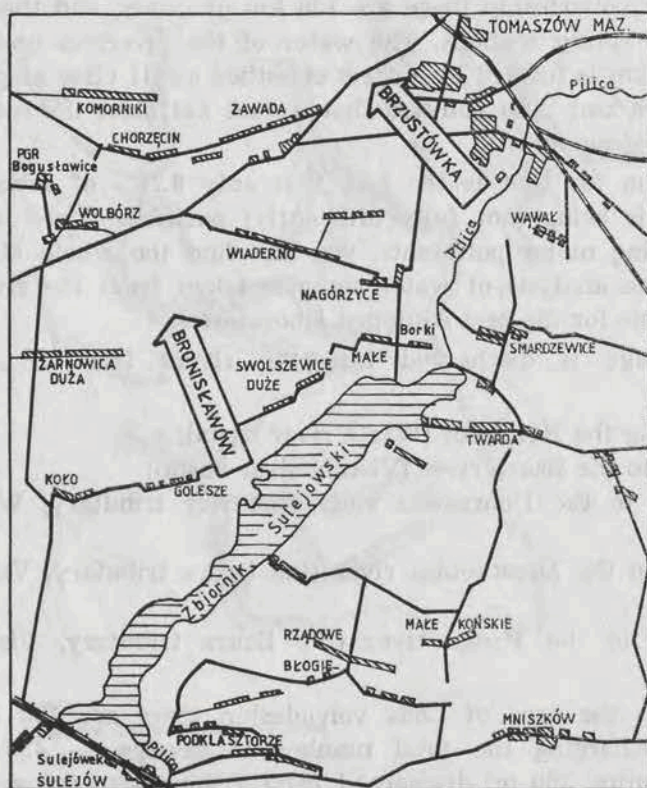


Fig. 2. Water intakes for Łódź and points of the water quality measurements

- from Sulejów reservoir at Bronisławowo about 150 000 m³/d
- from industrial water intakes about 10 000 m³/d
- totally 240 000 m³/d

49% water in the voivodeship of Łódź comes from deep water intakes.

Here are these intakes:

- Waterworks and Sewerage Company intakes:
 - in Łódź voivodeship 65 000 m³/d
 - in Piotrków voivodeship 30 000 m³/d
- Communal Management Enterprise in Łódź voivodeship 50 000 m³/h
- intakes belonging to industry 75 000 m³/d
- rural water intakes 7 000 m³/d
- totally 227 000 m³/d

The indexes of consumption of water for Łódź amount to: from surface intakes — 36% and from deep water intakes — 64%. The indexes referring to industry are much worse: 12% and 88% respectively. In the

area of Łódź voivodeship there are 120 km of rivers, and these sections of them are spring sections. The water of the rivers is unserviceable. Less than 2 km is formed by waters classified as III class of purity. The rest (over 118 km) is so polluted that it does not meet the requirements of any class of purity.

The reason for that is the fact that only 6.76% of sewage of the voivodeship is being (not fully efficiently) purified. There is no point in enumerating major pollutants, you can find the whole Mendeleeff's table, and the analysis of water samples taken from the rivers might be troublesome for the best equipped laboratories.

The sewage is discharged into the rivers from 20 communal collectors:

- 6 outlets to the Ner river (Warta river basin);
- 7 outlets to the Bzura river (Vistula river basin);
- 2 outlets to the Dobrzyńska river (the Ner tributary, Warta river basin);
- 2 outlet to the Moszczenica river (the Bzura tributary, Vistula river basin);
- 3 outlets to the Mroga river (the Bzura tributary, Vistula river basin).

Totally in the area of Łódź voivodeship there are 150 sources of pollution discharging the total number of sewage — 430 000 m³/d, including approx. 300 m³ discharged from 9 sources to the ground. 82% of sewage — 350 000 m³/d is discharged from the Łódź city.

The biggest receiver of sewage is the Ner river. Into this river and its tributaries (Olechówka, Dobrzyńska, Jasiień, Łódka rivers) over 90% of sewage is discharged. About 10% of sewage is directed to the Bzura river and its tributaries (Sokolówka, Moszczenica, Mroga). A very small amount of sewage (0.13%) gets to the Miazga river and further to the Pilica river (fig. 3).

Łódź voivodeship is one of those regions where man's activity has proved to be especially destructive for the natural environment. Massive antropogenic changes of landscape, pollution resulting from high level of urbanisation and concentration of industry, created the necessity to conserve the nature. The area surrounding Łódź until 19-th century was sparsely populated and densely forested with little varying species. The rapid development of Łódź industry, started in 1823, led to nearly complete deforestation of Łódź woodland. The woods cover less than 15% of the voivodeship area, while the national average equals about 28% (fig. 4). The remains of the old Łódź woodland are preserved in the reserve "Polesie Konstantynowskie".

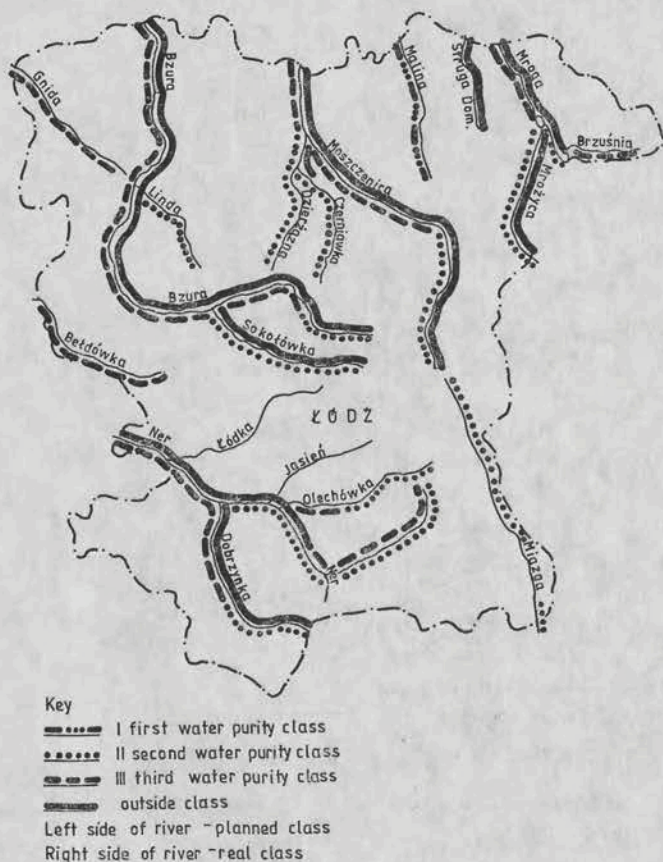


Fig. 3. Pollution of rivers in Łódź voivodeship

Totally, there are 7 reserves in Łódź voivodeship:

— Polesie Konstantynowskie	9.8 ha
— Wiączyn	8.3 ha
— Ciosny	2.4 ha
— Zabrzeźnia	27.6 ha
— Rąbień Peat Bog	42.1 ha
— Dąbrowa Grotnicka	100.5 ha
— Struga Dobieszkowska	37.7 ha
and the planned reserves:	
— Szczawin	42.0 ha
— Grądy nad Lindą	56.0 ha
— Łagiewniki Forest	57.4 ha

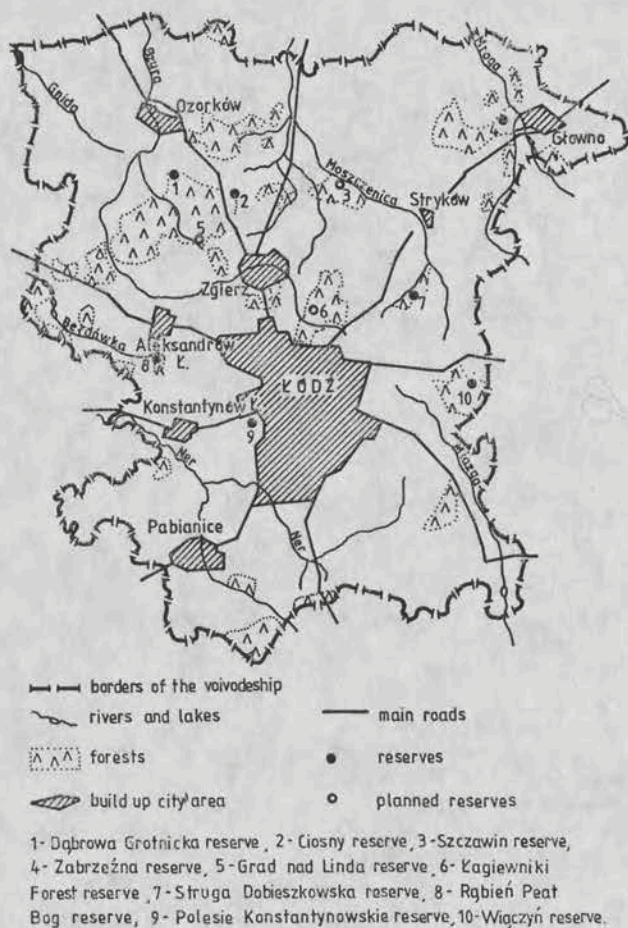


Fig. 4. Location of reserves and protected landscape zones in Łódź voivodeship

In the Łódź voivodeship there are 3 established protected landscape zones covering in total the area of 30 000 ha, 394 monuments of nature, including 6 clusters of trees, 4 lanes, 379 single trees, 20 Old Parks — monuments and many village parks.

In spite of that, in the area of the voivodeship there is a lack of areas that might provide good recreation conditions. The Łódź inhabitants visit the neighbouring voivodeships, mainly the Zalew Sulejowski area in Piotrków voivodeship and Zalew Jeziorsko in Sieradz voivodeship. The Skierniewice and Włocławek voivodeships do not provide good recreation conditions either.

THE ŁÓDŹ REGION

As it is clearly visible, the Łódź voivodeship cannot be treated as an independent unit and a self-supporting one. The co-operation with the neighbouring voivodeships is unavoidable creating thus the Łódź region. Łódź is a big industrial centre that provides people from the nearby areas with employment. In this natural way, the industrial centre forms the boundaries of the areas where small and medium plants, co-operating with the Łódź voivodeship industry, are created. As a big academic centre has at its disposal a high qualified staff whose knowledge and experience is used by the bordering voivodeships. Łódź is the only city in Poland where two Medical Academies are situated, so it is the medical centre for the whole region of central Poland. Many areas of activities can be mentioned, e.g. culture, means of transport, primary and secondary schools, banks and many others.

We should also bear in mind that in this small voivodeship there is a shortage of agricultural areas that might form the food basis for the voivodeship; shortage of recreation areas, shortage of waters etc. It is necessary to consider many — if not all — aspects of man's activity in the regional aspect, not limited by the line of country administrative division.

We are going to compare selected information in relation to the voivodeships forming the Łódź region i.e. the area in which the natural relations influencing the quality of life have been created.

The central location of the Łódź region in Poland, with the lack of higher hills, causes the opportunity for coming air masses of various origin to this area. This is the reason for considerable variety of weather, having an impact on aerosanitary and bioclimatic conditions of the region, especially Łódź agglomeration. These conditions are dependent on directions, frequency and power of wind. In the discussed area the western and south-western winds are prevailing, and the eastern ones in winter. The lowest frequency is characteristic of the northern winds. In this situation, not only local pollution sources but the sources in the west and south as well are very meaningful. We should remember that not very far from our voivodeship other areas of ecological emergency are located, and they influence this area. These are the following districts:

- Bełchatów district — the Piotrków voivodeship — brown coal mine and Bełchatów power plant. The emission of pollution from 360-meters-lunnels reaches the whole voivodehip area from the south;
- Konin district — pollution emitted by Pałnów-Adamów power plant

in the Konin voivodeship reaches the Łódź voivodeship from the west and north-western side;

- Tomaszów district — with Chemitex-Wistom industrial complex, in case of the eastern and south-eastern winds a lot of chemical industry pollution reaches the Łódź voivodeship;
- Włocławek and Płock districts — situated a bit further from Łódź, in case of the northern winds they are pollution source for the northern part of the voivodeship.

As it is evident from air pollution emissions examination occasionally conducted outside urban areas, these emissions do not determine the state of air purity, but they influence it to some extent.

The table below shows the emission of atmospheric air pollution from the bordering voivodeships.

Table 1

Voivodeship	Sulphur dioxide [thous. t/year]	Nitrogen oxides [thous. t/year]	Dust [thous. t/year]	Equivalent emissions [thous. t/year]
Łódź	68	19	51	271
Konin	140	26	65	405
Piotrków	13	83	46	743
Płock	83	18	46	743
Sieradz	15	3	13	61
Skierniewice	11	2	8	41
Włocławek	23	6	16	88

A lot of pollution is transported from these districts to remote distances and high lunnels result only in its spreading on a large area, not decreasing the amount of emission.

On the other hand, the basic factor affecting the state of air purity in the urbanised areas is the opportunity of town ventilation. There are 2 groups of factors:

- natural — land configuration, green complexes, running rivers etc.;
- antropogenic — width of streets, variety of buildings, factors causing air mass turbulence.

All these factors are very important for the creators of spacial management planning. The first of them should be, after very careful studying, appropriately used from the point of view of environment and social needs; the second group (antropogenic factors) should be used

appropriately from the same angles. In the case of the Łódź region, mainly the Łódź agglomeration, these problems are not properly dealt with, especially in respect of town ventilation, and the planning of too monotonous buildings, in respect of height, which does not improve the aerosanitary conditions in the city.

The water consumption in the central voivodeships varies a lot. It is the result of the number of inhabitants and industrial potential. Water supply is also different in each voivodeship. The water consumption for communal needs and for industry in the Łódź region voivodeships is shown in the table below.

Table 2

Voivodeship	Total consumption [hm ³]	For communal needs [hm ³]	For industry [hm ³]	For agriculture and forestry [hm ³]
Łódź	165.4	142.5	21.2	1.7
Konin	1 909.2	14.3	1 860.0	34.9
Piotrków	167.4	22.1	102.9	42.5
Płock	66.5	24.6	33.0	8.9
Sieradz	63.3	12.4	7.4	43.4
Skierniewice	85.0	12.4	16.4	56.2
Włocławek	58.9	21.3	29.6	8.0

In this table the water consumption only is shown. It is not equal to the actual consumption. The differentiation of water consumption can be illustrated by the amount of sewage discharged from a given voivodeship. The suitable data are shown in table 3.

Table 3

Voivodeship	Totally [hm ³]	Industrial waste [hm ³]	Municipal waste [hm ³]
Łódź	128.5	8.0	120.5
Konin	1 955.8	1 941.0	14.8
Piotrków	74.7	48.3	26.4
Płock	46.1	25.3	20.8
Sieradz	13.6	2.5	16.8
Skierniewice	22.4	5.7	16.8
Włocławek	38.5	19.1	18.8

It can be noticed that there are reasonable flows of water among the voivodeships. The best example of this is the Łódź voivodeship. The great part of water consumed here comes from the Piotrków voivodeship — surface water intakes on the Pilica river and Zalew Sulejowski, and a deep water intake in Rokiciny. For the present the sewage is discharged, into the Ner river, Warta tributary. The capacity of taking such considerable volume of water by such a small river, is limited. This is why the project of connecting the Ner and Bzura rivers and shifting the surplus of water back to the Vistula river basin or to any of its tributary has been prepared. A part of the sewage from the Łódź voivodeship is directed to the Vistula river basin, and very little, over 0.1% to the Pilica river basin.

The solving of waste problem is dependent on the level of land urbanisation. In the region the morphology and the amount of waste vary to a great extent. Data illustrating this problem is shown in table 4.

Table 4

Voivodeship	Industrial waste [thous. t]	Municipal solid waste [thous. t]	Municipal liquid waste [thous. t]
Łódź	1 159.3	1 612.1	194.6
Konin	39 753.1	155.5	143.7
Piotrków	23 711.7	396.5	189.3
Płock	242.1	241.7	67.7
Sieradz	36.9	185.4	111.3
Skierniewice	114.0	231.5	168.0
Włocławek	137.4	467.9	129.4

All this waste in the region is stored in dumps and unfortunately there is no utilisation plant for them.

In urban areas, especially in big cities and agglomerations, the rational waste disposal is absolutely necessary. Since there is no sorting of waste in households, the initial sorting should be done before the process of utilisation. Some sorting plants should be situated in the suburb, so that waste could be taken out of the town without being driven through inhabited districts. The system ought to be organised in such a way that the plants might serve not only cities but communes and suburb estates as well. The sorted waste should undergo neutralisation (composting,

methane fermentation) or utilisation (burning). Only some harmless and not troublesome for environment wastes might be stored directly in dumps. The system of waste removal should be connected with the system of transport (roads).

In respect of unurbanized areas some possible variants can be mentioned e.g.:

- systems of dumps serving one or some communes;
- system of temporary storing areas with initial sorting or without it;
- harmful waste utilisation plants (plant pesticides, their containers, past-slaughtering waste);
- small communal dumps.

While planning such a system special attention should be paid to the deep water protection.

In strongly damaged urban areas all green areas, natural and man-made water reservoirs or rivers are very important. In the case of urbanised and densely populated area, such as Łódź region, especially the Łódź voivodeship, these areas are very important recreation areas as well.

Large forests are very significant. The forestry factor of the Łódź voivodeship is almost 15%. In the central-west and north-west parts, and sometimes in the north-east areas of the voivodeship there are big forest complexes. Those complexes are set on glaciofluvial and dune sand soils, which are not valuable from the agricultural point of view, and are fresh and mixed-fresh wood types. That is why, being very valuable areas for the bioclimate, these areas could be used as recreation areas. Their significance, especially on the areas so strongly urbanised and industrialised as the Łódź voivodeship is very high, and it causes the necessity to take them seriously during the planning.

In the case of Łódź region its neighbourhood embodies large wood complexes which could be recreation areas for the Łódź agglomeration as well (e.g. woods in Konin and Skierniewice voivodeship). Furthermore, some potential recreation areas are man-made water reservoirs and their surrounding areas, first of all Zalew Sulejowski in Piotrków voivodeship and Zalew Jeziorsko in Sieradz voivodeship should be noticed.

These reservoirs, as well as the woods situated out of the Łódź voivodeship, are the places where on weekends and during vacations large numbers of the Łódź voivodeship inhabitants used to go, mainly by cars. This is the reason why it is necessary to pay special attention in planning to the new road system and — if necessary — to the correction of the existing system. People planning the development of the region have to ensure on the one hand the adequate structure the

road system, parking places, restaurants, hotels and adapt this system to the environment state and requirements on the other.

Possible conflicts arising from different functions fulfilled by different areas should be foreseen and taken into consideration in the process of working out spatial development plans, and solved without detriment to the natural environment. It is not possible to pursue such policy on the scale of one voivodship, for the various functions are performed not by administrative units at the voivodship level, but by entire regions. That is why regional planning should form the basis of spatial planning.

CONCLUSIONS

1. The awareness of the interdependence between the social and economic development and its natural conditions has been growing recently. Especially highly urbanised and industrialised areas, such as the Łódź voivodship and region, afford an opportunity to realise how close this relationship is. On these territories certain upper limits have been exceeded, for example their biological capacity and raw materials resources. This in turn calls for adopting the policy of sustainable development in different level plans formation.

2. Spatial development plans must include strategies of ecological balance restoration. There are three basic directions of such activities:

— restoration - in areas of particularly heavy degradation of the environment, frequently in all its elements;

— preservation - in areas fairly little degraded and environmentally attractive;

— activation - in areas relatively unattractive environmentally, which after some "reinforcement" of the nature might be turned into recreational grounds, especially round large urban and industrial agglomerations.

3. The three directions mentioned above cannot always be separated, especially on a regional or local scale. In the case of the Łódź voivodship and particularly the Łódź agglomeration the most desirable seem to be the regenerating and to a lesser extent the stimulating activities.

4. The restorative activities in the Łódź region must involve meeting three major challenges of the region:

— decreasing the atmospheric pollution through the reduction in polluting emissions and wider application of more efficient reducing facilities, as well as designing the building pattern in such a way as to improve the ventilation of the city;

— substantial reduction of the industrial and communal sewage discharged without proper prior treatment directly into surface waters; it should result in attaining at least III class of water purity in the majo-

city of rivers classified today as being beyond any acceptable level of pollution, which in turn would improve the quality of river water in neighbouring voivodships forming the Łódź region;

— resolving the problem of communal and industrial wastes; it involves on the one hand finding new, environmentally safe grounds suitable for dumps, which, if sensibly located, could perform their function for two or three communities, and on the other - the installation of wastes treatment facilities (eg. for incineration and composting), which could also serve several communities contributing jointly to a relatively high cost of their purchase.

5. Activation in the case of the Łódź agglomeration should concern mainly the recreational grounds situated beyond the urban zone. These are among others the border areas of the Łódź Upland (to the north and north-east of the city), and areas surrounding artificial water reservoirs in the Sieradz and Piotrków voivodeships.

6. The considerations presented above lead to the conclusion that regional planning forms the basic of spatial planning. It is the regional level that allows proper assessment of the natural environment conditions, capacity and resources, determining the economic development of the region, and living conditions of its inhabitants.

7. Local (communal) plans should supplement regional strategies and provide specific solutions. It is at this level that technical infrastructure ensuring proper functioning of a given area should be developed. It is essential that there is close co-operation and feedback between the regional and local level, and that both these categories of plans regard environmental policy as a factor determining their social acceptance.

Jacek Nalewajko, Tomasz Malinowski

UWARUNKOWANIA ŚRODOWISKOWE JAKO PODSTAWA PLANÓW ZAGOSPODAROWANIA PRZESTRZENNEGO NA PRZYKŁADZIE REGIONU ŁÓDZKIEGO

Streszczenie

Dotychczasowe traktowanie środowiska przedmiotowo, a nie podmiotowo, doprowadziło w naszym kraju do powstania wielu obszarów ekologicznego zagrożenia, których jaskrawym przykładem jest region łódzki, a zwłaszcza woj. łódzkie. Przedstawione w tym artykule fakty potwierdzają tezę, że dotychczasowy sposób gospodarowania był główną przyczyną osiągnięcia przez środowisko barier odporności. To z kolei jest dzisiaj jednym z najistotniejszych czynników ograniczających dalszy rozwój społeczno-gospodarczy.

Celem tego artykułu jest, poza przedstawieniem stanu wybranych elementów środowiska w regionie łódzkim, zwrócenie uwagi na konieczność znacznie poważniejszego traktowania biotycznych i abiotycznych składników przyrody w procesie tworzenia planów lokalnych i regionalnych. Planowanie musi już na tych szczeblach uwzględniać „nową filozofię” tzw. rozwoju zrównoważonego (sustainable

development), w której cele społeczno-gospodarcze muszą być wkomponowane w uwarunkowania środowiskowe. Region łódzki jest klasycznym wręcz przykładem, gdzie uwzględnianie założeń tej filozofii w tworzonych planach przestrzennego zagospodarowania jest absolutnie niezbędne.

W opracowywane plany przestrzennego zagospodarowania muszą być wpisane strategiczne kierunki działań na rzecz przywrócenia równowagi ekologicznej. Można wyróżnić trzy podstawowe kierunki: restytucyjne, ochronne i aktywizujące. W przypadku woj. łódzkiego, a zwłaszcza aglomeracji łódzkiej, w aktualnym stanie środowiska za najbardziej pożądane w najbliższych latach należy uznać działania restytucyjne i aktywizujące z przewagą tych pierwszych.

Wśród działań restytucyjnych na pierwszy plan wysuwają się, w aktualnym stanie środowiska, trzy problemy:

- poprawa stanu czystości powietrza atmosferycznego;
- zdecydowane zmniejszenie ilości ścieków komunalnych i przemysłowych zrzucanych bez oczyszczenia bezpośrednio do wód powierzchniowych;
- rozwiązanie problemu odpadów przemysłowych i komunalnych.

Działania aktywizujące powinny być planowane i realizowane zwłaszcza na obszarach pełniących funkcje rekreacyjno-wypoczynkowe usytuowanych poza strefą miejską. Są to m. in. nieco bliżej położone tereny strefy krawędziowej Wyżyny Łódzkiej (na północ i północny-wschód od miasta) oraz usytuowane w odległości 50—70 km obszary nad zalewami Sulejowskim i Jeziorsko.

Z przedstawionych w artykule faktów wynika, że podstawą planowania jest planowanie regionalne. Tylko na tym szczeblu planowania możliwa jest rzeczywistość i pełna ocena wydolności i predyspozycji środowiska, od którego zależy rozwój społeczno-gospodarczy, a przede wszystkim odpowiednie warunki życia mieszkańców. Uszczegółowienie planów regionalnych powinno następować w planach miejscowych (gminnych). Plany te powinny z jednej strony wypełniać treścią założenia regionalne, a z drugiej powinny stanowić o rozwoju infrastruktury technicznej zabezpieczającej wszystkie niezbędne funkcje danego obszaru. Szczególną rolę odgrywać musi istnienie ścisłego sprzężenia programu rozwoju umieszczonego w planach regionalnych z programami zawartymi w planach miejscowych. W obu tych kategoriach planów środowisko staje się dziś jednym z najważniejszych czynników ich społecznej akceptacji.

NOTES

Andrzej Suliborski

SOCIO-ECONOMIC SPATIAL STUDIES IN THE UNIVERSITY OF ŁÓDŹ

INTRODUCTION

Social and economic studies enriching and widening the scope of the theoretical contents of spatial planning or directly employed in the planning practice are conducted at the University of Łódź mainly in the Institute of Economic Geography and Space Organization and at the Faculty of Economics in the Department of Regional Economics and Environment Protection, and the Department of Urban Economics. In addition to this, numerous spatial studies are carried on by representatives of various academic disciplines, mainly history, sociology, ethnology, physical geography and biology.

This paper, being a brief outline, sets out only the principal orientations of spatial and planning research conducted at the Łódź University.

EARLY STAGE IN THE RESEARCH IN GEOGRAPHY AT THE UNIVERSITY OF ŁÓDŹ

Geographical studies in the area of spatial planning started in the University of Łódź from its very beginning, that is 1945 — the year of its foundation. As early as in 1950 was established the Department of Economic Geography, headed by prof. S. Berezowski. Rapid development as regards both organization and research work, serving also the needs of the national economy, began in 1956, when prof. L. Straszewicz, having a background in spatial planning, was appointed head of the department. During the period of his management evolved two principle directions of scientific interest in spatial issues in which many research workers are engaged, also today. The range of problems, apart from urban and industrial geography and tourism, covers also issues in spatial economy,

regional studies and planning. The research potential created at that time in the form of faculty and technical base made it possible to set up in 1981 a separate Institute of Economic Geography and Space Organization.

In this past period problems in spatial research were determined in the first place by the following directions of study:

1) Research on spatial distribution of industry (predominantly textile) in Poland and in the world.

2) Research on settlement, embracing rural and urban settlement structure, urban space organization and monographs on large urban agglomerations in Europe.

3) Research on population migrations, demographic and social structures of towns and their living conditions.

4) Studies for the purposes of spatial planning, studies on structural and functional design of towns, regional atlases and monographs of geographical regions.

Field research activities were carried out mainly in the Łódź region and Śląsk Opolski. They resulted in a sizeable literary output exceeding in 1970 two hundred titles, including a large proportion of books.

Since 1981 research work is conducted by organizational units of the Institute, which defined their own specific directions of study and developed those already existing. Since that time the faculty has grown in number, reinforced by new young scholars, and the curriculum has been revised and updated. At present the Institute consists of 5 organizational units, namely: Department of Urban Geography and Tourism, Department of Political Geography and Regional Studies, Department of Production Location and Spatial Economy, Department of Environmental Economy and Spatial Policy, and a supporting unit — Laboratory of Graphic and Computing Techniques. Four didactic specialities are taught at the Institute: 1) geography of tourism, 2) space economy and planning, 3) socio-economic regional geography, 4) environmental management and protection (jointly with the Institute of Physical Geography and Environment Protection). Within the above specializations are delivered seminars for M.A. candidates, where scientific supervision is provided to students writing their M.A. theses. Many of those theses are original spatial studies dealing with social and economic issues. The educational programmes realized at all specialities prepare graduates for work in various areas of spatial economy.

MAIN ISSUES IN SPATIAL RESEARCH — GEOGRAPHICAL APPROACH

Research work carried out at the Institute is divided among the organizational units, which pursue the directions of study developed

largely at an earlier stage. An index listing some of the titles written by the Institute faculty, illustrating major research directions, is attached at the end of this paper.

The traditional area of scientific interest is the settlement geography, pursued along two main lines (research conducted chiefly at the Department of Towns and Tourism and the Department of Political Geography and Regional Studies):

1. Research on urban regions, their development, spatial and functional structure, and their inhabitants' living conditions in their theoretical, morphological, functional and social aspects. The testing ground is the Łódź urban region, for which a rich information basis has been compiled, and a number of thorough empirical studies has been carried out (E. Dziegieć, J. Jakóbczyk-Gryszkiewicz, S. Liszewski, A. Matczak).

2. Research on the origin, present morphological and functional structure of towns, and the hierarchy in regional urban systems. Publications in this field on the one hand advance the theoretical study of urban morphology and function, and on the other enrich the empirical knowledge about Łódź and other towns of the Łódź region (M. Koter, M. Kulesza, S. Liszewski, A. Suliborski).

Settlement study is closely related with social and geodemographic issues. Focus in this area has moved from demographic studies to social problems. Main research trends are the following:

1. Research on population migrations both inside a city and between settlement units. Studies in this field helped elaborate the typology of urban space structure and were used for identifying zones of towns' influence, for verifying the existing administrative divisions and for designing future ones. They provided a criterion for the hierarchization of the regional settlement network (J. Dzieciuchowicz, E. Dziegieć, W. Michalski, S. Pączka, A. Suliborski).

2. Research on social and demographic structures of the Łódź agglomerations, its population's living conditions, and particularly assessment of living-space valorization. Similar in character is study of urban and rural populations' living standard (J. Dzieciuchowicz, S. Kaczmarek, S. Liszewski, K. Rembowska).

3. Socio-demographic studies and research on the French Polonia conducted in cooperation with the Jagiellonian University and University Lyon II in France. The major accomplishment in this interesting field of study was, apart from a series of articles, the Atlas of the French Polonia (T. Marszał, J. Dzieciuchowicz).

One of major areas of interest at the Institute has traditionally been the industrial geography, especially geography of the light industry. The main topics pursued within this area are:

1. Spatial structure of the textile industry and factors affecting its development and transformation processes. Very detailed studies have been devoted to Polish textile industry, the Łódź region, Central and East-European countries, and to consumption as a factor affecting global textile industry distribution (T. Marszał, S. Pączka, E. Marczyńska-Witczak).

2. Spatial aspects of industry restructuring and modernization in the Łódź Industrial District, and space organization in the Bełchatów Mining and Power Industry Complex (T. Marszał, A. Niżnik, S. Pączka, E. Marczyńska-Witczak).

Relatively new areas of study, undertaken after 1981, are spatial studies in political geography, and geography of tourism. Research work carried out in this field spans a wide range of topics, both new and relating to formerly pursued interests. These are the main directions of study within the geography of tourism:

1. Methodology and theory of the geography of tourism (S. Liszewski, A. Matczak).

2. Tourist settlement and processes started by tourist activity (E. Dziegieć, S. Liszewski, A. Matczak).

3. Tourist region.

4. Spatial organization of city-dwellers' free time.

Research in this area, apart from the theoretic and cognitive function, has also practical application represented by numerous guide books, reference books, directories, maps, surveys, etc.

As regards broadly-based political geography, an equally innovative field of study at the Institute, the main issues are the following:

1. Types and functions of borders and border-zones (M. Koter, M. Sobczyński, W. Michalski, T. Kunka).

2. National and religious minorities, and the question of autonomy (M. Koter, M. Sobczyński, T. Kunka).

3. Social and spatial aspects of region and regionalism (M. Koter, A. Suliborski, K. Rembowska).

Research in this field covers the territory of Poland and countries of Central and Eastern Europe.

An important area of research work are spatial studies conducted within various research projects financed from external sources. They are utilized in economic practice and in the theory of planning and spatial economy. Among the most important projects the following should be mentioned:

1. Structure and changes in suburban zones in large agglomerations.

2. Role of the Polish minority in the spatial organization of the Rhone Alpes region.

3. Spatial distribution of the Łódź Industrial District's population's living standard.
4. Depopulation of Polish villages (example of the Pilica region).
5. Atlas of the Bełchatów Industrial District — spatial and economic restructuring.
6. Development of spatial and functional structure, and territorial links (example of the Piotrków Voivodeship).
7. Spatial problems in restructuring the Łódź Industrial District.
8. Assessment of the research on tourist traffic in Poland and a comparative analysis of tourist settlement.

Spatial studies of social and economic issues are carried out also under numerous cooperation schemes with foreign universities (12 universities), and during conferences and symposia (during the 8-year span over 25 conferences were organized, including about 15 international meetings). In addition to that spatial issues are dealt with in three journals issued by the Institute, that is: 1) "Problems in Textile Geography", 2) "Acta Universitatis Lodziensis — Tourism", 3) Acta Universitatis Lodziensis — Folia Geographica". The above journals are forwarded to many scientific institutes in Poland and abroad.

SPATIAL STUDIES — ECONOMIC APPROACH

Economic problems in a spatial perspective have been pursued almost from the moment the Faculty of Economics and Sociology was set up at the University of Łódź. Geographers also made a considerable contribution. (T. Olszewski, B. Chudy, Z. Wysocki, and others). Since 1976 spatial economic research was conducted chiefly at the Institute of Regional Policy. The Institute specialized in issues concerning urban and regional economics, spatial planning, location theory, and the use of the theory of systems for the needs of planning local and regional development. Moreover, in the 1980s the Institute, headed by the J. Regulski, was one of major centres laying foundations for the functioning of local governments.

At present spatial research is continued mainly by two departments: the Department of Regional Economics and Environment Protection, and the Department of Urban Development Economics. Present-day scientific interests of both departments include mainly:

- methodology of regional studies,
- regional and local economic development,
- spatial planning and land economy,
- conditions for regional development of small and medium-sized firms,

- problems of the location of economic entities,
- economics and the shaping of man's environment.

Apart from basic research, the results of which were published in the form of books, articles in Polish and foreign journals (the list at the end of this paper includes selected items), the two departments carry out numerous studies and surveys (under job order contracts) in the area of spatial economy, major issues being:

- 1) Łódź development strategy (1991).
- 2) Analysis of conflict-bearing situations in shaping the living conditions as part of urban grounds management on the example of selected towns of the Central Macroregion (1988).
- 3) Regional impact of adopting economic measures, including problems in the implementation of spatial and economic policy of local authorities (1987).
- 4) External advantages as a factor shaping spatial structures (1981—1985).
- 5) Barriers to economic and spatial growth of towns and urban regions.
- 6) Delimitation of agricultural problem regions (1987).

The departments cooperate with numerous foreign research centres in the field of spatial studies (with 5 universities under cooperation agreements, and with 11 universities — without an official contract).

Both organizational units are engaged in educational activity concerning spatial issues through the specialization called "Urban Economy". M.A. seminars and theses deal principally with: 1) economy and environment, 2) local development and spatial economy, 3) environment protection policy, 3) housing management and 5) problems in small and medium-sized firms development.

Besides the above-mentioned departments spatial approach to economic research can be found in studies in economics, industry, building and trade, as well as in planning and economic policy, whereas spatial aspects of social research are dealt with by sociologists interested in the problems of urban and rural communities and in the issues in industrialization and environment protection.

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Jakub Wujek

PLANNING RESEARCH AND EDUCATION OF THE TECHNICAL UNIVERSITY OF ŁÓDŹ

PART 1

Each attempt explaining a foreigner how academic urban planning education functions in Poland, must be reverted to the history of the past 60—70 years.

Only the knowledge of conditioning which invented this structure intellectually, then under favourable conditions premitted its realization and then for many years stabilized it to such a degree that lots of people could not imagine that there might exist a number of parallel models of education — gives this chance.

The reasons result from different economic and legal conditionings, i.e. from completely different civilization premises.

A specific model of an urban designer has been created in Poland. He was rather a creator of space than an organizer of processes leading to new quality of our environment.

The beginning of this process reaches the time shortly after the end of World War I.

Poland, as one of few countries, was in on exceptional situation. After desintegration of Austrian, Prussian and Russian empires, Poland declared independence. All social strength of the nation was directed to the future. It was seen as something completely different and promised ease of realization of dreams.

Polish urban design and Polish architecture registered themselves in this enormous longing for something new. So, one could believe that there was nothing more difficult for the nation, which in spite of guns and gold became independent.

It was the time of establishing of associations, professional organizations, forming law which would unite three sectors of divided Poland into one organism.

It is for me quite understandable that the majority of architects and urban designers had eagerly identified themselves with radical slogans of European vanguard led by Le Corbusier. So far, his influence in Poland has not, as it seems, been sufficiently investigated.

In newly established technical universities, architecture and urban design started to exist on equal rights at the faculties of architecture.

It is not known how this process would proceed later on. The crisis of the Thirties and then the war do not give a chance of checking it up. Only speculations are left but they are in a completely different sphere.

The World War II and then the Yalta Agreement ascribed Poland to the Soviet bloc.

New régime demanded banners. It had to have visions of splendid future. Moreover, the devastated country should have been rebuilt quickly. However it was made in completely different economic conditions, where nationalization of private property was the most important.

Freedom to form the space became the reason for the creation of a new type of an architect — urban designer.

He had enormous planning but slight practical possibilities. Nevertheless a new structure called Polish school of urban design was created. Despite its unquestionable achievements this school became also the reason for many, many space disasters.

Idealistic realization version, sometimes after numerous personal defeats, the structure created in units, seeking only financial profit and deriving those simplest benefits from already worked out designs — was the basic mistake of this school.

This is the Polish reality and I am sorry, but it is a significant part of it.

A statement that no attempts to change the existing model were not undertaken would be too large simplification of the problem. However it proceeded with the effort of groups of people, not institutions.

In some design centres there started the process of withdrawal from dogmatically understood Polish School of Urban Design.

At the end of the seventies in Łódź there appeared a group trying to come back to regulation planning. The discussion was initiated on urban record, separation of urban design from architectural one and on the reasons for "the not quite success" of Polish School of Urban Design.

I present here these facts not by chance. In certain period all three of us, i.e.: Zdzisław Lipski, Andrzej Owczarek and Jakub Wujek worked together in the Institute of Architecture and Urban Design — in the urban design team — at present only Mr. Zdzisław Lipski — an architect and the undersigned work there. In the meantime in some

urban design centres in our country, particularly in Warsaw, Gdańsk and Cracow, the process of discussion on so advanced, applied teaching methods and the way of performing the profession of an architect — urban designer started as well.

These explanations were indispensable before presenting the organization of teaching. Because the time of teaching of urban design and architecture as compact elements was very long, it is obvious that not only 10 persons from the Urban Design Team participated in the whole process, but also the lecturers of problems of environment protection, country architecture, village architecture and urbanized environment protection and rehabilitation with particular attention to the 19th century.

These problems penetrate one another and complete and, let's hope with benefit both for young people and urban design.

PART 2

In order to characterize the didactic process, it is worth mentioning that it lasted throughout the period of studies and not frequently ended up with an urban design diploma and further on with a doctorate.

First year

Students obtain knowledge on urban composition and also basic information on urban workshop.

Second year

The history of the Town Building appears here as the basic subject. It is supported by such subjects as: traffic systems, small urban architectural complex planning and also urban engineering. Students obtain here practical knowledge on urban and architectural design in order to be able consciously to compete with problems concerning urban design.

Third year

Here most of the subjects are related to urban design. Principles of the Fundamentals of Town Building are continued in another form: Urban Economics and Organization is introduced. Now it is the time to design a general plan of a small town of 20 000—30 000 inhabitants and

also The Regulation Plan of a housing estate for about 6000 inhabitants. It is completed with urban-architectural design of a housing estate, the history of urban design and urban engineering. As it is seen, the three tendencies are to be reconciled: history, urban-architectural detail and independent designs.

Fourth year

The most important design plan here is a detailed plan with special attention to regulation planning. It is supported by urban design methodology, where a student is acquainted with real designs. Natural environment protection, town and country planning and landscape design play a significant role here.

Fifth year

It is the summing up of the whole didactic curriculum. Students make projects on environment rehabilitation of an urbanized 19th century system, town and country planning, prediploma consultations.

The final effect of five years' work may be an urban design diploma. The problems may be different. From transformation of the existing urban structures to housing estate design, detailed plan and a general plan.

PART 3

We are in the period of changes. In Poland we are faced with transformation of economic and social structures. It is obvious that the university must not only keep up with them but inspire them as well.

The time will show if we should be able to cope with this problem or not. We are convinced that the changes will occur and we are open to them. What changes and when they will occur — the practice will show.

We give a ready ear to hear what the changing life around us says. We would also appreciate very much to talk about a new curriculum here and that is why this paper is presented.

At the end I would like to inform that an exhibition of students' works has been organized in the Institute of Architecture and Urban Design to celebrate the VII AESOP Congress.

On behalf of Authorities of the Institute I would be honoured to invite you to see it.

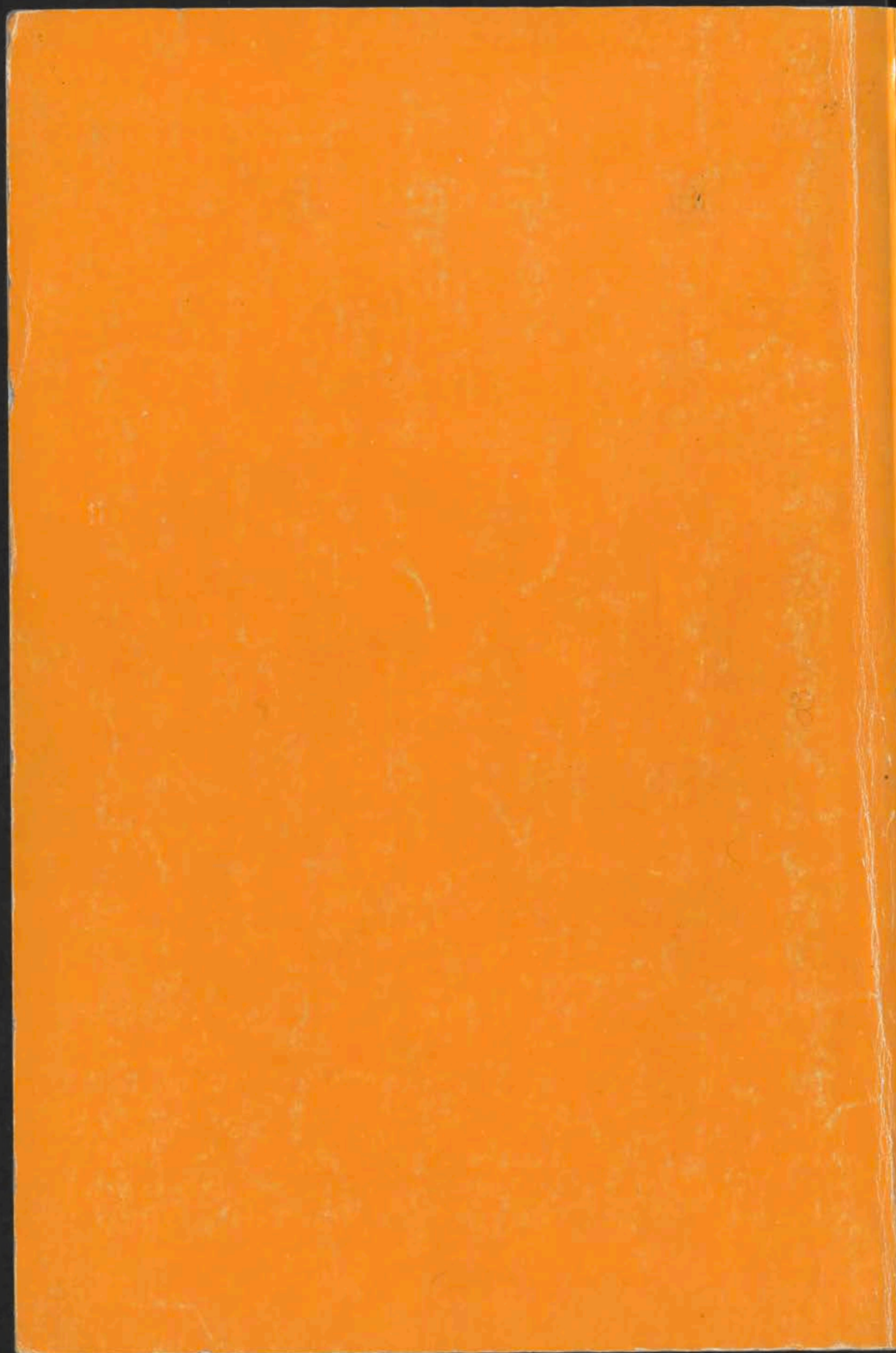
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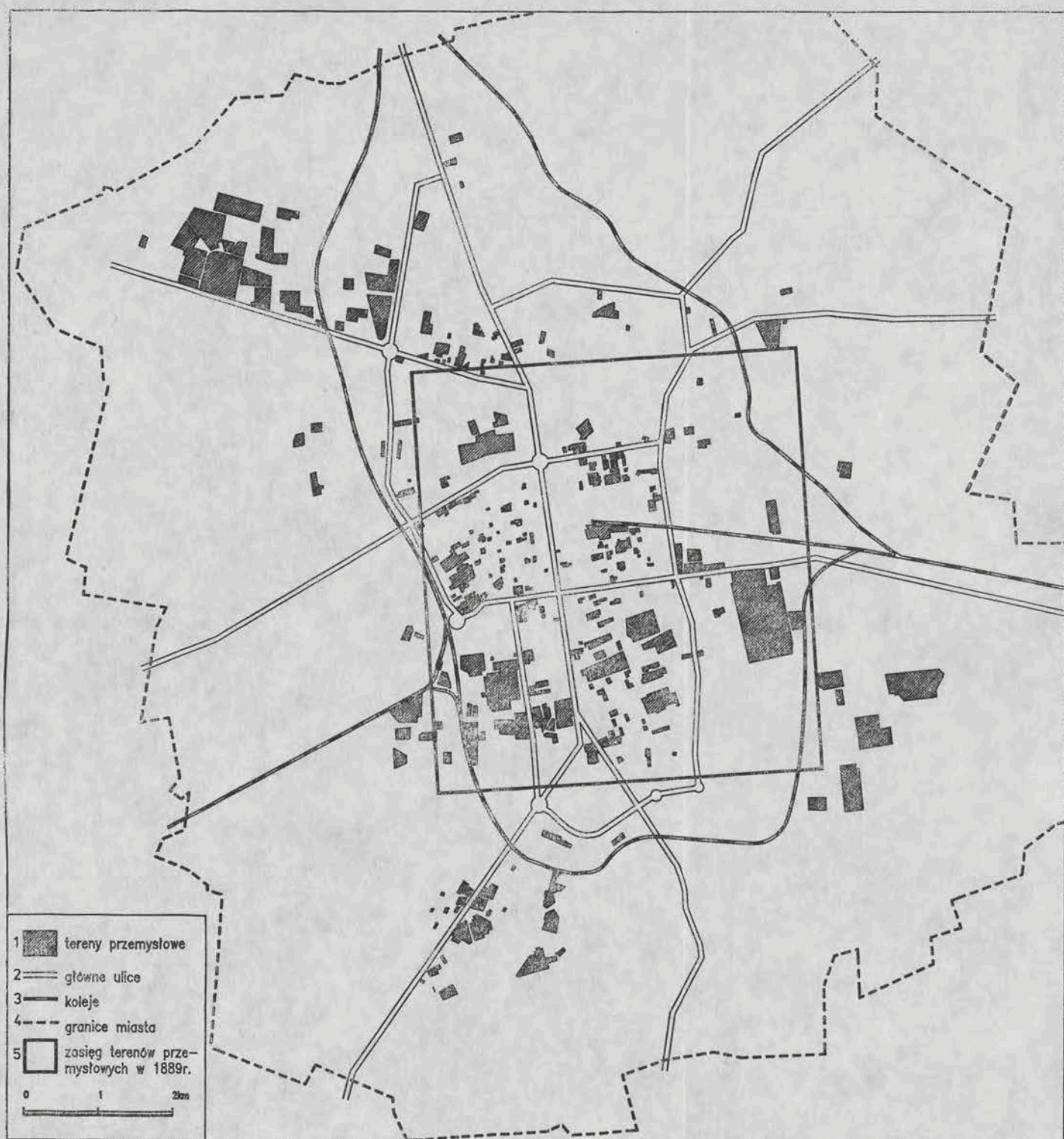


Fig. 8. Industrial grounds distribution in Łódź in 1990 (by J. Kotlicka)

1 — industrial grounds, 2 — main streets, 3 — railway lines, 4 — city borders, 5 — area occupied by industrial grounds in 1889