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Lwów and Łódź

Comparison of History and Environmental Conditions

Until 1939, Lwów (Lvov) was the second greatest and second most prominent city of the Second Republic of Poland, and after 1944 (the year of the ultimate loss of Lwów, although a so-called Curzon's Line B left Lwów on the Polish side [4]), the second city in terms of the number of residents and industrialization became Łódź (Lodz), (but the second city in terms of significance and territory in the Republic of Poland is Kraków – Cracow). This is the first similarity. The second is multiethnic, multicultural and multireligious (at least until 1939) character of both cities – however with the predominance of Polish element [1].

The third similarity are environmental conditions and situation of these cities in Central Europe. Both these agglomerations are situated, almost exactly on drainage divides of the catchments of large European rivers: Lwów – of the Vistula and Dniester; Łódź – Vistula and Oder. This has certain ecological consequences and since 20th century has been connected with the problem of water supply (not only drinking water) in such big municipal and industrial centres. The situation of these amazing cities is a result of geo-political situation in this part of Europe and is connected to history, especially in case of Lwów.

The presented map (Fig. 1), coming from the monograph by Prof. Andrzej Piskozub [5], presents the area of Polish territories (the whole catchments of Oder, Vistula, Pregoła and the rivers of Pomerania, about 364 000 km²) – i.e. with Lwów, Brześć n. Bugiem (Brest) and Królewiec (Koenigsberg), where the situation of Lwów and Łódź was marked. It can be easily seen that the south-east border of Grody Czerwieńskie (the so-called Czerwieńsk Territory), according to historical data, are almost the same as the drainage divide of the upper Dniester and upper Vistula catchments. It was a disputable territory between the state of Polans and Kievan (Varangian) Rus' (Ruthenia), although, it seems that the oldest settlement is of Lechite origin [6].

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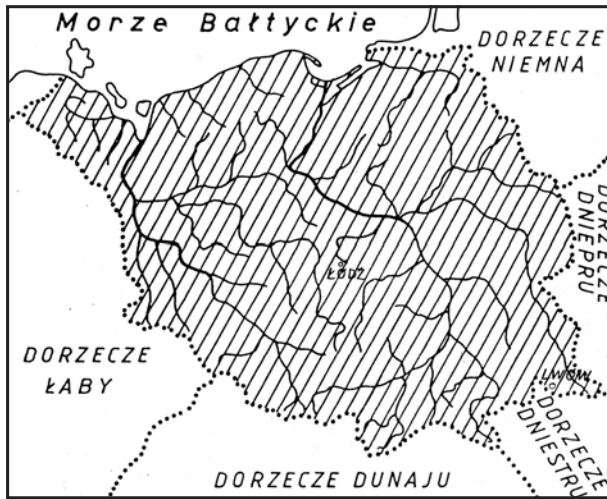


Fig. 1. A map of the so-called Polish Territory in catchments of Oder, Vistula, Pregoła and Pomeranian rivers

Source: acc. to [5]

Between 950 and 981 this territory belonged to the state of Polans. In 981 it was conquered by Varangian Rus' (in the alliance with the Emperor Otto II, as well as due to sealing Rus' from the Black Sea by Pechenegs, which made Varangians seek new routes to Byzantium). In 1018–1031 Grody Czerwieńskie again belonged to Poland, then it was conquered by the Duchy of Kiev. In 1068 (or 1069) Grody Czerwieńskie were re-conquered by Poland, and after the fall of King Bolesław the Bold, they were again incorporated into Rus' (in 1081?). In the following century, because of the fragmentation of Poland into principalities and fights between junior dukes and the senior duke, the interest in this territory diminished. One should emphasize that approximately in the same time also Rus' became fragmented and the Duchy of Halych became a direct neighbour to the Małopolska (Little Poland).

In 1205 a significant political event took place. It was the Battle of Zawichost taking place on the embankment of the Vistula, between the Krakow Duke Leszek the White and the Halych Duke Roman who had invaded the Małopolska. At certain moment of the battle the embankment collapsed, burying the Ruthenian knights together with Duke Roman. As a result of this untypical victory the Małopolska again took the control over at least the Przemyśl Region, Sanok Region and Lubaczów Region for about 10–15 years (1205–1215 or 1221). then, in rather unclear for today circumstances, these territories were again taken by the Halych Rus', although Leszek the White, until his tragic death near Gąsawa in 1227, had been trying to subdue the whole Duchy of Halych, with the help of

King Andrew II of Hungary. In the occurring geopolitical situation, the succeeding Duke of Halych Daniel Romanovich established in about 1250, on previous south-east borders of Grody Czerwieńskie – on the hills near the springs of Pełtew (the Poltva River – left tributary to the Bug) – a settlement called – after his son Lev Danilovich – Lvov. In 1272 the duke transferred the capital of the duchy to Lvov. This was caused not only by the wish to better control western territory of the Halych Duchy that had been keeping changing the rulers for about three hundred years, but also the necessity to put the capital further from the territory of the Golden Horde. Moreover, Mongol attacks contributed to the reverse of ethnic relations on desolated (due to earlier attacks, e.g. in 1241) territories between the upper San and upper Bug, where the Ruthenians arrived escaping from Tartars.

One should emphasise that as a result of Mongol attacks the links between the Halych-Vladimir Duchy and the remaining Ruthenian duchies had been weakened (besides, since the 2nd half of 13th century being conquered by Lithuania). This duchy became more and more Polish-oriented and at the end of his rule Lev Danilovich (died in 1301) supported Ladislaus the Little (Władysław Łokietek) in his fight against Wenceslaus II Premyslid. And the last Duke of Halych and Vladimir – Boleslaw-Yuri (Bolesław Jerzy) Trojdenowicz (of the Mazovian Piasts), in his will, left his duchy to Casimir III the Great, who nearly located Lwów in 1356, according to the Magdeburg Law, starting the period of Polish rule and prosperity of the city.

Thus, after four centuries of struggle not only the territory of Grody Czerwieńskie, but also Red Ruthenia (formerly Red Chrobatia, Red Carpathia) became a part of Poland.

The history of Łódź is very different. This city is situated in the centre of Poland on a historic territory of the Łęczyca Country. The drainage divides between the main Polish Rivers Vistula and Oder is going through Łęczyca Country (see Fig. 1). The beginning of Łódź was very modest and much later than in Lwów. In 14th century there was a village called Łodzia, which in 1423 received the urban status and the emblem (which was a boat, for the Polish word *łódź* means “boat”).

For the following four centuries, in the town of Łódź, nothing practically happened. At the same time Lwów flourished in demographic, economic, commercial, cultural and political aspects. For nearly a year, during the Swedish invasion, Lwów was even an unofficial capital of Poland, where King John II Casimir gave his famous Oath and, in 1656 established the University.

Only during the time of the the Polish Kingdom (so-called Congress Kingdom after the Vienna Treaty) when Łódź was in the Rawa District of the Mazovian Voivodeship, in this small town (in 1820 only 767 residents) industry started developing very fast, which, together with an (non-)special geographic situation involved significant environmental changes.

In 1823, four centuries after the urban status, the government of this Polish Kingdom included Łódź into industrial cities and towns and Łódź became the centre of textile industry in the Congress Poland. Over 75 years the population of Łódź increased to about 300 000 residents, which was unique in the European scale. The acceleration of industrial development took place in the second half of the 19th century, after the fall of the January Uprising – during the era of positivism, owing to the organic work and basic work. In those times Łódź became a multicultural and multiethnic city; there were Poles, Russians, Germans, Jews and other ethnic groups.

Environmental conditions, in this rapidly developing urban and industrial centre on the borders of the Russian Empire (but in the centre of Europe) were catastrophic; the consequences can, unfortunately, be seen now. No care was taken about anything, in particular air or water protection. No care was taken about the conditions of work, life or communication.

Apart from luxury palaces of the factory owners or bank owners, gloomy working-class settlements areas were built. Vast majority of inhabitants had problems with food, hygiene and health. Fatal accidents often took place in factories.

In this aspects it is difficult to look at similarities with Lwów [2], which developed relatively steadily in the Austro-Hungarian Empire as a capital of an autonomous (since 1867) *so-gennante* Kingdom of Galicia and Lodomeria (in this way in a corrupted form the name of Halych and Vladimir Duchy) came back, and the excuse for this decision was the claim to the Halych throne by King Andrew II of Hungary in 13th century). Łódź was not even the seat of the *guberniya*...

The fundamental difference between the Austro-Hungarian Empire and Russian Empire also occurred in the area of geodesy, surveying, cadastre, real estate status and legal conditions. While Lwów developed *lege artis* and according to the rules (of geodetic measurements, cadastre etc.), in Łódź the development was chaotic and instead of law the will of corrupted tsarist officials was decisive.

The inter-war period in both cities has already shortly presented in the beginning of this publication.

After the World War II geopolitical situation again changed and environmental conditions in both cities deteriorated. In particular it referred to water supply and sewerage (municipal and industrial wastewater treatment) in the growing urban and industrial centres of both Łódź and Lwów. Moreover, the growth of industrial emissions of gas and dust pollutants occurred. E.g. Łódź is surrounded by vast ellipses of the dust fall on the snow cover and huge smoke threads emitted to atmosphere by industrial emitters and the cogeneration plant (for the distance of 30 km), which was proved by multi-spectral satellite images [3] (see Fig. 2), on which an interpretation of air pollution propagations in Łódź and its neighbourhood is presented.

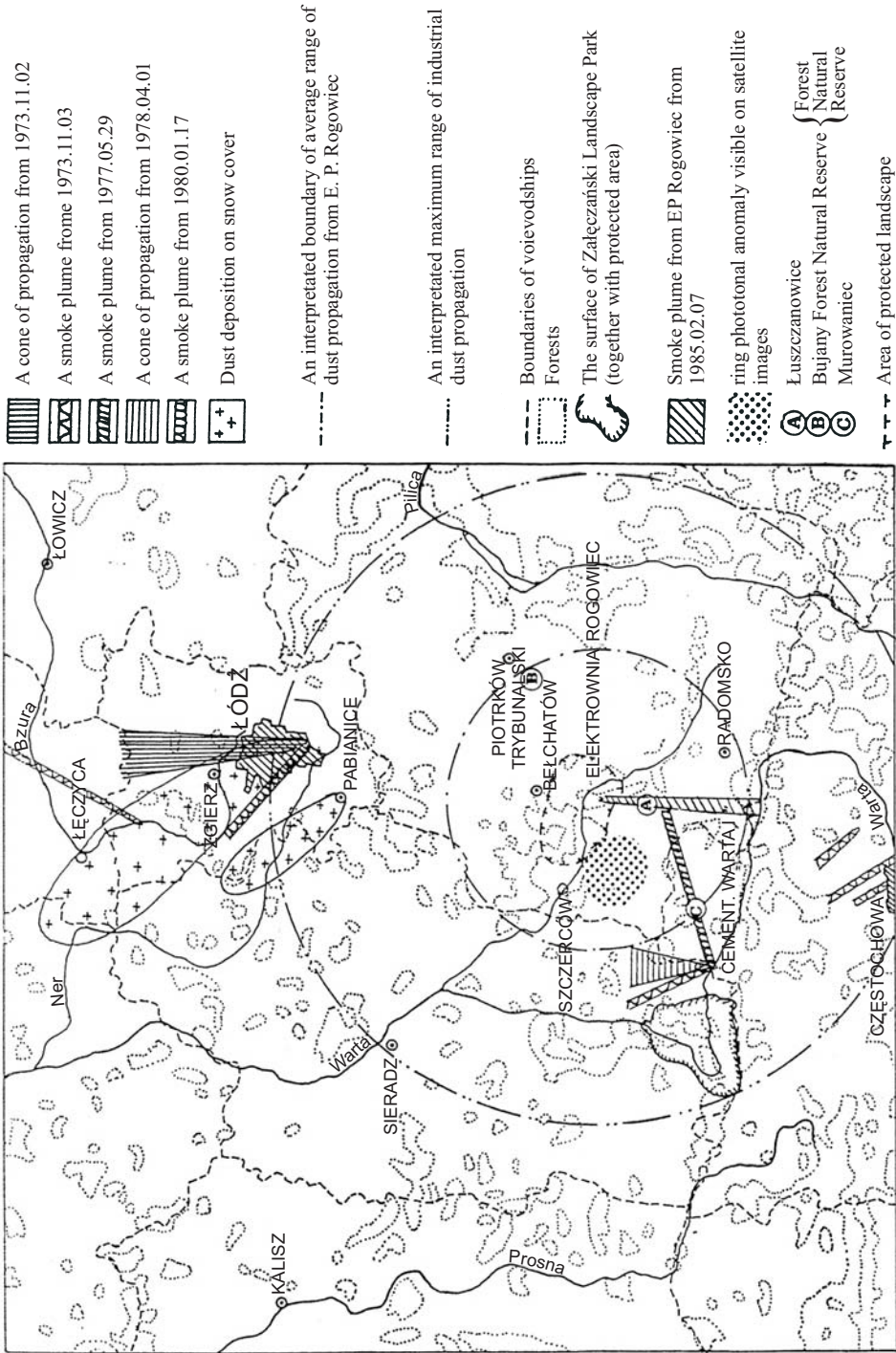


Fig. 2. An interpretation of air pollution (dust) propagations in Łódź and its neighbourhood

The situation in these several-hundred-thousand-cities started to take features of ecologic catastrophe. In Poland in 1960 the decision to built a Dam on the Pilica River and make the Sulejów Reservoir that for decades has been systematically providing water for drinking purposes and industry. And after 1990 in Łódź the emission of industrial pollutants diminished, both because of the production decline (even closing the factories) and applying pro-environmental technologies. Environmental conditions in the agglomeration and the area improved significantly.

Lwów was during USSR a border town of this vast colonial empire and Soviet authorities did not care about environmental or living conditions. In 1980 a tragic situation in water supply occurred. For several hours a day water was not supplied to residential areas. And it was possible to apply the solution similar to accepted in Łódź and Kraków (the Dobczyce Reservoir) – put a dam on the Bug river near Kamionka Strumilowa and the from the “Bug Reservoir” the water could be sent with pipelines to Lwów. However in former USSR such an investment has not been made. After Ukraine gained independence in 1991 a newly arising state had different problems of economic and social nature; first of all, hazardous effects of the Chernobyl disaster had to be liquidated. The Chernobyl Power Plant was finally closed in 1996, 10 years after the disaster.

Maybe now, after the Orange Revolution, also due to the help from Poland and the European Union, the dreams of water for the inhabitants of Lwów could fulfil and the postulated “Bug Reservoir” would be built. Only in this way, like in Łódź, environmental conditions (deteriorating over the past centuries, caused by geopolitical causes and unfortunate decisions on the development of these cities in unfavourable zones of the drainage divides in the Baltic Sea and Black Sea catchments) in Lwów can radically improve.

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