

*Declining Cities/Developing Cities: Polish and German Perspectives*  
Marek Nowak and Michał Nowosielski (Eds.)  
Instytut Zachodni, Poznań 2008  
© 2008 the authors and Instytut Zachodni

## **Spatial Restructuring of the Katowice Conurbation**

Jarosław MIKOŁAJEC

**Abstract.** The Katowice conurbation is a classic mining conurbation, like many others which emerged in Europe at the turn of the nineteenth and twentieth centuries. Its restructuring and revitalization process in large measure involves changes in its spatial order. Since a conurbation is not a single city, but rather a complex of cities, changes of the spatial order comprise changes of relations between its components – namely cities and industrial estates. In terms of restructuring, the Katowice conurbation is backward compared to analogous industrial areas in western Europe, and for this reason it can take advantage of their experience.

At the beginning of the nineteenth century, the most important factor determining urbanization was industrialization. So close a correlation between urbanization and industrialization has never occurred before or since. Never had so many new cities and city complexes of purely industrial origin emerged, and the growth of old cities had never before been so dependent on industrial development. Those new forms of spatial order which are characteristic of the capitalistic economy of the century, namely the coal conurbations, were developed at that time.

In modern times, mining has been one of the most important reasons for urbanization. In the case of coal conurbations, the mining industry was the direct reason for the urbanization process. When mining was not the direct reason for the urbanization, it sometimes – in an indirect way – contributed to the development of cities. A good example of this might be the very fast growth of the San Francisco population in the middle of the nineteenth century, which was directly caused by the California Gold Rush (1848-1855), for which the city had administrative and service functions (Korcelli 1969, 36).

The extraction of mineral resources, coal, and metal ores, and the development of the processing industry were accompanied by the progressive enlargement of settlements in the Katowice conurbation. This was followed by real changes in the life of societies, a consequence of both the accumulation of people and the character of their settlements. They were industrial settlements which depended on the development of industry, but the communities of workers' estates did not have urban features.

It seems that the period of very close correlation between industrialization and urbanization is gone for ever. Modern urbanization is not always connected with industrialization. Rapid urbanization of developing countries – which has led to the creation of monstrous cities with millions of inhabitants – is an example of the superiority of the urbanization process over industrialization, whereas modern technopolies are an example of the opposite dependence (Jałowiecki 1978, 103). The restructuring of the Katowice conurbation has to be connected with the reformulation of traditional relations between urbanization and industrialization. The disappearance and restructuring of old industry must have some consequences in the urbanization processes.

Because the Katowice conurbation is not a single city, but a complex of cities, the restructuring and revitalization processes are not identical to the restructuring and revitalization of a single city, and the problems of structural changes to the whole region have to be taken into consideration. So next to the restructuring and revitalization of a single element of conurbation, there is the problem of restructuring and revitalizing the whole conurbation. Because the relations between the cities and estates of the conurbation are in the majority of cases spatial ones, the restructuring of the Katowice conurbation must come down to the restructuring of its spatial order.

Shaping the new, postindustrial spatial order – that is, the attempt to overcome the old polycentric order of a conurbation – can consist of:

- deglomeration of a conurbation;
- reduction of the polycentric order via the creation of several new centres;
- transformation of a conurbation into a monocentric agglomeration;
- transformation of each element of an agglomeration while preserving its polycentric character.

It is worth noticing that these four processes include phenomena on different spatial scales. The first and third concern the whole conurbation, the second concerns parts of it, and the fourth concerns particular settlement elements which constitute the conurbation.

These processes do not happen independently, but act together and are closely related. The history of the Katowice conurbation shows that each of these phenomena, to some degree, took place at the very beginning of the conurbation's existence. The formation of the conurbation was a process always linked to its deglomeration, but in different periods one or the other dominated. Similarly, the process of industrialization was always accompanied by the phenomenon of disappearance of industrial activity which happened, for example, because of the development of new deposits of mineral resources, and the end of exploitation of the old ones. The problem of transformation of the conurbation's spatial order has always existed, and we can say that it has been an immanent problem in its history. Nowadays, during the conurbation's rapid restructuring, the problem has merely accelerated.

Let us now look into the four processes of transformation of the spatial order of the Katowice conurbation.

The first such process is deglomeration – the opposite to agglomeration – which can be a spontaneous, unplanned phenomenon, but can also be planned and artificially accelerated. The two most important historic deglomeration plans for the Katowice conurbation – one Polish and one German – were created during periods when the whole agglomeration was part of, respectively the Polish or the German political organization.

The first deglomeration plan concerned with organizing the space of the Katowice conurbation was one of German origin from the time of the Second World War. This plan intended to reduce the population of the central part of the agglomeration by spreading the cities' population around the Upper Silesian Industrial Region – known by the abbreviation “GOP”. It was planned to create a city of 200,000 inhabitants to the northeast of Dąbrowa Górnicza, to enlarge the population of Tychy to 150,000 people, to expand Łabędy, Tarnowskie Góry, Pyskowice, and other centres, and to develop roads and highways (Gwosdz 2004, 132).

In 1953 the GOP regional plan was created; it was also known as the “Pieńkowski Plan,” after its main architect. Deglomeration was to consist of the relocation from the heart of the agglomeration (the so-called zone A) of a large number of inhabitants and a major part of the industry, to the periphery of the conurbation, away from the zone of coal exploitation. The realization of this plan resulted in the transformation of Tychy into a satellite of Katowice, for which it fulfilled the housing functions. But the deglomeration of the heart of the agglomeration was not entirely successful (Kotela 1995, 11-27).

The contemporary process of deglomeration is, however, a spontaneous one and it has assumed a demographic character. Since the end of the 1980s, the population of the Katowice conurbation has been decreasing, because of both the negative birth rate and the negative migration balance. We can take the year 1979 to be the year of maximum development of industry in the Katowice conurbation; at this date, the extraction of coal in Poland exceeded 200 million tons annually, and since then it has been decreasing.

The time variation of the Katowice conurbation population curve is similar to that of analogous coal-mining regions in western Europe, for example the Ruhr area in North Rhine-Westphalia, where the cities

attained their maximum population during the 1960s. The variations were more drastic in western American mining settlements during the gold rush, when the population drastically increased for a year or two, and then drastically declined; after a few years these settlements began to disappear, creating ghost towns typical of the Wild West. Considering the decline of population that occurred in the Katowice area, the plans for the artificial deglomeration of the conurbation – which consisted of creating new cities and settlements on its peripheries, to be populated by surplus inhabitants from the centre – were abandoned.

A second potential transformation process in the Katowice conurbation polycentric order could be the creation of a number of zones with their own local centres. One of the main features of the Katowice conurbation is the lack of a natural centre, a city which would be well qualified to hold the central position. Katowice, situated on the southeastern edge of the conurbation, holds a dominant position in the conurbation mostly by accident (Rajman 1997, 41).

During the history of the conurbation, Bytom, Gliwice and Chorzów have all aspired to the role of its main centre. For a long time Bytom was the largest city in the region. Gliwice is the only port city and lies in the western part of the mining zone; it had the advantage of being connected to the western part of Germany, and so it fulfilled the function of the conurbation's "gate." Chorzów's advantage was its central position, but between the two World Wars it lost this, because of the creation of the new Polish-German border through the centre of the conurbation, changing it from the central city to a peripheral one.

Yet it is not out of the question that during the further evolution of the conurbation's spatial order that these cities might regain the position of local centres around which the neighbouring cities would be assembled. Most often Gliwice is appointed to this role, because it is the academic and scientific centre from which it was attempted to create a modern technopolis, with modern industry and a free trade zone. Gliwice could become the second important centre after Katowice, which would give the conurbation a bipolar character. To this list should be added Sosnowiec, the centre of the Zagłębie Dąbrowskie region, whose history is slightly different from the rest of the conurbation.

The third possible mode of evolution might be a transformation of the polycentric conurbation into a monocentric agglomeration. The

Katowice conurbation is the biggest urban complex in Poland; yet its biggest city, Katowice, in 2006 had only 317,000 inhabitants – no more than 15% of the conurbation's population. This fact itself is evidence that Katowice could not be the natural centre toward which the other cities of the conurbation would gravitate.

But if the cities of the Katowice agglomeration were joined together in one urban organism, the resulting city would have more than two million inhabitants, and would become not only the most populated Polish city, but also the second central European metropolis after Berlin. The most frequently proposed name for the potential new city is "Silesia" (the Latin name of the region), but there are also other propositions, such as "Katowice" or "the Katowice Agglomeration" (Agglomeracja Katowicka).

The character of the future city is controversial. Would it be one city with a central administration, or a complex of cities which would form a kind of federation or confederation? First of all, the creation of the city of Silesia would make one central city of the Silesian voivodeship dominate the other parts. The population of the city of Silesia would be ten times greater than that of the next two biggest cities of the voivodeship, Częstochowa and Bielsko-Biała.

In the second case, the polycentric spatial structure and the conflicts of interests between the different cities could be a cause of centrifugal movements. Unsuccessful examples of the creation of new cities through the merging of the smaller centres of a conurbation – such as the Rybnik Coal Region (*Rybnicki Okręg Węglowy*) adjacent to the Katowice conurbation in the south – make scepticism a frequent attitude toward the possibility of total integration. In the Ruhr area in western Germany, despite the creation of an urban complex – the *Regionalverband Ruhr* – originating in the nineteenth century, total integration has never happened, and today there is no plan of creating a single integrated city.

I would like to recount here the story of the historic attempt to create a single administrative unit from the western part of the conurbation – the German tricity, formed from Gliwice, Zabrze and Bytom. At the end of the 1920s there was the idea of joining these cities into one body with a joint administration, but the plan was never realized. Under this scheme, three cities together with three attached neighbouring communities were to constitute a main administrative unit with a slightly

strange name, the *Bezirks-Zweckverband*. The joining-together of these three cities was to be accompanied by their thorough reconstruction, creating new green and recreation areas, and new communication lines, including a highway joining the German part of the conurbation with the rest of the country (Szczyпка-Gwiazda 2003). Because the project was utopian and very expensive to implement, it was never realized.

The fourth possible path of evolution is a change in the character of each urban unit of the conurbation, while preserving its polycentric character. The question of what is the fundamental unit should be considered here; it seems that the fundamental settlement units in the Katowice agglomeration are the workers' estates – very often miners' estates – rather than the cities themselves. This arises directly from the origin of the agglomeration: the settlement units which emerged as a consequence of the development of the mining and processing industries were workers' estates.

The development of the city centre was often a secondary phenomenon, and did not always catch up with the development of the estates. Hardly ever has the city centre emerged spontaneously, as it did in Gliwice where there is a market square and a thoroughfare, Zwycięstwa Street, which leads from the square to the railway station. More often city centres have been created deliberately – frequently by revitalizing and reconstructing some part of the city (this is true in the cases of Katowice, Chorzów, and Sosnowiec). Similar phenomena could be observed in the cities of the Rybnik Coal Region, such as Jastrzębie Zdrój and Żory, where the old city centres lost importance because of the creation of new miners' housing estates.

An analysis of the distribution of its population shows that the Katowice agglomeration is in great part a system composed of many types of workers' estates, and therefore of many different types of building. Among them there are the so-called familoki estates (characteristic multifamily housing blocks for the families of industrial employees, from the nineteenth and the beginning of the twentieth century), the estates of blocks of flats from the period of real socialism – of which the best example is the Tysiąclecia estate (known as “Tauzen”) in Katowice – but also more sophisticated settlement units, whose building character differs from the standards of the period. For example, we can mention some workers' estates in Katowice which were created at the

beginning of the twentieth century, before the First World War, such as Giszowiec (German Gieschwald), built between 1907 and 1910, and which resembles Ebenezer Howard's garden cities; and Nikiszowiec (Nikischschacht), built between 1908 and 1911, which resembles Fourier's Phalanstere; or the estate of Finnish houses in Bieliszowice, Ruda Śląska.

Workers' estates are the most typical settlement units in the Katowice conurbation. Very often, cities in Upper Silesia are mechanical conglomerates of several independent estates. A classic example is Ruda Śląska, which is itself a conurbation composed of several elements – the estates of Ruda, Bykowina, Bielszowice, Nowy Bytom, Godula, Halemba, and Kochłowice. Sometimes the affiliation of estates peripheral to a given city is a matter of convention, and sometimes it is even accidental. A good example is Sośnica, which belongs to Gliwice, but which traditionally gravitates toward Zabrze.

Mining estates located near mines, or even near a single mineshaft, were inhabited by communities whose life was closely connected with the mine. The creation of mining communities in which it is difficult to see urban features, and which on the contrary rather resemble the preindustrial *Gemeinschaft*, was made possible by specific circumstances. In his classic work concerning British mining communities, Bulmer (1975) identifies the ideal type of local mining community, which consists of such elements as spatial isolation from other estates; the economic dominance of mining, together with homogeneity of professions; specificity of the work of the miners, which necessitates solidarity especially in extreme situations such as accidents; a distinct division within the family between male and female roles, even in free time; and class solidarity in conflicts with the employer (*ibid.*)

A good example of a mining estate community that was destroyed by new socioeconomic conditions is Murcki, the estate analysed before the Second World War by Chałasiński (1935) and more recently by Nawrocki (1998). Murcki was initially a mining estate, then an independent city, and finally a peripheral southern district of Katowice. The analysis of Murcki shows that when such a conurbation is structurally transformed by a limitation of coal-mining activity, traditional communities based around mining estates can disappear.

It should be considered whether or not the process of restructuring conurbations should be limited to the transformation of the estates composing it, and whether the question of creating one or several centres should be abandoned. Is there any point in creating bigger administrative units? The polycentrism of the conurbation does not need to be considered an obstacle in the way of its development, but rather a value of which advantage could be taken. The specialization of each city and estate could facilitate the economic development of the region, and at the same time help resolve the problem of unemployment.

But the majority of the mining estates must be revitalized and restructured – and this costs a lot. What has to be revitalized is space, both the material space and the social space related to it. Revitalization is not simply “renovation,” but rather a composite transformation of the whole space, giving it new sense while, at the same time, preserving its traditional values.

The Katowice conurbation, as a typical coal conurbation, has been trying throughout its history to get rid of its original chaos and fortuity. This disorder affects not only the conurbation as a whole, but also each element of its parts, including even the smallest mining estates. There are two different ways of conforming the spatial order to the changing society: either can it be completely rebuilt, or new sense can be given to the existing spatial order. A real evolution of the spatial order of the mining estate would be found somewhere between these two different possibilities.

The revitalization of a mining estate could consist of using post-industrial objects for new purposes, such as gastronomy, commerce, or apartments – but we should not ignore their historical value, either. Even run-down elements of the natural environment may be adapted to recreational purposes, or may become an integral part of the landscape. Reservoirs and clay pits situated near mines, which in some places create specific “micro-lake districts,” can become recreation districts; mining slag heaps may be afforested or even become ski routes. So the revitalization of mining estates is a complex task (Gasidło 1998).

The Katowice conurbation is one of many similar coal regions which emerged and evolved, both in Europe and on other continents – their origin was similar everywhere. Compared to similar regions in western Europe, the Katowice conurbation is backward; it emerged later and it

was also restructured later. This was because of its geographic location and historical circumstances: it was situated on the semiperipheries of the developing world economic system. Now it is in its developing stage, which the restructured western European conurbations experienced many years ago. It seems that the restructuring experiences of the western European conurbations may be useful for the further evolution of the Katowice conurbation.

## References

- Bulmer, M. 1975. Sociological models of the mining community. *The Sociological Review* 23, no. 1.
- Chałasiński, J. 1935. Antagonizm polsko-niemiecki w osadzie fabrycznej „Kopalnia” na Górnym Śląsku: Studium socjologiczne. *Przegląd Socjologiczny* 3.
- Gasidło, K. 1998. Problemy przekształceń terenów przemysłowych. *Zeszyty Naukowe Politechniki Śląskiej, Architektura* 37.
- Gwosdz, K. 2004. *Ewolucja rangi miejscowości w konurbacji przemysłowej: Przypadek Górnego Śląska (1830-2000)*. Cracow: Instytut Geografii i Gospodarki Przestrzennej Uniwersytetu Jagiellońskiego.
- Jałowicki, B. 1978. Charakterystyka procesów urbanizacji Polski. *Studia Socjologiczne* 70, no. 3.
- Korcelli, P. 1969. *Rozwój struktury przestrzennej obszarów metropolitarnych Kalifornii*. Warsaw: PWN.
- Kotela, C. 1995. Gospodarka przestrzenna w GOP na przykładzie realizacji planów zagospodarowania przestrzennego w latach 1945-1989. *Śląski Kwartalnik Urbanistyki i Architektury* 1-2.
- Nawrocki, T. 1998. Stosunki społeczne w osadzie „Kopalnia” na Górnym Śląsku: Śladami Józefa Chałasińskiego. In *Śląsk – Polska – Europa: Zmieniające się społeczeństwo w perspektywie lokalnej i globalnej*. Ed. A. Sułek and M. S. Szczepański. Katowice: Wydawnictwo Uniwersytetu Śląskiego.
- Rajman J. 1997. Struktura przestrzenna ludności i osadnictwa aglomeracji katowickiej w okresie transformacji gospodarczej. *Zeszyty Instytutu Geografii i i Przestrzennego Zagospodarowania PAN* 46.
- Szczyпка-Gwiazda, B. 2003. *Pomiędzy praktyką a utopią. Trójmiasto Bytom-Zabrze -Gliwice jako przykład koncepcji miasta przemysłowego Republiki Weimarskiej*. Katowice: Wydawnictwo Uniwersytetu Śląskiego.