

RESIDENTIAL AND INDUSTRIAL AREAS [OF THE CZECHOSLOVAK TOWNS

Obytné a průmyslové plochy československých sídel s více než 5000 obyvateli (kromě velkoměst). — Ve spolupráci s Výzkumným ústavem výstavby a architektury byly ve 282 československých obcích zjišťovány obytné, výrobní, dopravní plochy a plochy veřejné zeleně. Zdaleka největší plochy zaujímají plochy obytné a průmyslové. Obytné plochy zaujímají nejčastěji 70—80 nebo 80—90 %, průmyslové 10—20, 20—30 a 5—10 % celkové sídelní plochy. Nejvyšší podíl průmyslových ploch vykazují střediska silného průmyslu již v kapitalismu a sídla industrialisovaná v socialismu. Většina studovaných sídel (zvl. na Slovensku) se vyznačuje větším či menším soustředěním průmyslu do určité části sídelní plochy. Menšina sídel (zvl. v českých zemích) má průmysl rozptýlený po celé sídelní ploše díky menším závodům zvl. lehkého průmyslu. Větší prostorová koncentrace slovenského průmyslu lépe vyhovuje moderním požadavkům na rozmístění průmyslových ploch. Topografická poloha průmyslových ploch zvl. těžkého průmyslu se vyznačuje vázaností na železnici, rovinatý terén a okraj obytných ploch. Je patrný i vliv struktury průmyslu na jeho rozmístění.

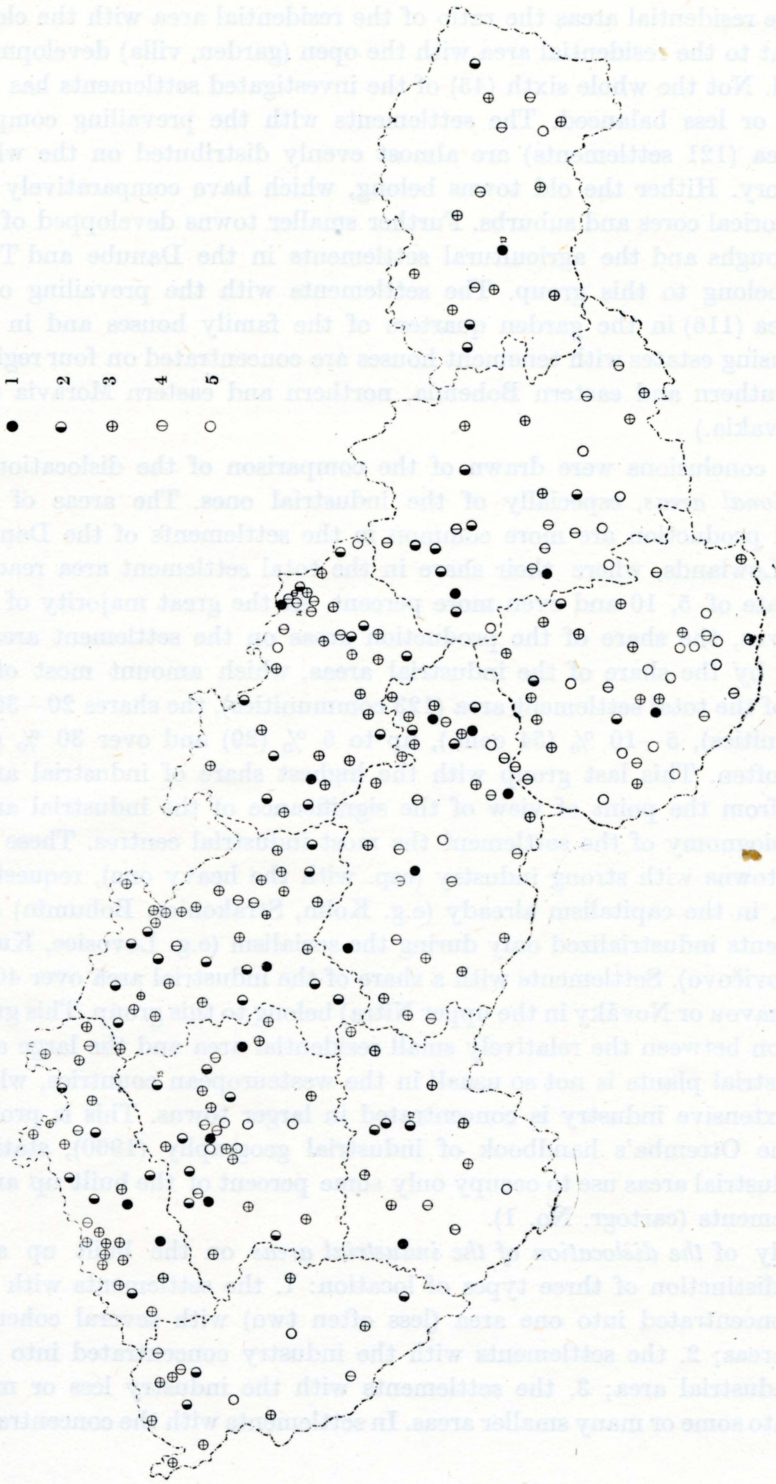
The Czechoslovak geographical literature did not deal hitherto in a special study with the location of the functional areas in the towns. In the foreign literature such studies are also rarely met with and they refer to the study of the location of the industry in the cities most often (e.g. Robertson's study about Edinburgh, Zimm's about Berlin, Bencze's about Budapest). The comparing studies, occupying on this theme by more settlements for the certain region are exceptional (e.g. Jonas' study about the towns of Low Saxo. .).

In cooperation with the Research Institute for Construction and Architecture in Brno, the settlement areas in the Czechoslovak settlements with more than 5000 inhabitants with the exception of 5 greatest cities were investigated in the Geographical Institute of the Czechoslovak Academy of Sciences in Brno. The military maps with the scale 1 : 25.000, giving the state of the years 1950—57 approximately, served as a basis for these investigations. The settlement areas have been planimetrically established in 282 towns altogether. In these towns only the parts of the administrative communities near of their core or united with it were included. The farther and separated parts of the communities and the parts of scattered plan were dropped from the investigations. The built-up areas (i.e. the areas of the buildings and courtyards), the areas of streets, squares and gardens in the residential areas are

included. The productional areas are divided into industrial and agricultural areas. To the industrial areas the areas of the industrial plants (i.e. of the factories with courtyards) including the tractordepots and storehouses are added. To the agricultural areas belong the areas occupied by the state farms, by the farm buildings and by the equipment of the collective farms. To the transportational areas the larger railway-stations (i.e. buildings, ramps, rails) and the broader railway tracks limited by the excavations and embankments belong. The spaces of public green relate on the parks and forested areas with the distinguished paths. The investigations showed, that the largest areas are occupied by the residential and productional, especially industrial areas, which assert consequently most strongly in the physiognomy of the studied settlements. The following table shows the differentiation of the settlement area in ha:

Size of the town:	Settlement area	Residential area in ha	Production	Transport	Public green
50—100 000 inhabitants therein:	8798	6 438	1 677	452	231
Košice	847	686	120	28	13
Olomouc	1 059	765	192	49	53
Liberec	996	818	109	42	27
Č. Budějovice	988	710	173	83	22
Ústí n. L.	899	572	198	106	23
Hradec Králové	672	457	179	17	19
Gottwaldov	606	509	83	2	12
Pardubice	736	530	149	31	26
Havířov	231	201	24	6	—
Kladno	681	432	211	32	6
Karviná	668	454	170	16	28
Most	415	304	69	40	2
10—50 000 inhabit. Settle. w.	31 347	22 647	6 118	1 324	1 257
5—10 000 inhabit.	26 584	20.774	4 504	458	848
Total	66 729	49 859	12 299	2 234	2 336

The residential areas occupy most often 70—80% (at 96 communes) and 80—90% (at 80 communes) of the whole settlement area of the community. Among the towns with a high percentage of the residential area (over 90%) there are settlements with a less developed industry, some towns and communities of the Ostrava-Karviná Basin with the large workers' colonies, the communities in surroundings of Prague and the agricultural communities of the Danube Lowland. The lowest percentage of the residential area (below 60%) occur mostly at towns with a well developed industry, eventually with a railway crossing.

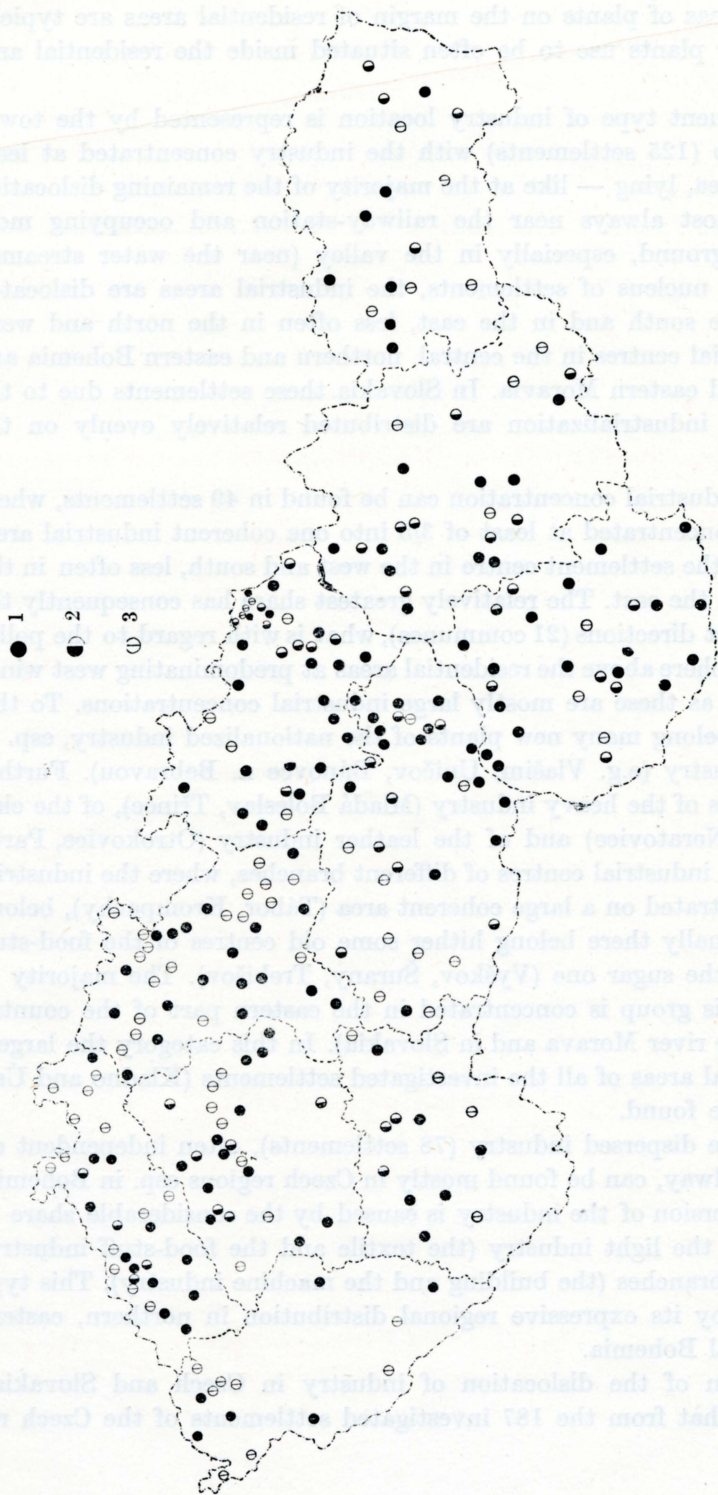


1. The industrial areas in the Czechoslovak settlements with more than 5000 inhabitants (with the exception of 5 greatest cities). The share of the industrial areas on the total settlement area amounts: 1. more than 30%. 2. 20—30%. 3. 10—20%. 4. 5—10%. 5. less than 5%.

Inside the residential areas the ratio of the residential area with the closed development to the residential area with the open (garden, villa) development was studied. Not the whole sixth (45) of the investigated settlements has this ratio more or less balanced. The settlements with the prevailing compact built-up area (121 settlements) are almost evenly distributed on the whole state territory. Hither the old towns belong, which have comparatively extensive historical cores and suburbs. Further smaller towns developed of the former boroughs and the agricultural settlements in the Danube and Tisza Lowlands belong to this group. The settlements with the prevailing open built-up-area (116) in the garden quarters of the family houses and in the modern housing estates with tenement houses are concentrated on four regions (central, southern and eastern Bohemia, northern and eastern Moravia and central Slovakia.)

Valuable conclusions were drawn of the comparison of the dislocation of *the productional areas*, especially of the industrial ones. The areas of the agricultural production are more common in the settlements of the Danube and Tisza Lowlands, where their share in the total settlement area reaches often the rate of 5, 10 and even more percent. At the great majority of the studied towns, the share of the production areas on the settlement area is determined by the share of the industrial areas, which amount most often 10—20 % of the total settlement area (123 communities), the shares 20—30 % (59 communities), 5—10 % (54 com.), up to 5 % (29) and over 30 % (17) occur less often. This last group with the highest share of industrial areas represents from the point of view of the significance of the industrial areas in the physiognomy of the settlement the most industrial centres. These are partly the towns with strong industry (esp. with the heavy one), requesting large space, in the capitalism already (e.g. Kolín, Strakonice, Bohumín) and the settlements industrialized only during the socialism (e.g. Lovosice, Kunovice, Sládkovičovo). Settlements with a share of the industrial area over 40 % (Žďár n. Sázavou or Nováky in the upper Nitra) belong to this group. This great disproportion between the relatively small residential area and the large area of the industrial plants is not so usual in the westeuropean countries, where the more extensive industry is concentrated in larger towns. This is proved even by the Otremba's handbook of industrial geography (1960), stating, that the industrial areas use to occupy only some percent of the built up areas of the settlements (cartogr. No. 1).

The study of *the dislocation of the industrial areas* on the built up area led to the distinction of three types of location: 1. the settlements with the industry concentrated into one area (less often two) with several coherent industrial areas; 2. the settlements with the industry concentrated into one coherent industrial area; 3. the settlements with the industry less or more dispersed into some or many smaller areas. In settlements with the concentrated



2. The dislocation of the industrial areas in the Czechoslovak settlements with more than 5000 inhabitants (with the exception of 5 greatest cities and towns where the share of the industrial areas amounts up to 5% of the settlement area). Settlements: 1. with the industry concentrated in one area (less often two), 2. with the industry concentrated in one coherent industrial area, 3. with the dispersed industry.

industry large areas of plants on the margin of residential areas are typical, while the smaller plants use to be often situated inside the residential area (cartogr. No. 2).

The most frequent type of industry location is represented by the towns of the first group (125 settlements) with the industry concentrated at least of 2/3 into one area, lying — like at the majority of the remaining dislocation categories — almost always near the railway-station and occupying most often the plain ground, especially in the valley (near the water streams). In regard to the nucleus of settlements, the industrial areas are dislocated most often in the south and in the east, less often in the north and west. These are industrial centres in the central, northern and eastern Bohemia and in the central and eastern Moravia. In Slovakia these settlements due to the uniform socialist industrialization are distributed relatively evenly on the whole territory.

The extreme industrial concentration can be found in 49 settlements, where the industry is concentrated at least of 3/5 into one coherent industrial area, situated towards the settlement centre in the west and south, less often in the South-west or in the east. The relatively greatest share has consequently the orientation to west directions (21 communes), what is with regard to the pollution of the atmosphere above the residential areas at predominating west winds disadvantageous, as these are mostly large industrial concentrations. To this type of location belong many new plants of the nationalized industry, esp. of the machine industry (e.g. Vlašim, Uničov, Bánovce n. Bebravou). Further some older centres of the heavy industry (Mladá Boleslav, Třinec), of the chemical industry (Neratovice) and of the leather industry (Otrokovice, Partizánské) and older industrial centres of different branches, where the industrial plants are concentrated on a large coherent area (Tábor, Krompachy), belong to this group. Finally there belong hither some old centres of the food-stuff industry esp. of the sugar one (Vyškov, Šurany, Trebišov). The majority of settlements of this group is concentrated in the eastern part of the country (in the east of the river Morava and in Slovakia). In this category the largest coherent industrial areas of all the investigated settlements (Kladno and Ůstí n. Labem) can be found.

The type of the dispersed industry (78 settlements), often independent on the site of the railway, can be found mostly in Czech regions esp. in Bohemia. The relative dispersion of the industry is caused by the considerable share of smaller plants of the light industry (the textile and the food-stuff industry) and of the other branches (the building and the machine industry). This type is characterized by its expressive regional distribution in northern, eastern and partly central Bohemia.

The comparison of the dislocation of industry in Czech and Slovakian regions showed, that from the 187 investigated settlements of the Czech re-

gions 121 (64.7%) communities belong to the first two categories with a concentrated industry and only 66 (33.3%) communities to the group with a dispersed industry. In Slovakian regions this relation is 53 communes (81.4%) with a concentrated industry to 12 (18.6%) with a dispersed one. The space concentration of the Slovakian industry is due to the actual socialist industrialization consequently greater than in Czech regions.

The rough establishment of the main features of the dislocation and of the topographic situation of industrial areas in the studied Czechoslovak settlements showed the basal dependence of these areas on railways and on plain terrain and the influence of the structure of the industry on its dislocation. The more detailed explanation of the causes of the industry dislocation would require at least at older industrial centres the study of the historical development.

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