obnovy v Lednicko-valtickém areálu. Věnoval se zejména rezidenčním zámeckým zahradám v Lednici a ve Valticích. Jedinečné Krajině pro chov ceremoniálních kočárových koní v Kladrubech nad Labem a péči o ni prostřednictvím naplňování Management planu, se věnoval zahradní a krajinářský architekt Tomáš Jiránek. Na něj opět navázal Přemysl Krejčiřík, který projektuje obnovu vybraných částí krajinné památkové zóny Kladrubské Polabí a zaměřil se zejména na přírodně krajinářský park Mošnice, který leží v areálu Národního hřebčína Kladruby nad Labem, s.p.o. Na příkladu několika krajinných památkových zón (Libějovicko-Lomecko, Lednicko-valtický areál, aj.) ukázal Jozef Sedláček z Ústavu plánování krajiny Zahradnické fakulty MENDELU možnosti studia a hodnocení kulturních krajin ČR a představil dílčí výsledky projektů Národní kulturní identity (NAKI), který byly mimo jiné věnovány krajinným památkovým zónám. David Tuma z plzeňského pracoviště NPÚ se věnoval oborám a bažantnicím jako nezpochybnitelné součásti naší kulturní krajiny. Představil dílčí výsledky z projektu NAKI *Obory a bažantnice v kulturní historii*. Hlavní program uzavřel zahradní a krajinářských architekt a vysokoškolský pedagog Pavel Šimek výkladem o aktuálním stavu krajinářského parku v Průhonicích (památka UNESCO) a o proběhlé rozsáhlé obnově tamního podzámeckého alpina.

V průběhu semináře proběhly četné diskuse nad představovanými tématy, které potvrdily náročnost a komplexnost procesu péče o kulturní krajinu, což také zmínil po skončení semináře Zdeněk Novák: *„Potěšilo mě, že brněnské pracoviště NPÚ pořádá tato odborná setkání a že jsem tentokrát mezi účastníky viděl tolik mladých tváří. Péče o kulturní krajinu jako kulturní dědictví je mimořádně složitá disciplína, jak se potvrdilo během přednášek a diskusí. Proto jsem rád, že jak organizátorem tak většinou účastníků jsou mladí lidé, které téma evidentně zajímá, a že odborná péče o kulturní krajinu má budoucnost."*

Poté se již hosté odebrali do zahrady a vily Stiassni ke komentovaným prohlídkám.

Celodenního semináře se zúčastnilo pětapadesát hostů nejenom z různých pracovišť NPÚ, přítomni byli také zástupci výkonných orgánů státní památkové péče, muzeí, soukromých ateliérů, sdružení, ale také zástupci správ historických zahrad a parků a vysokoškolští studenti.

O organizaci semináře se postaral Roman Zámečník, specialista na kulturní krajinu, památky zahradního umění a referent památek s mezinárodním statusem z NPÚ, ÚOP v Brně.

Na viděnou v zahradě vily Stiassni při sedmém ročníku semináře se těší

Roman Zámečník

Reflections on the industrial landscapes of the Czech Republic

Karel KUČA; Věra KUČOVÁ

Key words: industrial landscape, industrial heritage, cultural landscape, heritage care

Bohemia, Moravia, and Silesia, rightfully considered the raw material and industrial hearts of the Austro-Hungarian monarchy, were significantly affected by the development of industry in the 19th and 20th centuries (as well as by mining since the Middle Ages). The degree of change in different areas was naturally different. The prerequisite for an area to have been considered an industrial landscape (and not just a land affected by industry) was a marked transformation of the overall appearance and the old structure of the landscape by industrial activity, as well as a sufficient area and degree of concentration of industrial units. The most prominent industrial landscapes, especially associated with underground or surface coal mining and its associated development of heavy industry, are in fact a separate category of cultural landscapes, provided that the term "cultural" is understood as any kind of transformation of the landscape by man. The main difference in comparison to an organically developed cultural landscape, for example, is that an industrial landscape was not created with the perspective of the long-term sustainability of such an arrangement, but rather focused primarily on the exploitation of natural resources and the narrow economic aspects of industrial production. This is actually in contrast to other types of cultural landscapes, since to develop it further means to eliminate its older form. In essence, industrial landscapes are also encoded by a characterization of self-destruction: after the raw materials have been depleted, the mining areas are then abandoned and reclaimed (and thus completely changed) in order to be used for other purposes. The lack of raw materials also has a natural impact on the associated areas of heavy industry. In addition, these are characterized by a constant need for modernization and the replacement of obsolete operations with more modern ones. Their further existence is conditioned by the economic profitability of the operation. In particular, the fundamental structural and social changes after 1989 have caused, together with the effects of globalization of the economy, the extinction or significant decline of many industrial sectors in our country. The article shows that heritage care has only very little objective possibilities to stop the natural and lawful process of such extinction and other transformations in industrial landscapes. It can scarcely attempt to do more than to preserve the characteristic and most valuable evidence of the development of industry and of segments of the landscape. This requires that the constant and continuous documentation of the form and transformation of the industrial landscape play even more of a major role.

Illustrations: ***Fig. 1.*** *Kaňk (Kutná Hora), distinctive relict montane landscape on the hillside;* ***Fig. 2.*** *Komáří Vížka (Krupka), a massive precipice as a remnant of pre-industrial mountainous activity;* ***Fig. 3.*** *Brod (Příbram), shaft No. 15. of the Příbram uranium mines with a large heap;* ***Fig. 4.*** *Háje (Příbram), bore of shaft No. 16 of the Příbram uranium mines;* ***Figs. 5, 6, and 7.*** *Doly, formerly Karviná (Fryštát), comparison of the landscape on imperial prints of the stable cadaster map from 1836 with an orthophotomap from the 1950's and a current orthophoto map;* ***Fig. 8.*** *The same, mine towers of the Gabriel mine;* ***Fig. 9.*** *Lower district of the Vítkovice Ironworks with Hlubina mine at the border of Moravian Ostrava and Vítkovice;* ***Fig. 10.*** *Kladno, town panorama from the northeast with the massive Poldi factory in the foreground;* ***Fig. 11.*** *Vinařice (Kladno), Mayrau mine, now used as an outdoor mining museum;* ***Fig. 12.*** *Kladno, lime kilns of the Vojtěšská ironworks;* ***Fig. 13.*** *Lampertice (Žacléř), Jan Šverma mine;* ***Fig. 14.*** *Oslavany (Ivančice). One of the dominant features of an industrial landscape is also the tall heap above the station;* ***Fig. 15.*** *Hromnické Lake at Hromnice (Plzeň), a result of the vitriol slate quarry;* ***Figs. 16 and 17.*** *Svatava (Sokolov), comparison of orthophotomap from the middle of the 20th century and the present;* ***Fig. 18.*** *Mined-out area of the surface quarry at the foot of the Krušné hory Mountains. View from Jezeří Castle;* ***Fig. 19.*** *Limestone quarry Čertovy schody in the Protected Landscape Area of Český Kras;* ***Fig. 20.*** *Kaznějov (Plzeň), massive kaolin quarry supplying the nearby kaolin plants;* ***Fig. 21.*** *Ledce (Židlochovice), a system of large sandstone quarries in the elevated zone between the rivers Svratka and Jihlava;* ***Fig. 22.*** *Chlum (Dubá). The important landscape dominance of the Macha region was gradually destroyed by the break-up of stones;* ***Fig. 23.*** *Kostelec nad Labem (Neratovice), a small hydropower plant with a lock, one of the outstanding technical constructions of the Elbe waterway and linear industrial river landscape;* ***Fig. 24.*** *Smržovka (Tanvald), the spinning mill of Johanna Priebsche Dědicová, known as Klášter (now the company SEBA T);* ***Fig. 25.*** *The Chvaletice thermal power plant (Přelouč), whose actual dimensions are evident when compared with the church in Trnávka;* ***Fig. 26.*** *Zlín, the former Baťa plant as seen in an aerial photo from the southeast;* ***Fig. 27.*** *Plzeň, urban industrial landscape formed by a major railway junction, Škodovka complex in the west, and breweries in the east.*

Industrial landscapes as part of cultural heritage

Věra KUČOVÁ

Key words: industrial landscape, industrial heritage, cultural landscape, heritage care

Industrial heritage creates an image and documents of specific types of the cultural landscape. This material heritage and the large industrial landscapes

that are defined by it are literally disappearing before our eyes; the production units that once determined the image of the location are currently beyond the limits of possible rescue and are even the subject of organized liquidation. The search and naming of the values and importance of industrial landscapes must be systematic, scientific, and motivated.

Even though the leading experts in this segment of cultural heritage have been very active for a long time, the Czech Republic as a whole has unfortunately not been very successful in the area of industrial heritage. The topic of industrial landscapes, especially mining landscapes and their relics, is very important for the Czech Republic as a country with a great industrial tradition.

The article contains a summary of arguments and reference links intended to enhance interest in the heritage of industry in the landscape. It focuses on international methodological documents and selected works by leading European specialists on this topic. It brings parallels to practice in the Czech lands and openly highlights the negative situation and the rapid extinction of large sites, including the inadequate documentation of their appearance and values. It also points to recent findings from Norway, where the identification and regeneration of documents of large sites which co-create the national identity were the subject of governmental decisions, on the basis of which the selected entities were renewed.

Illustrations: ***Fig. 1.*** *The landscape of production facilities in Kladno near the Vojtěšská works at the end of the 19th century;* ***Figs. 2 and 3.*** *Odda, Hordaland (Norway), the rugged valley landscape dominates the site of former foundries and cyanamide production factories;* ***Fig. 4.*** *Norrköping (Östergötland, Sweden), large parts of the production sites create unmistakable units in the urban landscape. The site of former textile and paper mills using the power of the Motala River;* ***Fig. 5.*** *Petřkovice (Hlučín). Anselm mine;* ***Fig. 6.*** *Berg sleusse (Östergötland, Sweden, north of Linköping), Längs Göta canal is part of the waterway between the Baltic Sea and Lake Vätern. It is a major water line work for the transport of goods, material, and people, boldly crossing the terrain of the hilly landscape between the lakes Roxen and Boren;* ***Fig. 7.*** *Teichmühle (Müdisdorf, Mittelsachsen district, Saxony, Germany), the southern edge of the village lines the large pond Unterer Grosshartmanndorfer Teich, founded in the 16th century, which is an important part of the sophisticated water system related to mining activity south of Freiberg;* ***Fig. 8.*** *Freiberg (district Mittelsachsen, Saxony, Germany), one of the centers of the mining landscape of the Ore Mountains (Krušné hory), interesting for the mining and production structures that, together with the heaps, make up a significant part of the landscape;* ***Fig. 9.*** *Finsterwalde (Elbe-Elster District, Brandenburg, Germany), visitor-accessible F60 surface excavator, the largest in Europe;* ***Fig. 10.*** *Ronlad near Thyborøn (village of Lemvig) in central Jutland (Denmark), the large production area fills the entire area of a long-cut ridge separating the North Sea from Limfjord;* ***Fig. 11.*** *Hamburg, Germany, Speicherstadt – the unmistakable port city landscape at the mouth of the Elbe into the North Sea, where a set of warehouses and small shops, a symbol of both inland and oversea shipping, was formed at the end of the 19th century south of the historic center of the Hanseatic City;* ***Fig. 12.*** *Niederfinow (Barnim district, Brandenburg, Germany), a massive ship elevator (Schiffshebewerk) linking the Finow Canal (Oderberger Gewässer) with the much higher (36 m) Oder-Havel Canal;* ***Fig. 13.*** *Mildenberg-Ziegelei (Oberhavel district, Brandenburg, Germany), a large brickworks complex presented as a museum in broad landscape contexts;* ***Fig. 14.*** *Mildenberg-Ziegelei (Oberhavel district, Brandenburg, Germany), a brickworks complex converted into a museum;* ***Fig. 15.*** *Čížkovice (Lovosice), a large cement plant founded in 1898 visible against the background of the Central Bohemian Mountains;* ***Fig. 16.*** *Lubná (Rakovník), Rako mine – the last active deep mine on refractory claystone in the Czech Republic, functional since 1919.* ***Fig. 17.*** *Lubna (Rakovník), heaps near the Rako mine;* ***Fig. 18.*** *Lovosice, a large industrial complex on the Elbe waterway.*

Linearity and continuity. The Frýdlant area as an example of industrial landscape research

Petr FREIWILLIG

Key words: proto-industrialization, Frýdlant Region, industrial landscape, textile production, industrial heritage

The study deals with the phenomenon of the linear industrial landscape that formed on the borders of Bohemia, Germany and Poland, in the Frýdlant extension. Although this area, after the de--industrialization of the last twenty years, has been an agricultural landscape of pastures, fields and forests, it has a rich industrial and proto-industrial past preserved in fragments, sections, and even subtle remnants. The structure of the landscape is predetermined not only by the morphology of the terrain and hydrographic conditions, but also by medieval and modern settlements and demographic conditions. From this point of view, the area studied is a predominantly linear industrial landscape with components of a textile industry landscape, but also of mining and processing of mineral resources. The Frýdlant area is now a peripheral location of the Czech Republic, affected in the 20th century by an entire chain of phenomena which caused long-term stagnation or depression of the area. In the Early Modern Age, however, this was one of the most populous estates in Bohemia, thus creating appropriate demographic conditions for proto-industrialization.

The dominating settlement structures is from the middle ages are the linear villages which create several kilometers of continuous bands of settlement along the watercourses. The most significant of these is the Smědá River into which most of the area drains into. The river is characterized by a considerable drop: over 46 km the flow drops an extreme 756 m, then 218 m in the urbanized area. In the upper flow in particular, it has excellent conditions for hydro-energetic power. The Smědá, diagonally intersecting the territory from the southeast to the northwest, forms a basic landscape-forming axis linking settlements, production, and infrastructure. Linearity is the basic form of topographic location of production activity in the monitored area.
The course of the water flows was the determining factor, but new industrial buildings with purely steam engine operation were built in the stream river valleys, since the railroad ran through here, facilitating the delivery of coal and raw materials.
It is therefore an open chain, determined by the geomorphology of the territory: water flow → settlement → route → water-powered plant → factory → settlement → railroad → factory.

Of particular importance for the development of both guild and non-guild rural textile production was the establishment of contacts with Upper German merchant houses. It was through them that the Frýdlant area was ranked among typical proto-industrialization areas. This system also benefited the local aristocracy, since all craft production was subjected to a feudal monopoly. The numerous weavers in the countryside were the vast majority, and their number, unlike the stagnant guilds in the cities, increased dynamically. Another trend was the increase in the number of orders per single wearer. Cloth production was heavily concentrated in villages in the Oleška valley, creating a single settlement strip with Markocice (Markersdorf) and Bogatynia (Reichenau), today in Polish territory, formerly Germany. This densely populated valley seemed to be a reservoir of cheap labor for the neighboring villages in the Czech territory and gave them a competitive advantage against guild-based production. The villages, where the majority of the inhabitants found their livelihoods in proto--industrial domestic production, did not visibly differ from other settlements – except perhaps in their usually larger populations. The change was brought about by the advent of factory production which created industrial villages.

In these villages, often in the center, one or two or even more factories would grow from the existing buildings, usually quite disproportionate in size. The production building next to the church became the new dominant landmark. It even surpassed it, which can be seen as a symbol of modernization of the 19th century. However, this was not just the production area itself. At a later stage, this was accompanied by factory colonies and staff houses, or a significant expansion of residential developments. Qualitatively different housing in villas

in close proximity to their factories was brought about by the owners of the factories. This all changed the image of these villages in a fundamental way and created somewhat bizarre scraps of industrial, folk, and villa historical architecture which was typical for the entire North Bohemian region. The influence of proto-industrial and industrial production was reflected in the territorial development of such villages, characterized by an abrupt growth of residential development in contrast with purely agricultural villages. The textile industry thus became a starter and the driver of the region's industrialization. The article draws attention to the need to notice manufacturing structures across the country and presents the possible outcomes of such an approach.

Illustrations: ***Fig. 1.*** *Graph of the population of the Frýdlant estate/district between 1651 and 1930;* ***Fig. 2.*** *Typical types of settlement landscapes in the monitored area. The numbers identify the main settlement bands formed by chains of successive linearly formed settlements. 1 – Hornosměďavský belt, 2 – Řasnický belt, 3 – Pooleší belt (Dětřichovsko – Bogatyňský pás), 4 – Bulovský belt, 5 – Srbsko-Miłoszówský belt, 6 – Dolnooldříšsko-Miedzianský belt, 7 – Jeřický (Oldřichovsko-Mníšecko-Novoveský) belt, 8 – Vítkovský belt;* ***Fig. 3.*** *Černousy, Pouštka and Háj (Liberec district) in the old settlement landscape, characterized by centuries-old forms with a younger reorganization of plowfields;* ***Fig. 4.*** *Jindřichovice pod Smrkem (Liberec district) in a landscape of late medieval colonization, typical rocky valley village with longitudinal ridge plowfield based on German law;* ***Fig. 5.*** *Bílý Potok (Liberec district). The rocky valley village wedged between the northern slopes of the mountains is characterized by an extraordinary number of smaller burning structures of the sub-species layers centered around the Smědá River and Hájený Creek;* ***Fig. 6.*** *Nobility-owned settlements of Nová Pertoltice and Ferdinandov (Liberec district), founded between 1781 and 1783. They are characterized by a strictly regular urban concept with evenly dimensioned plowfields and identical orientation of the structures;* ***Fig. 7.*** *Frýdlant and Nové Město pod Smrkem (Liberec district);* ***Fig. 8.*** *Frýdlant (Liberec district). Since the mid-19th century, large industry began to penetrate into the immediate vicinity of the fortification periphery;* ***Fig. 9.*** *Hejnice (Liberec district). The upper stream of the Smědá River is characterized by a number of waterworks, here the weir and the beginning of the millrun to the grain mill No. 260;* ***Fig. 10.*** *Poustka (Liberec district). On the meandered lower flow of the Smědá there are waterworks at greater distances but with greater power;* ***Fig. 11.*** *The longitudinal profile of the Smědá River with marked waterworks and their power in 1930;* ***Fig. 12.*** *Map of production facilities on the territory of the former Frýdlant estates/district;* ***Fig. 13.*** *Raspenava (Liberec district). Typical situation of a linearly formed production and settlement site on the border between Raspenava and Hejnice;);* ***Fig. 14.*** *Dětřichov (Liberec district). Typical industrial village;* ***Fig. 15.*** *Number of tributary looms in selected villages on the Frýdlant estate between 1591 and 1749;* ***Fig. 16.*** *Number of weavers in towns and villages of the Frýdlant estate in 1752 according to manufactory tables;* ***Fig. 17.*** *Comparison of the Heřmanice site as a typical proto-industry textile industry (in 1749, the weaver records indicated 66 weavers) with the typical agricultural Krásný Les (11 weavers);* ***Fig. 18.*** *Structure of industry in the Frýdlant district according to the number of employees in 1914 (entities over 30 employees, excluding mining and wood and mineral resource processing);* ***Fig. 19.*** *Number of houses in the towns and villages of the Frýdlant estate/district between 1654 and 1930;* ***Fig. 20.*** *Number of houses in selected villages of the Frýdlant estate/district between 1654 and 1930;* ***Fig. 21.*** *Number of water-powered technical facilities at the Frýdlant estate/district in the long run;* ***Fig. 22.*** *Industrial plants in the Frýdlant district according to their association with the proto-industrial water work in 1930.* ***Tab. 1.*** *Number of weavers and estates in the villages in 1614, 1700, and 1710;* ***Tab. 2.*** *Number of persons involved in proto-industrial rural textile production at the Frýdlant estate in 1710 according to villages; Tab. 3. Area of land in selected municipalities of the Frýdlant estate according to the Theresian Cadastre (in stones).*

The Žatec hops landscape in the second half of the 19th century and early 20th century

Lucie RADOVÁ

Keywords: hops, hopfield, drying room, landscape, settlement

The characteristic feature of the hops landscape around Žatec, more than in other cases, is the complete interconnection of landscape and settlements. However, it would not be possible to use it extensively without the facilities that the settlements provided for the subsequent processing of hops. On the contrary, the specific appearance of towns and villages in the Žatec area, as well as their urbanization and development, are influenced by the requirements resulting from the need to process this crop. Žatec hops have been considered to be the world's best since at least the middle of the 18th century, which was the breakthrough period when hops farming saw a massive development, but the biggest "transformation" of the countryside and settlements came only during the last third of the 19th century and the beginning of the 20th century. This period is associated with major changes in hops cultivation and processing technology. The greatest impact on this process was the gradual introduction of artificial hop drying. The symbol of this activity are the hop drying rooms, tower structures initially built into the ground plan of the village farms or directly into some of the farm buildings, later emerging on the outskirts of the villages as a self-standing new buildings. Hops are crops that require specific conditions, both during their actual growth and subsequent treatment. During transport and processing, there are chemical changes in the brewing substances in hops, so the drying has to take place as soon as possible after sowing. The drying rooms have accelerated the act of processing and thus increased the area of the hopfields.

The second revolutionary innovation of the hopfield landscape was the cultivation of hops on wire constructions. These trellises began to be built at the end of the 19th century, and they are still in use today. It was cheaper to acquire such constructions than the hops poles that had been used until then; the hopfields had higher yields, the hops were higher quality, and covers and mechanization could be used in cultivating the hops, which helped to save labor.

Both of the above-mentioned innovations led to great developments in hop production, which became the dominant agricultural sector in this area and was thus involved in the development of other areas, in particular rail transport and electrification. Above all, it gave this landscape its specific atmosphere and dynamic appearance, influenced by hops, one of the fastest growing plants in the world.

Illustrations: ***Fig. 1.*** *Hopfield near Tuchořice (Louny district);* ***Fig. 2.*** *Hop dryer and hopfield in Trnovany near Žatec (Louny district);* ***Fig. 3.*** *Hopfield in Liběšice near Úštěk (Litoměřice district);* ***Fig. 4.*** *Kolešov (Rakovník district), village green with pond, hop dryer at No. 25 and transformer station;* ***Fig. 5.*** *Sířem (Louny district), hop dryer (No. 1) built into a farm complex;* ***Fig. 6.*** *Layout of no longer existent hop dryer attached to a farm building in Hřivice;* ***Fig. 7.*** *Tuchořice (Louny district), a wood-fired oven (No. 101/1) built into an older farm building;* ***Fig. 8.*** *Tuchořice (Louny district), one of the last functional hop dryer (No. 103/3) – interior, 1st floor, view of the forest with so-called drawers, where the dried hops were handled;* ***Fig. 9.*** *Tuchořice (Louny district), one of the last functional hop dryers (No. 103/3) – interior, ground floor, view to the fireplace;* ***Fig. 10.*** *Sířem (Louny district), stand-alone drying room (No. 9/1);* ***Fig. 11.*** *Želeč (Louny district), residential house in the back with a connected hop dryer (No. 146/1);* ***Fig. 12.*** *Želeč (Louny district), "barn type" drying room (No. 127);* ***Fig. 13.*** *Soběchleby (Louny district), torso of a brick factory on the outskirts of the village;* ***Fig. 14.*** *Hopfield under Stekník Castle (Louny district).*

The transformation of the Czech landscape in the first half of the 20th century as influenced by the systematic electrification of the country

Martin BOHÁČ

Keywords: industrial landscape, electrification, development of the Czech lands at the beginning of the 20th century

The paper deals with the development of the high and extra-high voltage power grid in the first half of the 20th century and its impact on the transformation of the landscape of the Czech lands and Slovakia.

The construction of field and later long-distance high and extra-high voltage power lines in most countries was the second phase of industrialization through network systems (after the railway system and before motorways). High and extra-high voltage power lines, thanks to their tall steel construction and very high density, comparable perhaps only with the density of roads and highways, has very markedly transformed the industrialized landscape, with the Czech Republic and Czechoslovakia being no exception. The article focuses on the development of the construction of 110 kV networks on the territory of former Czechoslovakia in 1918–1945, when it formed the basis of these networks and when it brought about the most significant change of the landscape. Until then the country had not been affected by this type of infrastructure.

At that time, the first 110 kV lines – or 100,000 V as they were technically called at the time – were created as the backbone connectors of large power stations with significant power consumption centers and, to a certain extent, as the connecting lines of large power plants to provide a uniform supply of distant parts of the power grid. Given that these were new structures, being completely unique in the first years, these power lines formed a new landscaping element, unknown at the time. This was even more striking to the uninitiated observer, since they often passed through not only industrial areas, above all mining and urbanized areas, but also through rural areas with which they had no association. It should be noted that in 1926, at the time of the construction of the first Czechoslovak 100,000 V power line from Ervěnice to Prague, the systematic electrification of the countryside was first taking place, so in many cases lines could have been passing through villages that were not yet electrified. The more significant change took place in the years after World War II, when the 220 kV and 400 kV overhead networks were built. The 110 kV network was thickened, gradually losing its backbone character and becoming more of a distribution network serving the adjacent areas.

Unfortunately, long-distance high-voltage lines do not receive sufficient attention in the Czech Republic from the perspective of the technological history, and it is certainly necessary to preserve one of the existing 110 kV power lines as a technical monument. Ideally, it should be one of the sections of the Ervěnice-Prague power line from 1926 in the Central Bohemia Region.

Illustrations: ***Fig. 1.*** *Dominant features of the Czech rural landscape from different epochs: Baroque church and 110 kV electrical tower;* ***Fig. 2.*** *The course of the first Czechoslovak 110 kV line from Ervěnice to Prague, commissioned in 1926;* ***Fig. 3.*** *Tower of the "circle" Prague-North – Prague-South 110 kV line in the crossing point of the former Prague-Vršovice marshalling station (left, not in the image) in the area of today's V Korytech Street;* ***Fig. 4.*** *The first 110kV Czechoslovak line from Ervěnice to Prague, put into operation in 1926 – a section leading from west to southeast around the Okoř castle;* ***Fig. 5.*** *Passage of the 110 kV line Ervěnice – Praha-Sever through Lenešice pond near Litoměřice;* ***Fig. 6.*** *Passage of the 110 kV line Třebovice–Třinec–Žilina suburb of Ostrava (Moravská Street);* ***Figs. 7 and 8.*** *Construction of the 110 kV line Třebovice–Třinec–Žilina along the Kysuce River in the early 1930's;* ***Fig. 9.*** *Tower for simple 110 kV line from Vranov nad Dyjí to Oslavany from the early 1930's, near Vranov;* ***Fig. 10.*** *Portal of simple 110kV line from Vranov nad Dyjí to Oslavany from the early 1930's (?) directly above the Vranov Dam and its power plant and distribution;* ***Fig. 11.*** *The course of the Slovakian 110 kV line from Ladka to Handlová via Strážovské vrchy hills;* ***Fig. 12.*** *Simple 110 kV line from Ladce to Handlová from the second half of the 1930's in the mountain landscape of the Strážovské vrchy hills;* ***Fig. 13.*** *Construction of the 110 kV line from Ladce to Handlová in the Strážovské vrchy area;* ***Fig. 14.*** *Slovenian 110 kV line from Handlová to Banská Bystrica;* ***Fig. 15.*** *Construction of the 110 kV line from Handlová to Banska Bystrica in high mountain areas at altitudes over 1000 meters above sea level in the years 1930–1931;* ***Fig. 16.*** *Map of the 110 kV line network as of 1 August 1941 in the Czech lands, including the Protectorate and the detached territories (and partly the adjacent territory of Austria);* ***Fig. 17.*** *Anchor power line with double arms for transposition of both triple 110 kV lines from Toušeň to Kolín u Poříčan;* ***Fig. 18.*** *110 kV power lines from the World War II years, in this case Štěchovice–Zvírotice, in the countryside;* ***Fig. 19.*** *Electrical towers for 110 kV lines Postoloprty – Stochov – Prague-South in Prague-Lahovice from 1944 to 1946, with the arms after the non-functional transposition clearly visible.* ***Tab. 1.*** *Electricity consumption of the City of Prague in 1918–1928 (before 1922 including independent suburbs, this year included into the so-called Great Prague);* ***Tab. 2.*** *Electricity production in Ervěnice in 1926–1934.*

Railways and landscape

Karel HÁJEK

Keywords: railways, transport buildings, civil engineering buildings, railway station, landscape

In its almost two centuries of development, the railway has drastically influenced the appearance of the modern cultural landscape. Extensive landscaping and civil engineering have left an unmistakable landscape character for these modern line structures. Their application in urban areas and municipalities has also been decisive for the character of the urbanization of the second half of the nineteenth century.

Historic transport buildings, whether for road or water, are relatively few in the countryside. The railroad is the opposite case. The maximum radius of arcs for the directional route and the elevation of the route in a constant gradient resulted in the need to build a number of artificial underpass structures. Efforts to use favorable sloping conditions led to the design of railways in valleys parallel to waterways. Due to the geomorphology, it was necessary to look for ways of designing that would allow the railways to run through mountainous areas as well. A high altitude route is developed as a sloped route using a number of directional slope arcs using artificial structures of railway roadbeds and bridge construction for crossing uneven terrain. In the case of rather isolated routes leading along mountainous plateaus, extensive bridges crossing wide and deep valleys were used. With the development of construction possibilities, tunnels are being built more and more frequently to overcome even dramatic field obstacles.

When a railway station is located away from construction, the connection between railway station and city takes on the role of new city radial and determines the direction of further development. New residential units and industrial plants are set up close to it. With the gradual development of city urbanization, the railway station gradually goes from being located outside the city to being in its wider center. Today the railroad route can be a barrier that prevents further expansion of the city. Nevertheless, it forms an integral part of the urbanized landscape and its place in the transport system is irreplaceable.

The examples presented of historic railway constructions demonstrate the influence of the railway on the development of urbanized spaces and the cultural landscape of the second half of the nineteenth century.

Illustrations: ***Fig. 1.*** *Prague, viaduct of the Northern State Railways – the so-called Negrelli Viaduct;* ***Fig. 2.*** *Viaduct across the Kocourov Valley near Žampach;* ***Fig. 3.*** *Prague, railway bridge under Vyšehrad;* ***Fig. 4.*** *Prague, Nusel Valley, view from the Nusel Bridge;* ***Fig. 5.*** *Berounka River valley;* ***Fig. 6.*** *Two examples of "railway arbors".* ***6a*** *– arbor at the station in Bayerisch Eisenstein.* ***6b*** *– Arbor in front of the Peruca railway station;* ***Fig. 8.*** *Nelahozeves tunnels;* ***Fig. 9.*** *Děčín, railway station east.*

The domestic development of typology, construction, and warehouse architecture

Lukáš BERAN

Keywords: industrial architecture; warehouses; operation; construction; history

At the end of the nineteenth century, thanks to the advancing mechanization of operation, basic silos began to develop independently as storage facilities for grain as well as other goods. Several-storey buildings which, besides transferring goods between trains or vessels and wagons, also provided for their storage, and began to replace original sheds in stations and ports. The Czech lands, or former

Czechoslovakia, became the stage for a number of design and operational innovations of this typology. In 1890–1896, the Northern Railway of Emperor Ferdinand rebuilt the southern part of the Brno railway junction for its freight station, designed by construction director Wilhelm Ast at two levels. It also included a warehouse for goods, designed as three-storey, with the arrival of cars on two levels. Use was made not only of concealed concrete, but above all serratedly arranged ramps from which freight cars could be independently load or unload as well as more easily connect them to trains. This design also appeared in 1881, when Hermann von Schwind used it to design the warehouse of the Austrian company for local railways in Olomouc--Hodolany. Between 1921 and 1923, the transport company Bohemia built a warehouse in Bratislava's port, designated by the number 7. Its operating arrangement was created by engineer Albert Brousil. It was modeled after a multi-storey warehouse built in the 1890's in the Rhine harbors, equipped with a range of folding doors on the leading side so that the goods could be loaded directly by a crane. On the top floor he placed a loft grain warehouse, served from the middle tower by an elevator and a carousel switchboard. Stanislav Bechyně, the designer of the executing company Skorkovský, used Emperger's concrete columns with cast iron cores, which were the first in Austro-Hungary that combined them with flat ceilings using mushroom--shaped heads, which he turned diagonally against the construction grid in the construction of the basement. In 1926, engineer Augustin Rödig originally developed the principle of false quay, the terraced grading of the leading facade of the port warehouse, when designing the building of the joint--stock company Veřejné skladiště (public warehouse) in Prague-Holešovice. Here, four ramps extend from the second floor, on the third floor the ramps form four receding construction fields, and only the fourth floor recedes by half a tract in all sixteen fields. The ramps are positioned alternately above each other to prevent interfering with the work of a pair of cranes. The Skorkovský company again used the mushroom pillars and the architect František Bartoš showed this construction on its functionalist front facade. The resultant experience with the height distribution of traffic and the construction of flat ceilings carried by the mushroom pillars led to the freight reservoir in Prague's Žižkov, whose buildings were designed in 1930–1931 by architects Karel Caivas and Vladimír Weiss. The railway engineer Miroslav Chlumecký devised its original operational solution, allowing for the collision-free operation of the state railway and a large number of private carriers renting the floors and basement areas of the same facility. Another realization of the Skorkovský company with mushroom ceilings, the warehouse of the Ministry of Posts and Telegraphs in Prague-Vysočany from 1929–1934, shows the direction of further development – this is a warehouse served only by cars.

Illustrations: ***Figs. 1 and 2.*** *Brno, warehouse of the North Railway Station of Emperor Ferdinand, a view from the southwest and from the north;* ***Fig. 3.*** *Cadastral plan of Brno 1 : 2 880 from 1906. Detail showing the layout of the railway tracks of the warehouse of the Northern Railway of Emperor Ferdinand;* ***Fig. 4.*** *Bratislava, warehouse No. 7 in the Bratislava port, view from the west;* ***Fig. 5.*** *The same, view from the southwest;* ***Fig. 6.*** *The same, combined ground plan of the foundations, basement and ground floor of the warehouse;* ***Figs. 7 and 8.*** *Prague-Holešovice, building of the Veřejné skladiště company before completion in 1927 and in the interior of the second floor in 1932;* ***Fig. 9.*** *The same, study of the facade by František Bartoš;* ***Fig. 10.*** *The same, the current condition;* ***Fig. 11.*** *Karel Caivas; Vladimír Weiss, building of the Freight Station in Prague's Žižkov, cross section of the wing, 1930;* ***Fig. 12.*** *Prague-Žižkov, railway station, a view from the track to the wing and the platforms with lifts. Photo by Lukáš Beran, 2015.*

The transformation of factory chimneys from functional buildings to important symbols of the industrial revolution

Martin VONKA

Keywords: factory chimney, industry, history, values, landmark

The lungs of a factory, totems of laborers, smoking columns, masts of work. All these were, and still are, factory chimneys. Although factory chimneys could be perceived as utilitarian, purely functional, and dirty structures, we can look at them from another angle. During the Industrial Revolution, factory chimneys became self-confident structures which, as decorative dominant features of the urbanized landscape, pointed out the level of development of the given location.

Factory chimneys were designed to fulfill two basic functions – to provide draft and to exhaust fumes at heights to ensure good dispersion. Chimneys were thus constructed on the basis of functional demands, and these physical, static, structural, and economic requirements gave them their typical shape of a self-standing conical pipe. During the construction of the first chimneys from masonry and possibly stone from the 17th to the beginning of the 19th century, the aesthetic aspect did not play a role; chimneys were built without excessive ornamentation and their plain and austere construction reflected their purely functional essence. It is no wonder that, thanks to the unchanging smoky pipes at the beginning of the Industrial Revolution, the statement "to be as ugly as a chimney" emerged in England.

Despite their purely pragmatic purpose, masoned chimneys have a very interesting evolutionary history. In spite of their utter utilitarian use, they bear a wide variety of forms, shapes and sizes. It is interesting to see how their structure developed, how their aesthetic aspect improved and the architecture changed, how chimneys became beautiful and admired as a symbol of the factory, or became unnecessary and demolished. The construction of chimneys became an entirely new field, involving a wide range of professionals from different disciplines of science and technology.

From the middle of the 19th century we can see a targeted effort to build chimneys in a certain artistic form so that the vertical aspect becomes a detailed and important part of the urbanized landscape, appropriately representing and demonstrating the significant status of the factory. It is obvious that a number of factory owners wanted a chimney that would be more an object of interest and admiration rather than a thorn in the eye. High--quality architecture was faced with the clear task of defeating opinions such as chimneys being "utterly nasty, looking like the long and narrow neck of underground monsters piercing the soil to exhale their stinking and unnatural breath".

Chimneys went through several milestones. At first, they stood at the birth of massive technical and industrial developments; the construction of a factory chimney visibly pointed out the actual transformation of a manufactory into a large-scale production factory. Later, and for a very long time, the chimney was an indicator of prosperity but was also an unwelcome companion that annoyed its surroundings with smoke. In the days of the economic crisis, its inactivity indicated decline and misery. During the wars, it would unwantedly announce, "here's the factory, bomb here". Then from the second half of the 20th century, it became an ecological threat.

The end of masoned factory chimneys in the Czech Republic definitively arrived in the 1980's, the last one being built in the Domažlice brewery in 1984. Today, brick factory chimneys have become technologically obsolete, unnecessary in their traditional form. The entrepreneur who needs a chimney today chooses practical steel or reinforced concrete structures.

Today, most old masonry chimneys no longer pollute their surroundings with black smoke, but rather silently look on at the demise or transformation of conventional industries. The era of factory chimneys is not over yet, but these old and beautiful masterpieces are witnesses of a historical milestone. These slowly extinct structures are now gradually becoming an integral part of our history and are moving to the realm of symbolism.

In the Czech Republic, there once stood several tens of thousands of brick factory chimneys. To date,

over three thousand have survived, and the estimated majority of them no longer serve their original function. In the last decade, at least 350 masonry chimneys have been demolished. Given their value, some of these demolitions may be considered a missed chance.

Factory chimneys are an important topic for industrial heritage. They are genuine witnesses to our industrial entrepreneurship, technical development, and prosperity. Over the last few centuries, they have made an important contribution to the panorama of our towns, cities, and landscapes. The chimney can significantly point to the past of a site and is an important topographic element on the horizon of an urbanized area. These are constructions that have become technical icons of progress and have grown into symbols with the strong potential to remind us of one important era of mankind.

Illustrations: ***Fig. 1.*** *Chrastava, the energy heart of a factory (boiler room and chimney) supplying energy to its textile factory;* ***Fig. 2.*** *Klamova huť in the Blatensko area, the chimney as a castle tower, view and cross section, orientation of the existing state of a cultural monument;* ***Fig. 3.*** *Ruda, mine, later a steam mill with a chimney in historicist style, probably from the turn of the 1850's–60's;* ***Fig. 4.*** *Oslavany, power station with a 120-meter high chimney from 1950, a postcard from the 1950's;* ***Fig. 5.*** *Mladá Boleslav, Lederer's distillery and Lučební factory – the fight between the locals and smoke and odors from the factory lasted for many decades; contemporary photographs, undated;* ***Fig. 6.*** *Zábřeh, typical scenery of an industrial city, where the factory is near the historical center of the city;* ***Fig. 7.*** *Lenešice, industrial footprint in the landscape – brick chimney in the cadaster of the village;* ***Fig. 8.*** *Krsy, a forgotten place in the forests of the village;* ***Fig. 9.*** *Křimov, an undirected dilapidated torso after a flax plant in the middle of the fields near the village;* ***Fig. 10.*** *Strupčice, brick factory chimneys in the cadaster of the village – their conservation and new use are under negotiation;* ***Fig. 11.*** *Neškaredice, the only chimney in the village – remains of the local brick factory;* ***Fig. 12.*** *Zahořany near Kadaň, specifically preserved typologically unique chimney with water reservoir (year of construction 1920) after a coal sorting plant;* ***Fig. 13.*** *Břínkov, impressive post-industrial scenery – the local brick factory is being overtaken by nature;* ***Fig. 14.*** *Slatiny, patterned brick chimney with a white stork nest – the Slatiny brick factory;* ***Fig. 15.*** *Ratboř, refinery chimney (year of construction 1900) after the demolition of the production buildings.* ***Fig. 16.*** *Holýšov, a chimney converted into an anti-aircraft observation deck in an ammunition factory.*

Ten chimneys of the Benešov brewery and malt house. The chimney as a symbol or as a functional part of the operation?

Michal HORÁČEK

Key words: brewery, malt house, factory chimney, industry, history, Benešov

When one hears the word "brewery", the image of a furnace chimney most often comes to mind. Furnace chimneys are among the most specific solitaire structures of factory chimneys, not only through their ending but also due to their unique method of location and functionality. Breweries, however, are buildings in which we can find a number of other factory chimneys of all types, sizes, and uses. These, in combination with the furnace chimney, have become a typical part of brewing complexes in the industrial period.

This paper presents a case study which served as a subject of interest in the brewery and brewery complex in Benešov. The company originally formed as an independent malt house which was partially transformed into a brewery after a few years of operation. Later, another brewery was set up close by which partly used some of its premises. Even later, a separate new building for a third brewery was set up in the vicinity of the malt house, and the malt house was subsequently expanded back to its original size.

Thanks to the complicated development of the brewery and the malt house, we can gradually count up to ten factory chimneys that served for longer or shorter periods for various production areas, including one entirely unique case. The paper connects the general aspect of the study of the development of factory chimneys in our country and their specific application in the individual sections of brewing and malting operations. At the same time, it reflects on the role of chimneys as part of the industrial complexes and the reflection of their operation over a long-term period of transformation.

From the original separate malt house, there have been preserved two furnace chimneys. One is still functional and has been repeatedly rebuilt to its present form from the 1950's, while the second has been preserved in its torso as it looked in the 1980's. The chimney over the former boiler room was demolished at the beginning of the 20th century. A unique chimney above the boiler room of a pair of older breweries built temporarily and partly in the malt house existed for only about 25 years. It was created by using the flue channel of one of the canceled furnaces of the time and by breaking a new opening in the vault and a low chimney terminal.

After the establishment of a new brewery in 1897, the complex gained a new dominant position in the form of a high factory chimney above its boiler room. This remained in operation until 1924, when it was replaced by a modern and taller chimney for the ever-increasing demands on capacity and draft. This has remained in operation until today. The original boiling room of the brewery with direct heating had a combustion exhaust leading from the furnace which was designed with a pair of chimneys passing through the peak of the roof above the boiling room. After 1915, it was removed with the transition to indirect steam heating. The last two factory chimneys in the complex were related to the construction of a pair of machine barrel cleaning facilities. Both chimneys were later removed, the newer one after the definitive abandonment of the use of wooden barrels in the brewery.

Of the ten factory chimneys in the brewery and malt house premises, there are only three of them today, two of which are still used for their original operation. The loss of seven chimney structures associated with the operation of the brewery and malt house combined with the survival of a pair of chimneys is a matter of concern as to whether chimneys, as part of a functional industrial structure, are more of a witness to its development and history and should be preserved as such, or whether they are witness to their operational modernization and will logically change and disappear along with how operations are changing and modernizing. The answer to this question seems to be somewhere in the middle. The fact remains that since 1872, the brewery and malt house with their chimneys have been symbols of the city of Benešov, which has changed its vertical character many times but has lost nothing of its expression or function.

Illustrations: ***Fig. 1.*** *Benešov, the brewery and malt house shortly after the construction of the new archduke brewery;* ***Fig. 2.*** *Benešov, schematic plan of the brewery and malt house with numbered marking of all chimneys in the complex;* ***Fig. 3.*** *Idealized drawing of the joint-stock malt house with factory chimney and a pair of furnace chimneys in Benešov;* ***Fig. 4.*** *An unrealized plan for rebuilding the left furnace (and the former archduke boiling room) in Benešov from 1898;* ***Fig. 5.*** *Construction plans of the new archduke brewery in Benešov show both the chimney above the boiler room and the pair of lower chimneys above the boiler furnace;* ***Fig. 6.*** *Benešov, a view of the brewery and malt house from the beginning of the 20th century depicts the furnace chimneys as they looked in 1900 (left) and 1887 (right);* ***Fig. 7.*** *Benešov, the dense smoking chimney of the boiler room of the first archduke brewery, broken by the crest of the discontinued left furnace (sometime between 1887 and 1895);* ***Fig. 8.*** *Construction plan of the new chimney above the boiler room of the then-state brewery in Benešov from 1924;* ***Fig. 9.*** *Benešov, brewery, present appearance of the repaired and still used chimney over the boiler room;* ***Fig. 10.*** *Cross section of the building plan of Emanual Vrazal for the modernization of the machine-driven barrel cleaning facility of the Benešov brewery in 1901;* ***Fig. 11.*** *Benešov, aerial view of the brewery from 1922;* ***Fig. 12.*** *Building plans of the new brewery in Benešov brewery from 1937 by František Scharf; Fig. 13. Benešov, view of the brewery at the beginning of the 1960's;* ***Fig. 14.*** *Benešov, later built boiler room of the first archduke*

brewery from 1895, now serving as a brand-name shop for the company; ***Fig. 15.*** *Benešov, present form of the two malting furnaces, the left of which is still in operation.*

Charcoal piles – small monuments to burning charcoal in our forests. Three examples from Central Bohemia

Václav MATOUŠEK; Roman BREJCHA

Key words: charcoal pile, pre-industrial landscapes, Brdy

The subject of the article are charcoal areas, relics of wood burning in historical charcoal piles (Fig. 2). These small technological monuments are most often preserved in places where they originated and served their purpose – i.e. in forests. In the past, charcoal was used for a variety of purposes. Most often, it was mentioned as an ideal fuel for metallurgical processes, since during heat treatment only minimal undesirable admixtures are passed from the fuel to the metal ore or metal. Charcoal was also used in the production of gunpowder, in food production, in healing processes, and as a tool for artists ("charcoal drawing").

The history of the origin and development of charcoal burning undoubtedly began deep in prehistory. The oldest archaeological documents of carbonization in coal pits come from the earlier Iron Age, from Waschenberg in Austria. In the 1540 work De la Pirotechnia: Libri X, the Italian Vannocius Biringucius distinguishes older carbonization in pits from younger technology in above-ground piles. The largest number of written sources about the history of coalmaking, however, came from the 18th and 19th centuries, when the largest amount of charcoal was consumed by large-scale production and the processing of iron. The decline and disappearance of traditional charcoal burning brought about applications and more efficient coke burning technologies in iron furnaces.

From 2012 to 2015, the systematic documentation of historical coal-fired piles was carried out in the vicinity of historical metallurgical centers in forest areas in the Křivoklátsko, Brdy, and Rakovník areas (Fig. 5). A total of 227 carbon pile remnants, or platforms, were found and documented. The high density of platforms in selected forest areas indicates that charcoal workers did not respect forest management requirements to return to the same sites as often as possible and not destroy the forest by setting up new workplaces. The size of the platforms ranged from 7–11 × 6–9 m. This means that the platforms most often held piles with a diameter of approximately 4 m and a height of 2–2.5 m. All platforms were found on flat terrain and recessed into a slope (Fig. 4). In terrain, however, the more pronounced platforms were embedded in a slope. The most common type is a platform with a circular ground plan (Fig. 7a). In all locations, the carbon platforms were tightly connected to the forest roads.

Illustrations: ***Fig. 1.*** *Scheme of a standing charcoal pile;* ***Fig. 2.*** *Relic of a pile partially recessed into a slope. Komorsko, cadastral area Jince, Příbram district;* ***Fig. 3.*** *Standing pile burner in the middle phase with visible smoke openings. charcoal worksite near Groşii Ţibleşului, Maramureş area, Romania;* ***Fig. 4.*** *Standing pile in the initial burning phase and a charcoal covering;* ***Fig. 5.*** *Scheme of the formation of terrain relics of charcoal burning;* ***Fig. 6.*** *Locations where the systematic exploration of charcoal burning relics took place. 1 – Mokřinka; 2 – Komorsko; 3 – Radeč;* ***Fig. 7.*** *Mokřinka, cadastral area Branov, Rakovník district;* ***Fig. 8.*** *Schematic of ground plans of charcoal platforms recessed into slopes;* ***Fig. 9.*** *Stráň pod Komorskem, cadastral area Jince, Příbram district;* ***Fig. 10.*** *Brewery bottle from platform No. 24 from Radeč survey in 2015. Condition after joining;* ***Fig. 11.*** *Radeč, cadastral area Sklená Huť and Těškov, Rokycany district;* ***Fig. 12.*** *Radeč, cadastral area Těškov, southwest slope of the Čihátko spot height (654 m AMSL), cross section 410 × 410m. Visualization of aerial laser scanning data through methods: A) hillshading; B) slope; C) principal component analysis; D) sky view factor; E) positive openness; and F) local relief model. Arrows indicate the position of the carbon plates;* ***Fig. 13.*** *Burning charcoal pile. Experimental burning of charcoal in Lhota u Kladna 2007.*

Hospitals on the outskirts of the city: the second life of the avant-garde

Jaroslav ZEMAN

Keywords: Česká Lípa, hospital, post-war architecture, interwar avant-garde, Vít Obrtel

A significant part of construction before 1989 was not only due to the construction of housing estates but also to healthcare buildings. The unprecedented development in this area in the second half of the 20th century caused Czechoslovakia to have the densest planned distribution of healthcare facilities in the Central European region in terms of population. The hospital in Česká Lípa (1976–1982) is one of the most significant achievements of the pioneer of the Czechoslovakian avant-garde, Vít Obrtel. Its construction is related to the overall regulation of the city following a significant increase in the number of inhabitants as part of the development of the uranium industry. The construction was to be carried out as a single investment unit, but for economic reasons it was eventually divided into three stages. It was originally planned as a type I hospital, but already during the construction, the building program was adapted to a type II hospital. The Česká Lípa hospital represents the logical completion of Obrtel's distinctive work and at the same time is proof that even the well-thought-out and typified architecture under the leadership of an experienced and artistically talented artist has unquestionable qualities. Together with the remarkable set of buildings of the Liberec association SIAL, this is one of the most valuable examples of the architecture of the second half of the 20th century, not only in the Česká Lípa area but also in the wider area of northern Bohemia.

Illustrations: ***Fig. 1.*** *Pavilion system, characteristic for the 19th century, on the example of the general hospital in Jablonec nad Nisou, Anton Möller (?), 1890;* ***Fig. 2.*** *An example of a multi-block arrangement. New Hospital in Ústí nad Labem (1926–37, Ernst Krob, Franz Josef Arnold) on a postcard from the 1960's;* ***Fig. 3.*** *Residential house of the Central Unity of Economic Cooperatives (1937–1939) at the corner of Žitná and Štěpánská streets in Prague;* ***Fig. 4.*** *Project of a functionalist villa (1931–34). Pencil, ink, watercolor, paper, 244 × 373 mm, Olomouc Art Museum;* ***Fig. 5.*** *Architect Vít Obrtel on a caricature of the artist and architect Jaroslav Kándl from the 1960's;* ***Fig. 6.*** *Model of the hospital in Žatec (1948), clearly influenced by interwar functionalism;* ***Fig. 7.*** *Municipal Institute of Social Services in Plzeň (1958) shortly after completion;* ***Fig. 8.*** *Project of the Sanatorium in Lenoir (1973–1975). Main facade and floor plan of the ground floor;* ***Fig. 9.*** *Tropical Climate Hospital Project (1963);* ***Fig. 10.*** *Picture of the 1976 Česká Lípa hospital model published in the current electoral program. The model represents Obrtel's original and more generous intention, while the former hospice is still visible in the hospital foreground;* ***Fig. 11.*** *Picture from the course of construction of the Česká Lípa hospital, specifically the central monoblock for adults;* ***Fig. 12.*** *Floor plan of the hospital complex in Česká Lípa;* ***Figs. 13–22.*** *Pictures of the hospital in Česká Lípa:* ***Fig. 13.*** *Adult polyclinic, shortly after completion;* ***Fig. 14.*** *Children's polyclinic, shortly after completion;* ***Fig. 15.*** *Children's polyclinic, ground plan of 1st storey;* ***Fig. 16.*** *General view of the hospital complex from Purkyňova Street on a picture from 1985;* ***Fig. 17.*** *General view of the central monoblock for adults;* ***Fig. 18.*** *Current condition of the adult polyclinic;* ***Fig. 19.*** *General view of the children's polyclinic, current condition;* ***Fig. 20.*** *Adult polyclinic, in the forefront is the elegant entrance area of the child's wing;* ***Fig. 21.*** *Current condition of the adult polyclinic;* ***Fig. 22.*** *Pathological and anatomical department with atypical luxferal pre-casting;* ***Fig. 23.*** *Prague-Bulovka, Gynaecological pavilion, Adolf Pospíšil 1982–86.*