

Sacral Art in Czech Mining and Metallurgical Regions

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Abstract

There are many mining and metallurgical areas in the Czech Republic. Some mining and metallurgy centers are already historical and non-functional, others mostly modern and these modern centers are still productive. Many buildings in these areas have become a state-protected monument. The distribution of cultural, sacral and technical monuments depends on the age of the mining or metallurgical area. In the historic centers there are the most cultural monuments such as town houses, sacral buildings, less mining or technical monuments. In the mining and metallurgical areas of the 19th and 20th centuries, there are more technical monuments (including infrastructure and workers' colonies) than sacral monuments. Both historical and technical monuments are attractive for various groups of people. The historic centers of historical mining and metallurgical areas have long been the center of interest, especially in organized tourism, without any special link or interest in mining, metallurgy or technology. The newer centers of mining activity are the focus of individual tourism with an interest in technical or meta-technical and quasi-technical branches and industrial heritage. In this interest there is also a kind of neo-romantic spirit or modern fashion trends such as steampunk etc.

Keywords: Mining and Metallurgy, Sacral Art, Cultural Monuments, Industrial Heritage, Czech Republic

Mining and metallurgical centers in the Czech Republic

Mining activities in the Czech Republic have historically been associated with mining and processing of precious metals (silver, gold), lead, tin, iron and uranium ores. Underground mining of precious metals in the Czech Republic began in the 13th century, coinage (silver deniers) in the 10th century and earlier was carried out from imported silver, the actual silver mining is not documented at this time. However, gold panning, perhaps even tin, took place here, but even for these rather sure activities in the period up to the 11th century, there is still no clear material evidence. For the sake of completeness, it should be mentioned that in the Czech Republic at the locality Tušimice there was underground mining of quartzite used as flint (KUNA, 2019) in the Old and Middle Eneolithic (approx. 3700–3350 BC.).

Active large-scale silver mining began in the Czech Republic in the 13th century in the Vysočina Region between the towns of Havlíčkův Brod - Jihlava - Brno, the administrative center of this mining activity was the town of Jihlava. Later, the main center of silver mining became the town of Kutná Hora from the 14th century, where silver was mined until the 18th century, the depth below the city reached 500 meters (1600 ft) or even more (Agricola, 1530).

In the 16th century, silver fever broke out in the Ore Mountains in the area of Jáchymov, later other ores, arsenic, bismuth, cobalt, uranium were mined here, and the depth of mines down to the 20th century reached 700 meters (2300 ft).

During the inflation of silver prices in the 16th century, silver mining in the Czech Republic was significantly reduced. In 1875 a world record was reached in Příbram, when the Vojtěch (Adalbert) shaft reached 1,000 meters (3280 ft) for the first time in the world. These ore mines were in operation until 1978, the depth of the Příbram ore mines (silver, lead, antimony) reached 1500 meters (5000 ft).

Tin mining is also old in the Czech Republic. Tin mining started probably in the 13th century, first by panning, later by underground extraction. At that time, Czech tin was an important export article and occupied an important position on the world tin market. The main mining centers of tin were Horní Slavkov and Krupka-Cínovec. Tin was mined in the Czech Republic until 1991. Similarly, iron ore was mined on the territory of the Czech Republic. Underground mining of iron was completely terminated in 1992.

Ore mining in Czechia was restored in the 2nd half of 20th century tin, gold, silver, lead, copper, zinc and iron ores were mined to the 1992.

In the Czech Republic, uranium started to be mined in the middle of the 19th century in Jáchymov. However, the main center of uranium mining became the town of Příbram, where a large deposit of uranium was found outside the original ore mines. The newly built mines reached a depth of 1500 meters (5000 ft), the

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deepest shaft no.16 even 1838,4 meters (6031ft). Uranium was mined in many places in the Czech Republic. The uranium mine Rožná in the Vysočina Region was mined until 2017.

No	City (area)	Raw Material	Century
1	Jihlava - Havlíčkův Brod – Brno area (Vysočina)	Ag	13 th –16 th
2	Kutná Hora area	Ag, Cu, Pb, Zn	14 th –18 th (20 th)
3	Horní Slavkov area	Sn, U, W	14 th –20 th
4	Krupka – Cínovec area (Krušné Hory / Erzgebirge)	CaF, Mo, Sn, U, W	14 th –18 th (20 th)
5	Jílové and Nový Knín area	Au	14 th –20 th
6	Bruntál area	Ag, Pb	14 th –18 th (20 th)
7	Zlaté Hory area	Au, Cu	14 th –18 th (20 th)
8	Kašperské Hory and South Bohemia area	Ag, Au	14 th –20 th
9	České Budějovice and Český Krumlov area	Ag, Au, Ni, graphite	14 th –20 th
10	Jáchymov area (Krušné Hory / Erzgebirge)	Ag, As, Bi, Co, Fe, Ni, Sn, U	16 th –20 th
11	Příbram area	Au, Ag, Fe, Pb, Sb, U	14 th –20 th
12	Most – Chomutov – Sokolov	lignite (steam coal), chemical industry, energy, oil refinery	18 th –21 st
13	Prague–Kladno–Nučice–Beroun–Zdice area	hardcoal (steam coal), Fe, limestone , steel production, energy	(18 th) 19 th –21 st
14	Plzeň and Stříbro area	hardcoal (steam coal), Fe, Pb , steel production, pyrite, kaoline , chemical industry, uranium	(14 th) 16 th –20 th
15	Trutnov – Žacléř – Malé Svatoňovice area	hardcoal (steam coal), polymetal ore, U, coal energy	(16 th) 19 th –20 th
16	Ostrava – Karviná area	hardcoal (coke and steam coal), chemical industry, coke, energy , oil refinery, steel production ,	18 th –21 st
17	Třinec	steel production	20 th –21 st
18	Rosice – Oslavany area	hardcoal (coke and steam coal), energy	18 th –20 th
19	Hodonín – Dubňany	lignite (peat lignite - steam coal), energy	19 th –21 st
20	Břeclav area	crude oil, gas	
21	Olomouc–Opava area	roof slate (stone industry)	19 th –21 st
22	Dolní Rožínka area (Vysočina)	uranium	20 th –21 st
23	Stráž pod Ralskem area	uranium	20 th –21 st

Table 1: The main mining and metallurgical centers (areas) in the Czech Republic. Refers to Fig 1.

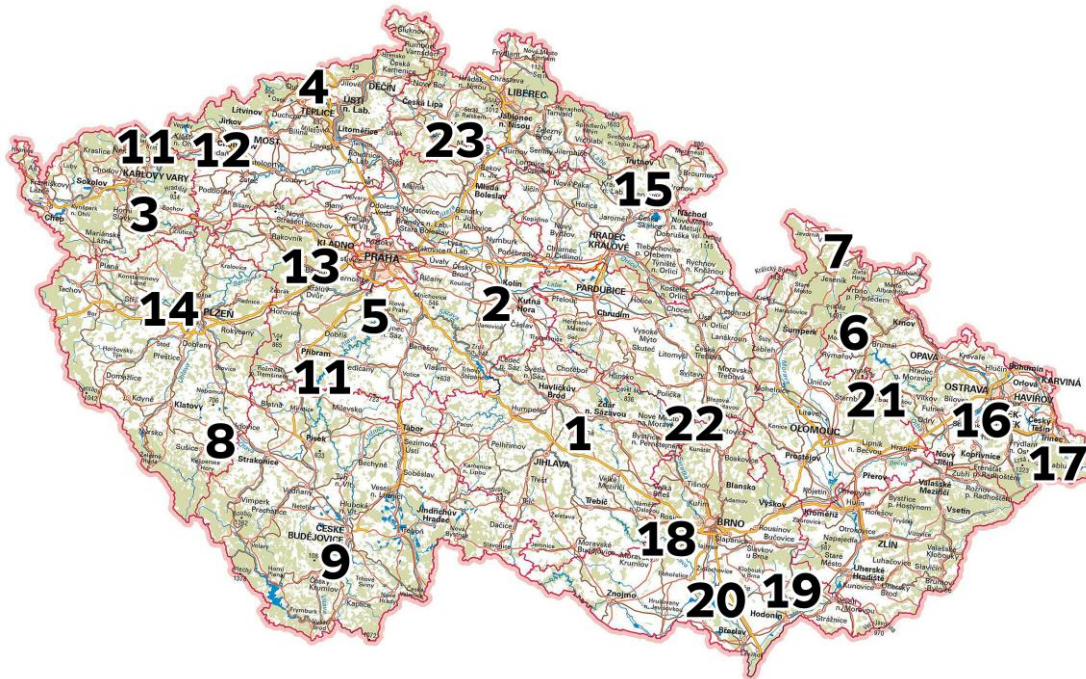


Fig. 1: Refers to Table 1. The main mining and metallurgical centers (areas) in the Czech Republic.

Coal has been mined in the Czech Republic since the 15th century, but the boom of mineral fuels came in 3/4 of the 18th century with a gradual 200-year-long growth. Since the 1980s coal mining has been decreasing. In 2020, is hard coal for coking still mined underground in 4 mines in Karviná County and lignite (steam coal) is mined in 5 large open-pits in northwestern Bohemia.

Despite dramatic achievements in the field of ecology, coal mining will probably be terminated under political pressure from the EU in the Czech Republic. This will be another small part leading to the collapse of European values and civilization, of which the using of fossil fuels is an integral part. Fossil resources cannot be quickly replaced by renewable sources with an EU directive without the fall of the European democratic system and its replacement by environmental totalitarianism. The increasing number of pensioners in the EU will never allow for a radical reduction in their standard of living. The EU is therefore trying to weaken their numbers by new residents, unfortunately from culturally incompatible areas.

It can be assumed that tourism will soon be climate-unfriendly to the EU. If this option occurs, it will affect the tourism, numbers and structure of visitors to Czech sacral, mining and metallurgical monuments.

Kutná Hora

In the area of today's Kutná Hora, there was a medieval settlement already in the 10th century in Malín, where even silver deniers from imported silver were minted. This fact is random in relation to the later intensive silver mining around Kutná Hora and Malín. In 1142 a Cistercian monastery was founded in Sedlec (today Kutná Hora). Perhaps this intellectual background led in the 13th century to a systematic search for ore veins, which in the second half of the 13th century (1260–1290) led to the discovery of the Kutná Hora deposit. This deposit became the most productive medieval silver deposit in Bohemia and led to great wealth of the whole Czech Kingdom. This made it possible to build impressive sacral buildings not only in Kutná Hora, but mainly in Prague, Kolín, Čáslav, and brought prosperity to the whole area and the Přemyslid dynasty and strengthened the Czech statehood (Kořan 1950).

The most important sacral monuments in Kutná Hora include the Church of St. Barbora (Barbara), the Church of St. Jakub (James the Elder), the Basilica of Nanebevzetí Panny Marie a svatého Jana Křtitele (Basilica of The Assumption of the Blessed Virgin Mary and St. John the Baptist) in the former Cistercian monastery in Sedlec on the site of the oldest Kutná Hora settlement and chapel with ossuary in Sedlec and church of St. Štěpán (Stephen) in Malín.

The most famous of these buildings is undoubtedly the Church of St. Barbora (Barbara). This building was built on a prominent promontory on the site of an older mining chapel, which probably originated at the beginning of mining in Kutná Hora from the end of the 13th century. The construction was carried out at the instigation of the Brotherhood of Corpus Christi. Rich burghers of Kutná Hora, traders with ore and silver, entrepreneurs in mining, metallurgy and related services invested in the construction. The construction took place in 1388–1558. The first phase of the construction was interrupted by the Hussite Wars. After the end of the

calming of the situation in Bohemia, the construction continued, but inflation of the silver price in the mid-16th century stopped the construction in 1588. Only about half of the grand project was built. In 1626 the Jesuits took over the temple and built a large college next to it. Between 1884 and 1965, a purist regotization of the temple took place, which was extended by one vault and gained a gabled roof, which with its three turrets forms a dynamic dominant feature of Kutná Hora. (Beneš-Vocel, 2004).

Other relatively well-known sacral buildings are the Cathedral of the Nanebevzetí Panny Marie a svatého Jana Křtitele (The Assumption of the Blessed Virgin Mary and St. John the Baptist) and the cemetery church and chapel with the ossuary of Všechn svatých (All Saints) in Sedlec, originally part of the Cistercian monastery in Sedlec. The monastery was abolished in 1783 by the decree of Joseph II. In 1812, a state tobacco factory was placed here, which in 1992 was privatized into the Philip Morris concern. However, all sacral buildings continued to serve liturgical purposes. The public is most attracted to the ossuary in the Chapel of Všechn svatých (All Saints) under the cemetery church of All Saints. There are large, artificially assembled objects made of human bones, forming a macabrous reminder of the Baroque motto “memento mori”. These are the remains of about 60,000 deceased, buried in Sedlec cemetery.

The decoration of the Chapel and Church of Všechn svatých (All Saints) with skeletal remains from the abolished cemetery began in the early 18th century by architect Jan Blažej Santini - Aichel, who rebuilt the monastery, the Cathedral of The Assumption of the Blessed Virgin Mary and cemetery church with ossuary All Saints in specific Czech “Baroque Gothic” style. The last artistic modification of the ossuary was made by František Rint in 1870. The ossuary is with its dimension an extraordinary Czech and perhaps even a European sacral and cultural heritage.

A real unique sacral example originating from Kutná Hora are the Kutná Hora sacral music manuscripts from the 15th and 16th centuries, which contain several, essentially secular depictions of mining and metallurgical activity, including the mining and processing of silver ores, trade, assaying and coinage of silver.

It is a Kutnohorský gradál (antiphonary) from the 70s of the 15th century from the workshop of Valentin Noha from Jindřichův Hradec, the work is stored in the Národní knihovna Praha (National Library in Prague) (Antiphonarium, 1470). Another well-known hymn book is the Kutnohorský Gradual from the turn of the 15th century and 16th century deposited in the Österreichische Nationalbibliothek Wien (Cantionale, Wien). Another monument is the Kutná Hora Illumination GASK, It is only one sheet (Kutnohorská Iluminace GASK). Originally it was obviously an introductory sheet of an unknown gradual.

These manuscript book illuminations illustrate in detail the many stages of mining and ore processing. They show us in detail horse whim with a crown gear (lantern gear) for lifting water in bulky leather bags from large depths, ventilation of mines using wind towers and hand wooden fans, working in mines and other related activities. In terms of the history of technology, especially mining and metallurgy, these are the most important sacral monuments originating from the Czech territory. In this specific context, they are perhaps the most important Czech mining monuments. Their importance was confirmed by the discovery of a wooden fan in the abandoned historical mine “Bylanka 4”. The old ventilator dendrochronologically dates back to 1520.

Another important monument is the book of the Jesuit priest Jan Kořínek (1626–1680), the Old Memory of Kutná Hora, which was published in 1675. This book describes in detail Kutná Hora mining, including mining works and machinery. At that time, mining in Kutná Hora was already declining (Kořínek, 1675).

The town of Kutná Hora has a well-preserved center of the town and for its Central European importance it has become a UNESCO reserve, this nomination and announcement, unlike other localities, was conducted in a transparent and objective way.

From the point of view of mining and metallurgical monuments, the most important monument is the medieval silver show mine, Vlašský dvůr and horse whim. The silver show mine is the upper floor of the original Kutná Hora mines, which are flooded deep down. Vlašský dvůr is at the heart of a late medieval fortified palace with a mint and a cash register. The original mint cabins have been preserved here, where silver coins were minted. The most common cultural monument protected by the state are the town houses in Kutná Hora.



Fig. 2: An ossuary in the Chapel of Všech svatých (All Saints) under the All Saints cemetery church of Cistercian monastery in Sedlec – Kutná Hora. Photo: Wikipedia



Fig. 3: Kutna Hora Gradual shows various details from mining, processing and trade of silver ores (Cantionale, Wien)



Fig. 4: The age of Kutná Hora Gradual is estimated at the turn of the 15th and 16th centuries. Detail of wooden hand fan in mines of Kutna Hora (Cantonale, Wien).



Fig. 5: A wooden hand fan found in an abandoned mine "Bylanka 4". The wooden hand fan dendrochronologically dates back to 1520. The form corresponds with the figure 4 from Kutná Hora Gradual. Photo: Martin Přibil and Karol Šmehil, 2019

Jáchymov

At the place of today's Jáchymov, at the end of the 15th century, there was a hammer mill and a small settlement called Kondradsgrün. In 1512, an adit was driven here, and the first rich silver vein (Fundgrubner vein) was discovered. In 1516, the mining settlement Joachimstal - Jáchymov was founded. The settlement and mining grew rapidly, the settlement acquired city rights in 1520. In the second half of the 16th century, the negative economic effect of silver inflation began to be manifested by the import of cheap silver from America from Potosi. In the first half of the 17th century, the mines were declining, with some growth in the 18th century with an interest in cobalt and bismuth. In the mid-19th century, uranium mining began here for the first time in the world. The greatest boom in Jáchymov came after 1945, when uranium for the USSR began to be mined to a large extent. This stage lasted only until the end of the 1950s, in 1964 uranium mining was ended. Only the Svornost Mine remained in operation due to the pumping of radioactive waters for medical purpose for Jáchymov Spa. (Majer, 1968).

There is considerably lower number of significant sacral monuments in Jáchymov than in Kutná Hora. There are several chapels. The first is the Chapel of St. Jakub (James). This chapel was built on the site of the original wooden chapel from 1517, which was founded near the place where after 1512 silver ores were discovered on the Fundgrubner vein and mining in Jáchymov began. It is therefore a very important sacral place. Next is the chapel of Jan Nepomucký (John of Nepomuk), from the beginning of the 18th century and the Chapel of St. Barbora (Barbara) from 1770. The largest sacral monument in Jáchymov is the Church of St Jáchym (Joachim). This church was also founded on the site of the original chapel, which was located at the outcrop of the Küh vein. The spirit of the city was evangelical until the re-catholicization in the 17th century.

An important sacral monument near Jáchymov was the Capuchin monastery and church from the end of the 17th century in Mariánská (Mariasorg), which was abolished after 1945 and gradually destroyed by the Communist police supervising uranium mining. The most common state-protected cultural monument in Jáchymov are burgher houses (21 Outings, 2012).

From the European point of view, the "handsteins" (handstones) are probably the most important religious monuments in Jáchymov. They are interesting aggregates of argentite, which were artistically adjusted into ornate pedestals. Religious motifs, which are at the top of the composition, were then carved into the argentite aggregates. There are often scenes from mining or penitents in the body under a religious motif. Sometimes the original natural essence of the mineral has been preserved in places. In particular, the scenes from mining are an interesting iconographic document and a contribution to the history of mining. The most important "handsteins" from Jáchymov are the work of the goldsmith Kaspar Ulich (1515-1576) and originated in 1540–1575. To the detriment of Jáchymov and the Czech Republic, none of the Jáchymov handstein is found in our territory, most of which are held by the Austrian State in the collections of the Kunsthistorisches Museum Wien (KHM Wien, 2019).

In 2019, Jáchymov, along with other sites, became part of the UNESCO Mining Region Erzgebirge. This announcement was not carried out objectively and transparently, it was pushed through by managers of various grant projects and the tourist-economic lobby. This is one example of how UNESCO works in a non-transparent and corrupt way and why the US and Israel have ceased to respect UNESCO.



Fig. 6: Handstein mit Kreuzigung und Auferstehung Christi. (Handstein (Handstone) with crucifixion and resurrection of Christ) - Caspar Ulich, 2nd half of 16th century, Jáchymov (Joachimsthal), Bohemia. 30 cm × 14 cm × 11 cm. Kunsthistorisches Museum Wien, Kunstammer Inv. No. KK 4149, Room XXIV. Photo: KMW.



Fig. 7: Handstein mit Bergwerk und Kreuzigung Christi (Handstein (Handstone) with Mine and Crucifixion of Christ). Caspar Ulich, 2nd half of 16th century, Jáchymov (Joachimsthal), Bohemia. 30 cm × 14 cm × 11 cm. Kunsthistorisches Museum, Kunstammer Inv. No. KK 4157, Room XXIV. Photo: KMW.



Fig. 8: Handstein mit bärtigem Mann (Handstein (Handstone) with a Bearded Man). Caspar Ulich, 2nd half of 16th century, Jáchymov (Joachimsthal), Bohemia. Height 20,6 cm. Kunsthistorisches Museum, Kunstammer Inv. No. KK 4162, Room XXIV. Photo: KMW.

Příbram

The first mention of the existence of Příbram dates back to 1216. Although it is a historic site, there are not too many sacral monuments. The most important is the nearby Baroque pilgrimage complex on the Svatá Hora (Holy Mountain).

The most important sacral monument in city of Příbram is the Church of St. James the Great on the Great Square. Originally from the first half of the 13th century, it was rebuilt several times, most notably in the 18th century, to become re-Gothic in 1869.

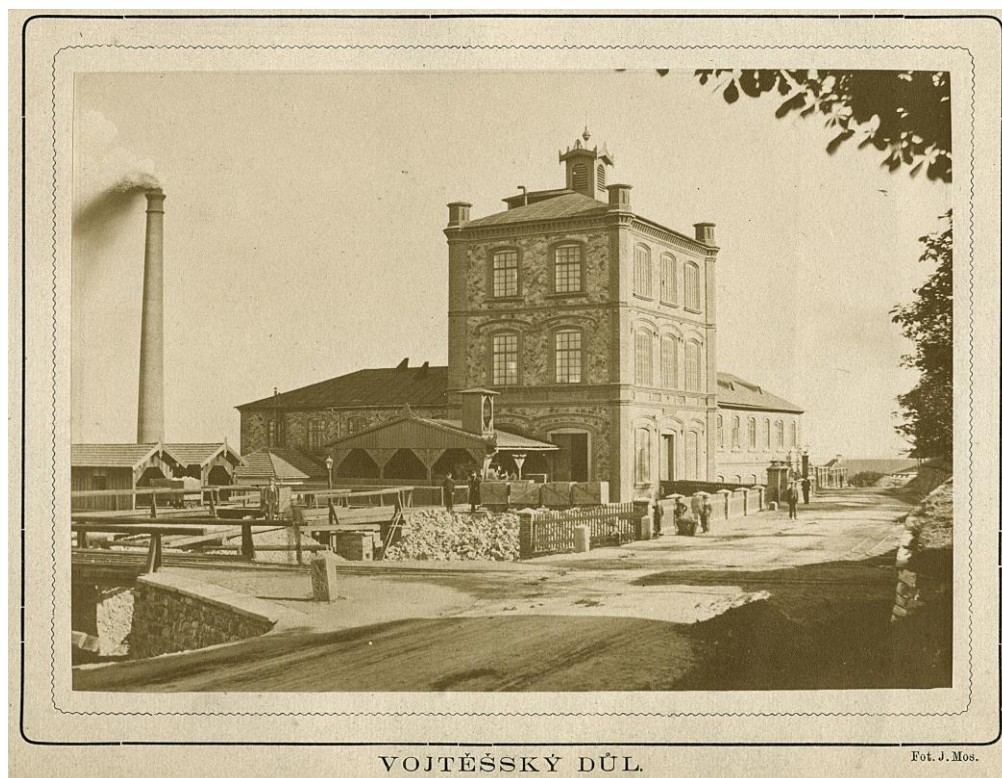
A modern but distinctive church of St. Vojtěch (Adalbert) is located in the mining district of ore (Ag, Pb), part of Příbram - Březové hory. It is an Empire style building built in 1886–1889 according to a design by Antonín Baum and Bedřich Münzberger. This church is already off the traditional east-west sacral axis. It is a church built for miners and metallurgists, a prototype temple in the industrial age of steam. Another mining church of St. Prokop is located on a hill on Březové hory. The church is from 1880, built on the site of the chapel. It was built on the site of a bell tower from the 16th century, from which the bell from 1580 has been preserved. This place was probably related to the discovery of silver vein in these places (Velfl, 2013).

The most important sacral monument in Příbram and its environs is the pilgrimage complex on the Svatá Hora (Holy Mountain) intensively built by the Jesuit order since 1648. They built a pilgrimage path with a number of small chapels along the way from Březnice (Jesuits set up here a study campus as well) to Příbram. It was therefore a wider concept of sacral landscape.

The work of the Jesuit priest Bohuslav Balbín “*Diva Montis Sancti ... Argentofodinas Prizibramenses*”, which is the first in the Czech space to display a water wheel with pumping rods leading to a mining pump, is related to the Jesuit college and intelligence (Balbín, 1665).

In May 1892 a large mining disaster occurred in Příbram, when 319 miners perished in a fire at the Marie Mine (38% of the 835 miners in shift). This mining catastrophe is commemorated by a cast iron monument in empire style in the cemetery.

In Příbram there are the most important technical mining monuments from the 18th to 20th century. They are located in the part of Příbram called Březové Hory. Since 1849, the Mining University has been located in Příbram. Příbram together with the town of Banská Štiavnica (Schemnitz, Selmeczbanya) in Slovakia and Leoben in Austria became the centers of Austro-Hungarian technical education. Příbram achieved world leadership in 1875, when the Vojtěch shaft exceeded 1000 meters (3280 ft) for the first time in the world. To the centenary of this event, a depth of 1838,4 m (1242 meters below sea level) was reached at uranium shaft No. 16 in Háje near Příbram. This shaft thus became the deepest European shaft in one vertical length (Kafka, 2003).



VOJTĚŠSKÝ DŮL.

Fot. J. Mos.

Fig. 9: For the first time in the world, a depth of 1000 meters (3280 ft) was reached at the Vojtěch Mine in Příbram. Photo J. Mos, 1875.



Fig. 10: Uranium Shaft No. 16 in Háje near Příbram is probably the deepest shaft in Europe in one vertical length 1838,4 m (6031 ft). The deepest uranium mines in the Europe were in the GDR in the Schlema-Alberoda area, there is vertical difference nearly 2000 meters between the upper shaft and bottom of the deepest "383IIIbis" blind shaft, the absolute depth at the deepest point reached 1,470 meters below sea level in the cascade of shafts. The deepest mine below sea level in Europe was the anthracite mine Ibennbürren in the BRD, which reached a depth of 1630 meters below sea level in the year 2012. The shaft No. 16 near Příbram is situated at a higher position, shaft collar is 596 meters above sea level, so Shaft 16 reached a depth of 1242 below the sea level. Photo: Martin Přibíl, 2008.

Ostrava – Vítkovice

Vítkovice is now part of the Ostrava agglomeration, but previously it was an independent mining and metallurgical "steel" city. The first mention of the village is from 1357, but it was a very small village. Vítkovice began to develop intensely with the development of mining, coke, metallurgy and mechanical production after 1828, when the blast furnaces were established and hard coal mining started. Hard coal began to be mined in the Ostrava and its surroundings in 1776. Later, mining expanded throughout the area and continued in the direction of Karviná. This coal area is called the Ostrava-Karviná District. Coal mining in the Ostrava area stopped in the 1980s and 1990s.

There are only two sacral monuments, one church and one vicarage. The Great Synagogue was burnt down by the Nazis during the war. One small chapel, St. Florian was in the premises of the ironworks and was demolished.

Great Church of St. Paul the Apostle was founded (as in Příbram) off the east-west axis. Land and building materials and finances were provided by Vítkovice Ironworks, the temple was built in 1880–1886. For the inhabitants of the industrial city, only one large temple and one large synagogue were enough. In Vítkovice there are more state-protected technical monuments than sacral monuments (Matěj – Korbelařová – Tejzr, 2014).



Fig. 11: Vitkovice Ironworks, Cokery Plant and Hard-coal Mine "Hlubina". National cultural monument of Czechia (the highest form of cultural monument protection). Despite the highest possible status of monument protection, Vitkovice Ironworks was damaged by ambitions of architects and local politicians to build their own monument here in the form of various inappropriate building extensions. For example "Usain Bolt Tower" on the top of Blast Furnace No. 1. Photo: Martin Přibil, 2015.

Karviná

Karviná is situated relatively close to Vítkovice and belongs to the same industrial area called Ostrava-Karviná District. Coal is still mined underground in 4 large mines. Near Karviná there is a very interesting sacral monument marked by mining. It is the Church of St. Peter of Alcantara. Allegedly there was a wooden church of St. Martin already in the middle of the 15th century. The present church was built by the owner of the estate, the Larisch family in 1756–1759 and had an ancestral tomb (Mojžíšek, 1996).

The area was still relatively sparsely built up in the 19th century, but gradually with the development of mines a number of colonies and a large settlement formation today called the "Old Karviná" were established here. Church of St. Petr (Peter) of Alcantara was located directly between the large mines of ČSA, Lazy and Darkov at the site of intensive mining. It absorbed the entire settlement formation, as well as mining colonies where about 20,000 people lived, who moved to new housing estates. The only one left is the Church of St. Petr (Peter) of Alcantara, but even that is not in its original location, as a result of longwall mining in several coal seams above each other, it dropped by 37 meters and happily remained in the otherwise abandoned mining depression basins (SOA Karviná, 2010).



Fig. 12: Church of St. Petr (Peter) of Alkantara in Karviná dropped by 37 meters due to coal mining underground. Photo: Martin Přibil, 2019.



Fig. 13: Mining cultural landscape in Karviná is an example of a living prosperous industrial landscape, bringing prosperity to the whole region. Photo: Martin Přibil, 2016.

Most

Most is a former historic town. Historic center of Most was demolished in behalf of progress and lignite (steam coal) mining. One of the preserved monuments is the late gothic Church of Nanebevzetí Panny Marie (Church of The Assumption of the Blessed Virgin Mary). This temple was built on the site of an old burned down church, the construction lasted from 1517 to the 17th century. In 1975, the church was moved by 841.1 meters (2759 ft) on a rail chassis to a new place outside coal mining area. It is therefore another sacral monument directly related to mining (Přesun, 1976; Koukal, 2007)



Fig.13: Movement of the Church of The Assumption of the Blessed Virgin Mary in Most, before the advancing coal open pit. Photo: anon., 2016



Fig. 14: CSA Open Pit near Most. It is not exactly the most beautiful landscape, but coal open pits give us high quality and nowadays more environmentally friendly electricity and heat.

Conclusion

The Czech Republic cannot boast of prehistoric ore mining or prehistoric sacral shrines. However, a number of remarkable results have been achieved in the Czech Republic in mining and metallurgy. It is a remarkable depth of mine in Kutná Hora, around 500 meters or more at that time (16th century). Furthermore, it reaches a depth of 1000 meters at the mine Vojtěch in Příbram in 1875. Equally remarkable is the volume of steel production in the 20th century. There are also a number of interesting sacral monuments in the Czech Republic, which were created thanks to the wealth brought by mining and metallurgical activities, these are the historic centers of cities such as Prague, Kutná Hora or Český Krumlov. A number of sacral music manuscripts are also coming from the territory of the Czech Republic. They contain world-famous scenes that document mining activity at the turn of the 15th and 16th centuries. In a way, there is also a unique relocation of the Church of the Assumption of the Virgin Mary in Most, which was standing and reinforced in 1975 and moved on rails outside the reach of coal open pit mining. An analogy of this shift is the decline of the church of St. Peter of Alcantara in Karviná which dropped by 37 meters into mining depression basins due to the longwall mining in several coal seams above each other.

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