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RADOSŁAW ZDANIEWICZ*, HENRYK POSTAWKA**

DISEASE, CATACLYSM, OR INDUSTRIALISATION? A COMMENT ON THE EXISTENCE AND DISAPPEARANCE OF A MODERN PERIOD SETTLEMENT IN THE VICINITY OF TRACHY IN UPPER SILESIA

Abstract: An analysis of map charts of Upper Silesia from the second half of the 18th century allows us to identify at least a few lost settlements and hamlets. There is no doubt that one such lost settlement existed upon the Bierawka river, in the vicinity of the present-day villages of Trachy (*Althammer*) and Tworóg Mały (*Quarghammer*). Regrettably, the exact location of this settlement has never been identified. An archival query and test excavations demonstrated that the settlement actually came into existence and developed as late as the Modern Period. A fragment of a stone and brick foundation that was uncovered in the course of excavations was the vestige of a hut or of a more professional industrial workshop, such as a finery or forge. It was equipped with a waterwheel. Unfortunately, the reasons behind the disappearance of the village are unknown. It may have been caused by one of the epidemics which affected the inhabitants of Upper Silesia in the 19th century or by another cataclysm. It cannot be excluded, however, that the disappearance may have been due to the economic transformations of the 19th century.

Keywords: Upper Silesia, Modern Period, lost settlement, Trachy, Tworóg Mały, hut, industrial workshop

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Introduction

An analysis of map charts of Upper Silesia from the second half of the 18th century allows us to identify at least a few lost settlements and hamlets in this region. There is no doubt that one such lost settlement existed upon the River Bierawka, in the vicinity of the present-day villages of Trachy (*Althammer*) and Tworóg Mały (*Quarghammer*) in Upper Silesia (Fig.1:a-d). In the Modern Period (from c. 1550 to the 19th century), settlements in this part of Upper Silesia were often more or less significant centres of bog ore mining and smelting. There are many premises that the origin of this now-lost settlement was also related to iron ore processing. This is demonstrated both by

* Doctoral School of University of Lodz; **(b)** https://orcid. org/0000-0001-5816-1075; gparcheolog@gmail.com

** Institute of History, University of Opole; **(b)** https://orcid. org/0000-0002-1954-5460; postawka@gmail.com cartographic sources which confirm the existence of a waterwheel in the settlement (perhaps for the needs of a forge), and first of all by the results of archaeological reconnaissance carried out in 2020. Regrettably, the reasons behind the disappearance of the settlement are still unknown. It may have been caused by one of the epidemics which affected the inhabitants of Upper Silesia in the 19th century or by another disaster. It cannot be excluded, however, that the disappearance of the settlement may have been due to the economic transformations of the 19th century. This issue will be discussed in this paper.

Search for settlement traces

The precise location of this settlement in the field has never been identified. The earliest archival maps made since c. 1750 are handwritten charts, which were not prepared on the basis of precise cartographic systems that are known today. Thus, they are often schematic



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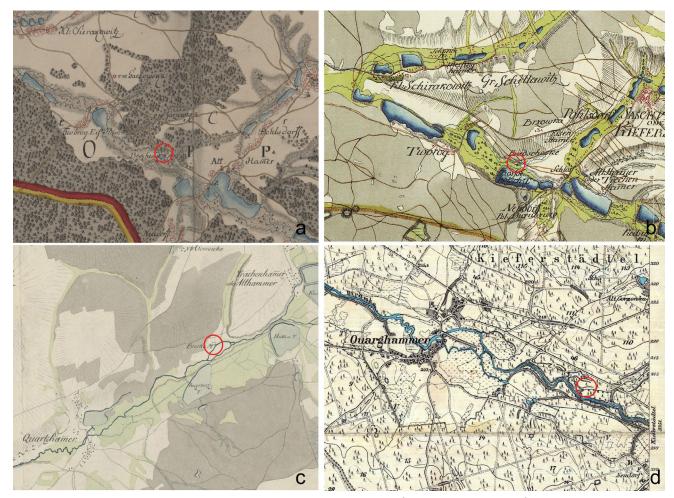


Fig. 1. Archival maps of the examined territory from the second half of the 18th to the first half of the 20th century, collection of the Staatsbibliothek Berlin, Preußischer Kulturbesitz, Kartenabteilung: a – Christian Friedrich von Wrede, c. 1749-1750, Krieges-Carte von Schlesien, acc. no. SBB_IIIC_Kart_N 15060_Band 2_Blatt 27; b – Schmettausches Kartenwerk 1:50.000 (1767-1787), acc. no. SBB_IIIC_Kart_L 5420_7_Blatt (219); c – Christian Karl August Ludwig von Massenbach, Karte der Provinz Schlesien, acc. no. SBB_IIIC_Kart N 16058 Blatt 30; d – Meßtischblätter, 1883, Jakobswalde, Chart 3350, 1938.

and were certainly influenced by the perception of their creators. On archival maps, the discussed settlement was marked as a small hamlet with a symbol indicating the presence of a waterwheel there (Fig. 1:a-d). In attempts to discover the material remains of the hamlet, an analysis of the background layers of ground surface laser scanning was first of all applied (Fig. 3). It turned out that the area that was selected as a possible location of the settlement had undergone transformations. These were both natural transformations and transformations related to the urbanisation development of present times. The riverbed of the Bierawka also underwent transformations in the segment where the location of the settlement was supposed to have been located. On a map from 1747-1753 the river flowed in one stream bed, and there was a pond near the putative location of the settlement (Fig. 1:a). On the other hand, there are two stream beds on maps from the years 1767-1787 and 1796 near the assumed location of the settlement. One of these beds (the northern one) was supplied by the waters of a smaller stream,

known as the Sośnicowice Stream (*Potok Sośnicowicki*) (Fig. 1:b-c). This northern bed is an old dry riverbed which was partially destroyed after World War II by the bank of the Kotlarnia-Leboszowice sand railway, and is now covered by forest. The aforementioned map backgrounds also provide some pieces of information concerning the village's name in the past. On the earliest map the settlement is called *Beschech M. (Mühle)* (Fig. 1:a), while in later ones its name is *Brzoska M. (Mühle)* (Fig. 1:b).¹ These names are perhaps related to owners of the waterwheel in the settlement. In a map from 1827 the settlement is called

¹ The State Archive in Racibórz stores documents concerning the purchase of mills in the first half of the 19th century. These mills may have belonged to the same owner and were located in Turza Śląska and Kuźnia Raciborska upon the River Ruda, cf. *Verkauf der Brzoska Mühle in Ratibor Hammer betreffend*, State Archive in Katowice, Racibórz Branch, Ducal Chamber of the Castle in Racibórz (Komora Książęca Zamku w Raciborzu), no. 18/16, acc. no. 29.

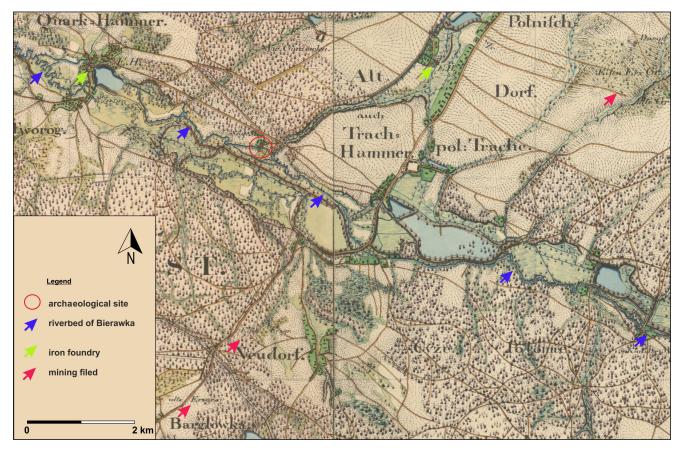


Fig. 2. Archival map of the examined territory from 1827-1928, collection of the Staatsbibliothek Berlin, Preußischer Kulturbesitz, Kartenabteilung, Generalstabskarte, Preußische Urmesstischblätter 1:25.000 (1822-1872), Kart N. 729, Chart 3350 (1827); 3351 (1828).

Sag Muh (Fig. 2) and the presence of two waterwheels in its territory was marked. One of these wheels may have been used for the needs of a sawmill (Germ. Sägemühle) that existed there in this period.

In the register of localities of the Silesian Province from 1830 and 1845 the settlement is recorded under the name of Brzozka (Brzosta) and was considered to be a hamlet of Trachy (Trachammer).² However, it was not mentioned at all in similar sources that were published in 1783 and 1865.3 Regrettably, an archival query yielded no specific historical sources concerning the existence of the settlement. The main research question, apart from identifying its location and function, were reasons behind the settlement's disappearance. Unfortunately, the discussed hamlet was no longer marked on the earliest surviving 1:25 000 German topographical map (*Meßtischblatt*) from 1883 (Fig. 1:d). Bearing in mind the fact that these maps were made with great attention to detail and accuracy in depicting the terrain's topography, it can be concluded that the settlement no longer existed at that time.

Apart from the query in historical sources, preliminary field reconnaissance was also carried out. An individual terrain anomaly was selected for test excavations on the basis of LIDAR data. This anomaly was considered the possible remains of old buildings (Fig. 3). The presence of settlement structures was also implied by surface discoveries, including shards of modern period ceramic vessels and building ceramics such as, among others, brick fragments. A test trench was marked out in the place of the aforementioned terrain inversion. It was revealed that a building existed at this location in the past. It may have been a dwelling or a production feature. The remains of a massive foundation were found. These were made of large pebble-like stones and bricks that were joined with lime mortar. The remains of a brick floor or paving were also found, which implies that the floor of a building or household arcade may have existed there in the past. The absence of large rubble and discovered parts of building accessories (nails) suggest that the building that was constructed on this foundation was made of timber. However, it is difficult to identify its construction type. Attention is drawn to the fact that the majority of traditional huts constructed in Upper Silesia in the 18th-19th centuries had no foundations - that role was fulfilled by substructures that

² Knie and Melcher 1845, 64.

³ Zimmermann 1783, 333-356; Triest 1865, 340.



Fig. 3. LIDAR visualisation of the portion of the River Bierawka valley with the terrain anomaly which was examined archaeologically. Prepared on the basis of a point cloud in Planlauf software, R. Zdaniewicz.

were placed directly on the ground or on larger stones.⁴ Stone and brick wall bases can only be found in houses with cellars or those belonging to wealthier owners, as well as in features with economic functions.

What can putatively imply a production function for this building are the features and finds that were discovered in its vicinity. First of all, a troughlike feature was uncovered there (Fig. 4, Feature 5). Lumps of iron were found in its fill, which suggests that the feature was related to iron processing, for example perhaps a bloomery furnace, smithing hearth, or refining hearth. The latter may have been related to the process of decarburising blast furnace iron lumps (Fig. 5). Fragments of iron lumps were also deposited in the feature's direct vicinity. They may imply that bloomery iron was processed there in order to purify it from slag. On the other hand, it cannot be excluded that the discovered feature could have been a finery hearth where blast furnace pig iron was decarburised. Metallurgical examinations of these lumps would certainly shed more light on this issue.⁵ Therefore, the discovered part of the stone and brick foundation could be a vestige of a more professional finery or forge-like industrial workshop which was equipped with a waterwheel. However, additional test excavations would be needed to confirm this assumption. A number of iron artefacts were found in layers deposited in the vicinity of the aforementioned foundation. These were, among others, a key, fragments of knives, and an adze or wedge for wood splitting, and nearly completely surviving horseshoes (Fig. 6:1-9).⁶ Other finds were small artefacts of daily use, such as copper alloy buttons, a pipe bowl cap, and shards of ceramic vessels. All these finds can be dated to within the late modern period horizon (18th-19th centuries), which is also indicated by the discovery of a Prussian 3 Pfennig coin from 1822 (Fig. 6:10).

⁴ Dubiel 1971, 34.

⁵ Lysik 1968, 69. We would like to thank Prof. G. Żabiński for his help and valuable remarks concerning the possible function of this feature.

⁶ We would like to thank the Commune Office in Sośnicowice for help and financial support for the conservation of the discovered archaeological finds.

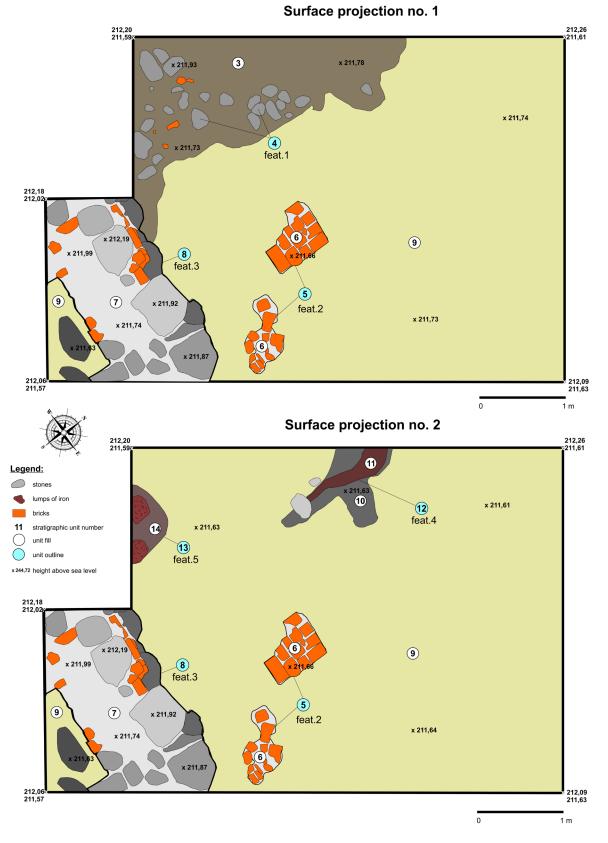


Fig. 4. Horizontal projections of Trench 1/20. Identified stratigraphic units are marked. Drawing R. Zdaniewicz.



Fig. 5. Feature 5, section. Photo R. Zdaniewicz.

Disappearance of the settlement

While discussing possible reasons behind the disappearance of the discussed settlement of Brzoska, at least three hypotheses should be taken into account. One hypothesis is natural causes. The riverbed of the Bierawka has not been regulated until today in the segment where the research was carried out. As mentioned in the first part of the paper, analysis of the historical maps of this area demonstrates changes and transformations of the hydrological network of the region. Sudden high waters and floods often cause changes in the course of a riverbed.⁷ It is possible one such cataclysm caused terrain transformations which rendered further operation of the waterwheel impossible, thus undermining the economic foundations of the settlement's existence. It cannot be excluded, either, that the settlement may have been directly affected or even destroyed by high water.

In attempts to identify the reasons behind the disappearance of the settlement, attention must also be paid to another aspect which is partially related to the local memory of the population inhabiting this region. Near an old route from Tworóg to Trachy, at the level of the discovered remains of the settlement there is a wayside shrine of St Roch. It contains a figure of this saint and a figure of St John the Baptist, the latter having probably originated in the 18th century. The shrine has existed in this place for at least several decades (Fig. 7).8 In Europe, St Roch was venerated as early as the 15th century and, together with St Sebastian, he became a patron saint protecting against plague.9 However, shrines dedicated to this saint are not very frequent in the territory of Silesia, although his cult was certainly celebrated by the rural population.¹⁰ As late as the post-WWII period in Opole Silesia there was a habit of gathering of the faithful around St Roch's shrines and offering poultry in order to protect livestock against plague.¹¹ Shrines and figures of the saint were usually placed near roads, also in order to stop the rampant plague or as an expression of gratitude for protection against the epidemic. It is difficult to unequivocally say whether the presence of such a shrine can indicate that inhabitants of the nearby settlement had been touched by plague already, or whether it was erected to protect them against possible epidemic. As demonstrated by statistical data, cholera decimated

⁸ KZS, 106.

⁹ Niewęgłowski 2006, 133.

¹⁰ Pośpiech 1987, 265-266.

¹¹ Pośpiech 1987, 265.

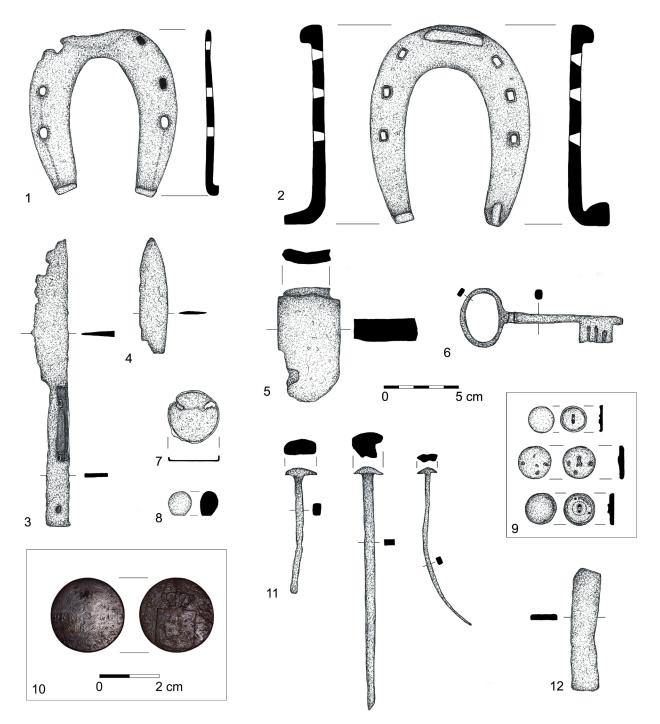


Fig. 6. Metal artefacts discovered within Trench 1/20. Legend: 1, 2 – horseshoes; 3 – iron knife; 4 – iron knife fragment;
5 – iron adze (?) fragment; 6 – iron key; 7 – iron cap of a pipe bowl; 8 – lead globule; 9 – copper alloy buttons; 10 – copper coin from 1822; 11 – iron nails; 12 – fragment of unspecified iron artefact. Drawing R. Zdaniewicz.

the population of Upper Silesia in the 19th century a few times. It often originated from the poor sanitary and living conditions of the population in this period.¹² In the Silesian Province of Prussia tens of thousands people died of cholera epidemics from the 1830s to

the end of the 19th century. The plague was especially intense in the years 1848-1856.¹³ There is no doubt that subsequent epidemics of cholera provoked anxiety and fear among the inhabitants of Upper Silesia. Therefore, people often sought help from the

¹² Czapliński 2012, 41-71.

¹³ Czapliński 2012, 217-235.



Fig. 7. Wayside shrine of St Roch with the figure of this saint and the figure of St John the Baptist (possibly dating from the 18th century), next to the archaeological site. Photo R. Zdaniewicz.

Holy Virgin and other patron saints in order to obtain protection and reverse the results of the plague. The rural population, being traditionally Catholic, had especially strong beliefs in divine intervention in daily life. Therefore, it cannot be excluded that the disappearance of the settlement may have been related to an epidemic which went through this region in the 19th century. In order to confirm this assumption, interviews with the oldest inhabitants of the neighbouring village of Trachy were also held.¹⁴ In responses that were obtained concerning the studied territory, there were mentions of the figure of St Roch. It was believed to have been carved by a local miller due to a disease of his son. According to another piece of information, the shrine was transferred from its original location in the direct vicinity of the area of excavations when the railway line was constructed (Fig. 2). In spite of the fact that this is merely a brief oral mention which should undergo scrutiny, it must still be noted that it is an interesting piece of evidence related to the local memory of the population, as such peculiarly understood 'antiquity' is considered by sociologists to be a constituent of the local community that builds ties between the group and their social and natural environment.¹⁵ Diseases and epidemics, especially local ones, may be remembered for a long time, even more than one generation, as evidenced by this example. In the case of the aforementioned shrine of St Roch, it is impossible to prove its direct relationship to epidemic results. It has been demonstrated, however, that in the awareness of inhabitants of the neighbouring village of Trachy the shrine is related beyond a doubt to the history of the lost hamlet upon the Bierawka.

Furthermore, economic conditions in this part of Silesia in the 19th century must also be discussed within the context of the disappearance of the hamlet in question. The origins of metallurgy and iron ore extraction in the area around the town of Sośnicowice (including Trachy as part of the so-called 'Sośnicowice land') are

¹⁴ We are indebted to Mr Gerald Kobierski, an inhabitant of Trachy, for numerous remarks and help in holding interviews.

¹⁵ Kurczewska 2006, 349-351.

no doubt related to the family of von Trach from Brzezie, who were greatly interested in the economic development of their estates.¹⁶ In 1576, the first landowner of this family, Jan Trach from Brzezie (von Birkau) issued a special edict called 'Gemeindeordnung' (also called 'Commune constitution'). It granted certain rights and duties to the citizens of the town of Sośnicowice. Two years later his son Jan Paweł Trach confirmed and specified all these rights, as well as those concerning the extraction and processing of local iron ore resources. He likely also invited new settlers to the region from Bohemia and further abroad. The settlers established two new industrial settlements in the vicinity of Sośnicowice: Kuźniczka, where iron was smelted, and Trachy, where iron ore was extracted. Therefore, Kuźniczka in Polska Wieś (the latter being now a quarter of Sośnicowice) was one of the earliest forges in Silesia, while Trachy (Trachhammer) was one of the first settlements where iron ore was extracted on an industrial scale in this part of Upper Silesia (Fig. 2). The establishment of settlements related to iron processing strongly influenced the economic development of the region. Apart from that, in the late 18th century in Kuźniczka there were three fineries and one light tilt-hammer, so-called Zainhammer.17 In Trachy, a blast furnace for iron smelting (Al*thammer*) was built in 1703, one of the earliest furnaces of this kind in Upper Silesia.¹⁸ Its production capacity was considerable for 19th century conditions, and as late as 1834 it yielded 5847 quintals of pig iron while employing 10 workers. Important observations concerning the economic development of territories on the Bierawka river were made by L. Musioł and S. Pluszczewski. These researchers identified as many as fifteen smelteries which operated in the 19th century in the river valley.¹⁹ These authors mention as many as four forges in the central course of the river near the present-day village of Trachy up to Tworóg Mały, that is, in the segment which is of interest to us: (1) 'Stara Kuźnia' in Trachy (Trachhammer) to the south of Sośnicowice near present-day Polska Wieś (Polsdorf); (2) 'Kuźniczka', situated in the neighbourhood of 'Stara Kuźnia' in the village of Polska Wieś; (3) one forge in Sośnicowice itself, and (4) one forge in the settlement of Tworóg Mały (Quarghammer). The latter was combined with a finery, established as early as 1740 (Fig. 2). However, these authors underline that 'Kuźniczka' in Polska Wieś and 'Stara Kuźnia' in Trachy may apply to one and the same enterprise. This issue requires further research. Regrettably, there is no information

about the existence of a possible forge or finery in the studied settlement. The settlement was not mentioned, either, in an official Prussian statistical document from 1853 in the territory of the Sośnicowice Department.²⁰ What deserves attention, however, is the fact that Trachy was transformed into an ironmaking enterprise after the construction of the blast furnace in 1703. As the demand for iron ore increased, it also commenced to be extracted from shafts (so-called *Erzgrube*). These were located in the direct vicinity, e.g. in Nowa Wieś (Neudorf). What remains of these installations are small shafts in the border of Nowa Wieś, Stanica, and Bargłówka, which can be seen in mining maps of the region from the 19th and even the early 20th century (Fig. 2).²¹ Traditions of iron ore extraction in this area can be dated back at least to the mid-17th century. At this time, three feudal lords - Lord Sławięcic (of the Trach family until 1701), the abbot of the monastery in Rudy, and the Duke of Racibórz - founded new mining settlements (Nowa Wieś, Górniki, and Bargłówka) in the borders of their estates.²² Perhaps the examined hamlet upon the Bierawka was also a settlement of this kind, related to ore extraction and initial processing. In 1864, the aforementioned blast furnace in nearby Trachy was decommissioned.23 During this time, the metallurgical industry was being transferred to larger and more modern industrial centres where production was based on pit coal and coke.²⁴ It was perhaps for this reason that smaller production hamlets, related to more traditional iron smelting with the use of bog ores and charcoal (including the studied settlement near Trachy), disappeared as a result of being less efficient and profitable. What may have also been of significance was the market for ironworking products, which considerably deteriorated after the period of the so-called 'Spring of Nations'.²⁵ Only the largest enterprises were able to survive longer crises.

Summary

Over the course of multi-aspect research on the hamlet that once existed upon the Bierawka river, it was possible to determine that the settlement was

¹⁶ Schmidt 2008, 5-6.

¹⁷ Zimmermann 1783, 347.

¹⁸ Fechner 1907, 583.

¹⁹ Musioł and Płuszczewski 1960, 14-16.

²⁰ Łysik 1968, 69.

²¹ See also "Geologische Karte von Preußen und benachbarten deutschen Ländern", Chart 3350, Jakobswalde, Berlin 1938.

²² See "Die Grenze zwischen dem Mediat Herzogthum resp. Herrschaft Rauden westlich Stanitz des Majorat Herrschaft Pilchowitz 1831/1845" and Die Mediat Herzogthum Ratibor und dem Majorat Herrschaft Slawentitz im Jahre 1767/68, acc. nos. 278, 287, Herzogliche Kammer zu Schloss Ratibor, State Archive in Katowice, Racibórz Branch.

²³ Schmidt 2008, 6.

²⁴ Kwaśny 1968, 251-256.

²⁵ Kwaśny 1968, 183.

related to processing and perhaps to the extraction of iron ore in this region. This is evidenced by the results of archaeological excavations and to some degree also by historical query. There is no doubt that the problem of the development of mining and metallurgy in Upper Silesia before the Industrial Revolution (which was in progress as early as the second half of the 19th century) still poses many questions and issues that remain unanswered. Due to this, the region of the Bierawka river valley certainly calls for further research that should be carried out both by archaeologists and by historians of industry. Attempting to reconstruct an image of the local ironmaking industry is no doubt an interdisciplinary task that should make use of the achievements of various branches of science. What would be beneficial in further works are non-invasive techniques (such as ground-penetrating radar or magnetometer) which have become widespread in archaeological field research. These techniques can be used for the purpose of locating lost settlements or hamlets. Furthermore, laboratory examinations of soils and palynology would also be of use. Regrettably, it was not possible to identify the direct reasons behind the disappearance of the studied settlement. It may have been caused by a cataclysm, disease, or by economic factors. This question still remains unanswered, but we hope that in our paper we were at least able to restore the memory of a human settlement which does not physically exist anymore, but lives on in the awareness of the local population. Therefore, the words of Isaac Newton can perhaps be quoted here: 'What we know is a drop; what we ignore is an ocean'.

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References

- Bajkiewicz-Grabowska E., Mikulski Z. 2006. Hydrologia ogólna. Warszawa.
- Czapliński M.P. 2012. Epidemie cholery w rejencji opolskiej w latach 1831-1894. Rybnik.
- Dubiel L. 1971. Zabytkowe i współczesne budownictwo chłopskie na wsi gliwickiej. Gliwice.
- Fechner H. 1907. Wirtschaftsgeschichte der preussischen Provinz Schlesien. Breslau.
- KZS Katalog Zabytków Sztuki w Polsce: województwo katowickie 6 (5), I. Rejduch-Samkowa, J. Samka (eds.), Warszawa 1966.
- Kurczewska J. 2006. Pamięć lokalna z perspektywy rodziny i ...narodu. In: J. Kurczewska (ed.), Oblicza lokalności: różnorodność miejsc i czasu. Warszawa, 349-373.
- Kwaśny Z. 1968. Hutnictwo żelaza na Górnym Śląsku w pierwszej połowie XIX wieku. Wrocław.
- Łysik S. 1968. Rejestr zakładów hutniczych na Górnym Śląsku w połowie XIX w. "Zeszyty Gliwickie" 6, 65-76.
- Musioł L., Płuszczewski S. 1960. Wykaz zakładów dawnego hutnictwa żelaza na Górnym Śląsku od XIV do połowy
- XIX wieku. In: J. Pazdur (ed.), Studia z dziejów górnictwa i hutnictwa 5. Wrocław.

Niewęgłowski W. A. 2006. Leksykon świętych. Warszawa.

Knie J. G., Melcher J. M. L. 1845. Alphabetisch-statistisch-topographische Uebersicht der Dörfer, Flecken, Städte und andern Orte der Königl. Preuß. Provinz Schlesien. Breslau. Available online: https://reader.digitale-sammlungen.de/de/fs1/object/display/bsb10014998_00067.html.

Pośpiech J. 1987. Zwyczaje i obrzędy doroczne na Śląsku. Opole.

Triest F. 1865. Topographisches Handbuch von Oberschlesien. Breslau.

Schmidt J. 2007. Dzieje Trachów. Gliwice.

Verkauf der Brzoska Mühle – Verkauf der Brzoska Mühle in Ratibor Hammer betreffend. State Archive in Katowice, Racibórz Branch, Ducal Chamber of the Castle in Racibórz (Komora Książęca Zamku w Raciborzu), no. 18/16, acc. no. 29.

Zimmermann F. A. 1783. Beyträge zur Beschreibung von Schlesien 2. Brieg.