

Dagmara Chylińska
Krzysztof Kołodziejczyk

University of Wrocław
Institute of Geography and Regional Development
Department of Regional Geography and Tourism
dagmara.chylinska@uwr.edu.pl
krzysztof.kolodziejczyk@uwr.edu.pl

DEGRADED LANDSCAPES AS A TOURIST ATTRACTION AND PLACE FOR LEISURE AND RECREATION

Abstract: The aim of the article is to assess the role of degraded landscapes in tourism. The authors try to answer questions about the contexts in which such landscapes may be found in relation to those complex phenomena concerning the human need for travel, leisure, cognition and experience. They also pose questions about the physical and symbolic limits to tourism and recreation in degraded landscapes. The work is based on a literature review and observations on chosen degraded landscapes (mostly industrial and post-industrial) located at the Czech foreground of the Ore Mountains (Czech *Krušné Hory*, German *Erzgebirge*).

Keywords: degraded landscape, tourism, leisure, recreation, tourist attractiveness.

1. INTRODUCTION

Pustina – a fictional village portrayed in a criminal drama by HBO Europa (2017) – creates a dark and truly ugly scene for a mother's tragedy: Hana Sikorová is desperately looking for her teenage daughter Miša who has gone missing without any trace. The scenery is gloomy literally, hence Pustina, located on the margins of a large opencast lignite mine which is constantly consuming new land to transform it into a desert. In the background of the village, depopulated and deprived of any prospects, viewers can see the smoking chimneys of a large power station, growing heaps of rubbish and post-mining waste. Everything creates a landscape so ugly that it becomes intriguing. The reason for choosing such depressed and estranged landscapes for the film seems obvious: the degraded and unpleasant sceneries of Pustina intensify the gloomy and disturbing atmosphere of the abstruse crime story.

Although film scenes were made from a combination of many real sites, most of them are located in the vicinity of Chomutov, a middle-size town in the north-west Czech Republic. In reality these places are not so horrible as we see them in the programme, but they still represent degraded landscapes, strongly transformed through heavy industry and mining. It is all

the more surprising that the surroundings of Chomutov or – in a broader spatial perspective – the eastern foothills of the Ore Mountains (Czech *Krušné Hory*, German *Erzgebirge*) are for many reasons attractive for tourism and leisure, including the scale and uniqueness of local industrial landscapes. The Ore Mountains are promoted as the 'undiscovered tourist pearl' of Czechia.

Numerous theories in the field of aesthetics and environmental psychology try to examine which factors influence positive or negative perceptions of the landscapes we see and in which we live. Among these indicators naturalness and usefulness for human survival might be found (physical-perceptual approaches and biophilia). Not only such features as complexity, novelty, incoherence and surprise (Berlyne's aesthetics), but also coherence, legibility, complexity and mystery (the Kaplans' theory). Taking into consideration the fact that modern culture is mostly based on visual impressions it may seem obvious that views which are simply beautiful, scenic or monumental are assessed as those more attractive or visually pleasant. Directions in the development of contemporary tourism – both in choice of tourist destination and tourism promotion – seem to prove

this. However, does only the beauty of a landscape attract tourists?

In the article the authors, inspired by the landscapes of the fictional Pustina and in juxtaposition with their own observations made during journeys along the Czech side of the Ore Mountains and their foothills, ask questions about the tourist attractiveness of degraded landscapes and about limits – both physical and symbolic – of their usage for tourism and leisure purposes. In which contexts may they be found in relation to the complex phenomena concerning the human need for travel, leisure, cognition and experience? The article presents case studies of degraded landscapes located in the Czech foreground of the Ore Mountains.

2. STUDY AREA

The Ore Mountains are a range in north-western Czechia and south-eastern Germany (Saxony), approximately 150 km long and about 40 km wide, stretching from south west to north east along the state border (MIGOŇ *et al.* 1999, p. 462). It is a marginal, elevated part of the Czech Massif, similar to the Sudeten Mountains which are located more to the east. The Ore Mountains extend from *Fichtelgebirge* in Germany (Czech: *Smrčiny*) in the west to the deep Elbe gorge and Děčín in the east. The highest summit is Klínovec in the Czech Republic (German: *Keilberg*, 1244 m a.s.l.). The Ore Mountains are built from crystalline rocks (STUPNICKA 1978, p. 142), predominantly strongly folded metamorphic Precambrian rocks (mostly various types of gneisses), as well as thick Cambrian (slates) and Ordovician (slates and phyllites). In the western part of the range late Carboniferous granitoids can locally be found, connected with poly-metallic mineralisation. Moreover, the eastern edge of the Ore Mountains is composed of Cretaceous sandstones (MIZERSKI 2015, p. 187; *Zažijte...* 2014). In the tertiary period the whole range was faulted and elevated in the form of a horst concurrent with basaltic volcanism (MIGOŇ *et al.* 1999, p. 462). The elevation was irregular and as a consequence slopes facing Germany are less steep than those facing the Czech side (a distinct, high ridge called *Krušnohorský zlom* can be found here). High plateaus with vast peat bogs are an effect of earlier erosion of the mountains.

The Ore Mountains after the Second World War were not so popular among tourists. On one hand this was due to political and administrative reasons because of their location near the state border, occurrence of strategic resources and forced labour camps, access to this area was severely limited. On the other hand (a little bit later) local industry, particularly

power plants fuelled by brown coal, caused pollution and the decay of the artificially introduced spruce monocultures¹, especially in the 1980's (this process corresponds with a similar phenomenon in the Izerskie Mountains). Changes in the political situation and more ecological technologies have enabled a revival of tourism in recent years (it had existed already in the 19th and the early 20th c.) (<http://www.krusnehory.eu/>). Today, after regeneration of the forests, abandoned villages can be mentioned as visible effects of the negative processes in the post-war period. This is a result of planned displacements as well as a natural drift of people from rural areas to towns with better living conditions. Because most of the former buildings were demolished, the only reminder of some settlements is a name on a map. However, in some cases, ruins of houses can still be found.

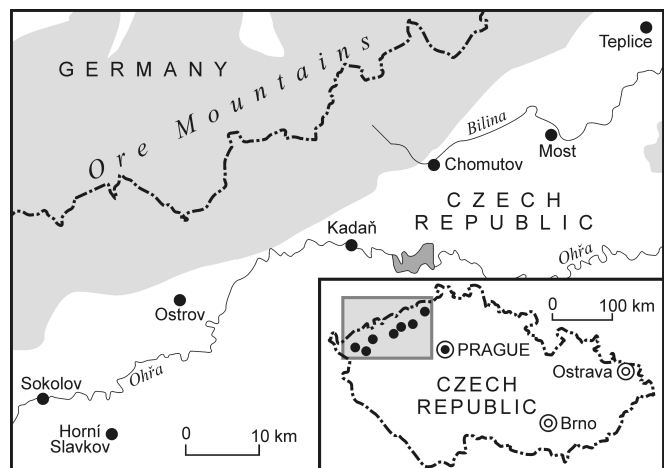


Fig. 1. Ore Mountains – study area
Source: authors

In the article the main attention is focused on the Ore Mountain foreground, where brown coal is exploited, and the marginal, eastern part of that range which spatially accompanies excavations at their base. Beyond the Ore Mountains, observations focused on degraded landscapes (Fig. 1) and were conducted in two regions: *Sokolovská pánev* and *Chomutovská pánev*, built from tertiary sediments with seams of lignite and locally granites and tertiary products of volcanism (MIZERSKI 2015, p. 187; *Zažijte...* 2014).

3. ECONOMIC HISTORY OF THE ORE MOUNTAINS

Both in Czech and German, as well as in Polish, the name of the mountain range² makes reference to rich deposits of silver, tin³, iron, copper and lead ores,

exploited from the Middle Ages. At the beginning of the 17th c., after the seams were exhausted (or their extraction less profitable), nickel, cobalt, bismuth and arsenic were mined, and later from the mid-19th c. uranium and fluorite. The region owes its wealth to metal ores, especially from the 15th to the 17th c. The development was interrupted by the Thirty Years War which caused a reduction in metal mining and the movement of German communities from the Czech part of the Ore Mountains to Saxony. However, in the 18th c. mining revived together with metallurgy, glass-making, production of musical instruments, gloves and lace. Until 1946 the Ore Mountains were the most highly populated mountain range in the then Czechoslovakia. Jáchymov, today an impoverished mining town with a revitalised spa centre, had been for a couple of decades the second biggest settlement in terms of inhabitants after Prague (in 1534 18,200 people lived there, although Jáchymov was only founded in 1516; today there are only 3,400 inhabitants). The names of settlements and summits are testimony to the former mining industry. For example, in the northern part of the range is the village of Cínovec (Czech *cín* means 'tin') and in the middle part, a mining town, Měděnec (Czech *měď* means 'copper'). The mining cultural region of the Ore Mountains (Czech: *Hornická kulturní krajina Krušnohoří*, German: *Montanregion Erzgebirge*) has been from 1998 a German-Czech candidate for inclusion on the UNESCO World Cultural and Natural Heritage List. The relations between mining, industrial and artistic traditions and the preservation of local customs are emphasised.

In the foreground of the Ore Mountains there are quite large deposits of brown coal (lignite), which, contrary to the metal ores in the actual mountains, have been exploited from several opencast mines and used in power plants. An effect is the contrast between the afforested slopes of the Ore Mountains and the degraded foreground, although severely transformed landscapes connected with the 19th- and 20th-c. mining are also typical locally for the mountains themselves. The development of opencast coal mining resulted in mass displacement of villages or even towns. One of the most spectacular examples is the transfer of a district town called Most. Among former buildings only one church survived (it was very valuable late gothic, and that saved it from being demolished), as well as the castle Hněvín, situated on a hill. At a distance of 1–3 km from the former location, new buildings were constructed, huge blocks of flats, typical for the communist period, were erected in the socialist realist style. They were built in many towns in the foreground of the Ore Mountains (for example in Ostrov nad Ohří – compare ZEMAN & ČEPELÁKOVÁ 2017, p. 19) and became a place to re-house inhabitants

displaced from villages. In the following years these buildings were simplified to high-rise blocks, typical also for Polish cities. Because these buildings offered a higher standard of living than the older tenement houses or cottages people quite willingly moved there, followed by inhabitants of villages from the interior of the Ore Mountains. As a result, the region is now highly urbanised. Many labour camps for political prisoners functioned here after 1950 and several were concentrated around Jáchymov which became a closed district with its own legal regime. Representatives of the political opposition were forced to mine uranium ore there, which was later sent to the Soviet Union.

4. LANDSCAPE AS A TOURIST ATTRACTION

Modern tourism is a phenomenon strongly based on visual impressions; it is 'institutionalised voyeurism' (see: PODEMSKI 2005; quoted after: Urry 1995, 2007, LEVI-STRAUSS 1964). It happens not only because most stimuli from outside come to us due to the sense of sight, but also because of a number of cultural practices (different kinds of gazing, looking at or making and collecting images) which were created by tourism or simply used by tourism as a handy tool for tourist consumption (see: SONTAG 2009). This does not mean that in modern tourism emotion is not one of the most important tourist motivations, however the sources of these emotions are mostly visual. Tourists fitted with a special kind of 'sharpened gaze' (so-called *tourist gaze*) eagerly give themselves over to visual consumption (URRY 1995, 2007, URRY & LARSEN 2011) of tourist attractions (places or whole landscapes), collecting photos from a journey as formerly drawings, paintings or postcards were collected. A 'landscape-view', culturally constructed (nowadays usually thanks to mass media and in the past – art), plays an important role in modern tourism being a kind of symbolic, visual representation of selected places: from a single tourist attraction to whole tourist regions. They create among tourists a conviction that selected landscapes are typical and representative of various spaces. Because of this tourists think they know what they should expect when visiting places thousands of kilometres away from their homes. The accordance of these images with reality is often a foundation for a tourist's satisfaction with a trip. Landscapes, both present in tourism so-to-say naturally⁴ (natural and cultural) and those which are staged by and for tourism (cultural), play the role of scenery or a stage on which a spectacle of tourist consumption is taking place (MACCANNELL 2005).

The relation between landscape and tourism is a subject of detailed research conducted among others by Kulczyk (2013) who analyses such issues as tourist landscapes⁵, landscape tourism or tourism in a landscape. In each of these approaches landscape plays a different role, but in all of them its function for tourism is significant and vital. The complexity of the problems connected with assessing relations between landscape and tourism was also identified by B. WŁODARCZYK (2009a, 2009b, p. 90). He suggests the term 'landscapes of tourism spaces' which is understood both as landscapes perceived or 'consumed' by tourists as well as these which are a visual effect of that consumption. This problem is seen a little bit differently by J. ŚRODULSKA-WIELGUS & K. WIELGUS (2007) who distinguish landscapes understood as natural landscapes 'where no signs of human interference are the condition for active recreation development', but also as typical cultural landscapes transformed for sport, recreation and tourism purposes. Each of these authors (S. Kulczyk, B. Włodarczyk, J. Środulska-Wielgus & K. Wielgus) understands the problem similarly, but examines it from a different academic perspective.

The influence of landscape on humans (indirectly in the context of tourism) is also scrutinized by environmental psychology. The landscape, in which we are living, working or relaxing, affects people, deciding not only mood but also health. Assessments – positive or negative – on a landscape can impact human behaviour or, what is especially important for tourism, choices of, for example, tourist destinations. There are many theories connected with the issue why some landscapes are evaluated positively and others negatively. Among them we find those which explain positive assessments of selected landscapes in relation to features such as the level of naturalness or the presence in a landscape of elements which ensure survival (physical-perceptual approach, biophilia). Other theories accentuate the significance of complexity, novelty, incoherence and surprise (Berlyne's aesthetics, see BELL *et al.* 2004), but also: coherence, legibility, complexity and mystery (S. & R. Kaplan, see BELL *et al.* 2004). The assessment of landscape attractiveness, appreciated as beautiful, intriguing, and evoking feelings and emotions, is undoubtedly influenced by a broader social, cultural and historical context. For example, in the 18th and 19th c. in both art and the tourism of that time the most desired landscapes were the 'picturesque'. 'Picturesque' aesthetics favoured views which showed nature, on the one hand, as harmonious, full of calm and dignity, subordinated to the human, and on the other, as spontaneous, unpredictable, full of unbridled elements, monumental and sublime (FRYDRYZCZAK 2013). Landscape is rarely only a view, it is often a set of contexts, meanings and

references to culture. Not without reason landscape might be a part of national cultural heritage, legally protected for reasons more important than aesthetic. It might be a symbol, an icon, a reflection of significant values and ideas, and that is why it becomes a subject of interest and an aim for many forms of cultural and cognitive journeys.

Although beauty is one of the most important aesthetic categories, selected theories of environmental psychology show that it is not indispensable to make a landscape the subject of tourists' interest. According to S. KULCZYK (2013) landscape is perceived at three levels, physical, visual and mental, and each of them, individually or together, might be a foundation for positive assessments and as a consequence, an indicator of tourists' interests. A landscape can also be a subject of independent assessment in terms of its tourist attractiveness or, as MEYER (2007) writes, an element of an area's tourist attractiveness.

5. DEGRADED LANDSCAPES

A degraded landscape, generally speaking, deprived of value (variously defined), is a very ambiguous notion, connected in a variety of ways with many other terms used in the academic literature: relinquished landscape, devastated landscape, lost space, non-places, anti-scape, brownfield (post-industrial fallow), etc. Each is related to some consequence of degradation in a specific sphere of the living environment and human activity (DOMANOWSKA 2010). As an example, Z. MYCZKOWSKI & K. WIELGUS (2007) define degradation and relinquishment of landscapes (or conversely – relinquishment and degradation) as a result of political processes (for example the First and Second World Wars, transformation in Eastern Europe after 1989), as well as historical and economic. In this context of relinquished landscapes (submitted to degradation) the authors include landscapes connected with former mansions and monasteries, the post-agricultural, post-industrial and post-military, and also landscapes of past communication facilities and other engineering installations. For some areas degraded landscapes are recognised as typical. Due to their problematic character a number of actions (practical and theoretical) are undertaken to restore their value or to fit them with new ones originating from forms of management and use different than before. Surprisingly many of these actions, especially in a tourism context, deal with the physiognomy of degraded landscapes, their 'ugliness', visual signs of decay and relinquishment as things that should be aestheticized, and not a potential value itself. Among others Z. MYCZKOWSKI & K. WIELGUS (2007, p. 180) write about this problem in a rather picturesque way:

For post-industrial landscapes the term brownfield is quite often used, contrasted with greenfield. It is often translated as 'industrial fallow', which is neither universal nor neutral. (...) It can speak volumes about the general attitude to degraded landscapes – post-worlds, being a consequence of fast-changing reality. An extremely degraded area recently relinquished by industry or the army is more trouble than opportunity. A rational solution here could be a radical revitalisation eliminating all hitherto existing characteristics because they are considered negative.

The authors notice at the same time that increasingly often in tourism (especially cultural), characteristics of relinquished landscapes are appreciated. They are not only curiosities, but they have also become a value.

This conviction is shared by the authors of this article, however there are many other works appreciating the distinct features (sometimes with controversial aesthetic values) of degraded landscapes, usually connected with industry, or even whole industrial landscapes. They are acknowledged as worth preserving (irrespective of their aesthetic value), as specific landmarks manifesting the *genius loci* of a place (GÓRNY 2004, IDZIAK & HERMAN 2008, OPANIA 2014, pp. 42-48, KUBICA & OPANIA 2015).

6. TOURIST ATTRACTIVENESS OF DEGRADED LANDSCAPE AND ITS USAGE

At a first glance degraded landscapes are not a tourist attraction for an observer looking for basic aesthetic impressions. In the traditional approach they are neither beautiful nor harmonious. So what singles them out and makes them a potential tourist attraction? The answer is hidden in three simple features: dissimilarity, size (scale) and history written in a landscape. Degraded landscapes with mostly an industrial genesis are often linked with geographically determined economic activity (spatially limited) – usually with the presence of natural deposits or other features (e.g. water) used and necessary for technological processes in all kinds of industry. Thus, for tourists, newcomers from the outside, these landscapes, although ugly, fulfil a criterion of 'dissimilarity', something from the border or beyond of everyday experience. In this context they are also unique. Tourists might also be surprised by the large scale of landscapes, the vastness of a view, its multiplicity of planes, contrasts, the relation of human to landscape and the human to the products of human activity (e.g. machines, tools, technical facilities, etc.). All the previously mentioned features of a degraded

landscape do not make it beautiful, but certainly rough, oppressive and monumental. Landscape monumentality⁶ is favourable to its 'positive' assessment in relation to both natural landscapes (for example a mountainous panorama) and cultural ones (mostly industrial or urban). In relation to the second it evokes reflection on human power and a determination to subordinate nature to personal needs and the often destructive consequences of those desires. Finally, tourists' interest in a degraded landscape might result from the fact that it is an effect and simultaneously the most legible illustration of the history of a place. In Poland, for instance, it is difficult to imagine Upper Silesian landscapes without mineshafts, smoking chimneys and numerous spoil heaps... The described contexts of the tourist attractiveness of degraded landscapes can be perfectly illustrated by the places chosen in this study, located both within and in the surroundings of the Czech Ore Mountains.



Photo 1. Contrasts in a landscape – historical landscapes and contemporary landscapes – industrial and degraded. Hasištejn Castle against the background of the chimneys of the Pruněřov power plant related to lignite mining – photo by the authors (2017)

Open lignite pits do not seem to be interesting from a tourist point of view. However, there are many proofs that interest in degraded mining landscapes exists (especially if they are contrasted with natural forest landscapes, with historical elements dominated by castles and palaces). Testimony is provided by the numerous viewpoints located on the edge of the Ore Mountains (Photos 1, 2, 3). A degraded landscape is not 'covered', on the contrary, it is exposed here. Moreover, viewpoints are usually located in such a way that enables observation of the contrast between various types of landscapes: natural and cultural (historical and industrial or harmoniously transformed and degraded). These highlighted contrasts enforce the audience's reception, sometimes even of

shock. Especially spectacular is the Czechoslovak Army pit (Czech: *Důl Československé armady*) which stretches directly from the foot of the Ore Mountains between Most and Chomutov. Thanks to such a location several viewpoints exist on the mountain's edge from which tourist can see the open cast pit and the Komořany power plant in the background. This infrastructure mostly dates back to the pre-war period (for example Terezina viewpoint), created to enable observation of villages (now usually disappeared) in the foreground of the mountains. However, marked tourist trails lead today to most of these viewpoints (for example near the relics of Starý Žeberk castle) which proves the existence of tourism (also experienced by the authors). An especially spectacular view can be observed from the Jezeří Palace⁷ which is located right above an open pit (Photo 3).



Photo 2. Panorama observed from a viewpoint over a lignite open cast pit.

In the foreground Jezeří Palace, one of the 'Pustina' locations – photo by the authors (2017)



Photo 3. Mining machines at the bottom of an open cast pit, Jezeří Palace neighbourhood – photo by the authors (2017)

The region of the Ore Mountains is evidence that open cast lignite pits can attract tourists, even becoming a part of the tourist product. Firstly, as an

argument we can mention towers and viewpoints located around the excavations, created after the establishment of open cast coal mining, whose main purpose is to show the transformed (degraded) landscape. A tower and two viewpoints were created on the southern side of the Vršany pit west of Most (Fig. 1). In their close vicinity were marked cycling trails which enable tourists to circle the entire open cast mine. The tower of Hněvín Castle on a hill of the same name (399 m a.s.l.) also serves as a viewpoint. Visible from there are the immense excavations situated north of Most, now being revitalised (the planned Most Lake), the Komořany power plant, as well as more distant views, the Vršany pit and the Czechoslovak Army pit, while in the background there are the Ore Mountains. Also 'coal safaris' offered in Most by *Severní energetika*, the company extracting coal, testifies to the idea that surface mining can be the core of a tourist product. Although a trip must be booked earlier, the offer is quite popular among tourists and even accessible to those in wheelchairs (*Do Krušných...* no date, p. 32) with 'safari' tourists being taken to the bottom of a pit to see all the equipment used to extract and transport lignite. A new, steel, view tower on Skřivánčí vrch (460 m a.s.l.) near Málkov, 7 km west from Chomutov, has also been built to show the panorama of a working open cast pit for lignite with the Tušimice and Pruněrov power plants in the background. Next in Březno, a village south from Chomutov, a huge 'harvester' used for coal extraction has been placed and opened to the public. The machine, which worked for 30 years in the Nástup Tušimice pit, is 67 m long and 38 m high. In the region tourists can also visit a technical museum (Czech: *Podkrušnohorské technické muzeum*) in Kopisty, a district of Most, located by the former Juliusz III mine. However, it focuses mainly on underground mining (*Do Krušných...* no date, p. 23).

Places enabling observation of excavations can also be found in the Sokolov region. Above Nad Družba⁸ and Jiří pits near Nové Sedlo (the second pit is still operating) there are viewpoints at Horní Pískovec, a village mostly absorbed by one of the mines (Fig. 3). In the background the Ore Mountains can be seen. Moreover, in Sokolov itself there is a 16 m high view tower called Hard, standing on the top of the Na Hardu hill. Although it is a construction from the beginning of the 20th c., in the last quarter it was closed and only in recent years restored and once again opened. The tower enables observation of, apart from Sokolov and a panorama of the southern Ore Mountains, the former open cast pits north and south of the town, the old mine spoil heap, Antonín, and, located closer, one of the biggest chemical factories in Czechia (Fig. 3). The region of Sokolov is so tightly identified with coal mining (its distinctive feature) that

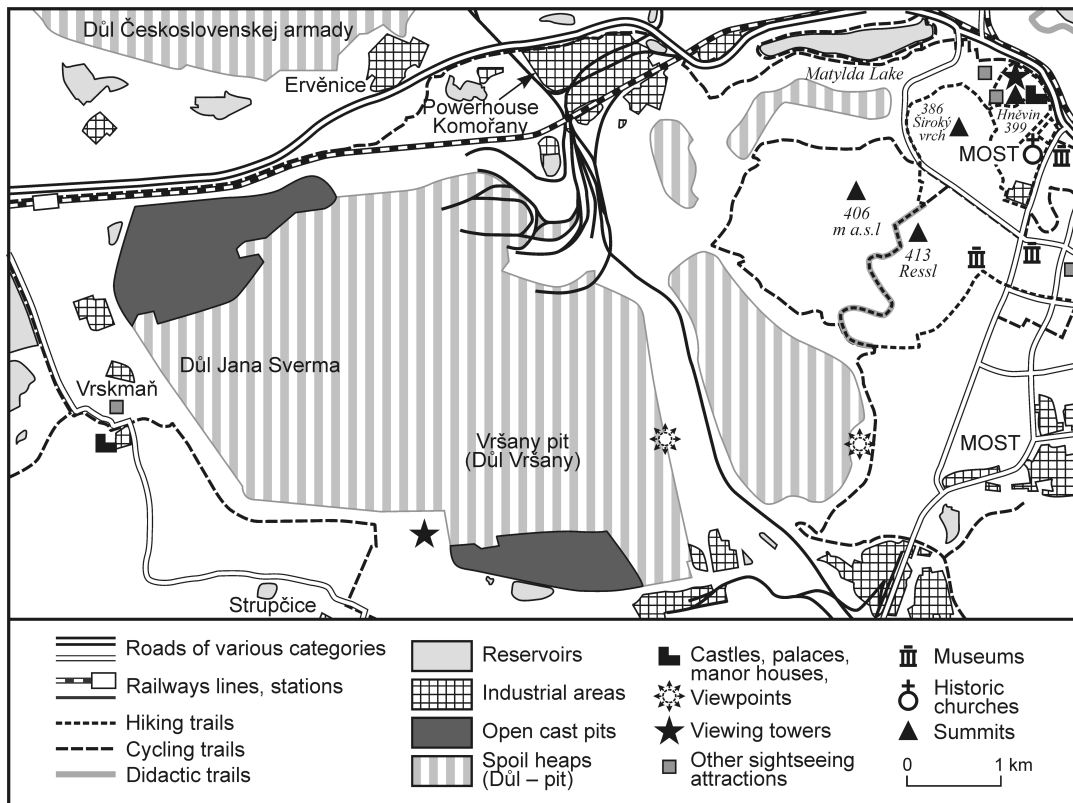


Fig. 2. Tourist infrastructure surrounding a complex of open cast lignite pits stretching west from the town of Most
 Source: authors, based on <https://mapy.cz/>

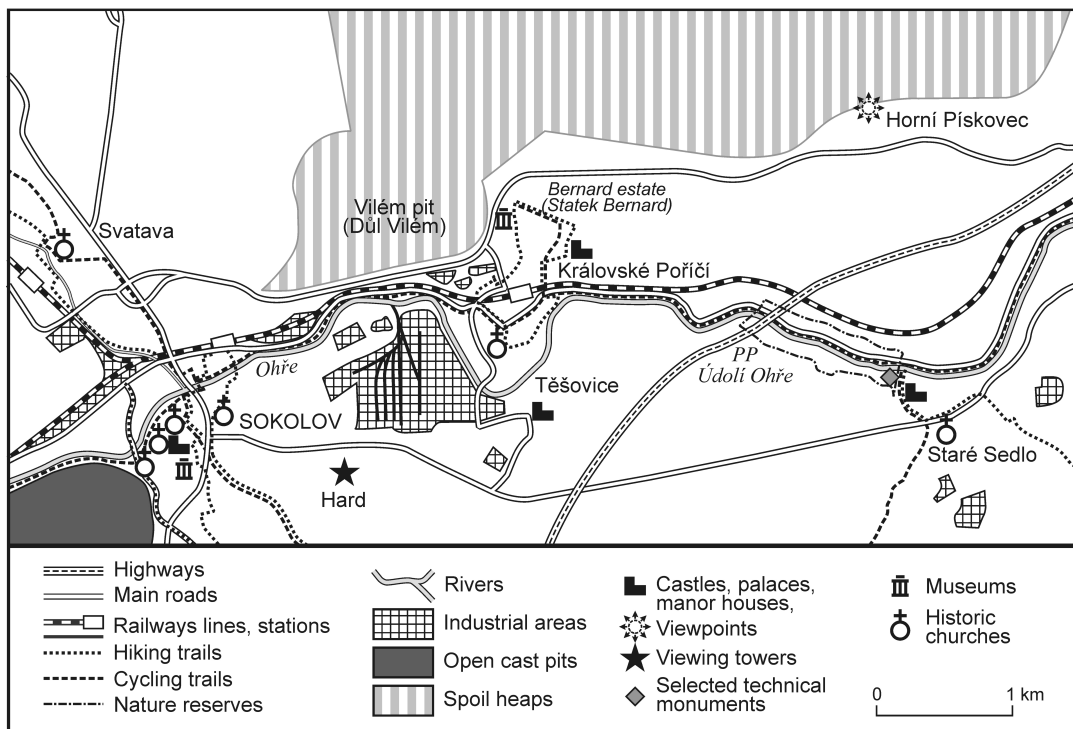


Fig. 3. Tourist infrastructure of the vicinity of pits, spoil heaps and factories near Sokolov
 Source: authors, based on <https://mapy.cz/>

among suggested trips there are some leading to old pits and spoil heaps (not only these already revitalised), but also to the neighbourhood of functioning mines (*Dovolená...* no date). An educational trail *Velká krušnohorská výsypka* was created near one of the spoil heaps. The region of Sokolov (as well as the above mentioned Jáchymov) is a part of the Egeria National Geopark with its seat in Sokolov. Together with the GeoLocí National Geopark with its seat in Svojsín near Střibro, and a part of Bavaria they form the Czech-Bavarian Geopark (*Zažijte...* 2014).

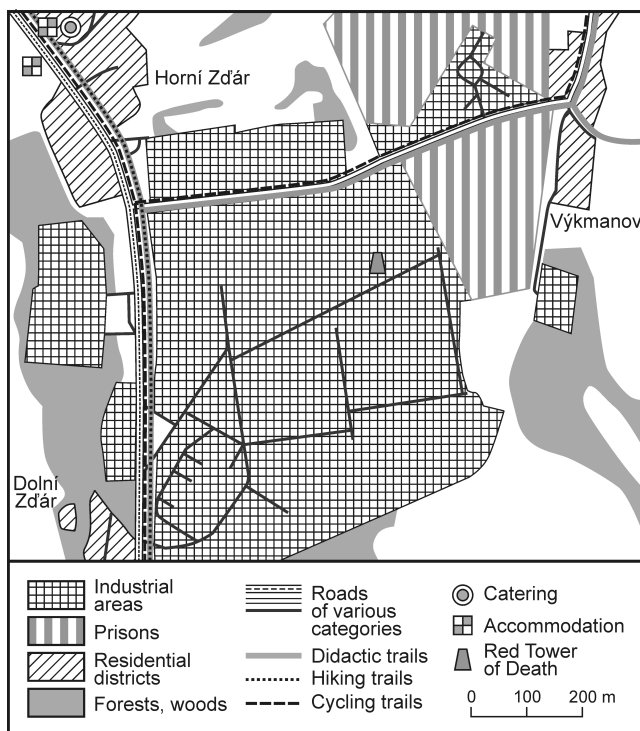


Fig. 4. The Red Tower of Death (Czech: *Rudá věž smrti*) and the tourist infrastructure of Dolní Zďár, a northern suburb of Ostrov

Source: authors, based on <https://mapy.cz/>

In the region of the Ore Mountains not only places for lignite mining can be pointed out as examples of a degraded landscape now being made accessible for tourists due to their cognitive value, especially those connected with history. Such things have happened to various other industrial facilities, however mostly no longer operating or actually shut down. On the one hand these are factories where certain products were manufactured for the first time at a regional or national scale. Others were famous due to the quality or the scale of production. As an example, Horní Slavkov can be mentioned, where the first porcelain factory in Czechia was opened and later its products were widely appreciated across the world (SCHRAMM 2014, p. 71). In present times tourist trails with information panels mark these factories, now unfortunately

closed down. An immense industrial area, connected with processing of ores mined in the neighbourhood of Jáchymov, is located in Dolní Zďár, which nowadays is a northern suburb of Ostrov (Fig. 7). Today almost the whole area is neglected, but former buildings, mostly still remaining, are a testimony to bygone industrial activities and also events from political history. The so-called Red Tower of Death (Czech: *Rudá věž smrti*) dominates the complex. Constructed from brick, it was the central building of a factory processing uranium ore. In the 1950's political prisoners worked there and the tower became a symbol of their martyrdom. From this example we can unequivocally see the role of history marked in the landscape as a factor of tourist attractiveness. The route to the tower is marked with the brown signs typical for tourist attractions. Hiking and cycling tourist trails were marked along former industrial areas. There are also educational trails (one dealing with mining in the region of Ostrov and another, circular around the town, referring to various themes). Approximately 300–400 m from the old factories accommodation and catering facilities can be found, although they are probably connected more with the road leading to Jáchymov and the Ore Mountains located to the north.

7. THE SECOND LIFE OF A PIT – RECREATION AND LEISURE IN OR NEAR AN OPEN CAST MINE

Open pits and spoil heaps have become an inseparable element of the landscape of the Ore Mountains' foreground. They accompany the region's citizens all the time, while leisure, especially short-term (for example weekends). In Czechia so-called recreational houses are very popular (VÁGNER 2001). Very often they were created as a result of an adaptation of neglected cottages, but in certain regions, especially away from mountain areas, these were new buildings of various forms and sizes (FIALOVÁ 2001). Inhabitants of towns located at the foot of the Ore Mountains choose their immediate neighbourhood as a place of recreation. This can be confirmed by data from the 1991 census when the phenomenon of recreational houses in the then Czechoslovakia was taken in account. In the whole country approximately 37.3% of owners of recreational houses located in a certain district (Czech: *okres*) lived in the same administrative unit. But in the Chomutov, Most, Sokolov and Teplice districts the percentage was roughly twice as high (respectively 61.7%, 86.3%, 73.2% and 75.2%) (PROCHÁZKA 2001, pp. 64–67). These proportions were among the highest in districts not including a large city (since in Prague the percentage was 98.5, in the

České Budějovice region – 81.1, and in the Olomouc region – 90.8). These relations were even more visible in 1971. From 1,717 recreational houses in the Chomutov district, owners of 1,623 (94.5%) lived in the same voivodship (*Severočeský kraj*). At the same time in the Sokolov district from a total of 510 recreational houses, 448 had owners who lived in *Západočeský kraj* (PROCHÁZKA 2001, pp. 68–71). In these districts the percentage of Prague inhabitants among owners of recreational houses was considerably lower (in 1991 in the whole of the Czech Republic the percentage was 31.8%, while in Chomutov – 6.9%, Most – 4.3%, Sokolov – 6.7%, Teplice – 5.6%) (PROCHÁZKA 2001, pp. 64–67). On the one hand this might result from restrictions on entering the Ore Mountains (which are located near the state border), but on the other, from considerable environmental transformation and the reluctance of those from outside the region to go there (which has now changed).

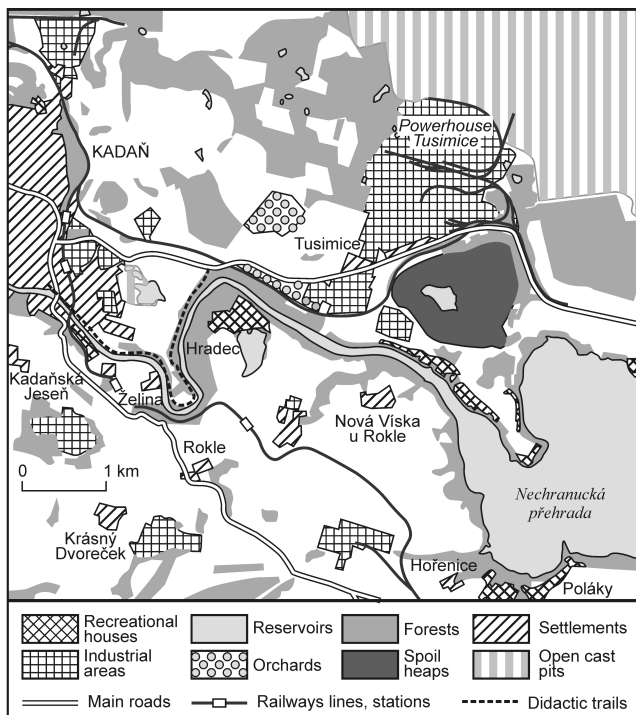


Fig. 5. Complexes of recreational houses near Kadaň and the *Nechranická přehrada* reservoir related to present land use
Source: authors, based on <https://mapy.cz/>

Due to people taking recreation mostly within their own region (and restrictions on entering the Ore Mountains) recreational houses have been located close to degraded landscapes, i.e. open cast lignite pits, spoil heaps or industrial areas, especially power plants. Although people tried to select possibly the most attractive locations, they quite often adjoined areas anthropogenically transformed. Complexes of recreational houses around the *Nechranická přehrada* reservoir (to supply the nearby Tušimice power plant)

established in 1968 on the Ohře river near Kadaň, is an example (Fig. 5). Recreational houses situated on the north bank are literally squeezed between the lake and a spoil heap, industrial buildings and railway lines leading to the power station. In between there is only (but not always) a narrow strip of forest. Moreover, within a distance of 2–3 km an operating lignite open cast mine is located. The location of houses on the south bank of the reservoir and along the Ohře river north-west from the lake is more favourable. Nevertheless, in this case a wind power plant and power lines compose, in the authors' opinion, a disharmonious element in the landscape. It must be emphasised however, that *Želinský meandr*, a part of the river valley above the reservoir is protected by law as a natural monument. An educational trail *Údolím Ohře* has been marked there. To the north-east *Nechra-nická přehrada* adjoins another natural monument called *Běšický a Čachovický vrch* with its two hills being a buffer between the recreational houses by the lake and the spoil heaps and industrial areas. We can see that elements commonly appreciated as attractive for tourists adjoin landscapes severely transformed. Together they form a specific combination, where many people, surprisingly, are willing to stay.

Leisure and recreation within or in the vicinity of open cast pits is much more than just recreational houses. On the one hand open cast pits and spoil heaps are being revitalised (often for tourism purposes), on the other, around unexploited pits, tourist infrastructure is being created, and not just the towers and viewpoints mentioned above. In *Královské Poříčí*, only 200 m from the edge of the abandoned Vilém pit, is the restored Bernard Seeböhm Estate (Fig. 3). Despite its location near a former pit the estate (Czech: *Statek Bernard*) wants to familiarise whole families with rural life and the old handicrafts of the Ore Mountains. Demonstrations and courses for producing a variety of products, for example ceramics, are organised (SCHRAMM 2014, p. 69). There is a joiner's shop, herbal workshop, apiary and a traditional oven. The interactive exhibitions at the Handicrafts Museum are an important element of the offer, however it is open only on request. In the complex one can visit a shop with regional products, a restaurant and a café; moreover, there are guest rooms and the Czech-German centre for the River Ohře (interactive exhibition with a river model and panels in Czech and German languages). Although the surrounding landscape is, in the authors' opinion, not especially picturesque, the complex is popular among Sokolov inhabitants as a place to relax or to organise wedding parties. *Královské Poříčí*, a village squeezed between a lignite pit and the chemical factory in Sokolov (Photo 3), tries to develop its tourist function not only using the Bernard Estate and a small zone with some

wooden cottages in the centre of the settlement. Additionally, a palace from the beginning of the 20th c. has been restored, and an educational trail joining all the attractions marked. This refers to the nearby pit, coal mining in the region in general and connected changes in the landscape (including the displacement of nearby villages and railway lines).

On the edge of Sokolov (southern part), as an element of revitalisation, on an old open cast lignite mine one of the most popular 18-hole golf courses in Czechia has been set out on an area of 200 ha. A lake called Michal (with a recreation area) has been created from a nearby pit, while the Medard pit is now being reclaimed and will also be changed into a lake. Similar processes are taking place in the region of Most. The Vrbenský pit was flooded (the present day 40-ha Matylda Lake) and is now a place for leisure with an appropriate infrastructure of bathing places, camping, catering and a cycling trail round the lake. Another open cast pit was changed without great transformation into a racing circuit (Fig. 1; *Do Krušných...* no date, p. 38, 42). Among examples of successful reclamation (however at the beginning maybe not completely planned) are the older excavations in the region. In the north-eastern part of Chomutov Kamencové Lake (16 ha) exists, created in 1809 as a consequence of the gradual flooding of an alum mine. In time, due to its unique water properties, a health resort was created, however in 1920's the whole lake was transformed into a public bathing place. Nowadays it is a popular recreational area with an accommodation offer (hotel, camp sites, guest houses) and catering. In its vicinity a zoo and an open-air museum presenting the traditional architecture of the Ore Mountains can be found (*Kapesní...* 2015, p. 8-13).

8. CONCLUSIONS

In the article many examples of the tourist utilisation of the degraded landscapes in the region of the Czech Ore Mountains have been shown. They consider the matter of what is appreciated by the tourism industry as attractive (or not) for tourists. Contrary to common thinking not only places and landscapes visually 'pretty' have the potential to develop a tourist offer. The functioning of 'ugliness' as a category considered in the context of a tourist attraction (independently or an element influencing tourist attractiveness) seems to be dependent on the frequency it occurs in tourists' everyday experiences (it seems the more rarely, the more attractive, especially if a tourist has only had brief contact). A tourist offer can be constructed using areas highly transformed by humans and disharmonious, however it must be characterised by at least one of these attributes: dissimilarity, scale, or the

history of the place. We can suppose that for the majority of tourists the first two attributes are the most important, however 'shallow' the perception. That is why managers of tourist infrastructure should emphasize and impart to tourists information connected with a place's history (for example settlements displaced and destroyed due to surface mining) or with the scale and importance of local production in comparison with a broader context of a region, state or even the whole world. Among examples presented, very special in historical terms is the Red Tower of Death in Ostrov, connected not only with economic history, but also with politics. The Ore Mountains together with their surroundings supply various positive models emphasizing the tourist attractiveness of degraded landscapes (towers and viewpoints, educational paths and other tourist trails, 'coal safari'). They can also be useful in other regions highly transformed by humans. Tourism in this case may become, at least partly, an alternative to developing (or in contrast - declining) industry.

As these observations show, degraded landscapes have become a scene of leisure and recreation for local communities. This is possible because they create the *genius loci* of areas where these people live, work and relax. They compose an accustomed space, understood as a 'small motherland'.

ENDNOTES

¹ Originally the Ore Mountains were covered by mixed forests.

² Names *Erzgebirge - Rudohoří - Rudné hory* occurred at the end of the 16th c. Earlier the range was called *Český les - Saltus bohemicus - Böhmerwald*. The name *Krušné hory* is subsequent (*Sasko-česká...* no date).

³ Colonisation of the Ore Mountains started in the 12th c. from the Saxon part and was connected with the discovery of silver. A mining town, Freiburg, was then founded. With the exhaustion of ores in this part of the range the miners moved to the eastern, Czech, side.

⁴ Tourism phenomena however do not leave any visible signs there.

⁵ 'Tourist landscapes' are landscapes potentially attractive for tourism, however they might be also understood as landscapes constructed by tourism due to staged tourist attractions (scenes) or through a domination of tourist facilities in the landscape.

⁶ It may be expressed by the extensiveness of a panorama as well as by the large scale elements dominant within a landscape. As a reason the difference in scale between the human and the landscape intensifies.

⁷ The Jezeří Palace is a result of many transformations of a castle from 1365. Its present form is owed to a baroque rebuilding after a fire in 1713. After the Second World War it was occupied by Soviet soldiers. In the 1960's it was decided to destroy the palace because of the development of an open cast lignite pit. It did not happen, but in the 1980's the building was one of the most devastated historic monuments in Czecho-

slovakia. From that time, it has been restored and now is open to the public.

⁸ From the Družba pit, until recently two million tonnes of brown coal were extracted every year (*Zažijte...* 2014).

BIBLIOGRAPHY

- BELL P.A., GREEN TH.C., FISHER J.D., BAUM A., 2004, *Psychologia środowiskowa*, Gdańskie Wyd. Psychologiczne, Gdańsk.
- Do Krušných hor bez barier, 2015, Destinační agentura Krušné hory, o.p.s., Svazek obcí v regionu Krušných hor, n.p.p.
- DOMANOWSKA M., 2010, Problematyka definiowania przestrzeni zde-gradowanych, *Problemy Rozwoju Miast*, II, pp. 81-87.
- Dovolená na Sokolovsku: výletní okruhy – mapa*, n.p.d., Mikroregion Sokolovsko – východ, n.p.p.
- FIALOVÁ D., 2001, Typologie rekreačních lokalit, [in:] D. Fialová, J. Vágner (eds.), *Druhé bydlení v Česku*, Univerzita Karlova, Přírodovědecká fakulta, katedra sociální geografie a regionálního rozvoje, Prague, pp. 90-102.
- FRYDRYCZAK B., 2013, *Krajobraz. Od estetyki the picturesque do doświadczenia topograficznego*, Wyd. Poznańskiego Towarzystwa Przyjaciół Nauk, Poznań.
- GÓRNY A., 2004, Park krajobrazowy Duisburg jako przykład rewitalizacji terenów przemysłowych, *Architektura Krajobrazu*, 1-2, pp. 42-49.
- IDZIAK A., HERMAN K., 2008, Między kopalnią a krajobrazem. Transformacje sztuki krajobrazu. Instalacje, rzeźba, performance jako formy rekultywacji krajobrazów postindustrialnych, *Prace Komisji Krajobrazu Kulturowego*, 10, pp. 386-394.
- Kapesní průvodce Chomutovem*, 2015, Statutární Město Chomutov, Chomutov.
- KUBICA M., OPANIA S., 2015, Potencjał elementów poprzemysłowych w krajobrazie w tworzeniu wizerunku i aktywizowaniu obszaru. Przykład doliny Przemyszy i Brynicy, *Architektura Krajobrazu*, 4, pp. 20-33.
- KULCZYK S., 2013, *Krajobraz i turystyka. O wzajemnych relacjach*, Uniwersytet Warszawski, Wydział Geografii i Studiów Regionalnych, Warszawa.
- LEVI-STRAUSS C., 1964, *Smutek tropików*, PIW, Warszawa.
- MACCANNEL D., 2005, *Turysta. Nowa teoria klasy próżniaczej*, Muza, Warszawa.
- MEYER B., 2007, Krajobraz jako element atrakcyjności turystycznej obszaru, [in:] A. Zaręba, D. Chylińska (eds.), *Studia krajobrazowe jako podstawa właściwego gospodarowania przestrzenią*, Instytut Geografii i Rozwoju Regionalnego Uniwersytetu Wrocławskiego, Wrocław, pp. 119-126.
- MIGOŃ P., GRYKIEŃ S., PAWLAK R., SOBIK M., 1999, *Geografia: słownik encyklopedyczny*, Wyd. Europa, Wrocław.
- MIZERSKI W., 2015, *Geologia kontynentów*, Wyd. Naukowe PWN, Warszawa.
- MYCZKOWSKI Z., WIELGUS K., 2007, Krajobrazy zaniechane, *Czasopismo Techniczne*, 10, seria: Architektura, 5-A, pp. 179-181.
- OPANIA S., 2014, Przykłady koncepcji kształtowania krajobrazu w planowaniu przestrzennym, [in:] K. Kołodziejczyk, D. Chylińska, A. Zaręba (eds.), *Studia krajobrazowe*, t. 4B, *Krajobraz jako nośnik idei. Ujęcia analityczne*, Instytut Geografii i Rozwoju Regionalnego, Uniwersytet Wrocławski, Wrocław, pp. 37-50.
- PODEMSKI K., 2005, *Socjologia podróży*, Wyd. Naukowe UAM, Poznań.
- PROCHÁZKA P., 2001, *Pohyb za rekreací v Česku*, [in:] D. Fialová, J. Vágner (eds.), *Druhé bydlení v Česku*, Univerzita Karlova, Přírodovědecká fakulta, katedra sociální geografie a regionálního rozvoje, Prague, pp. 55-71.
- Sasko-česká stříbrná stezka/Sächsisch-Böhmische Silberstrasse: Centrální Krušnohoří/Zentrales Erzgebirge*, n.p.d., Česko-bavorský geopark, Boží Dar.
- SCHRAMM K., 2014, *Cesta porcelánu, Porzellanikon – Staatliches Museum für Porzellan, Hohenberg a. d. Eger*.
- SONTAG S., 2009, *O fotografii, Charakter*, Kraków.
- STUPNICKA E., 1978, *Zarys geologii regionalnej świata*, Wyd. Geologiczne, Warsaw.
- ŚRODULSKA-WIELGUS J., WIELGUS K., 2007, Krajobrazy „przemysłu czasu wolnego”, *Czasopismo Techniczne*, 10, seria: Architektura, 5-A, pp. 172-173.
- URRY J., 1995, *Consuming places*, Routledge, London-New York.
- URRY J., 2007, *Spojrzenie turysty*, Wyd. Naukowe PWN, Warszawa.
- URRY J., LARSEN J., 2011, *The Tourist Gaze 3.0*, SAGE, Los Angeles-New York-London-New Delhi-Singapore-Washington.
- VÁGNER J., 2001, *Vývoj druhého bydlení v Česku*, [in:] D. Fialová, J. Vágner (eds.), *Druhé bydlení v Česku*, Univerzita Karlova, Přírodovědecká fakulta, katedra sociální geografie a regionálního rozvoje, Prague, pp. 42-54.
- WŁODARCZYK B., 2009a, *Przestrzeń turystyczna. Istota, koncepcje, determinanty rozwoju*, Wyd. Uniwersytetu Łódzkiego, Łódź.
- WŁODARCZYK B., 2009b, The landscape of tourism space/Krajobrazy przestrzeni turystycznej, *Turyzm/Tourism*, 19/1-2, pp. 83-90/pp. 89-97.
- Zažijte geopark! Geoturistická mapa: Česko-Bavorský Geopark*, 2014, Geopark Egeria, Muzeum Sokolov, Sokolov.
- ZEMAN L., ČEPELÁKOVÁ Z., 2017, *Ostrov, Město Ostrov, Ostrov*.

<http://www.krusnehory.eu/>, 18.07.2017.

<https://mapy.cz/>, 14.07.2017.

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