## Landscape in Transition, Heritage in the Making: A Research Agenda for Understanding Lusatia's Post-mining Landscape as a Practice of Past Presencing

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#### Abstract

The region of Lusatia in Germany is characterised by a permanent state of uncertainty – as a consequence of decades of resettlements due to lignite mining as well as structural changes resulting from the German reunification. This article discusses an inclusive concept of post-mining landscapes and the presencing of their pasts in regional discourses, given that lignite mining in Lusatia mainly took place in the settlement area of the autochthonous minority of the Sorbs/Wends. Since the end of lignite mining is planned for 2038, historicizing perspectives such as a World Heritage initiative are becoming increasingly important, leading to a new conceptualisation of the post-mining landscape primarily as a practice of past presencing itself, which functions as a coping mechanism for facing up to new uncertainties, thereby emerging as a new action arena for the negotiation of regional identity, belonging and power structures.

### Key words

uncertainties, post-mining landscape, deindustrialisation, heritagisation, minorities

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### 1 Introduction

On Sunday 23 April 2023, between 250 and 300 inhabitants of Mühlrose/ Miłoraz¹ in Lusatia formed a human chain in protest. Mühlrose/Miłoraz will be the last Lusatian village to be devastated for lignite mining in Germany - in this case for the Nochten open-pit mine. Interestingly, the protest was not against the open-pit mine or the loss of Mühlrose/Miłoraz, but against a Klima-Camp (Climate Camp), which had been planned by an association of distinct environmental protest groups from all over Germany, including Fridays for Future, Greenpeace, Alle Dörfer Bleiben and the self-proclaimed Sorbian Parliament Serbski Sejm (Weiß 2023b). The camp was to be a twoweek event with workshops and a closing demonstration against both lignite mining in general and the firm responsible - LEAG, but it was eventually rescheduled due to the local protest. In addition to the aforementioned human chain, other steps were taken by the municipality to prevent the camp from taking place. For example, it initiated a maintenance measure for the lawn of the sports field on which the camp was to be held, thereby rendering it unusable (Weiß 2023a). In the local press Mayor Jörg Funda stated that Mühlrose/Miłoraz would not become "a second Lützerath", referring to the controversial devastation of the village of Lützerath in the Rhenish lignite mining area (Weiß 2023c). Only a few months before, on 11 January 2023, the final evacuation of the already emptied Lützerath had taken place, which was led by the police and accompanied by numerous, mostly non-violent, protest actions, such as a central hut village, tree houses, mono and tripods and a demonstration procession from Keyenberg to Lützerath (Abrisse und Baumfällungen 2023). Many months before that, Lützerath had become a meeting point for numerous activists from all over Germany and other parts of the world. In the course of the protests, Lützerath became a central focal point for German energy policy debates surrounding lignite-fired power generation and its termination.

At least in the national press, Mühlrose/Miłoraz soon became known as the "Anti-Lützerath", as a rare instance of a place scheduled for devastation, yet without any visible protest against it (Herzog et al. 2023).<sup>2</sup> The eventual demonstration, which was born of an alliance of a plethora of environmental organisations, did not take place until 7 May and was held not in Mühlrose/Miłoraz, but in the neighbouring town of Schleife/Slepo.

<sup>1</sup> In the following text, the names of places in the legally recognized Sorbian settlement area are presented bilingually.

<sup>2</sup> We will return to the example of Mühlrose/Miłoraz in section 4 to discuss the main coping mechanisms of the local population.

Nevertheless, some of the inhabitants of Mühlrose/Miłoraz had protested against the devastation of their homes for years, drawing attention to a combination of social, cultural and environmental aspects of the region (Blaubeeren 2013; Winterlieb 2020). These forms of protest might not have been discussed widely in the national press, but they also constituted parts of the post-mining landscape, for example, by advocating the preservation of specific, culturally significant plants.

Against this background, the following text is intended as a starting point for an interdisciplinary research agenda combining historical, sociological, and ethnological work on the overlapping and interacting aspects of uncertainty that mark the mining and post-mining landscape of Lusatia, as exemplified in the discourse on Mühlrose/Miłoraz. Based on our cultural studies work within the current World Heritage initiative for Lusatia's postmining landscape,3 it was possible to combine initial theoretical and field research in the form of (1) a literary analysis on the historical research of minority rights, traditional land use, recultivation, mining law, resettlement, and memory culture within Lusatia; (2) site visits; (3) problem-centred expert interviews with local historians; and (4) non-structured as well as problemcentred expert interviews with Sorbian stakeholders/representatives and political representatives at different levels (carried out between July 2020 and December 2024). While these steps were primarily aimed at supporting and reflecting the application for a place on Germany's UNESCO World Heritage Tentative List – and, especially, assessing its potentials and limits for a more inclusive valorisation of the landscape within the current regional process of transformation (Hagemann et al. 2022) - as developed with our project partners, our work also led to the insightful observation that the Lusatian post-mining landscape itself is a specific practice of past presencing, and that it functions as a coping mechanism for facing up to new uncertainties. We therefore argue that continuing and deepening the work on these topics will add supplementary findings for current heritage and memory studies on post-industrial landscapes, deindustrialisation, and regions in transformation (Berger 2021; Eiringhaus 2022; Jaramillo – Tomann 2022; Bogner et al. 2018).

<sup>3</sup> The project "Strategie- & Managemententwicklung für die Welterbeinitiative der Lausitzer Tagebaufolgelandschaft" (Strategy & management development for the World Heritage Initiative of the Lusatian post-mining landscape) is being carried out by five partners, with the Institute for Heritage Management (IHM) as the leading partner. They are accompanied by the Brandenburgisch-Technische Universität Cottbus-Senftenberg (BTU-CS), the Tourismusverband Lausitzer Seenland (TVLS), the Institut für Neue Industriekultur (INIK) and the Sorbian Institute/Serbski institut (SI). The anticipated duration of the project is from September 2022 until February 2025.

For this we will first outline the theoretical and historical context illustrated by various examples and then discuss how the landscape serves as a coping mechanism to help deal with uncertainty in the process of its own heritagisation. Since most of the mining area in Lusatia overlaps with the historical and current settlement area of the autochthonous minority of the Sorbs/Wends,<sup>4</sup> a special focus will be placed on the Lusatian landscape as a culturally hybrid landscape (Fig. 1).

### 2 Theoretical remarks on uncertainty, landscape and heritagisation

The theoretical discourse on uncertainty, unsafety and insecurity is especially insightful for understanding the varying layers of danger marking the landscape influenced and left by lignite mining. As Alexandra Schwell puts it, security - on an institutional or political level - and safety - on an individual level – are basically the absence of danger and therefore subjective and relational. Both forms need an object of reference that is to be protected and a subject of reference that is identified as a challenge or threat (Schwell 2021). In the case of the post-mining landscape, the challenges and threats stem from two major issues: The first is the challenges of recultivation (e.g., reforestation or post-mining lakes) (Fig. 2), an aspect which is closely linked to the discursive understanding of the post-mining landscape as a place of technological innovation on the one hand and uncertainties such as resilient water management and landslides on the other. The second is the transition of people, socio-cultural networks, cultural practices and architecture due to resettlement and working migration, which is closely linked to the negotiation of minority rights, concepts of ethnicity and the formation of protest movements.

These aspects form differing threats for the objects of reference, which, in this case, are the human and non-human actors living in the former mining area. Going beyond this, Baumann differentiates between the insecurity of positions, entitlements and livelihoods, the unsafety of one's body, one's self and its extensions (such as possessions, neighbourhoods or the community) and the uncertainty about their continuation and future stability – the non-occurrence of unquestioned assumptions (Baumann 2000).

All these aspects interconnect within the Lusatian process of deindustrialisation and consequently form an uncertain and, in some cases, an unsafe landscape. As we focus on socio-cultural coping mechanisms, which means how people deal with insecurity and unsafety within Lusatia, we will combine Baumann's definition with the specification of "uncertainty" referred to by

<sup>4</sup> In this paper, we use the term "Sorbs" but include the term "Wends", which is also used, primarily in Lower Lusatia.

Anthony Giddens (Giddens 1990). Giddens understands uncertainty as the lack of continuity of the self as well as the inability to be convinced about the continuity of one's social and environmental framework. Both aspects interlock, especially relating to the livelihoods of the people to be resettled and workers in the declining mining sector.

Given that lignite mining in the German coalfields is planned to end between 2030 and 2038, historicizing perspectives on the industry and its subsequent landscape, such as the World Heritage initiative, are becoming increasingly important. As in other regions of deindustrialisation, the central function of these perspectives is to provide a sense of home, to stabilize and ultimately to overcome the challenges a decarbonising society is facing. Unsafeties in the post-mining landscape arise, for example, from landslides, which are caused by human activity (mining), but ultimately not initiated by humans (since the goal of recultivation is to prevent such events). Similarly, there are areas that are consciously and/or unconsciously left as pure successional areas – for example the Grünhaus nature reserve, which was mostly destroyed by the open-pit mines Kleinleipisch, Koyne, and Klettwitz between 1942 and 1989. Without any specific meliorative or reconstructive approach, the area was left largely untouched by the Lausitzer und Mitteldeutsche Bergbau-Verwaltungsgesellschaft mbH (LMBV) and the nature conservation association NABU, to provide a new home for pioneering plants and animals, which also form a distinct landscape.

For memory studies in general, but also for heritage studies, the question therefore arises: What is the role of non-human actors in past presencing processes such as pioneering species (here) and plants and animals in general? Can classical representational theories of landscape (Hard 1995; Weber 2019) provide a wholesome understanding of the post-mining landscape as a landscape of the Anthropocene? (Baumert – Meyer 2022). A concept of landscape in the sense of More-Than-Representational Landscapes, which George S. Jaramillo and Juliane Tomann developed for their anthology on post-industrial landscapes in Europe seems viable here. It takes into account "five key tenets: performative practice, worlds being made, affective natures, more-than-human engagements, and multiple experimental research praxis" (Jaramillo and Tomann 2022: 10). The concept thus allows for an understanding of the post-mining landscape not just as the result of sociocultural representation, but also as a process of interaction between human and non-human actors and a phase of transformation itself.

Finally, we use the term "heritagisation" to underline our understanding of cultural heritage as a specific practice of past presencing (Macdonald 2013: 16). It is an ongoing socio-cultural negotiation process with specific actors, mechanisms, and logics (Brumann 2015). Heritagisation is tightly

interwoven with uncertainty, because it focuses on artefacts and practices in need of protection, which therefore become the reference objects of security. In the context of heritagisation, the object is not so much endangered by a concrete subject of reference – even though this can also be the case if we consider the mining-related destruction of settlement structures –, it is rather endangered by oblivion (Harrison 2013). This also applies to the UNESCO World Heritage initiative in Lusatia. Here, too, the main goal is to convey knowledge on the discourses and techniques that form the landscape (Pinkepank – Otto 2022).

Additionally, one of the main uses of heritage is to construct continuity, and therefore certainty, in a fast changing and globalised world. It functions as a coping mechanism in the face of uncertain changes. As Stuart Hall has pointed out, heritage is closely linked to community-building and therefore part of the negotiations of power (Hall 2005). If we consider Lusatia's post-mining landscape to be the product of a heritagisation process, it leads to the question of how Sorbian and industrial facets of the region's history interconnect.

## 3 Whose uncertainty, whose heritage? Interconnections, ruptures, and continuities between "Sorbian" and "industrial history"

## 3.1 The rise of Sorbian heritage and lignite mining in the 19th century

As mentioned above, large parts of Lusatia belong to the historical and current settlement area of the Sorbian minority, which also overlaps significantly with the lignite mining area. Like many other Slavic groups that moved west in the 7th century, the Sorbian groups shaped the socio-cultural, political, and settlement structures of the area now called Lusatia for centuries, at the latest from the 10th century on, in both conflictual and non-conflictual exchange with German groups, which was accompanied by the growing political power of the latter (Rosik 2014). As our colleagues and ourselves have already pointed out in previous work, until recently the history and heritage of lignite mining and the history and heritage of the Sorbian minority have mostly been constructed as separated aspects of Lusatian regional identity (Hagemann 2023a; Hagemann et al. 2022). This is partly due to the fact that being Sorbian as a category of difference became much more important in the second half of the 19th century – and thus coincided with the rise of lignite mining as a profitable industry. From a historical perspective, pre-mining land use in 19th-century Lusatia was predominantly Sorbian, as the Sorbian population consisted mainly of small farmers, cottagers, gardeners and day labourers. At the same time, from, at the latest, the late Middle Ages the Sorbs held important offices in the growing cities of Lusatia, contributing to the

emergence of Sorbian literature, music, arts, science and clubs (Jatzwauk 1912; Mühle 2020: 326; Musiat 2001; Wölke 2005).

Nevertheless, after the Congress of Vienna in 1815, Prussian and Saxonian leaders became much more interested in creating a shared and unified national or state identity. The consequence was a site-specific, differing and contextual increase in discrimination, especially against Sorbian languages in schools and churches, with varying local success (Pech – Scholze 2003). As in other contemporary contexts, in Lusatia the late 19th century was a time of the establishment of national consciousness and national movements. Since the Romantic understanding of the nation is closely interwoven with ideas of *Heimat* (homeland), *Volk* (people) and historicity (Applegate 1990; Swenson 2013), the emergence of the specific Sorbian cultural heritage is rooted in this period (Hagemann 2023b). It was then that Sorbian culture was ethnographically investigated (Muka 2019) and exhibited for the first time, in both Upper and Lower Lusatia: in 1896, visitors had the opportunity to admire a wendisches Dorf (Wendish village) at an exhibition of Saxon arts and crafts; and, in 1908, the Cottbus Museum of Local History set up a wendisches Bauerndorf (Wendish peasant parlor) (Paulick 2014). In general, it was a time when the urban population rediscovered Lusatia, and with it the Sorbian culture, as an imagined rural space for themselves, especially the Spreewald (Noack 2008).

At this time, small-scale lignite mining had just begun, with few investors and sometimes farmers participating in this new industry. This situation changed completely at the end of the 19th century with the development of large-scale mining equipment and therefore, the establishment of lignite mining as an economically viable industry. This led to a huge change in the composition of the region's population at the beginning of the 20th century, with the influx of German-, Polish-, and Czech-speaking migrant workers (Förster 1990).

Local self-understanding as an industrial region then became a useful way of combining the differing identities of old and new Lusatians in a reasonable way. Accordingly, Sorbian languages and cultural practices became increasingly marginalised, also due to German-national tendencies in society in general (Kunze 2003). Being Sorbian became increasingly perceived as "rural", a marker for a pre-modern and backward lifestyle, even though many Sorbs worked in lignite mining. Additionally, initial recultivation approaches, even dating back to the late 18th century (Saxonian Mandat Wegen Pflanz- und Pfropfung, auch Cultivierung fruchtbarer, und anderer Bäume, in Dero Marggrafthum Nieder-Lausitz, 1753; Allgemeines Landrecht für die Preußischen Staaten, 1794), had only considered the re-use of the post-mining landscape in terms of economic re-use, especially in the form of re-forestation (Steinhuber 2005). The increased

discrimination against Sorbian languages and self-understandings during the period of the National Socialism led to a devaluation of Sorbian in Lusatia's public and social life. For example, villages with names that sounded "too Slavic" were given new, Germanised names (Redlich 1977).<sup>5</sup>

# 3.2 Differentiation of the legal framework: minority rights and mining planning in the 20th and 21st centuries

After the Second World War, the protection of the Sorbs as a minority was first legally established in 1948 (Kotsch 2000). However, within the vision of the GDR's leadership, minority protection could not be allowed to undermine economic interests: Communication and interaction networks that had developed over centuries were increasingly cut through and destroyed by open-cast lignite mining from the 1950s onwards. During that time, there was a strong emphasis on the development of differentiated recultivation strategies, leading to important innovations in the after-use of quarry fields and dumps, as well as soil melioration (Baumert 2023a; 2023b). Despite this, recultivation measures could not keep up with the state's need for lignite. According to Steinhuber, 53 percent of the land taken up remained untreated, leading to an extremely unsafe landscape (Steinhuber 2005: 276).

Overall, to this day, 137 villages or parts of villages have been destroyed, most of which had a population that identified as Sorbian until the end of the 19th century and which was still influenced by Sorbian traditions in the 20th century (Erler – Stein 2010; Förster 2014). Accordingly, the heritagisation of Sorbian culture increased within the specific framework of the GDR (Pech 2003).

After reunification, the legally anchored protection of minorities continued in the new federal states of Brandenburg and Saxony. This also changed the handling of population interests, and their Sorbian aspects, in lignite planning. At the same time, Lusatian mining planning adopted the concept of *Sozialverträglichkeit* (social compatibility) as it had been developed in the Rhenish mining area in the 1970s and 1980s (Akademie 2000: 58).

Regardless of this fact, concrete recommendations and references in the corresponding lignite mining plans often turned out to be vague and

<sup>5</sup> As was the case, for example, with Bergheide, devastated for the Klettwitz-Nord open-pit mine between 1987 and 1988. Until 1937, the village's name was Gohra, referring to the Sorbian word for mountain or hill, *góra*, and most likely stemming from the fact that the village was located on a hill. The Germanised version Bergheide also referred to the same fact, as the name literally means "heath on a mountain" (Förster 2014: 39).

non-binding upon closer inspection. Social engagement, such as that of residents affected by resettlement, showed the need and potential for development within existing plans: Only since 1997 have Lusatian mining plans considered relocating Sorbian communities within the Sorbian settlement area. This was one of the specific requirements of the residents of Horno/Rogow, who were finally translocated after years of protest in 2004 (Förster 2014: 112). The goal was not only to be translocated from one place to another, but to be able to continue and develop socio-cultural interactions and practices at the resettlement destination – which also means preserving Sorbian/local traditions and learning and speaking the Lower Sorbian language.

At this point, the specific Sorbian heritage of a village had become an important argument in the negotiation of the resettlement. It was not sufficient to prevent the resettlement as such, but it influenced the process and its specific implementation (Hagemann 2022a). Despite this, maintaining a focus on the protection and continuity of neighbourhoods and social networks depended largely on the commitment of the people concerned, which means that each resettlement was and is very different to any other on this level. In any case, industrial land grabbing in general and resettlements specifically were and are still hotly debated in Lusatia, especially because they lead to unsafeties and uncertainties.

# 4 Defined by uncertainty – defining uncertainty: Lusatia's (post-) mining landscape

## 4.1 Environmental and sociocultural effects of the mining activities

To understand the unsafeties and uncertainties of the post-mining landscape, the specifics and developments of the mining activities must be outlined. First of all, lignite mining is clearly a major intervention into the existing landscape that leads to physical unsafeties – for flora and fauna as well as humans. The mining landscape is a human made landscape. It is an attempt to make the landscape usable and controllable on a large scale, but in the end, it becomes even more unpredictable. The interventions begin before the open-cast mine is created. To enable the mining of lignite, the groundwater must first be pumped out far below the coal seams. This has created a total drained area of about 2,040 square kilometres (Kruse 2020). The extracted groundwater is discharged via the two largest rivers in the region, the Spree and the Schwarze Elster. These rivers were deepened and widened, straightened, and partly diverted specifically for this purpose. Since these rivers that currently appear to be rich in water will

decline sharply as soon as the groundwater is no longer discharged into them, environmental activists such as René Schuster, who has been active for many years, speak of "borrowed water" (Schuster 2022). Current water management strategies are the subject of considerable debate, since, on the one hand, the question arises as to what extent the industrial operators or the state must assume responsibility. On the other, rivers as transboundary spaces indicate the international interconnections of the Lusatian mining area with its Polish and Czech neighbours, which must be considered in the planning of extensive water withdrawals.

Besides these examples of direct effects on the environment, for the regional population the numerous and long-term resettlement processes have made the landscape an unsafe and also an uncertain place. As already mentioned, Giddens defines certainty as the continuity of the self and certainty about the continuity of one's social and environmental framework of actions (Giddens 1990). Even though this kind of certainty is mainly challenged in globalised contexts, the lack of this kind of certainty is a specifically defining quality of resettlement processes due to lignite mining. Case studies point out consequences on multiple levels – for example health issues, cultural security and social cohesion –, but there is still much more research to be done on such issues (Förster 1998; Jonda 2014; Kühne 2012; Ratajczak 2004).

What is certain is that resettlements take decades, and their planning changes with changing socio-political contexts. Due to a lack of alternatives, lignite became the GDR's main source of energy, and the lignite industry became immensely important (Landesamt 2023). Open-cast mines were opened and power plants were built on a hitherto unknown scale. Subsequently, tens of thousands of workers settled in the region. Hoyerswerda-Neustadt/Wojerecy Nowe město, a planned town for lignite workers and their families that was built within a few years, testifies to the immense importance of this energy source for the state as well as to the fundamental changes this brought about in the reality of life for the local population (Ess 2022). But the massive increase in production and the associated consumption of land during the GDR era also brought about a significant increase in the devastation of villages. Large-scale Bergbauschutzgebiete (areas reserved for mining) were established marking numerous villages as future mining areas (Förster 2014: 21). Even years before an open-cast mine was in operation this led to a socio-cultural and material decline in the villages' substance, since people stopped caring for houses and gardens, and the communal maintenance of infrastructures was also terminated. Regarding the resettlement processes, a model of individual and group resettlements was followed. Accordingly, the inhabitants of a village were usually placed in the surrounding towns with few and locally

extremely differing opportunities for participation in the decision-making process. The inhabitants of the village Groß-Partwitz/Parcow, for example, were divided between several locations, among them Lauta-Nord and the above-mentioned Hoyerswerda-Neustadt/Wojerecy Nowe město, which were both housing estates for workers in the lignite industry (Fig. 3).

After German reunification, lignite mining in eastern Germany lost much of its importance. Many open-cast mines and power plants were closed. The rest were privatised, and their processes were modernised and economised. While production volumes remained at similar levels, tens of thousands of workers in the mining industry lost their jobs, which led to uncertainties related to personal income and the loss of significance of the miners' identity that has endured to this day. During this, all planned resettlements were reevaluated and several were halted. As a consequence, those villages whose relocation was halted faced new challenges, as the example of Klingmühl illustrates: In 1983, preparations began for the complete devastation of the village for the Klettwitz open-pit mine. By 1989, 187 residents had already been relocated. Only a quarter of the farmsteads remained. In 1993, the Klettwitz open-pit mine was shut down prematurely. Thanks to a citizens' initiative that began a year earlier, residents who had already been relocated were able to gradually return to Klingmühl, from around 1996. Through their commitment and their return, the people of Klingmühl reappropriated the post-mining landscape in their own way, proving, once again, the importance of social engagement within resettlement processes.

On the planning level, environmental impact assessments and, through the mentioned adaptation of *Sozialverträglichkeit* (social compatibility), social impact assessments were also introduced. Nevertheless, even socially acceptable resettlements have had enormous impacts on those affected, on their socio-cultural interweaving in the broader region, and the cultural landscape that surrounds them.

Returning to the example of Mühlrose/Miłoraz, the current negotiations on who has the right to protest and against what show the consequences of decades of uncertainty: The village is part of the micro-region of Schleife/Slepo, which was and is surrounded by the Nochten open-pit mine. Parts of Mühlrose/Miłoraz had already been devastated between 1966 and 1972, followed by its southern neighbours Tzschelln/Čelno in 1979 and Nochten/Wochozy in 1987–1988 (Erler – Stein 2010: 260–265). Based on her observations on the now prevented devastation of Mühlrose/Miłoraz's neighbour, Rohne/Rowno, Jonda noted at least five model types of resettlers that can be differentiated by their coping strategies: (1) Fast settlers, who want to get the situation over with; (2) Hesitators, who do not want to exclude the possibility of not being devastated until the end of the process; (3) Ignor-

ers/deniers, who completely suppress the fact of their being resettled; (4) Refusers, who do not accept the devastation and often protest against it; and (5) Goal-orientated settlers, who seek stability above everything else (Jonda 2014). All these coping mechanisms can also be seen in Mühlrose/Miłoraz, with the protest against the *Klima-Camp* as an expression of a goal-orientated resettling focusing on the end of an uncertain process.

### 4.2 Current and future challenges of the post-mining landscape

However, even after the end of lignite mining the post-mining landscape remains a landscape marked by unsafeties, despite efforts to the contrary in the context of recultivation. After reunification, recultivation was institutionalised much more through the creation of the LMBV and the responsibility of the mining operators for the development of the subsequent areas in the first seven years after the end of mining, as laid down in mining law (Pinkepank - Otto 2022). Currently, one of the biggest challenges is water management throughout the region. During drainage, oxygen penetrates the soil and reacts with the sulphur- and iron-containing rocks. When the groundwater rises again after an open-cast mine is closed, sulphate, iron and hydrogen ions are released. This leads to the acidification of the water and gives it an ochre colouration, with far-reaching consequences for human and non-human actors, and it even influences water management in cities like Berlin and Frankfurt an der Oder. The iron sludge is deadly for many aquatic animals and plants and in some places the sulphate limits in drinking water are exceeded. The flowing waters must therefore be considerably diluted with low-sulphate water and lime must be regularly added to lakes in order to combat acidification (LMBV 2023). Nevertheless, how long these measures will be necessary and what will happen in the case of a flood remains uncertain.

Furthermore, the question also remains of what will happen to the areas depleted by the open-cast mines. The most cost-effective option is flooding. This recultivation strategy has already created a lake area of about 14,000 hectares called Lausitzer Seenland. Although it is an attractive area for leisure, recreation, and tourism, it poses major challenges, first and foremost to the water balance of this relatively dry region. This can currently be observed with Cottbusser Ostsee, which will be the largest man-made lake in Germany, created as a post-mining area for the Cottbus-Nord open-pit mine. Its flooding has led to several problems in a region that is becoming drier, but delays are causing bank erosions and landslides. This year, several up-to 50-metre-deep sections of the bank, which was considered stable, have broken off and must be restored at great expense. Therefore,

the Landesbergamt (State Mining Office) is currently recommending that a 50 to 75 metre-wide safety zone be placed around the entire lake (Halpick 2023). For the neighbouring villages, such as the municipality of Teichland, who have already invested in the economic valorisation of the lake by building a marina, those unsafeties of the landscape lead to financial uncertainties. This shows that a landscape transformation on such a scale cannot be planned in the same way as other construction projects.

What is certain regarding the future is that uncertainties will shape the region for a long time and recultivation will remain a challenge for many generations to come. Therefore, the term *Ewigkeitskosten* (perpetuity costs) is used. For example, after the end of open-cast lignite mining in Lusatia, which is planned for 2038, water scarcity and thus competition for the resource will initially intensify (Smekul et al. 2022). However, the near future also holds numerous challenges. Even though it may be 15 years until the final phasing-out of lignite mining, structural change<sup>6</sup> has already begun, and this is linked not only to questions of job creation, the modernisation of infrastructure and the distribution of subsidies, but above all to questions of regional identity. "In many places, Lusatia is viewed with negative connotations as a dying open-pit lignite mining area. This applies to outside perspectives in particular, but also corresponds to the self-image of many people in Lusatia." (Pinkepank - Otto 2022: 60) Even though there have been efforts to counter this with marketing campaigns such as vom Bergmann zum Seemann (from miner to sailor) it is questionable what influence they actually have on regional self-image. More likely, it will probably take some time for the local population to develop its own.

In summary, the situation of the region Lusatia can be described as a permanent state of varying, overlapping and contrasting levels of uncertainty. The uncertainty stems from, first, the changes and dangers of the mining and post-mining landscape itself, second, the decades of mining-related resettlements, third, the transformation processes after German reunification as well as the already beginning structural change due to the planned end of lignite mining and fourth, the cultural diversity of its population. To cope with these consequences of lignite mining, various practices of past presencing are used in differing contexts.

<sup>6</sup> As part of the adoption of the *Kohleausstiegsgesetz* (Coal Phase-out Act) by the German government in 2020, the *Strukturstärkungsgesetz Kohleregionen* (Coal Regions Structural Strengthening Act) also came into force. There is a budget of 40 billion euros, which is to be invested in all three German lignite mining regions in order to make the transformation socially acceptable and sustainable. In the regions affected, this process is currently referred to in common parlance as structural change.

### 5 Coping with uncertainty: The presencing of the post-mining landscape

With the increasing disappearance of village structures in the previous century, the social need for their remembrance has grown. Remembrance practices such as the naming of new districts, residential areas, or streets after devastated places increasingly found their way into the regional planning of the late 20th century. This development intensified significantly after German unification: A typical feature of this is the placement of erratic blocks that were deposited in the ground by glacial shifts and were brought to the surface during lignite mining. At the same time, these erratic blocks can also be understood as a reference to stone as a building material or the erection of gravestones. They are installed in various forms - from single stones on the banks of the flooded open-pit mines to larger installations on the recultivated areas of the original location (Fig. 4). In addition to these dedicated memorials, translocated objects such as monuments or church bells and reconstructed buildings also serve a commemorative function. Moreover, there are commemorative practices such as the annual Tag der abgebaggerten sorbischen Dörfer (Day of the Demolished Sorbian Villages), organised by Domowina, the Association of Lusatian Sorbs, an event at which a memorial is traditionally inaugurated and a lime tree – a symbol of Sorbian culture – is planted.

As already mentioned, in these contexts, the heritagisation of Sorbian culture and the lignite mining industry has thus far been on rather separate lines in the Lusatian discourse. Aspects emphasising the connections between these two lines, for example Sorbian workers in lignite mining, German, Czech or Polish workers in Sorbian villages or cross-cultural antilignite-mining- and remembrance-initiatives, have largely been neglected in official public images and identity narrations, particularly in regional tourism marketing (Hagemann 2022b).

## 5.1 The World Heritage initiative – opportunities and challenges

Today, it is possible to observe small changes with a partial softening of the strict distinction between Sorbian and German identity. This is mainly because Sorbian stakeholders are increasingly using the transformation process as an action arena for themselves. The current World Heritage initiative for Lusatia's post-mining landscape is a very vital example for this and, of course, for the ongoing heritagisation of the landscape in general. Started in 2020, the first project was aimed at examining the potential of the Lusatian post-mining landscape as an UNESCO World Heritage site by researching the technological and cultural specifics of the post-mining landscape:

"The goal of a World Heritage nomination of this landscape supports the social and cultural integration of this research in the region by enhancing the construction of an identity in Lusatia that proudly looks back on more than a century of innovative land use. The combination of unique, innovative land-use traditions with innovative and contemporary land-use research is intended to bring the Land-Innovation-Lusatia (LIL) research initiatives closer to the tradition-focused segments of the population and also increase the appreciation of them." (Pinkepank – Otto 2022: 60)

The result of the project was the application for inclusion in the German Tentative List for UNESCO World Heritage, which the Brandenburg Ministry of Science, Research and Culture (MWFK) submitted to the Conference of Ministers of Culture in 2021, in cooperation with the Saxon Ministry of Regional Development (SMR). At the beginning of the current follow-up-project, the focus was on the evaluation of the World Heritage initiative by an advisory board to the Conference of Ministers of Culture, which evaluated more than 20 applications for the German Tentative List prior to the end of 2023. In preparation for possible inclusion on the List, the project partners will intensify the dialogue with the Lusatian population and create participation formats. In addition, preparatory management and tourism concepts are to be developed that take into account the needs of minority groups, nature conservation and monument protection. In this way, the path to becoming a potential World Heritage Site is to be integrated into the region's processes of structural change.

As one of the five institutions that run the initiative, we see it as an opportunity for re-thinking the post-mining landscape. As in other research projects that accompany transformation processes in rural areas, we have become actors in the structural change. By providing knowledge about the history and achievements of recultivation, we want to support identification with the landscape and re-appropriation of the land formerly claimed by the mining industry. At the same time, we see the initiative as a platform to weave Sorbian perspectives into the discourse. Our goal and current challenge is thus: First to link the two sources of regional identity – Sorbian and industrial culture and second to address the change itself.

The first aspect not only arises from the fact that the proposed World Heritage area overlaps by two thirds with the Sorbian settlement area but also refers to the previously mentioned historical interrelations between Sorbian and industrial culture, especially regarding forms of land use and remembrance practices. One example is the village of Wolkenberg/

Klěšnik, which was devastated in 1992: 18 years later the area was recultivated as a vineyard – a historical form of land use – with an adjoining memorial site also presencing its Sorbian population and traditions (Fig. 5). An arrangement of several boulders even reflects the original village structure and the location of culturally significant village buildings. With the still active open-pit mine Welzow-Süd visible in the background of the vineyard, many of the aspects that form the post-mining landscape intertwine inseparably. In this manner, we want to offer an array of narrations of the landscape and include the Sorbian narration as a cross-cutting theme in the UNESCO application, including in internal and external communications.

The second aspect is linked to the understanding of the post-mining landscape, not only as an area of technical innovation in recultivation techniques, but mainly marked by movement, change and the loss of its former elements (especially settlement structures, infrastructure, and cultural practices). This requires a focus on the broadly intangible that addresses the knowledge of these changes and the ways people tried to cope with social and cultural uncertainties – particularly regarding the Sorbian language and culture. By considering the World Heritage initiative a tool of the structural change, we want to presence the previous changes and encourage people to see the upcoming transformation from a different perspective. This can only work by involving the local population and integrating their minority-specific perspectives. Therefore, one of the main goals of the project is to create participation processes on local and regional levels.

### 6 Summary, future questions and further tasks

From the historical as well as practice-oriented perspective outlined in this article, it can be summarised that living in Lusatia is characterized by various forms of unsafety, insecurity, and uncertainty over a long period of time: Initially, unsafety arises from the mining activities in relation to the integrity of the villages and their surroundings. The flooding of the open-cast pits massively interferes with the water management of rivers and intensifies climate change-related water management challenges. Moreover, landslides occur repeatedly, endangering and hampering the re-appropriation of the former industrial landscape. Secondly, insecurity arises from a lack of popular influence on and participation in the planning processes, which leads to unwanted dependencies on mining companies and politics. Although not exclusively, the Sorbian culture and languages were particularly influenced by the destruction of villages, agricultural land

and social networks. Thirdly, uncertainty relates to the future realignment of the entire region in the context of the German decision to halt lignite mining. In addition to the *Ewigkeitskosten* (perpetuity costs) that future generations will have to cope with, it is the change in regional identity that determines the current discourse.

At the same time, the region has developed mechanisms for coping with these situations, such as remembrance practices shaping and constituting the post-mining landscape. Memorial sites with commemorative stones, information boards or lookout towers have become typical for the remembrance of the devastated places and are often used for devotions or gatherings of the former inhabitants. The names of streets, lakes and even villages presence the pre-industrial past of the post-mining landscape. Recultivation strategies adopt historical forms of landscaping. These forms of heritagisation function as an action arena for negotiating new understandings of the region – not just as an industrial region, but rather as a hybrid region. This is used to reclaim, reshape and re-interpret the post-industrial landscape – both in the context of developing innovative recultivation techniques and within the ongoing learning process regarding the participation and rights of the local population.

With regard to future developments, our research agenda and practical work will focus on the possibilities and potentials as well as the limits and challenges that arise from integrating the perspective of an autochthonous minority into a World Heritage initiative. Therefore, we aim to widen the understanding of the post-mining landscape and enhance diverse perspectives in the negotiation processes of Lusatian regional identity. The World Heritage initiative provides many opportunities for this but also presents challenges. We therefore often face questions of how to include the intangible aspects of Sorbian culture into a possible World Heritage site based on material evidence - and how to do it without completely historicising Sorbian culture. Putting the specifics of Lusatia aside, the heritagisation of minoritised groups is always linked to questions of power and participation (Taylor 2009), as all heritagisation processes are (Hall 2005). For the Sorbian Institute, one of the main challenges ahead will be the inclusion of the heterogenous experiences of people affected by devastation and resettlement irrespective of their ethnic self-understanding.

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### Literature

Abrisse und Baumfällungen, Aktivisten in Tunneln. 2023, January 12. ZEIT online. [2023-11-03]. Available at: https://www.zeit.de/gesellschaft/2023-01/luetzerath-raeumung-tag-zwei

Akademie für Raumforschung und Landesplanung. 2000. Braunkohlenplanung und Umsiedlungsproblematik in der Raumordnungsplanung Brandenburgs, Nordrhein-Westfalens, Sachsens und Sachsen-Anhalts. Hannover: ARL.

- Applegate, Celia. 1990. A nation of provincials. The German idea of Heimat. Berkeley Los Angeles Oxford: University of California Press.
- Baumann, Zygmunt. 2000. Liquid modernity. Malden: Polity Press.
- Baumert, Martin. 2023a. '...und daß die Kippe, die zurückbleibt, sie wieder ernähren muß.' Rekultivierungsforschung in der DDR und ihr heutigen industriekulturelles Potenzial. In: Kellershohn, Jan (ed.): *Der Braunkohlenbergbau im 20. und 21. Jahrhundert. Geschichte Kultur Erinnerung.* Halle (Saale): Landesamt für Denkmalpflege und Archäologie Sachsen-Anhalt Landesmuseum für Vorgeschichte: 123–142.
- Baumert, Martin. 2023b. "Das Beste nach oben!" Forschung und Praxis der Wiedernutzbarmachung von Braunkohlenfolgelandschaften in der DDR. Berlin –Boston: De Gruyter.
- Baumert, Martin Meyer, Torsten. 2022. Konstruktion von Kulturlandschaft. In: Pinkepank, Heidi Otto, Markus (eds.): KULTUR [tagebau] Landschaft: Strukturen der Tagebaufolge lesen, verstehen, gestalten, entwickeln. Berlin: L + H Verlag.
- Berger, Stefan. 2021. Vom Nutzen und Nachteil der Nostalgie. Das Kulturerbe der Deindustrialisierung im globalen Vergleich. Zeithistorische Forschungen/Studies in Contemporary History 18: 93–121.
- Blaubeeren. Cerne jagody. 2013. [Documentary]. Director Nagel, Maja Günzel, Julius. Germany: Filmpuktart.
- Bogner, Simone Franz, Birgit Meier, Hans-Rudolf Steiner, Marion (eds.). 2018. Denkmal Erbe Heritage. Begriffshorizonte am Beispiel der Industriekultur. Holzminden: Verlag Jörg Mitzkat.
- Brumann, Christoph. 2015. Cultural Heritage. In: Wright, James D. (ed.): *International Encyclopedia of the Social & Behavioural Sciences*. 2nd ed., Vol. 5. Amsterdam: Elsevier: 414–419.
- Eiringhaus, Pia. 2022. How industrial heritage became green.

  Renaturalisation narratives in regional history culture. In: Bluma,

  Lars Farrenkopf, Michael Meyer, Torsten (eds.): Boom Crisis –

  Heritage. King coal and the energy revolutions after 1945. Berlin: De Gruyter

  Oldenbourg: 257–266. https://doi.org/10.1515/9783110729948-018

- Erler, Annelore Stein, Dörthe. 2010. *Dokumentation bergbaubedingter Umsiedlung. Dokumentacija pśesedlenjow pśez gornistwo*. Archiv verschwundener Orte Horno/Forst. Horno: Archiv verschwundener Orte.
- Ess, Julia. 2022. Neue Stadt Neue Menschen? Ansiedlung von Industriearbeiter:innen für 'Schwarze Pumpe' in der 'sozialistischen Stadt' Hoyerswerda-Neustadt. In: Otto, Markus Pinkepank, Heidi (eds.): Kultur (tagebau) Landschaft: Strukturen der Tagebaufolge lesen, verstehen, gestalten, entwickeln. Berlin: L + H Verlag: 51–60.
- Förster, Frank. 1990. *Um Lausitzer Braunkohle 1849-1945*. Bautzen: Domowina-Verlag.
- Förster, Frank. 1998. Bergbau-Umsiedler. Erfahrungsberichte aus dem Lausitzer Braunkohlenrevier. Bautzen: Domowina-Verlag.
- Förster, Frank. 2014. Verschwundene Dörfer im Lausitzer Braunkohlerevier. Bearbeitet von Robert Lorenz. Bautzen: Domowina Verlag.
- Giddens, Anthony. 1990. *The consequences of modernity*. Cambridge: Polity Press.
- Hagemann, Jenny. 2022a. Vom wendischen Notschrei und von sorbischen Kultur-Hochburgen. Nutzungen und Aneignungen kulturellen Erbes im wendländischen und Lausitzer Protest. *Lětopis* 69, 2: 6–23.
- Hagemann, Jenny. 2022b. Vererbte Regionen. Aneignungen und Nutzungen von regionalem Heritage im Wendland und in der Lausitz im Vergleich. Bielefeld: transcript.
- Hagemann, Jenny. 2023a. Industrie Kultur Erbe. Der Lausitzer Tagebau und seine Folgelandschaft aus minderheitensensibler Perspektive. Essay. In: Kellershohn, Jan (ed.): *Der Braunkohlenbergbau im 20. und 21. Jahrhundert. Geschichte Kultur Erinnerung.* Halle (Saale): Landesamt für Denkmalpflege und Archäologie Sachsen-Anhalt Landesmuseum für Vorgeschichte: 261–281.
- Hagemann, Jenny. 2023b. Sorbisches/wendisches Kulturerbe. Historische, kulturwissenschaftliche und regionale Annäherungen. Vol. 4. Bautzen: Serbski institut.
- Hagemann, Jenny Jacobs, Fabian Laschewski, Lutz. 2022.

  Welterbe als Chance für kulturelle Resilienz? Aspekte des

  Minderheitenschutzes bei der Erbe-Werdung Lausitzer

  Tagebaufolgelandschaft. In: Pinkepank, Heidi Otto, Markus (eds.):

  KULTUR[tagebau]LANDSCHAFT. Strukturen der Tagebaufolge lesen,
  verstehen, gestalten, entwickeln. Berlin: L+H Verlag: 97–102.
- Hall, Stuart. 2005. Whose heritage? Un-settling 'the heritage', re-imagining the post-nation. In: Littler, Jo Naidoo, Roshi (eds.): *The politics of heritage. The legacies of 'race'*. London/New York: Routledge: 23–35.

Halpick, Silke. 2023, September 19. Nach Rutschungen – Bergamt will Sicherheitskorridor rund um den See. *Lausitzer Rundschau* [on-line]. [2023-11-03]. Available at: https://www.lr-online.de/lausitz/cottbus/cottbuser-ostsee-nach-rutschungen-\_-bergamt-will-sicherheitskorridor-rund-um-den-see-71732153.html

- Hard, Gerhard. 1995. Spuren und Spurenleser. Zur Theorie und Ästhetik des Spurenlesens in der Vegetation und anderswo. Osnabrück: Universitätsverlag Rasch.
- Harrison, Rodney. 2013. *Heritage: Critical approaches*. New York: Routledge.
- Herzog, Martina Nauschütz, Silke Josling, Daniel. 2023, May 6. Das Anti-Lützerath: Der Kohleausstieg im Osten Deutschlands. *Berliner Morgenpost* [on-line]. [2023-11-03]. Available at: https://www.morgenpost.de/politik/inland/article238321883/Das-Anti-Luetzerath-Der-Kohleausstieg-im-Osten-Deutschlands.html
- Jaramillo, George S. Tomann, Juliane. 2022. Introduction. In: Jaramillo, George S. – Tomann, Juliane (eds.): *Transcending the nostalgic. Landscapes of postindustrial Europe beyond representation*. New York – Oxford: Berghahn: 1–17.
- Jatzwauk, Jakob. 1912. Die Bevölkerungs- und Vermögensverhältnisse der Stadt Bautzen zu Anfang des 15. Jahrhunderts. Leipzig: Universität Leipzig.
- Jonda, Bernadette. 2014. The movement to protect local values in Germany's Lusatia region. *Górnośląskie Studia Socjologiczne. Seria Nowa* 5: 136–151.
- Kotsch, Detlef. 2000. Minderheitenpolitik in der SBZ/DDR nach dem Zweiten Weltkrieg. Die Sorben, sowjetische Besatzungsherrschaft und die staatliche Sorbenpolitik. Eingeleitet und bearbeitet von Detlef Kotsch. Stuttgart: Berliner Wissenschaftsverlag.
- Kruse, Michaela. 2020. Wasser ist Schnee von gestern. Kohleatlas Sachsen. Daten und Fakten über einen verhängnisvollen Rohstoff: 8–9.
- Kühne, Marco. 2012. BERGBAU HEIMAT WIDERSTAND? Auswirkungen des Braunkohlenbergbaus im Lausitzer Revier auf Zusammenleben und dörfliche Strukturen. Master Thesis. Leuphana Universität Lüneburg.
- Kunze, Peter. 2003. Die Sorbenpolitik in der Ober- und Niederlausitz vom Wiener Kongress bis zum Ersten Weltkrieg. In: Pech, Edmund Scholze, Dietrich (eds.): Zwischen Zwang und Beistand. Deutsche Politik gegenüber den Sorben vom Wiener Kongress bis zur Gegenwart. Bautzen: Domowina-Verlag: 13–18.
- Landesamt für Denkmalpflege Sachsen (ed.). 2023. Zeugnisse der Braunkohleindustrie im Lausitzer Revier. Dresden.

- LMBV (ed.). 2023, July. Umgang mit Eisenhydroxidschlamm in Bergbaufolgegebieten. *LMBV.de* [on-line]. [2023-11-03]. Available at: https://www.lmbv.de/wp-content/uploads/2023/07/Broschuere-EHS\_20230720\_Web.pdf
- Macdonald, Sharon. 2013. *Memorylands. Heritage and identity in europe today*. New York: Routledge.
- Mühle, Eduard. 2020. *Die Slawen im Mittelalter. Zwischen Idee und Wirklichkeit*. Wien Köln Weimar: Böhlau Verlag.
- Muka, Arnošt. 2019. Statistik der Lausitzer Sorben. Aus dem Obersorbischen übersetzt und herausgegeben von Robert Lorenz. Bautzen: Domowina-Verlag.
- Musiat, Siegmund. 2001. Sorbische/wendische Vereine 1716–1937. Ein Handbuch. Bautzen: Domowina-Verlag.
- Noack, Martina. 2008. "Nach Berlin! Spreewälder Ammen und Kindermädchen in der Großstadt". Do Barlinja! Serbske seselnice a źiśarki we wjelikem měsće. Cottbus: Edition Wendisches Museum.
- Paulick, Andrea. 2014. Lemma "Museen". In: Schön, Franz Scholze, Dietrich Hose, Susanne et al. (eds.): *Sorbisches Kulturlexikon*. Bautzen: Domowina-Verlag: 255–257.
- Pech, Edmund. 2003. Eine Vorzeigeminderheit? Die Sorben in der DDR. In: Pech, Edmund Scholze, Dietrich (eds.): Zwischen Zwang und Beistand. Deutsche Politik gegenüber den Sorben vom Wiener Kongress bis zur Gegenwart. Bautzen: Domowina-Verlag: 102–129.
- Pech, Edmund Scholze, Dietrich. 2003. Zwischen Zwang und Beistand. Deutsche Politik gegenüber den Sorben vom Wiener Kongress bis zur Gegenwart. Dresden: Domowina-Verlag.
- Pinkepank, Heidi Otto, Markus. 2022. Identitätsfindungsprozesse in einer Tagebau-folgelandschaft vom Ausnutzen, Wandeln, Aneignen und Wertschätzen. *The Planning Review* 58, 3: 60–85. https://doi.org/10.1080/02513625.2022.2158601
- Ratajczak, Cordula. 2004. Mühlroser Generation. Deutsch-sorbische Überlebensstrategien in einem Lausitzer Tagebaugebiet. Münster: LIT Verlag.
- Redlich, Friedrich. 1977. Änderungen im Ortsnamennetz der Niederlausitz in den 30er Jahren des 20. Jahrhunderts mit Ausblicken auf Flur- und Gewässernamen und die politischen Hintergründe. Geschichte und Gegenwart des Bezirks Cottbus (Niederlausitzer Studien) 11: 137–145.
- Rosik, Stanisław. 2014. Die Christianisierung der slawischen Stämme auf dem heutigen Gebiet der Lausitz. In: Heimann, Heinz-Dieter Neitmann, Klaus Tresp, Uwe (eds.): Die Nieder- und Oberlausitz –

Konturen einer Integrationslandschaft. Band I: Mittelalter. Berlin: Lukas-Verlag: 57–62.

- Schwell, Alexandra. 2021. (Un-)Sicherheit und Grenzen. In: Gerst, Dominik – Klessmann, Maria – Krämer, Hannes (eds.): Grenzforschung. Handbuch für Wissenschaft und Studium. Vol. 3. Baden-Baden: Nomos: 267–282
- SMEKUL, MLUK, & SenUMVK (Eds.). 2022, September 19.
  Positionspapier der Wasserwirtschaftsverwaltung der Länder
  Sachsen, Brandenburg und Berlin: Kohleausstieg in der Lausitz und
  wasserwirtschaftliche Herausforderungen für die Region [on-line].
  [2023-11-03]. Available at:
  https://mluk.brandenburg.de/sixcms/media.php/9/GemeinsamesPositionspapier-Wassermanagement-Lausitz.pdf
- Steinhuber, Uwe. 2005. Einhundert Jahre bergbauliche Rekultivierung in der Lausitz. Ein historischer Abriss der Rekultivierung, Wiederurbarmachung und Sanierung im Lausitzer Braunkohlenrevier. Dissertation. Olomouc: Palacky-Universität Olomouc.
- Swenson, Astrid. 2013. The rise of heritage. Preserving the past in France, Germany and England, 1789–1914. Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9781139026574
- Taylor, Mary N. 2009. Intangible heritage governance, cultural diversity, ethno-nationalism. *Focaal. Journal of Global and Historical Anthropology* 55: 41–58. https://doi.org/10.3167/fcl.2009.550104
- Weber, Florian. 2019. Diskurstheoretische Landschaftsforschung. In: Kühne, Olaf – Weber, Florian – Berr, Karsten – Jenal, Corinna (eds.): *Handbuch Landschaft*. Wiesbaden: Springer VS: 105–118.
- Weiß, Regina. 2023a, April 21. Protest-Aktion 'Rosi bleibt!' will sich Kohle-Plänen der Leag entgegenstellen. *Lausitzer Rundschau* [online]. [2023-11-03]. Available at: https://www.lr-online.de/lausitz/weisswasser/klimacamp-muehlrose-protest-aktion-\_rosi-bleibt\_-will-sich-kohle-plaenen-der-leag-entgegenstellen-70319927.html
- Weiß, Regina. 2023b, April 23. Warum sich eine Menschenkette gegen Klimaaktivisten stellt. *Lausitzer Rundschau* [on-line]. [2023-11-03]. Available at: https://www.lr-online.de/lausitz/weisswasser/klimacamp-muehlrose-warum-sich-eine-menschenkette-gegen-klimaaktivisten-stellt-70367173.html
- Weiß, Regina. 2023c, April 24. Protest-Aktion 'Rosi bleibt!' vorerst abgesagt. *Lausitzer Rundschau* [on-line]. [2023-11-03]. Available at: https://www.lr-online.de/lausitz/weisswasser/klimacampmuehlrose-protest-aktion-\_rosi-bliebt\_-vorerst-abgesagt-70390491. html

Winterlieb. Libawka. 2020. [Documentary]. Director Nagel, Maja – Günzel, Julius. Germany: Filmpuktart.

Wölke, Sonja. 2005. Die Geschichte der sorbischen Grammatikschreibung. Von den Anfängen bis zum Ende des 19. Jahrhunderts. Bautzen: Domowina-Verlag.

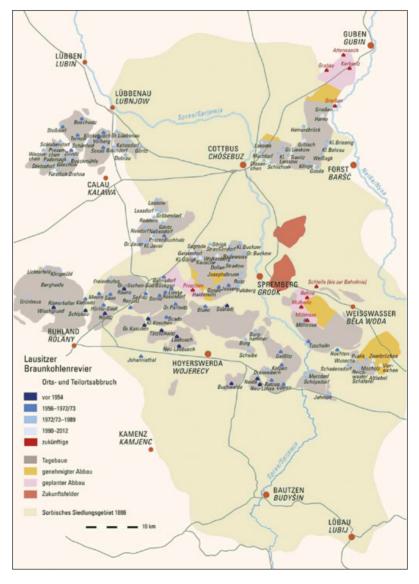


Figure 1 Lusatian lignite mining area and Sorbian settlement area. Map: Iris Brankatschk, 2013.



Figure 2 Lusatian post-mining landscape with the post-mining lake Blunoer Südsee and afforested areas. Photo:  $\ \$  Maximilian Beyers, 2021.



Figure 3 Workers' housing estate Lauta-Nord built in the years 1918–1920. Photo: © Maximilian Beyers, 2021.



Figure 4 Memorial site for the devastated village Groß-Partwitz/Parcow. Photo: © Lea Brönner, 2021.



Figure 5 Recultivated vineyard and memorial site for the devastated village Wolkenberg/Klěšnik. Photo: © Maximilian Beyers, 2021.