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# Thinking with Gaps between Coal and Post-Coal in an Eastern German Mining District

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**Abstract** By the mid-2030s, the Central German Mining District in eastern Germany is expected to see the end of brown coal mining. Drawing on ethnographic fieldwork, this article explores how the anticipated coal phase-out is entangled with the legacy of the post-socialist period following German reunification. It shows how these overlapping and often conflicting temporalities shape present-day life in the region. Phasing out coal is framed as progress toward a better future and as a corrective to the disruptions triggered by reunification. In this temporal configuration, the present emerges as a time of transformation. I conceptualise this present as a gap – a temporal and spatial condition shaped by the simultaneous presence of coal pasts and post-coal futures. The concept of the gap helps to reveal how disruptions and past-future entanglements in time structure the everyday experiences of those living in the Central German Mining District.

**Keywords** Coal mining. Energy transition. Eastern Germany. Gaps. Time.

**Summary** 1 Introduction. – 2 Becoming Post-Coal. – 3 Cracking Histories and Futures of Coal. – 4 Großgrimma: What is Left of a Place that No Longer Exists? – 5 Conclusion: Gaps as a Prism for the Present.



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#### 1 Introduction

Looking out over the open-cast brown coal mine in Profen reveals the current state of the coal industry. Massive excavators move through layers of sand, soil, and eventually coal, cutting a deep scar into the landscape. Not visible, however, are the villages that had to be erased from the map to allow for the expansion of the mine. Likewise, the ongoing debates surrounding climate change and the energy transition, which increasingly portray coal and its extraction as outdated, remain invisible. The long-standing economic significance of coal and the pride of generations of miners are also hidden from view.<sup>2</sup> A complex interplay of pride, loss, and transformation marks the history of the Profen mining site. However, when one looks into the pit today, these narratives do not immediately reveal themselves. What stands out instead is the absence, an immense area of lost land. The land appears to be missing, a gap between what was and what is to come - a gap in the landscape.

The open-cast mine becomes a break in the terrain, separating a coal-fueled past from a future shaped by uncertainty in the postfossil era. This break interrupts the continuity of the surrounding landscape. While the terrain in the mining region is largely flat, with only gentle rises that gradually level out again, the mine presents a stark contrast. It cuts deep into the ground, disturbing the layers of soil and unsettling the flow of the land. For over 80 years, coal that is 20 to 40 million years old has been mined at depths of up to 100 metres, which is then quickly transformed into energy for the present (MIBRAG 2025). The resulting CO<sub>2</sub>, released into the atmosphere, will pose a problem for humankind for a long time to come.

Coal mining in this region used to be on a massive scale, but now, the region anticipates a definite phase-out of coal in the nottoo-distant future. The Profen mine was opened in 1941. Since then, more and more land has been swallowed by the expanding mine as the demand for coal has grown. Coal mining in Profen is set to end by the mid-2030s. In the present, coal mining is still active, but industry and society are caught in a time of transition towards post-coal. In this paper, I ask how the transition to become post-coal is challenged by the temporal relationship between past, present and future.

<sup>1</sup> Although the technically correct term is 'lignite', this paper uses the term '(brown) coal' to emphasise its identity as a type of coal. The term 'lignite' does not linguistically convey this identity, and in the Central German Mining District, brown coal is not regarded as less valuable than hard coal.

<sup>2</sup> This article is based on ethnographic fieldwork conducted in the Central German Mining District, with the principal phase of data collection carried out between spring 2020 and autumn 2021. All quotations from interviews and other fieldwork activities have been translated by the Author from German into English for this publication.

The open-cast mines Profen and Vereinigtes Schleenhain, located nearby, serve as the physical and empirical starting points for this paper. The Central German Mining District spans across southern Saxony-Anhalt and northern Saxony in eastern Germany. Berlin is approximately 200 kilometres north. The major cities of Halle and Leipzig are located in the centre of the mining district, but have long been independent of the coal industry. The town of Hohenmölsen, situated between Halle and Leipzig, is guite distinct. Many residents here are employed in the mining industry, and the Profen and Vereinigtes Schleenhain open-cast mines are only 16 and 27 kilometres away. Some smaller municipalities are located even closer to the open-cast mine. The town of Deutzen, in the south of Leipzig, is situated directly on the edge of the Vereingtes Schleenhain open-cast mine. The village of Großgrimma is right inside the Profen open-cast mine. The three locations are at the empirical center of this article. All three places have been shaped by their physical closeness to the open-cast mine. Großgrimma, in particular, was not just influenced by the mine but entirely erased by it.

The expansion of the Profen open-cast mine destroyed the village of Großgrimma. Großgrimma was the last of 15 villages devastated since 1947 for the expansion of the mining sites Profen and Pirkau (Recarbo 2025).3 The village was relocated in 1998. Großgrimma can no longer be seen, yet the place is anything but absent. The coal underneath Großgrimma has 'not yet' been mined. Whilst all houses have long been demolished, one old oak tree still stands, surrounded by dirt and dust from the encroaching mining site. The oak tree is huge, majestic, and several hundred years old, with an enormous canopy. Today, the oak tree seems to be out of place in this otherwise unpopulated environment. The tree rises into the air, in a place that has disappeared into the depths and provokes conversations about a village that has long since ceased to exist.

This article explores how the transition to a post-coal future is complicated by disrupted relationships between past, present, and future - a disruption caused, in part, by the physical displacement of matter as coal is extracted from underground and brought to the surface. To explore this question, I use the former village of Großgrimma as an ethnographic anchor. Once cleared and resettled in the name of coal mining, the village persists through stories, memories, and symbolic elements such as its old oak tree. Together with material from Deutzen and Hohenmölsen, these narratives help illuminate how the past continues to shape the present in the Central

<sup>3</sup> A total of 53,000 people had to give up their homes because of mining in the Central German Mining District, and 140 villages had to be abandoned for the coal that lay beneath them (Berkner 2021, 22).

German Mining District. Based on ethnographic research, the article examines how coal mining disturbs linear notions of time, creating a present marked by temporal and spatial gaps.

The tree is of central importance to this article, as it forms the basis for my understanding of verticality and, ultimately, the 'gap' that emerges from the particular nature of open-cast mining. In the context of underground mining, themes of danger and darkness are often explored in both the social sciences and cultural discourse. John Berger described the atmosphere of an English coal mine in the 1980s as follows: "At pit bottom, the atmosphere is not unlike a ship's engine room. There's no sense of the nature of the earth you're in and under" (John Berger, in Overton, Harle 2024, 28). Rachel Squire and Klaus Dodds speak of "emotive, embodied, and affective responses with depth, volume, pressures, darkness, cold, heat" in subterranean settings (2020, 7). Sabine Luning and Robert Pijpers also describe this dialectic of seeing and not-seeing in their research on underground gold mining in Ghana. They speak of "visible witnesses of unseen extractive practices underground" (2022, 17) and emphasise the importance of vision for the production of knowledge, even in seemingly invisible fields such as underground extraction sites (Luning, Pijpers 2022, 20).

These conditions, however, are not found in open-cast mining, where extractive activities are always visible and in constant dialogue with the world above ground. Gigantic excavators first dig down to the coalbearing layers, then begin extracting the coal itself. The open-cast mine has its own infrastructure, designed to transport coal and overburden, as well as to make the mining site accessible. The overburden is initially deposited outside the mine and later backfilled into the pit. This process of dumping, along with the variable nature of coal deposits - sometimes in long seams, sometimes in deep troughs - creates a rugged and barren landscape inside the mine. Looking upward is always possible; the sky is visible. Here, I draw on Sabine Luning's proposal to apply a "vertical view" (2022, 185), connected to the "capacity to see or not see" (Luning 2022, 187). In open-cast mining, the view is directed downward toward the coal, but it always remains connected to the surface environment, which establishes a constant connection between surface and depth. I draw a connection between this vertical relationship and the temporal dimension in Daniel Knight's notion of vertigo, defined as "intense confusion and temporal disorientation where people interrogate their usually unquestioned relationship to pasts and futures" (2022, 37). The ever-present vertical perspective, directed toward coal, remains tethered to horizontal, linear understandings of time (Knight 2022, 39, 42), producing a tension between temporal continuity and spatial rupture.

This teetering between below and above ground, in my analysis, translates into a teetering between past and future in the present. In this article, the gap represents the space of the present. It is both a rupture - visible in the landscape and in the temporal structure of the region - and a site of connection. The disruption creates disorientation, but it also opens up room for dialogue. The present becomes a space for meaningful discussion about the past and future of the Central German Mining District.

In this paper, I treat the spatial gap in the landscape as an analytical device - one that helps to identify gaps in the present of a 'not yet' post-coal mining region. I use the figure of the gap to examine how the Central German Mining District seeks to move beyond coal without moving beyond its industrial identity; how it aims to end coal as an economic activity, yet retain coal as a cultural and historical reference point; and how it attempts to align with the green energy transition while holding on to its past. I draw on anthropological theories of time in extractive contexts (D'Angelo, Pijpers 2018; Irvine 2014; Palsson, Swanson 2016) as well as on research about processes and effects of becoming post-coal and postindustrial (Stewart 1996; Raffles 2020; Halvksz 2008; Dahlgren 2022; and others) to demonstrate how absences and disconnections are familiar phenomena in coal-affected regions, thereby contextualising my analysis of gaps. I show how ruptures and disconnections define the present of the Central German Mining District in a time of transformation.

In the first section that follows, I examine the temporal structure of the region, focusing on two key moments: 1989/90, marking the period around German reunification, and 2038, the planned end of coal mining. These two points in time frame a temporal gap that shapes how the present is experienced. The next section translates this temporal gap into its physical crystallisation point by showing how it becomes inscribed into the landscape through mining activity and the open-cast operation itself. In a subsequent ethnographic chapter, I bring together the temporal and spatial dimensions of this gap. There, I explore how space, time, and the present - conceived as a form of in-betweenness - manifest in the everyday lives of people in the mining district. The article concludes with broader reflections on the present as a temporal and spatial gap.



**Figure 1** View of the Profen open-cast mine: excavator and bird stickers on the excursion bus of the coal company. Photo taken by the Author on 7 September 2021

#### 2 **Becoming Post-Coal**

The Central German Mining District is undergoing a transformation to finally become post-coal. In June 2018, the German government established an external advisory commission to develop social and economic conditions for a definitive coal phase-out in the country. Whilst the government agreed that the German green energy transition and fight against climate change demands the end of coal consumption, the framework of such a phase-out was debated heavily. The commission consisted of experts, stakeholders and activists involved in the energy transition and coal phase-out (Hermwille, Kiyar 2022, 21 f.). Their task was to strike a balance between demands for a very early coal phase-out, in the interest of climate action, and a very late exit, in the interest of energy supply and the economic stability of the coal regions (Statitisches Bundesamt 2024; Fraunhofer ISE 2019). After eight months of negotiations, the commission published its final document in January 2019. Essentially, the commission insisted on a gradual phase-out of coal, which will be completed by 2038 at the latest. Secondly, this coal phase-out should not come at the expense of the economic structure in the German coal regions, which is why the coal regions should be provided with 40 billion euros in structural funds (Kommission Wachstum, Strukturwandel und Beschäftigung 2019). This ongoing, slow, yet final farewell to coal and the parallel investment in the mining districts is referred to as Strukturwandel (structural change), a fair transition into the post-coal future.

Although the recommendations from the commission were not legally binding, in July 2020, the German Bundestag approved all major points from the final report. Since then, what holds true for the Central German Mining District also applies to the Rhenish and Lusatian mining areas, the two other active German brown coal mining districts. The present is marked by a period of Strukturwandel in which these regions are expected to transform into a post-coal future by 2038. The present became an undefined space, which, regarding one high-ranking civil servant responsible for implementing the coal exit, should enable the "transition to a different comfort zone". Today's coal mining industry is still operating, but the post-coal industry does not yet exist. The "decline of the old parallel world will only begin in ten years", the civil servant told me. 4 The present evokes a mix of hope and uncertainty about the post-coal future envisioned for 2038 - the promise of well-paid industrial jobs in carbon-neutral markets, as well as the protection and enhancement of the mining

<sup>4</sup> Interview, 2020-05-25. Interview conducted by the Author with a senior civil servant involved in the Strukturwandel efforts in the federal state of Saxony-Anhalt. The interview took place in Halle.

district as a region worth living in - while simultaneously building bridges to the region's post-socialist past.

Until October 1990, the Central German Mining District was located in the German Democratic Republic (GDR). After the Peaceful Revolution of 1989, Germany achieved unification in 1990, ushering in years of political, social, and economic alignment with the West German model. While unification was legally achieved in 1990, social, economic, cultural, and political integration proved to be a much longer and more complex process. Rapidly introduced economic reforms were intended to harmonise living conditions in the East with those in the West (Ther 2019, 75), but those reforms took guite some time (Pagué 2021, 112 f.). It is therefore challenging to define an endpoint for the social and political unity of Germany, likely because this endpoint has not been reached and may never be attainable (Mau 2024, 37; Pates, Leser 2021, 48). The transition from East to West Germany meant a shift from socialism to capitalism, from an economy of scarcity to one of consumer overproduction, from political restriction to freedom - but for many, it also meant a shift from industrial labor to mass unemployment. The historian Philipp Ther describes how this change meant an unprecedented economic collapse for East Germany and a Schocktherapie, shock therapy (2019, 88).

The effects triggered by the fall of communism were pervasive and occurred with dizzying speed. To this day, the post-socialist transformation continues to shape understandings of time in eastern Germany, particularly when discussing events before or after reunification (vor oder nach der Wende) (Ringel 2022, 8). For the Central German Mining District, the difference between before and after reunification can be expressed in figures: 20 power stations and 15 mining sites were in operation in 1989 (MIBRAG 2019, 3), along with 59,815 workers (Statistik der Kohlewirtschaft e.V. 2022). Within just a few months, in 1990 this figure fell to 46,796 workers and again to 6,675 workers in 1995 (Statistik der Kohlewirtschaft e.V. 2022). Although these figures should be seen in relation to the negative population trend in the region, it must be emphasised that the decline was not slow, but rather a dramatic collapse within a few months and years. Today, three active mining sites, three power stations, and 1,781 workers remain (Statistik der Kohlewirtschaft e.V. 2022). During a guided tour through the Profen open-cast mine, one of the tour guides - who enables school groups, and members of the public to gain an inside view of the mining site - reflected on the political and social upheavals of the time. For many, he explained, the political transition was something they managed to adapt to; economically, however, particularly in terms of finding new employment, the shift proved far more difficult for most workers. Recalling the suddenness

of the transformation, he described it in stark terms: "In the evening, when you go to bed, you are still red; when you get up, you are black".

Behind this statement lies the profound transformation from life under socialism to life under capitalism. It implies a certain passivity among those involved, an effect that can also be attributed to the intensity and rapid pace of this upheaval. The notion of an overnight transformation reflects the temporal division commonly referred to in German as die Wende - a clear demarcation between the 'before' and 'after' of the Peaceful Revolution and reunification. Although the events of the East German Wende took place more than 35 years ago and are therefore clearly part of the region's past, they retain the power to frame the pre-Wende period as a seemingly closed chapter in history, clearly set apart from what followed. In contrast, the effects of the post-reunification period remain present and are continuously reflected upon and addressed in contemporary discourse - for example, by the tour guide at the Profen mining site.

1989 marks one edge of the gap in the temporal logic of the region. With the project of *Strukturwandel*, the other edge appears in 2038. During my research, it became clear that both energy transition practitioners and local residents near the coal industry often associated the envisioned post-coal future of 2038 with the legacy of the 1989 Wende; particularly with its negative afterlife, meaning the lasting economic and social disruptions that followed reunification. A resident of Deutzen, a mining village discussed in the next section, expressed scepticism about the promises of Strukturwandel, saying that these were "exactly the kind of dreams" widely spread after reunification.<sup>5</sup> I use this quote to illustrate that the transformation into the 2038 future is linked to the legacy of the 1989 past. As an anthropologist, I am concerned with the space in between, the present, which in this process of Strukturwandel became undefined; 'no more' 1989 but 'not vet' 2038.

The inhabitants of the Central German mining district must endure and make sense of a present that is encapsulated between the seemingly stable pillars of 1989 and 2038. The sociologist Till Hilmar described the 1990s in eastern Germany as a time of "great enthusiasm" yet also "a time of rupturing economic change". Consequently, Hilmar sees the "need for healing narratives, for cultural scripts that can help restore peoples' sense of dignity and deservingness in market society" (2023, 302). The political process of *Strukturwandel* might allow for such healing narratives in the present, enabling the past and the future to coexist and be acknowledged. However, this reconciliation attempt can only be initiated because past and future stand in such closeness within the

post-coal transformation. This closeness, in turn, becomes possible because the present is perceived as the time in between. I describe this condition of inbetweenness in the words of Kathleen Stewart: "where things are neither fully present nor absent but linger and echo in a simultaneous lack/excess" (1996, 67). For such a condition of inbetweenness, Hugh Raffles offers the term "unconformities", describing them as "holes in time that are also fissures in feeling, knowledge, and understanding; holes that relentlessly draw in human investigation and imagination yet refuse to conform" (2020, 6). Raffles locates these unconformities in layers of rock and soil: from these engagements with the materials beneath the earth, he speaks of disorders in the present that, in turn, generate new temporal meanings.

Both Raffles and Stewart refer to phenomena rooted in vertical extractivist practices - Raffles through interactions with diverse geological formations, and Stewart through coal mining in West Virginia. It is no coincidence that such temporal entanglements occur in a mining district. The vertical practice of breaking open the horizontal landscape also disrupts the linear conception of time as a sequence of past, present, and future. In the Central German Mining District, the temporal markers of the pre-turn past of 1989 and the post-coal future of 2038 form an echo within the present. This echo becomes ethnographically tangible and can be rendered in its effects through the spatial manifestation of the gap as a vertical intervention in the landscape. Mining operations, as Jamon Halvaksz writes, "point to time as subjective experiences". Mines possess a physical presence that "folds the past into the present" and, through their aesthetic qualities, have the capacity to transform the landscape (2008, 22). Lorenzo D'Angelo and Robert J. Pijpers discuss "various material and immaterial inscriptions and materialisations of past, present, and future dynamics" in mining regions, and accordingly call for an analysis of the "dynamics of extraction itself" within a temporal framework (2018, 217).

Regardless of the industry's current activity, life in the rhythm of coal requires confronting a post-coal future. Huw Beynon and Ray Hudson describe the decline of the mining industry in the United Kingdom, noting that since the mines have closed, things have changed for the worse (2021, 251). They argue that mining areas have long been defined and marked as distinct, separate places (Beynon, Hudson 2021, 15, 64). In the name of the coal miners in Wyoming in the US, Jessica Smith asks: "What happens when gifts are no longer desired by the receiver?" (2019, 99). When Hugh Raffles mentioned that the era of coal in Spitsbergen might be coming to an end, those sympathetic to the resource interrupted to ask, "Is it?" (2020, 155). Reflecting on Australia's vast coal mining industry, Thomas Hylland Eriksen noted that "guitting is hard" (2016, 37). Also writing about

Australia, Kari Dahlgren describes how the end of coal mining leaves behind voids, which she translates into a symbol of emptied opencast mines in Australia's Hunter Valley. In her work, final voids are understood as a "permanent scar on the landscape", a "reminder of destruction and loss", and a "metonym of the emptied futures that characterise the contemporary moment" (2022, 538). From this image of the landscape, Dahlgren notes, emerges not only a sense of loss but also potentials for future development (Dahlgren 2022, 550 f.).

The Australian voids correspond closely to the gaps identified in the Central German Mining District. In both Australia and eastern Germany, the tension between an active and declining mining industry has produced a coexistence of presence and absence, past and future - made visible in the landscape through the remains and realities of open-cast mining. In Germany, however, mining companies are legally obligated to restore land scarred by extraction. When this was no longer possible following the political transformation and the bankruptcy of the mining combines of the socialist planned economy, a government-funded agency assumed responsibility for eliminating the resulting voids. While Dahlgren acknowledges that such voids "can also serve as a base for potentiality" (538), she primarily emphasises their destructiveness (546), and vulnerability to false hopes - "for the void is most cheaply filled with false promises" (Dahlgren 2022, 552). A sense of emptiness permeates both the void and the gap, echoing Dzenovska's framing of the concept as a demographic and socio-political phenomenon in rural Latvia (2020). However, the idea of the gap as a lens for the present goes beyond emptiness and destruction. In contrast, by using the gap as a lens for the Central German Mining District, I aim to shift the focus from emptiness to coexistence - to the layered temporalities embedded in the local mining history and their ongoing negotiation (Luning 2018, 283). The following section addresses this very demand, demonstrating how this temporal setting, and the present as a gap, are inscribed into the landscape of the Central German Mining District.

#### 3 **Cracking Histories and Futures of Coal**

The surface of the Central German Mining District has been cracked multiple times, and the landscape is full of gaps. However, most of those gaps have not endured; instead, they have been deliberately filled or flooded as part of landscape transformation efforts. Occasionally, sinkholes appear as legacies of deep brown coal mining, which was replaced by open-cast operations in the early twentieth century. With the advent of large-scale open-cast mining equipment, this dangerous and costly form of extraction became obsolete (Baumert 2023, 131; Berkner 2016, 287). Today, those sinkholes have

grown over and are filled with vegetation. The fact that these are former open-cast mines is often no longer apparent. The process of landscape change after mining is most noticeable where mines became lakes (Pampus 2024, 87 f.). Initially, this transformation occurred by accident. Once the coal was extracted, the mining sites of the early twentieth century were left abandoned, and slowly, the groundwater rose until a deserted gap in the landscape turned into a lake. The danger of landslides was a significant concern during the second wave of turning abandoned open-cast mines into lakes. After German unity and the sudden decline of the mining industry. as well as after decades of resource exploitation, hard labour, and environmental damage, there was a need to restore the land.

In contrast to nineteenth-century mining operations, giant excavators have been consuming the land and soil, creating gaps of unprecedented size and scale. Whilst occasionally an industrial afterlife for those sites was achieved, the public mood was to have the sacrifices of coal mining followed by the beauty of a lake. Filling up the gaps with groundwater and river water was a lengthy process, and preparing the ground and the embankments was challenging. Eventually, however, a former mining area turned into a land of lakes (Regionaler Planungsverband Westsachsen 2019). Many gaps of the past have been filled, and verticality seemingly reasserted. While the rupture of the surface has been covered, now those lakes mark the landscape, as the lingering trace of an era that has ended, no longer constituting a present condition but rather a historical phase. These ongoing processes become especially tangible in Profen, a site where the gap has not yet been reclaimed, and where extractive presence still shapes the land.

A lorry converted into a bus takes visitors into the open-cast mine, deeper and deeper along dusty paths. At first, the coal is barely visible; instead, the eye is drawn to shades of grey and yellow. In the depths of the mine, layers of earth reveal themselves through shifting tones - muted greys, dusty browns, deep blacks, and ochre yellows - each marking a transition from loess and gravel to sand, clay, and finally the dark seam of brown coal. Toward the slopes and the rehabilitated edges of the mine, shades of green start to blend into the scene. The journey continues deeper into the mine, until the vehicle comes to a stop on a coal-covered surface. To the left, the exposed coal seam cuts through the terrain; behind, a conveyor system transports the coal away; and to the right stands a gigantic excavator. Several metres below ground level, the coal underfoot is millions of years old. The excavator looms nearby, immense and unsettling in its scale.



Figure 2 Profen mining site, a gap in the landscape of the Central German Mining District.
Photo taken by the Author on 9 May 2020

Nevertheless, the atmosphere is peaceful. The excavator is not in operation at the moment; otherwise, we would not be able to get so close. There is only some mining noise in the background. The clear view of the sky disguises how deep we have travelled into the opencast mine. Our guide, whom I introduced earlier, put it this way: "We have been travelling into a 20-million-year-old underground". 60 people work in open-cast mining per shift, in four shifts, which means 240 workers in the Profen mine, plus the same number in Vereinigtes Schleenhain. So, around 500 people who work in the coal industry and call themselves miners. Throughout his tours, the guide offers sharp and often nuanced reflections on the state and future of the mining district. About the coal, the guide said, "Inside here is the sun that created the coal, and when we burn the coal, we set the sun free again". With this metaphor, he subtly questioned the energy transition, implying that coal might not be more harmful than solar energy. During another tour a few weeks later, he described the Central German Mining District as 'not yet' post-coal but 'no more' truly dependent on coal either, calling it "the last remnant of what used to be a large mining district", a remark that implicitly devalues a still-functioning mining industry and, by extension, the entire region.

The decline of the mining industry is one legacy of German reunification, yet the continued existence of parts of the industry is another side of that legacy. In southern Saxony-Anhalt and northern Saxony, industry continues to play a major role, with the chemical sector, though considerably downsized after German unification,

deemed suitable for privatisation (Mühlhaus 2020), alongside active coal mining operations. Moreover, the decline of the mining industry did not begin in 1989. The height of coal mining in the Central German Mining District was in 1963, when the region produced 145,500 million tons of coal, making it the most important German mining district (Statistik der Kohlenwirtschaft e.V. s.d.). Thereafter, production numbers fluctuated but never regained those heights.

The understanding of coal and mining as matters of the past is not only inscribed in the landscape, but also reflected in the everyday realities of the region. A campaign sticker from the environmentalist group Ende Gelände (a movement that has been protesting against fossil fuels by disrupting and blocking open-cast mines since 2015) proclaimed that "Coal is so nineteenth century". 6 Meanwhile, "Ideas are the new Coal" was the campaign slogan of a Strukturwandel innovation hub. At a discussion forum on the future of Strukturwandel in the small village of Deutzen, an elderly gentleman reminisced about the past, saying that coal was "the engine here in the region", "coal has reigned, let me put it that way". 8 For him, as for many of my interlocutors, it was important to locate coal in the past and pinpoint its decline in the subsequent years of the German post-Wende period. The gentleman said he could mention 30 things off the top of his head that have improved after reunification. Nevertheless, he mainly lamented the loss since reunification: "Deutzen had everything, schools, kindergartens, after-school care centres, churches, a cultural centre. And nothing is left of all these, except a nice ice cream parlour".

The landscape of the Central German Mining District is shaped by centuries of extraction. For generations, mining activities have broken through the earth, creating a vertical connection to the region's underground resources - copper shale, hard coal, and above all, brown coal. Until well into the 2030s, the southern part of the district remains shaped by active open-cast mining. Here, past and future collide - both present, both inscribed into the landscape. The example of Deutzen makes this temporal entanglement especially tangible. At the public event on the region's future, the older man drew an analogy that reached back to the hopes and sacrifices of the post-reunification years. His perspective underscored how today's transformation is inseparable from the personal and collective commitments made in the 1990s. Fittingly, the discussion took place in the Catholic Church of Deutzen, built in the early twentieth century for migrant miners in an otherwise largely non-religious region. Just a few hundred meters away lies mining site Vereinigtes Schleenhain - one of the district's

- 6 Halle, 2020-11.
- 7 Zeitz. 2021-08.
- **8** 2020-07-22.

last remaining open-cast mines. In places like this, where the cracking of the surface is still ongoing, the landscape itself is absent. It is here that the collision of past and future most clearly defines the present of a mining district in transformation.

In the Central German Mining District, the vertical perspective into the ground opens only where mining is still active. This is crucial, as it directly links the phenomenon of temporal confusion to ongoing mining activity and marks this moment as a transitional phase: once the coal is exhausted, the hole will be filled. For now, however, it enables an engagement with both past and future. In this sense, the open-cast mines also correspond to what Alice Mah describes as post-industrial sites that have "yet to be transformed" (2012, 6). Here too, "violent tensions between the past, present, and future" emerge (Mah 2012, 69), yet not after but during the ongoing operations of industry. The following section examines ethnographically how this physical and temporal gap creates multitemporal perspectives on the region - perspectives that emerge not despite, but because of, its fractured surface.

## Großgrimma: What is Left of a Place 4 that No Longer Exists?

From the edge of the Profen mine, where the surface fractures begin, the path now leads down, closer to the processes unfolding below. Standing within mining site Profen, past and future can hardly be separated, and the old oak tree seems to confirm this temporal duplicity. It stands grand and looks marvellous. The tree itself would probably impress in most other urban or rural settings. However, mining site Profen, now home to the oak tree, is neither urban nor rural. The tree is surrounded by dust and dirt, yet it was once part of the physical infrastructure of the village Großgrimma. The devastation of Großgrimma began in 1995 and ended in 1998. Today, the boundaries of the village form part of the final section of the Profen mining site where coal is yet to be excavated. Since the 1930s, large-scale open-cast mines have been established in the region. In 1941, the Profen Sachsenfeld open-cast mine was opened (Regionaler Planungsverband Westsachsen 2000, 22 f.). Today, the land has been cleared of nearly all remaining human life, and preparations for the hunt for coal are soon to begin, before such mining operations are expected to end here and in Germany in the mid-2030s. As the excavators have not yet moved into this part of the open-cast mine, the oak tree still stands.9

<sup>9</sup> Locally, the oak is known as the oak of Grunau, a former district of Großgrimma. For simplicity, this article refers to it as the oak of Großgrimma (Recarbo 2015).

Until today, the resettlement of Großgrimma is remembered and discussed as a story of success, particularly in Hohenmölsen, the town that became home to most of Großgrimma's former residents. For the inhabitants of Großgrimma, the survival of mining in this part of the Central German Mining District after reunification meant that their village had no future. When they learned, however, that it would take at least another thirty years until the coal underneath the village would be mined, they collectively decided to negotiate an early resettlement with the mining company. They chose change in the present over passively awaiting future destruction - a choice often framed as such by those involved in the resettlement process. The resettlement history of Großgrimma was indeed rather special. Earlier resettlements occurred during the GDR era, and they benefited the resettled people very little. Only a few of the highrise buildings common in the former GDR stand in Hohenmölsen today, but those that do were used to resettle entire villages that had been relocated before reunification. The resettlement of the 800 residents of Großgrimma was mandatory as well. Eventually, people would have to give up their village. However, the relocation took place post-reunification. In a democratic state, many things were negotiable, and the compensations offered were decent. The resettlement is estimated to have cost the coal company MIBRAG nearly 100 million euros, with an additional 10 million euros provided by public authorities (Schierholz 2023). Anyone who had to give up their flat, house or land received a brand-new replacement or financial compensation. For the replacement buildings, a new settlement was established in Hohenmölsen, located am Südhang, a slope with a view over the surrounding countryside. Alongside the new housing estate, a new public square - the Square of the Miner - was also established in Hohenmölsen, featuring a community centre, a hotel, and a school with a sports hall. These investments are highly valuable for this relatively small rural municipality and vividly illustrate, in one place, how mining has both caused suffering and generated prosperity.

The resettlement took place after German reunification, but long before the major public debates around climate change and the coal phase-out became prominent. At the time, few questioned whether the demolition of Großgrimma was necessary to access the coal beneath it. Today, the unity between the village's former residents, local political figures, and the coal industry is often praised, especially by those dedicated to preserving the heritage of Großgrimma. The coal industry was not only involved financially in supporting the new beginnings of Großgrimma's residents in Hohenmölsen. Additionally, the mining company MIBRAG agreed to cover the costs of relocating the church in Großgrimma. The idea was later deemed unnecessary by most of the actors involved and was eventually dismissed. Instead, the money promised for the relocation

of the church was used to establish the Kulturstiftung Hohenmölsen heritage foundation, which commemorates the village of Großgrimma and preserves its memory and history to the present day. The loss of Großgrimma was a consequence of the coal industry, as was the new start in Hohenmölsen. You give, and you take; that is the way things are here with coal, as Cordula from the Kulturstiftung Hohenmölsen said to me: "The whole region depends on it; you live with it". 10 On another occasion, the mayor of Hohenmölsen, Andy Haugk, has put it in very similar terms: "The closer people live to the open-cast mine, the more relaxed they are about the issue of coal". Not only jobs but also social infrastructure exist thanks to mining. Moreover, concerning the villages that had to be devastated, the mayor was convinced: "People knew that". "We are at peace with coal mining". 11



 $\textbf{Figure 3} \quad \text{Formerly Großgrimma: old oak tree in the foreground, mining preparatory work in the background.}$ Photo taken by the Author on 25 September 2023

The guotes by Cordula and the mayor exemplify the positive mood surrounding the resettlement of Großgrimma. Whilst coal might take land, a village, and a home, it also provides labour, pride, and wealth - the ever-true reciprocity of coal, which those living close to the mines know only too well. In the summer of 2023, a ceremony

- 10 Name changed. Interview conducted in Halle, 2020-03-10.
- 11 Interview conducted in Hohenmölsen, 2020-06-16.

marking the 25th anniversary of the resettlement process was held at the community centre in Hohenmölsen, to which former residents and those involved in the resettlement were invited. At the event, the resettlement was praised as a voluntary act carried out in the service of the common good and "without any externally visible conflict", as one speaker remarked. The mood of the event was cheerful and celebratory, with local children singing the Steigerlied, the German miner's anthem - a symbolic act connecting present generations to their mining heritage. The sharing of anecdotes and communal meals fostered a sense of continuity and belonging, even though the village of Großgrimma itself no longer exists.

This celebration was meant to show that Großgrimma belongs to the past, but the memory of the place is kept alive. In this way, Großgrimma continues to live on in Hohenmölsen despite the presence of coal. Conversely, Hohenmölsen lives from and with coal. The narrative of the resettlement of Großgrimma as a difficult but collective and ultimately successful undertaking is intended to highlight this harmony of living with coal. The sacrifices made by generations living with and from coal are often framed as worthwhile. Indeed, especially in Hohenmölsen, the Profen opencast mine and the resettlement of Großgrimma have contributed to creating a solid social infrastructure for the town. Yet, this narrative coexists with enduring tensions - the impact on the landscape, loss of homeland, and the vast amounts of CO2 emitted by coal power generation temper the sense of triumph. The acknowledgment that these sacrifices have "paid off" thus encapsulates both gratitude and pragmatic acceptance.

Still, the past occasionally interrupted the celebration. When a former resident of Großgrimma was asked whether she now, after 25 years, feels at home in Hohenmölsen, she confidently replied, "Oh yes, we feel at home in Hohenmölsen, but sometimes we still think of our *heimat*". This ambivalence becomes even more apparent in the town church of Hohenmölsen. 12 In front of the church, the bell from the former church in Großgrimma is displayed; inside, a memorial space has been created with wooden plagues commemorating all the churches lost to resettlement in and around Hohenmölsen. I am visiting the church as part of an event organised by the Kulturstiftung Hohenmölsen, with the event focusing on remembering the abandonment of Großgrimma and the relocation of its residents. A local church representative offers a brief introduction to the building before turning to the history of mining-induced relocations - the reason for our gathering. A former local politician involved in the

<sup>12</sup> Discussion forum at St Peter's Town Church in Hohenmölsen as part of the Summer Academy of the Kulturstiftung Hohenmölsen, 2020-09-15.

resettlement of Großgrimma and a former resident of the village share their memories of the process.

The resettlement story has been presented as a model case, featuring sincere community participation, active support from both the municipality and the mining company, substantial financial compensation, and an overall improvement in living standards for those affected. And yet, in the pale light of the church interior, cracks begin to show in the polished narrative - another story, quieter but no less present, begins to emerge. It surfaces as the former resident, a teacher at the local grammar school, takes the floor. She recounted the familiar story of a hard but fair resettlement. Long after she had left Großgrimma, the village was slowly dismantled. Every day, less remained visible. The complete disappearance of the village was accepted and anticipated. However, from one day to the next, the church was demolished, and the loss of this landmark weighed heavily on her. That memory interrupted her previously light-hearted speech; her voice faltered and tears welled up. Later, she regained composure, but for a brief moment, the past forced its way into the present. Her account does not contradict the official narrative of peaceful resettlement, but it complicates it. "I probably would never have stayed there anyway", the teacher reflected. The resettlement was a success, yet the sense of a lost homeland remains.

This interplay of memory, loss, and enduring presence finds its material counterpart just a few kilometers away at the former site of Großgrimma, now part of the active Profen open-cast mine. "This was my childhood", said the mayor. The place evokes memories, and the old oak tree brings them to life. I asked the mayor of Hohenmölsen if he could still orient himself in this unreal and vanished landscape. "Yes, by this oak tree" was his response. To me, the oak tree was as fascinating as it was disturbing, since it evoked a distant past in the present. Moreover, the oak tree and the surrounding mining site also provoked an equally absent future. The apparent near future was to see the oak tree's end, as excavators approached to mine the coal beneath it. However, temporal scales do not always align. The tree could, in theory, become coal - through the process of carbonisation. But this transformation, from wood to peat to brown coal and to hard coal, would take millions of years.

Anthropologist Richard Irvine urges us "to find ways of understanding the interrelationship between human and geological temporalities" (2014, 170). D'Angelo and Pijper similarly highlight the environmental consequences of extractivism as both are rooted in deep time and extend far into the future (2018, 216). And Palsson and Swanson call for attention to "articulations of biographies and processes in the longue durée" (2016, 165). Yet even this longue durée manifests in the present. When visiting the Profen mine, the tour guide spoke of descending into "millions of years of history". A coal industry

representative once jokingly called coal a "renewable resource". All these examples, I argue, reveal how deep time is mobilised in the present. Even the deepest past only becomes meaningful through its articulation in the present.

In this present, coal mining remains active, yet the sacrifices of past mining and the uncertainties of a post-coal future heavily shape the present. "There is not too much more to coal", 13 I have heard from a community representative in Deutzen. He was expressing the sense that coal is losing its significance and value, despite the open-cast mine still being active in the direct neighbourhood. An employee representative at the coal mining company said that his company is "in its core business. a run-down company". 14 Meanwhile, another employee representative summarised, "If you come up with projects that have the word coal written on them, you can turn around on your heel and leave". 15 These statements highlight the temporal complexity in which the Central German Mining District finds itself: a present defined by coal that fades into the background, overshadowed by the legacy of its past and the uncertainties of its future. Coal mining is thus a subject that shapes the past, present, and future of the region. However, through the lens of what is first a landscape phenomenon and ultimately a temporal one, this perspective shifts. In the depths of the open-cast mine, by the towering, ancient oak tree, it becomes clear how past and future coexist within the present. As the examples from Hohenmölsen and Deutzen have shown, glimpses of the past and projections of the future come into focus. This projection occurs, on the one hand, at the expense of the present itself; yet, on the other hand, it establishes a dialogue between the coal-related past and the post-coal future.

#### 5 Conclusion: Gaps as a Prism for the Present

In this article, I have referred to gaps as physical phenomena in the landscape that translate into temporal phenomena; defining life in the Central German Mining District on its path toward a post-coal future. Located between a past defined by socialist modernity and fossil economies on the one side and a post-fossil energy landscape and society on the other, the present becomes a gap. Kathleen Stewart captured this relationship between past and future in her ethnography about the Appalachian region in the US, likewise a region defined by the legacy of coal mining: "The past, like the future,

- **13** Cited at a meeting of the local council in Deutzen on 2020-10-21.
- **14** Cited during an excursion to the Profen open-cast mine, 2021-09-07.
- 15 Cited at a closed event of the Rosa Luxemburg Foundation in Hohenmölsen, 2020-10-27.

comes and goes, drifting in and out of vision, but it haunts things until there is no telling what might happen and what people might do" (1996, 116). Consistently throughout her book, Stewart points to gaps as an undefined yet influential figure to describe this rugged relationship between what was, what is and what will come: "Imagine a world that dwells in the space of the gap, in a logic of negotiation, surprise, contingency, roadblock, and perpetual incompletion" (Stewart 1996, 17).

I argue that this logic is, first of all, of a temporal nature. I build upon the making and unmaking of temporal orientation in the present because the time of resource extraction is manifold (D'Angelo, Pijpers 2018, 216). Coal mining occurs in the present, but it also creates opportunities for the past and the future to intervene in the present. For the Central German Mining District, tales of the past and future promises are visible as a present disorientation. They become a disruption in the order of time and this disruption must be regarded as a disorientation that discloses and, therefore, defines the present and has practical implications for everyday life in the Central German Mining District. I have illustrated the implications of this disorientation through ethnographic vignettes from within and near the open-cast mines of the mining district.

This disorientation, illustrated by the concept of the gap, only applies to communities that live near and are characterised by coal mining. The gap, therefore, is not all-encompassing. It is a condition to be seen or unseen, referred to or ignored, embraced or endured. Active coal mining in the Central German Mining District is now limited to only a few locations. Beyond these sites, open-cast operations are barely visible, and the end of coal extraction is foreseeable. At the same time, the entanglement of multiple temporalities remains relevant, though it must be understood in relation to broader regional dynamics. Other employers now exist in and around Hohenmölsen; the town has absorbed the loss of Großgrimma. In nearby Deutzen, however, the decline of the coal industry is felt so strongly that the community, despite its geographic proximity to the mining areas, has distanced itself from coal altogether. This dialectic is not only visible in how people imagine a post-coal future but also in how they relate to the post-reunification past. The legacy of German reunification lingers like a background noise in the present - still relevant, and frequently a subject of political debate. Yet it is just one factor among many, perceived locally as more or less significant depending on the context. The condition of the gap can therefore be activated or ignored - both by actors in the field who seek to recalibrate the relationship between past, present, and future, and as an analytical lens through which to understand the present.

Gaps act as an inherent logic, a potential backdrop in everyday life in the mining region. Gaps, therefore, are always full of meaning and should therefore not be closed but endured (Fortun 2012, 452, 458). The aim of this article was to illustrate the significance and presentday nature of the gap for the Central German Mining District, I have argued for a reading of a mining site beyond its use for coal mining. I have argued that the mining site marks an absence, land missing, a gap in between. The gap brings future potentials and past legacies into conversation; in the present, it allows for the past and future to coexist. As much as the gap disrupts, it connects the streamline of history, and thus enables a dialogue between the end of the coal mining industry and the post-coal future.

The gap becomes a depiction of a present in transformation. To think with and through gaps is to break with horizontal readings of my field. In this paper, I have focused on how the anticipated end of coal mining is shaping the Central German Mining District. However, I did not focus so much on coal pasts and post-coal futures. Instead, the idea and physical reality of the gap helped to uncover how those coal pasts and (post-)coal futures shape the present of the Central German Mining District. Without visible gaps in the landscape, it is harder to have a dialogue between past, present, and future. The gap represents a space of possibility in which past, present and future enter into dialogue with each other. However, as I have shown, the gap can also mean that both past and future overshadow the present.

This paper is a guest to take gaps into account and take the disorientation they produce seriously - especially but not exclusively in times of the green transformation. To face the future as a time of becoming post-coal can provoke or foreclose debates about the past. In the present, those contradictions and misplacements are spelt out. The paper aimed to identify, understand, and address gaps in the social life of a *not yet* post-mining region, as gaps are a powerful reality in the present Central German Mining District.

## **Bibliography**

Baumert, M. (2023). "... und dass die Kippe, die zurückbleibt, sie wieder ernähren muss. Rekultivierungsforschung in der DDR und ihr heutiges industriekulturelles Potenzial". Kellershohn, J. (Hrsg.), Landesgeschichtliche Beiträge Band 1: Der Braunkohlenbergbau im 20. und 21. Jahrhundert – Geschichte – Kultur – Erinnerung. Halle: Landesamt für Denkmalpflege und Archäologie Sachsen-Anhalt -Landesmuseum für Vorgeschichte, 123-42.

Berkner, A. (2021). "Bergbaubedingte Umsiedlungen in Mitteldeutschland: Spurensuche zu den "verlorenen Orten". Mitteldeutsches Magazin, 1(1), 22-4.

Berkner, A. (Hrsg.) (2016). Auf der Straße der Braunkohle: Exkursionsführer. Leipzig: Pro Leipzig.

Beynon, H.; Hudson, R. (2021). The Shadow of the Mine: Coal and the End of Industrial Britain. London: Verso.

- Dahlgren, K. (2022). "The Final Voids: The Ambiguity of Emptiness in Australian Coal Mine Rehabilitation". *Journal of the Royal Anthropological Association*, 28, 537-55. https://doi.org/10.1111/1467-9655.13707.
- D'Angelo, L.; Pijpers, R.J. (2018). "Mining Temporalities: An Overview". *The Extractive Industries and Society*, 5, 215-22. https://doi.org/10.1016/j.exis.2018.02.005.
- Dzenovska, Dace. (2020). "Emptiness: Capitalism without People in the Latvian Countryside". American Ethnologist, 47(1), 10-26. https://doi.org/10.1111/amet.12867.
- Eriksen, T.H. (2016). Overheating: An Anthropology of Accelerated Change. London: Verso. Fraunhofer ISE, Fraunhofer Institut für Solare Energiesysteme ISE (2019). 33% weniger CO2-Emissionen durch Brennstoffwechsel von Kohle auf Gas. https://tinyurl.com/4y5c596j.
- Fortun, K. (2012). "Ethnography in Late Industrialism". *Cultural Anthropology*, 27(3), 446-64. https://doi.org/10.1111/j.1548-1360.2012.01153.x.
- Halvaksz, J.A. (2008). "Whose Closure? Appearances, Temporality, and Mineral Extraction in Papua New Guinea". *Journal of the Royal Anthropological Institute*, 14, 21-37. https://doi.org/10.1111/j.1467-9655.2007.00476.x.
- Hermwille, L.; Kiyar, D. (2022). "Late and Expensive: The Political Economy of Coal Phase-Out in Germany". Jakob, M.; Steckel, J.C. (eds), *The Political Economy of Coal: Obstacles to Clean Energy Transitions*. Milton Park: Taylor & Francis, 21-39.
- Hilmar, T. (2023). "Restoring Economic Pride? How Right-Wing Populists Moralise Economic Change". *Journal of Contemporary European Studies*, 31(2), 291-305. https://doi.org/10.1080/14782804.2022.2056729.
- Irvine, R. (2014). "Deep Time: An Anthropological Problem". Social Anthropology/ AnthropologieSociale,22(2),157-72.https://doi.org/10.1111/1469-8676.12067.
- Knight, D. (2022). "Vertigo and Urgency: Affective Resonances of Crisis". Social Anthropology/Anthropologie Sociale, 30(4), 37-53. https://doi.org/10.3167/ saas.2022.300404.
- Kommission Wachstum, Strukturwandel und Beschäftigung (2019). Abschlussbericht. https://bmwi.de/Redaktion/DE/Downloads/A/abschlussbericht-kommission-wachstum-strukturwandel-und-beschaeftigung.html.
- Luning, S. (2022). "Underground". D'Angelo, L.; Pijpers, R. (eds), *The Anthropology of Resource Extraction*. London: Routledge. 185-201.
- Luning, S. (2018). "Mining Temporalities: Future Perspectives". *The Extractive Industries and Society*, 5, 218-86. https://doi.org/10.1016/j.exis.2018.03.009.
- Luning, S.; Pijpers, R.J. (2022). "Drawing on Words and Images: Collaborations in the Anthropology of the Underground". *Anthropology and Photography*, 16, 1-22.
- Mah, A. (2012). *Industrial Ruination, Community, and Place: Landscapes and Legacies of Urban Decline*. Toronto: University of Toronto Press.
- Mau, S. (2024). Ungleich vereint: Warum der Osten anders bleibt. Berlin: Suhrkamp.
- MIBRAG, Mitteldeutsche Braunkohlengesellschaft mbH (2019). 25 Jahre MIBRAG: 1994-2019. Zeitz. Company brochure; available at Archive Schiedlowski.
- MIBRAG (2025). Tagebau Profen. https://www.mibrag.de/geschaeftsfelder/bergbau/tagebau-profen/.
- Schierholz, A. (2023). "Glück auf, die Bagger kommen". *Mitteldeutsche Zeitung*, 21. September, 3.
- Mühlhaus, C. (2020). "Die Privatisierung des Kombinates VEB Chemische Werke Buna aus Sicht eines Beteiligten". Merseburger Beiträge zur Geschichte der chemischen Industrie Mitteldeutschlands, Sachzeugen der chemischen Industrie e.V., 25(2), 7-48.
- Overton, T.; Harle, M. (2024). John Berger: The Underground Sea. Edinburg: Canongate.

- Palsson, G.; Swanson, H.A. (2016). "Down to Earth: Geosocialities and Geopolitics". *Environmental Humanities*, 8(2), 149-71. https://doi.org/10.1215/22011919-3664202.
- Pampus, M. (2024). "Life in the Ruins of a Post-Mining Landscape: The Co-Constitutive Character of Human and Non-Human Action in Land Restoration". *kritisk etnografi Swedish Journal of Anthropology*, 7(1), 81-100. https://doi.org/10.33063/DIVA-544572.
- Pates, R.; Leser, J. (2021). The Wolves Are Coming Back: The Politics of Fear in Eastern Germany. Manchester: Manchester University Press. https://doi. org/10.7765/9781526150233.
- Paqué, K. (2021). "Die Wirtschaftsstrategie der deutschen Vereinigung: Eine Zwischenbilanz nach mehr als 30 Jahren". Kowalczuk, I.; Ebert, F.; Kulick, H. (Hrsgg), (Ost)Deutschlands Weg: 35 weitere Studien, Prognosen & Interviews. Teil II Gegenwart und Zukunft. Bonn: Bundeszentrale für politische Bildung, 111-20.
- Raffles, H. (2020). The Book of Unconformities: Speculations on Lost Time. Portland: Verse Chorus Press.
- Recarbo (2015). Die Umsiedlung der Bäume von Grunau. https://www.recarbo.de/2021/01/12/grunau-lebt-2/.
- Recarbo (2025). Umgesiedelte Orte. https://www.recarbo.de/wandelgaenge-mondsee/umgesiedelte-orte/.
- Regionaler Planungsverband Leipzig-Westsachsen (Hrsg.) (2019). *Mitteldeutsche Seenlandschaft: Gewässerkatalog 2019-2021*. Leipzig: Regionaler Planungsverband Leipzig-Westsachsen.
- Regionaler Planungsverband Westsachsen (2000). *Braunkohlenplan Tagebau Profen*. Leipzig: Regionaler Planungsverband Leipzig-Westsachsen.
- Ringel, F. (2022). "The Time of Post-Socialism: On the Future of an Anthropological Concept". Critique of Anthropology, 42 (2), 191-208. https://doi. org/10.1177/0308275X221095930.
- Smith, J.M. (2019). "Boom to Bust, Ashes to (Coal) Dust: The Contested Ethics of Energy Exchanges in a Declining US Coal Market". *Journal of the Royal Anthropological Institute*, 25(1), 91-107. https://doi.org/10.1111/1467-9655.13016.
- Statistik der Kohlewirtschaft e.V. (2022). Beschäftigte nach Revieren. https://kohlenstatistik.de/downloads/braunkohle.
- Statistik der Kohlenwirtschaft e.V. s.d. *Braunkohlenförderung*. https://kohlenstatistik.de/downloads/braunkohle.
- Statistisches Bundesamt (2024). Bruttostromerzeugung in Deutschland für 2019 bis 2023. https://www.destatis.de/DE/Themen/Branchen-Unternehmen/Energie/Erzeugung/Tabellen/bruttostromerzeugung.html.
- Stewart, K. (1996). A Space on the Side of the Road: Cultural Poetics in an 'Other' America. Princeton: University Press.
- Squire, R.; Dodds, K. (2020). "Introduction to the Special Issue: Subterranean Geopolitics". *Geopolitics*, 25(1), 4-16. https://doi.org/10.1080/14650045.2 019.1609453.
- Ther, P. (2019). Das andere Ende der Geschichte. Über die Große Transformation. Frankfurt: Suhrkamp.