

Haldenschafe
Birkenwäldchen
Abraum
Restpflanzen
Gessenwiese
Luftschacht

(Susanne Kriemann and) Grit Ruhland

A meander line defines the margins of a surveyable tract. As such it walks the edge of something detectable, like a lake, balancing on the tipping point between lake versus not-lake, outlining a body in space. This form of meandering carries with it a gauging sensibility, which notices the environment in line with a set of determined aspects. As much as meandering might entail aimlessness, it also pertains to a certain weaving of temporalities, conjoining the physical with cognitive trailings.

With the express aim of encountering a place side by side, Susanne Kriemann organized a walk on 6 June 2019 that would parallel the paths of a number of individuals invested in varying aspects the post-uranium-mining landscape. Frank Weißflog¹, Dietrich Berger², Grit Ruhland³, Georg Büchel⁴, Daniel Mirgorodsky⁵, Mika Schwarz⁶, and Astrid Kirchhof⁷, each in their own right, could claim a vital understanding of these sites' particularities. For years they have been striving in parallel to achieve decontamination, control, memory, and a biological, geological, or cultural understanding of the first phases of what a society based largely on resource extraction has termed the *Folgelandschaft* (or following landscape, especially in relation to post-mining territories) and *Ewigkeitsschäden* (literally, eternal damages).

After the walk, Susanne Kriemann and Grit Ruhland compiled a list of relevant terms, from which six terms were randomly chosen that would form the nodal basis of their writings: *Abraum* (excavation material some-times translated as overburden), *Birkenwäldchen* (small birch forest), *Gessenwiese* (Gessen meadow), *Haldenschafe* (waste-rock-pile or slag-heap sheep), *Luftschacht* (airshaft), *Restpflanzen* (leftover weeds). Ruhland's text includes excerpts from her on-site research diary.

The *Haldenkühe* uranium-mining-waste-heap cows, stand in the *Neue Landschaft* (New

1 Frank Weißflog, former Wismut miner and current director of the visitors' mine, Besucherbergwerk Zinnkammern Pöhla e.V.

2 Dietrich Berger, botanist, associate lecturer, Department of Applied Geology, Friedrich Schiller University Jena.

3 Grit Ruhland, artist.

4 Prof. Dr. habil. Georg Büchel, (now former) Chair for Applied Geology, Friedrich Schiller University Jena.

5 Dr. Daniel Mirgorodsky, Scientific Associate, Department of Applied Geology, Friedrich Schiller University Jena.

6 Mika Schwarz, artist and production assistant to Susanne Kriemann.

7 Dr. Astrid Mignon Kirchhof, research group leader in the project "Visualized Contemporary Witnesses and Multimedia Memory. Uranium miners in East Germany 30 years later" at Humboldt University of Berlin, Department of History, and Saxon Academy of Science and Humanities.

Landscape), a filled-in and greened uranium mine, formerly the deepest in Europe—less than 500 metres as the crow flies from the medieval centre of the small Thuringian town of Ronneburg. A hole blasted into the ground by the German-Soviet nuclear industry during the Cold War that since the early 2000s has steadily been transformed into the area's tallest point — the flat-topped mountain named Schmirchauer Höhe, after the extinguished village of Schmirchau. The legacies of uranium mining were layered, depending on the activity: the more radioactive materials on the bottom, the weaker ones on top. On our hike Georg said that there were “difficulties” with this site — it warms up because the material inside reacts. Even in the then-active open-pit mine there were often fires due to the sulphurous minerals, which had initially been attributed to sabotage. This era of black dust, rusty barbed wire, and broken earth is by now filled in. Today, only a few information boards and the artificiality of the entire complex indirectly refer to it. After rehabilitation, the picture is characterized by geometric forms, signs, and stainless steel technical installations — a clean, controlled landscape straight off the drawing board with a chic new bike path. This is the path I often took through Gessen valley, past the artificial flat-topped mountain, the replicated open-cast mining area (“Lichtenberger Kanten”) now planted with rows of oak trees. Quiet and car-free all the way to Gera.

21 May 2015 (Thursday)

Around 4:45 pm I ride my bike from Paitzdorf to Gera Süd. In the New Landscape, near Drachenschwanz bridge, I see a bird of prey. Today there are more than a dozen brown-white cows (and a number of little calves) around Gessen stream, below the arboretum. At the leaky borehole, the asphalt path leading upwards is being dug up. Where the filled-up cavity has been torn open again, you can see pipes and iron-red tinged soil. I think about Anne Wilson Schaefer's [1998] book *Living in Process*. That our concepts are too static, that things are not things but processes.

16 June 2015 (Tuesday)

8:05 pm I ride my bike through Gessen valley. It's still light out and the weather's good; the sky's almost cloudless. Shortly before the sewage treatment plant the Gessenbach creek smells of scented wastewater. Yellow sediments by the underpass. The bottom of the pumping station basin is about 3/4 full of water — a pipe with a flap is letting water in. The exit to the bike path is marked by wheel tracks, smeared with ochre-coloured dried mud. Around the borehole has now been dug deeper. The bike path is being redirected outward. In the Gessenbach traces of larger amounts of water. Brown-white cows grazing in the evening light in the Lichtenberger Kanten. I ask myself if it's an appropriate picture, the one the animals are making here.

If you follow this path from Ronneburg to Paitzdorf, you will move on through the now invisible past. Hidden in the woods is a former spring; today only a round, bricked depression with stairs and stone benches amidst a grove of trees—thanks to mining, it has not had any water to offer for a long time.

22 August 2014 (Friday)

Side trip to Brunnenholz grove to visit the dried-up Eulenhofer spring. Two older women with a walker on a bench. One of them, who comes from Ronneburg, tells the story about how, when she was a child, she would come here to get water for her mother. There were multiple springs—one at Zellen and one at Herziger. The path has since become overgrown and the springs are gone too, that's because Wismut used so much water, the other woman adds. The woman from Ronneburg says she's 87. In the past she used to walk here a lot, but now she doesn't have enough “air.” She does not remember the water having any particular smell. But the other woman remembers the “stink” of the leaking water in Gessen valley. (She means the mine-water at the filled-up cavity area.)

Eulenhofers spring was discovered in the eighteenth century, emerging from a dilapidated tunnel, and used for almost two centuries. At that time, Ronneburg was a spa town, which now we can only see in old post-cards and history books. The gravel cycle path continues on through the middle of the former mining-waste-heap footprint, seemingly an inconspicuous plantation with young trees, fenced in to protect them from game animals. But this is exactly where the Paitzdorf mining shaft's widely visible mining waste heaps stood until 2004. For a long time—together with their nearby twins in Reust—they were the most famous symbol of uranium mining in eastern Thuringia. Later, these black cones were stored in the (aforementioned) Schmirchauer Höhe. At the base, birches grew high to the top of the cones, which from a distance — i.e. how most people saw them until the closure in 1991—looked a bit like fluff. A Birkenwäldchen, a small birch grove, meant to cover the black stones. With their bright trunks, they are friendly trees that always have something magical about them—maybe because they were such a frequent image in Soviet fairy tale films. Wismut, first as a purely Soviet, then as a Soviet-German stock corporation, was not only a “state within a state,” it also established a number of cultural elements. Nonetheless, all the “German-Soviet friendship” propaganda never really took hold in everyday life. If something “looked Russian,” it was not an expression of admiration, but of contempt. “Russians” and “Soviets” were somehow the same, at least seen from Saxony and Thuringia.

9 September 2015 (Wednesday)

Met C in the afternoon. When I had told her that I lived near Gera, we got into conversation. C's grand- parents lived in Braunichswalde. Directly behind the garden, the ore-laden trains rode along. Bits often tumbled down—her sister would play with them. Maybe there's a connection to what she called “that stomach thing” of hers.

Most of the uranium from Ronneburg was taken by freight train to the “Kombinat No. 7” in Sillamäe in the Estonian Socialist Soviet Republic. During Soviet times, this town at the shore of the Baltic Sea was closed to outsiders and had no postal addresses. Many of the workers likely had no idea that uranium was being enriched there. Today, it belongs to Estonia —the “Silmet” company plant is still in operation and refines rare earth. Sillamäe is still sort of a Russian enclave; no one speaks Estonian with us, only Russian and English. In the city museum the former company artist Aleksander Popolitov showed us a photo album about the creation of the mural *The Peaceful Use of Nuclear Energy* in Paitzdorf. The mural consisted of painted tiles and was attached to the front of one of the Wismut buildings. You could see it from the street. When the building was torn down, thanks to private initiatives, the mural was placed in the middle of the landscape along the cycle path near Löbichau.

Buildings are apparently exposed to a greater need for design than trees. Oaks, in particular, are often survivors of change; they are symbols of continuity for a reason. Birches, on the other hand, mark fractures and disturbed soil. And yet, they are also signs of the absence of control. As M explained to me, they are never actually planted in landscaping, but their seeds fly in on their own. The most active thing people do is to allow them to simply stand there. As such, birch trees mark areas we rarely use. In Central Germany this is pretty rare — if not being used for industrial agriculture, most of these areas are commercial forests, pastures, wild rubbish dumps, or traffic routes. Places that nobody uses are suspicious. Especially here there are many contaminated sites (*Altstandorte*) that have not been rehabilitated — in Saxony as well as in Thuringia. Between 1991 and 2001 the Federal Office for Radiation Protection (BfS) ran a programme for “recording and evaluating mining-related environmental radioactivity” in order to document mining legacies that did not fall under the Wismut act of 1991. According to this treaty, all the areas that SDAG Wismut ceased to own before 1962 do not fall within Wismut GmbH's area of responsibility for rehabilitation and thus are to be kept or rehabilitated by the state or municipality on their own. Small communities are overburdened by the task — and so are even larger administrative units.

This extensive contaminated-site project, during which both “small waste heaps in a rural idyll” as well as larger sites were identified by means of (helicopter-borne) aero-gamma measurements and data from Wismut, led to the creation of a register of contaminated sites that contained initially 200,000 records. Locations with less than 0.1 Becquerel/gram were not included, and thus an unrestricted use of the soil is possible. This is known as *Freimessen* (clearing by measurement). Cleared or not, there is often no marking, especially not at the older sites. Just such a place can be found along the path I often take between Paitzdorf and Mennsdorf, in the Aue meadow below Sturmsberg mountain. Here, too, you only notice the vegetation: a circular *Birkenwäldchen*, a small birch grove of about 15 metres in diameter. At its edge, towards the field, you see a concrete ring with a rusty pipe protruding from it. Once I made sound recordings inside. There was a kind of sonorous vibration—triggered, I think, by the water flowing underground.

Interview partners have told me that this little grove was once fenced in. In the 1950s it was a development shaft. When I jump to see whether the vibration could be heard, the movement was surprisingly loud and clear. Only now do I understand how fragile this slightly elevated ring of *Abraum* (excavation material) fundamentally is. Will certainly not attempt a second ump. Later I discovered a sign in the grass: “Do Not Enter! Danger of Collapse!” — visible during the winter once the grass had withered. Without the microphone’s amplification I probably would have taken this message just as casually as the rest of the fading warning signs. I also only learned later in an interview that there was another shaft, a bit further back, which was always “flooded,” apparently the reason why the project was abandoned. Later I found it too — in addition to a few rusty remains of barbed wire; K and I photographed it. Beforehand, I always thought the elevation was the artificial foxhole my mother had once mentioned. Until finding out that this was also an old site, I had considered it relatively unsuspecting and collected herbs there for years.

24 March 2016 (Holy Thursday)

I gather stinging nettle, ground elder, garlic mustard, and lungwort by the foxhole. We start the birch-sap harvest at Sturmsberg. Once again the ring-shaped remainders of a former *Luftschacht* (ventilation shaft) grab my attention. B jokes: alien signs.

In fact, my memories of this ventilation shaft in Mennsdorf are foggy. I don’t even know how close I got to it back then when it was still operating and visible. In any case, it was only 200–300 metres away from our house. Ventilation shafts transport fresh air into the mine and the radon-contaminated air to the earth’s surface. In the meantime, I find the fact that these whole installations were located so closely to settlements to be creepy. At some point the whole construction was eliminated. Today you really can’t see where the tower once stood.

It was the question of whether collecting plants and mushrooms is safe that originally led me to concern myself with the consequences of uranium mining on the living environment. In an overused landscape the areas released from use are refuges for animals, plants, and mushrooms. The most beautiful specimens grow in questionable places. At the very beginning, I actually only wanted to know what I could collect and where. I have only partially succeeded in answering this question though I can now lecture for hours about (post-)uranium mining.

6 June 2019 (Thursday) [Memo, August 2019]

When we arrive at our destination, I am surprised that it’s supposed to be Gessenwiese. I would have guessed it was on the other side of the Schmirchauer Höhe, there where the village of Gessen once stood. You can see Lichtenberg across the way. Susanne and Mika start harvesting a large amount of plants with my shovel, gathering them into their jute sacks, while Georg and I fight our way through erosion-gullies and hip-high sticky weed to measure an impressive hotspot (K loaned me his scintillator this morning, which detects the radiation much better than my Geiger counters do). With Dietrich I philosophize if or how much jam made from wild strawberries picked at this

place would be justifiable. The side of the road is full of berries, as well as a few mushrooms that have come up early and which he addresses with a Latin name. And all the while at the back of my mind I'm thinking about the local legend of the three-legged badger who haunted the area before any uranium was mined, and whether radioactivity might actually break the linearity of time.