

Skeletal Images of a Vegetal Body: On Nuclear afterlife

Walking over lush vegetation. Spiders on our feet. Geiger counters in our hands. Raindrops falling on our heads. Through a forest. By the side of a lake. Or, rather, multiple lakes that hold extractive histories, that intermingle and coalesce through—but mostly underneath—the landscapes and waterways of the Limousin. These watery networks layering the earth's surface are relics of a landscape of progress, one that fueled nuclear reactors for half a century. One that supplied the Commissariat à l'Énergie Atomique, then the Cogéma (Compagnie Générale des Matières Nucléaires), with half of the uranium production of France. These watery bodies are also former uranium mines, infrastructural skeletons. Submerged. Technically speaking, flooded.

It all starts in 1948, at La Crouzille, located in Haute Vienne, when a massive pitchblende ore source is discovered, subsequently named the Henriette Vein. Vein, as in the veins of human and other than human bodies. Geological extractive glossaries are founded upon analogies between the body and the earth's strata, the earth as body. A "vein," a "joint" (a surface in meeting of rocks along which little or no displacement has occurred), an "ore body" or even an "amygdale" (the pores from gas bubbles in lava). A geological imagination of bodily parts populating invisible, underground, abyssal realms. A corporeal lexicon that found its uncanny corollary—or, rather, its natural continuation—in mining labor, in the unseen bodies who t worked underground in the mines, who breathed the radon-filled air, who touched the uraninite with bare hands. Limousin's uranium extractive sites have become lakes created via artificial flooding (historically a military technique par excellence and a common practice in nuclear industry) once the mines were closed. Today these histories, just like the mines themselves, are submerged.

But plants in and around the flooded mines have absorbed traces of these histories (and its radioactive contamination): metabolizing it, at times growing with it, even thriving. They keep on going with the toxic afterlife of decades of uranium extraction. What would it mean to think about them « as knowers and not just as objects of knowledge, as co-participants in acts of creation rather than raw materials to be used »¹? In *Lupin, genet, fougères*, lupine, gorse, fern, three plants that abound in the region, become image agents. They leave shadow images. As water bodies, they intermingle and curve onto one another. As photograms, they produce skeletal images of the landscape, delineating its contours, its vegetal shapes. They hold its layers, its strata. Their shadows overtaking the image. Like bones deposited on swampy surfaces, they float on the skin of the image, on the skin of the earth. They float on the bottom of a lake.

¹ Catriona Sandilands, "Plants", in Jeffrey Cohen and Stephanie Foote (ed.), *The Cambridge Companion to the Environmental Humanities*, Cambridge: Cambridge University Press, 2021, p. 162.

At the Urêka Museum, which boasts a glorious history of uranium extraction. Sitting on a former mining site at Bessines-sur-Gartempe in Haute Vienne, it is founded and run by Orano, formerly known as Areva NP, formerly known as Cogéma. Exemplifying a longer history of corporate shape-shifting and offloading of responsibility, these are the companies (or is it one?) that mined uranium in Niger.^[1] Uranium's colonial ramifications are tangentially evoked in the institution, which mirrors the values of its creator, anchoring extractive histories in a national narrative. In the museum, one is immersed in a reenactment of the mining experience: a room simulates what it was like to work underground. Its floor trembles, like the Earth's bowels do. Post shaking, testimonials by miners, by workers, by fathers. In their mouths, extraction is a radiant chapter of local and national history. Uranium extraction as another instance of Gabrielle Hecht's potent connection between nuclear technological prowess and "le rayonnement de la France."^[2]

Radioactive nation building also occurs through extraction.

But where is the extraction? Where are the mines? No mines to be seen. We keep walking. We can only guess what is situated beyond fences. Peeking onto ghostly roads. Comparing our satellite images with historical maps. We end up listening to the landscape (instead of looking at it). At Bonnac-la-Côte, we listen to a mine that never was. After digging underground galleries for years, over kilometers, the project was abandoned, backfilled. Today, it is sound that dominates the landscape: crickets, the occasional chirping of birds, our steps over its swampy meadows, moving water, merging with the rhythmic clicking of the Geiger counter. It is the sound that challenges our expectations, our anthropocentric desires to see the mines. Traces of a history that has been incorporated (I mean the German word "einverleiben") here (but still is. Elsewhere, in another continent). Just like the *Lupin, genet, fougères* of this same landscape also hold traces. Their images (and the images they produce) make them vegetal documents of sorts.

Lupin, genet, fougères conjures a silent materialism by inviting us to listen to the landscape, in our imagination: depicting skeletal shapes, in black and white and full color, condensing these histories into two-dimensional skin. Archival pigments and silver gelatine merge with metals, dust, wood. The series documents a multilayered history of anthropogenic mutation and alteration by rejecting any hierarchy between plants and humans, by inviting reflection on the ways plants teach us about the reciprocity of the environment and the human, as long theorized

by Indigenous cosmologies². Importantly, a reciprocity that manifests via mutual responsibilities towards each other.

Representations of the vegetal life of this opulent, verdant landscape, punctured by beautiful water bodies in which people fish, picnic, bathe, spend their vacations. Where children enjoy summer camp on the shore of Lac de Saint-Pardoux. Recreational lakes that sheath, at their bottoms, proof of fifty years of uranium extraction. Uranium is the bone structure of the landscape that was forcefully taken out from it, leaving the ground ungrounded. As a skeletal fragment, today it is scattered in the landscape, it manifests in its skin, consisting of fungi, lichen, moss, layer by layer cleansing the aftermath of extractive labor. The series crafts the possibility of a *vegetal resistance* to the erasing of history. *Lupin, genêt, fougères* remember. How could this image, made of and through plants, resist?

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[1] These histories are detailed in Raphaël Granvaud, *Areva en Afrique. Une face cachée du nucléaire français* (Agone éditeurs, collection contre-feux, 2012).

[2] Gabrielle Hecht, *Le Rayonnement de la France. Energie nucléaire et identité nationale après la Seconde Guerre mondiale*, trans. Guenièvre Callon (Paris: La Découverte, 2004).

² A forceful analysis can be found in Potawatomi botanist and biologist Robin Wall Kimmerer's *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge and the Teachings of Plants*, Minneapolis: Milkweed Editions, 2013.