Permeance

Unearthed River Confessions
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Project Information (EN)

The river

The river Dommel is a natural fluvial system extending for the length of 146km, originating in Peer, Belgium and joining the river Meuse in the Netherlands. For over 125 years, the zinc-ore smelters in the Flemish Neerpelt, have been releasing toxic gases, and discharging contaminated waters with dissolved zinc and cadmium particles into the river Dommel. In the 1980s, after 85 years of uncontrolled industrial discharge, it became evident that the river bed soil contained heavy metal contaminants. Since then, soil decontamination projects have been carried out by scraping the river bottom and banks, and displacing the contaminated ground elsewhere. Despite the reduction of direct pollution from the smelters, the concentration of zinc and cadmium in the river sediment is still dangerously high for both aquatic and terrestrial creatures. These metals have permeated through bodies, from the industry into the river water, attached the soil, and absorbed by the flora and fauna. In this story, cadmium and zinc act as tracers as they continue their permeating journey, leaving behind a trail which reveals how entangled, contaminated and polluted our beyond-human encounters really are.

Permeance. To permeate, permeability, permeation: the action to diffuse through something.

Permeance is a conceptual lens through which to approach the entanglements of earthly life. It implies an awareness of our participation in symbiotic relationships with Earth, dismantling our parasitic use of the environment and its forms of life. The impermeable membranes created by modernity deteriorate into a pile of compost which stimulates exchanges of substances, nutrients, molecules and microorganisms through principles of physics and chemical processes, as well as molecular exchanges and biological absorptions. The notion of permeability enables us to trace pollutants and understand the ruins we inhabit. This research indeed follows a history of pollution, which has been the ruination of both ecosystems and indigenous cultures. Unfortunately, too often we —in the West— are blinded by our perception that our actions are impermeable. Instead, permeating is only possible if we see beyond our limits: rivers flow between confines; histories of pollution can be displaced but not erased; contaminations can be absorbed but do not vanish; material histories can take you back to their geologies and along them stories of extractions and colonial violence emerge. Permeance unsilences.

Collaborative chromatographic mapping

Situated between a scientific backdrop and artistic production, this research materializes through the medium of soil chromatographies, a form of sustainable, slow, alternative cameraless photography, which gives agency to contaminated earths by revealing their chemical compositions through their permeation in the photographic paper. By sampling along crucial points of the river, the soils used to create the chromatography actually unearth a mapping of pollutants. The result is a fundamental critique to both photography and cartography as anthropocentric, modern and colonial readings of the world. In opposition, the proposed mapping of the river blurs the lines —through contaminations— between art and science, dismantling the modern from a western positionality and proposing a demodern alternative. By critically reviewing the dominating human-centered practice of mapping, I searched for a new balance between my presence and the agency to the voices of living and non-living bodies. Through collaborative chromatographies, I conduct — bring together— the voices of the riverbed soil, permeating into each other, to speak about contaminations and map the voice of the river.

Projectinformatie (NL)

De rivier

De rivier de Dommel strekt zich uit over een lengte van 146 km en loopt van Peer (België) tot aan de Maas in Nederland. Ter hoogte van het Vlaamse Neerpelt, waar de rivier langs stroomt, produceren de zinkerts smelterijen al meer dan 125 jaar giftige gassen alsmede sterk verontreinigd water met opgelost zink- en cadmium. Na 85 jaar ongecontroleerde industriële lozingen in de rivier werd in de jaren 80 duidelijk dat de rivierbedding sterk verontreinigd was door zware metalen. Sindsdien worden bodemsaneringsprojecten uitgevoerd door de rivierbodem en oevers af te schrapen en deze verontreinigde grond naar elders te verplaatsen. Ondanks de saneringsprojecten en de vermindering van de directe vervuiling door de smelterijen is de concentratie van zink en cadmium in het riviersediment nog steeds gevaarlijk hoog voor zowel water- als landdieren. Deze metalen zijn doordrongen in het landschap: van de industrie naar het rivierwater, in de bodem, en geabsorbeerd door de flora en fauna. In dit verhaal fungeren cadmium en zink als tracers terwijl ze hun doordringende reis voortzetten en een spoor achterlaten die onthult hoe vervuild onze bovenmenselijke ontmoetingen werkelijk zijn.

Image List

Filename	Caption	Credit
dsc06442a-small_1630001667.jpg	Collaborative Chromatographic Mapping I	
dsc06476a-small_1630001675.jpg	Collaborative Chromatographic Mapping II	
legenda-small_1630001682.jpg	Chromatographic Mapping Legend	
dsc06235bn-small_1630001690.jpg	The zinc smelting industry	
dsc06274bn-small_1630001695.jpg	The Dommel river catchment area	

The images above are included in the ZIP under `/images`.