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## CHAPTER 13.

# WALKING ON *TERRILS*. RUDERAL ECOLOGIES AND TOXIC HERITAGE IN WALLONIA, BELGIUM.

*Daniele Valisena*

### Introduction

September, the time when autumn starts to colour up Wallonia. It was my second time in Liège, where I was concluding fieldwork in preparation for my Ph.D. dissertation. Leaving my room in the Carré neighbourhood, I got on a train at the Saint-Lambert station, right behind the Prince-Bishops' palace. It was a short ride to my destination in Jemeppe – ten minutes or so – but, after passing the last underground gallery, I gaped at the vision that presented itself. Exiting the train at Seraing Bridge (*Pont-de-Seraing*) I had entered the industrial *banlieue* of Liège, this in-between place sitting with one foot in the industrial revolution epoch and the other in the present post-industrial time. Rows of two-storied terraced houses with bricks blackened by centuries of air pollution and consumed by time, contoured the Meuse riverbeds on both sides. Clunky elevated conveyor belts and pipelines ran above the houses and crossed the river from side to side, connecting run-down giant steelworks and blast furnaces, most of which had been shut down or half-demolished. The sugary smell of gas and old car engines combined with the stinging odour of smelting iron that drifted from a nearby factory in Tilleur, one of the few still operating. The white soggy shade enveloping the sky was a familiar one to me: it was the same mixture of soot, humidity and smog that covers the sky where I grew up on the Po Plain in Northern Italy. It was at this moment in Liège that I began my walking ethnography through Pays de Terriil Landscape Park.

*Terril*<sup>1</sup> is a French-Walloon word indicating a spoil tip made of coal waste and the various refuse materials resulting from coal mining. Currently over 1,200 *terrils* exist in Southern Belgium.<sup>2</sup> Together, these constitute a human-made

1 Pronounced *tèrri* or *terrîl*, the term has long since been widely used in all French-speaking countries, testifying to the inherent connection between Walloon culture and coal extraction.

2 According to the official survey conducted by Région Wallonie in 1995 there are over 1,200 *terrils* in Wallonia. Some 339 of those are considered as *terrils majeurs* and were produced between 1840

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**Figure 1.**

Liège-Seraing from one of the paths climbing Terril du Gosson, 2015. Source: Veronica Mecchia.

hill range that traverses three countries from Nord-Pas-de-Calais in France, through Belgium and proceeding into Germany towards the Ruhr basin. These coal slag heaps, born as landfills, are physical leftovers of the mining epoch and embody memories, stories, and affections pertaining to a prosperous industrial past that is now dead. At the same time, *terrils* are ecologically-rich sites where foreign and local species dwell in new lively ecologies concurring in the transformation of those wasted environments.<sup>3</sup> From frogs to dragonflies, rare flowers and exotic plants, as well as warblers and nesting birds, *terrils* constitute some of the most important reservoirs for biodiversity in Belgium. *Terrils'* twofold significance makes them a perfect example of 'post-industrial scars', to use the expression of heritage studies scholar Anna Storm.<sup>4</sup>

Trailing on the material and cultural topology of *terrils*, in this short essay I perform a geo-historical walk of Terril du Gosson, in the former industrial

and 1984. This calculation does not include French or German spoil tips. See *Moniteur Belge*, 22 June 1995, Arrêté du Gouvernement Wallon fixant la classification des terrils, 16 Mars 1995.

3 In many cases, *terrils* have now turned into Sites of High Biodiversity Interest, *Site de Grand Intérêt Biologique*, according to the official Belgian classification.

4 Storm *Post-Industrial Landscape Scars*.

periphery of Liège. With geo-historical walking, I intend an itinerant topos<sup>5</sup> trajectory meant to unfold and interpret the layered meanings and stories of *terrils* as storied-places.<sup>6</sup> By bodily sensing and moving through Walloon spoil tips, I conduct a walking ethnography of place, focusing on the interplay between industrialisation, ruderal ecologies, material heritage and memories that characterises the socio-environmental configuration of present-day Wallonia. Drawing upon Don Mitchell,<sup>7</sup> I adopt a layered theory of landscape meant to uncover the stories and the ecological relationships that produced *terrils* as geological, geographical and historical assemblages.<sup>8</sup> Focusing on *terrils* allows the retracing of the geo-historical, ecological and toxic legacy of coal extraction and industrialisation which produced *terrils* as material heritage and make this lineage visible. On the other hand, as Van Dooren and Rose wrote,<sup>9</sup> ‘stories and meanings are not just layered over a pre-existing landscape. Instead, stories emerge from and impact upon the ways in which places come to be’, and from the relationship between past layered histories and living multispecies actors and their ecologies. In order to narratively entangle this meshwork of histories, stories and ecologies, I use my walking body as an itinerant and sensorial instrument meant to retrace past, present and future geo-historical trajectories within *terrils*. Walking becomes a geo-historical practice<sup>10</sup> in that bodily itinerant topographies can elicit memories, sensorial knowledge and conflicting stories, and retrace ecological constellations through the unfolding of the various layered-stories hidden in the hybrid environments I traverse. By retracing with my own walking body the various itinerant trajectories that signified and made the industrial landscape of Wallonia, I render manifest the import as movement heritage<sup>11</sup> of those hu-

- 5 With ‘topian trajectory’, Tim Ingold refers to the place-making quality that a wayfarer exerts with his own bodily trajectory through the act of walking. This topos (or place-making) quality of walking originates from the active engagement that attentive wayfarers continually establish with the environment. Wayfarers might benefit from some kind of preemptive geographical, historical, and geological (geo-historical) knowledge of place. As a result, such preemptive knowledge turns into a geo-historical compass that guides geo-historical wayfarers and elicit their itinerant art of attentiveness. See Ingold *Lines*; Van Dooren, Kirksey and Münster ‘Multispecies Studies: Cultivating Arts of Attentiveness’.
- 6 Van Dooren and Rose ‘Storied-Places in a Multispecies City’; Van Dooren and Rose ‘Lively Ethnography: Storying Animist Worlds’.
- 7 Mitchell *The Lie of the Land*.
- 8 Valisena ‘Coal Lives’.
- 9 Van Dooren and Rose ‘Storied-Places in a Multispecies City’, 2.
- 10 de Certeau *L’invention du quotidien. 1. Arts de faire*; Canovi ‘Pensare nella territorialità, abitare nel paesaggio’.
- 11 Svensson, Sörlin, and Salzman in the *Introduction* to this book, ‘Pathways to the Trail’.

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man, non-human and more-than-human environments. Retracing past and present geo-historical trajectories and stories by moving through the environment is a form of performative remembering, one that makes visible new and old relationalities and meanings in the landscape(s) we traverse.

Being alone, my geo-historical walking exploration turned out to be more focused on the ecological, bodily and non-human dimensions of the experience. Yet, as an abled white Italian man, my walking body did not simply unearth the manifold stories ensnared within the landscape, but rather brought about a particular account through my own 'politics, cultures, histories, and lived experiences',<sup>12</sup> which define my positionality and my relationship with the environment I traverse. Surely one could unearth other stories from the same landscape, for instance by focusing on environmental justice<sup>13</sup> or on environmental history of migration.<sup>14</sup> As Tim Ingold wrote: 'in storytelling and travelling, one remembers as one goes along'<sup>15</sup> and retraces new and old trajectories within landscapes.

Given their material, ecological and cultural import, spoil tips as hybrid socio-natures are nodal points both as place-making entities and as material and memorial legacy of industrialisation, hence constituting key signifiers in the coal-driven ecology of Wallonia. Nonetheless, as ruderal ecologies scholar Bettina Stoetzer has recently suggested, former wasted sites 'are not passive environments, but developed their own lives'.<sup>16</sup> Ruderal ecologies (from the Latin term *rudus*, meaning rubble) refers to ecosystems which prosper in severely polluted and disturbed environments. Following critical heritage scholar Caitlin DeSilvey,<sup>17</sup> I argue that ruderal thinking, with its focus on instability, ruination, decay and disturbed environment as the norm, might work as a socio-ecological compass for building new senses of place in Wallonia. Walking on *terrils*, one might equally encounter coal, mining debris, industrial wreckage, toxic waste, alien flowers, rare butterflies, *lieux de mémoire*, touristic trails, forgotten stories of labour and pieces of art. By retracing the geological, geographical and historical trajectories that produced such hybrid

12 Macpherson 'Walking Methods in Landscape Research', 426.

13 Thoreau and Zimmer 'Croisières toxiques'.

14 While in this essay I describe a solitary walking exploration, there exists a quite lively group of walkers and even sailors who are collectively exploring the former industrial landscape of Wallonia. See, for instance, La boucle noir (<https://www.cm-tourisme.be/en/a/gr412-boucle-noire>) in Charleroi, or the Croisières Toxiques group in Liège (<https://www.entonnoir.org/2019/10/24/croisiere-toxique-derniere-edition/>). See also Valisena 'Coal Lives'.

15 Ingold *Lines*, p. 17.

16 Stoetzer 'Ruderal Ecologies', 304.

17 DeSilvey 'Ruderal Heritage', 294–98.

ecologies, I want to unfold the ways in which industrialisation and its ruderal ecologies historically signified the environment, the history and the material memory of Wallonia through the concurrence of human and non-human storied-places.<sup>18</sup>

Drawing from environmental humanities, environmental history and memory and heritage studies, this text wants to contribute to the ongoing discussion on critical heritage studies arguing for a historical understanding of (post-)industrialisation that includes ruination, ecological continuities and toxicity as key elements of the Anthropocene. In that respect, I contend that geo-historical walking explorations can nurture new arts of noticing<sup>19</sup> and foster new senses of place through multispecies encounters and ruderal thinking.<sup>20</sup>

### Walking towards Terril du Gosson, Liège

From the mining town of Jemeppe it was hard to miss the spoil tip. Terril du Gosson dominates the industrial *banlieue* beyond the Meuse river bend southwest of Liège. Standing 165 metres above sea level, Gosson's green silhouette is sullied now and then by a few dark spots. Sitting between the municipalities of Seraing and Saint-Nicolas, the coal waste hill is actually composed of two spoil tips, Gosson 1 and Gosson 2. The *terril* originated from the slag and debris produced by Société Anonyme Charbonnière de Gosson-Lagasse, which was active between 1877 and 1966. As a consequence of such long coaling activity, the Gosson area now gathers some 9,500 m<sup>3</sup> of coal mining and industrial waste, occupying an area of 41.2 ha.<sup>21</sup> On my way towards the hill I encountered several mining rowhouses (*corons*), many of which hosted well-kept vegetable gardens in which I could recognise big orange pumpkins, tomatoes, lettuce, and even some free-roaming chickens. Vegetable gardens are important places in many working-class communities around the world,<sup>22</sup> and especially in mining communities.<sup>23</sup> In the case of former industrial areas, vegetable gardens often play the function of an identity reservoir signified with different cultural and ecological practices, through which communities can reappropriate their own environments and inscribe new relationships with the

18 Van Dooren and Rose 'Storied-Places in a Multispecies City'.

19 Tsing *The Mushroom at the End of the World*.

20 DeSilvey 'Ruderal Heritage'.

21 Fédération Wallonie-Bruxelles, La biodiversité en Wallonie, Sites de Grand Intérêt Biologique, Terril du Gosson, <http://biodiversite.wallonie.be/fr/1854-terril-du-gosson.html?IDD=251659927&IDC=1881>.

22 Cabedoce and Pierson 'Cent ans d'histoire des jardins ouvriers 1896–1996'.

23 Valisena 'Coal Lives', 297–302.

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land.<sup>24</sup> In the hamlet of Mabotte, those vegetables were literally growing less than a couple of metres away from the coal slag heap flanks, and the number of animals that thrived around them were eating grass and seeds which had probably mixed with and spurred from the coal waste. It was an uncomfortable thought to hold on to. On my way to the top of Gosson, I also crossed the old railway line, now turned into a cycling and pedestrian lane as part of a transnational touristic route of industrial heritage.<sup>25</sup> As in the case of cities like Paris, Stockholm and Berlin, former industrial infrastructures had been turned into a greening pathway within the heart of the spent industrial sprawl. While the architectures of the area were a living testimony of nineteenth-century's coal workers' towns, the public memory of the place also seemed to be filled with it through the toponymy: rue des Mineurs, rue Germinal; everything spoke of the legacy of coal mining. These ghostly trajectories are part of the material and cultural heritage of coal in Wallonia. These coal-produced assemblages are embedded traces – the mobility heritage – of the flows of materials, commodities, energy and infrastructure that informed and signified the landscape of Southern Belgium throughout the Modern era.

I reached the spoil tip's base level by walking a good twenty minutes north past Seraing Bridge. White birches were holding onto the hill flanks together with raptureworts and coltsfoots. The orderly trees stood next to one other almost identical in height. I figured it was probably a sign of the fact that they had been planted in the same period of time as part of the *terril* reforestation project between the 1960s and 1980s.<sup>26</sup> Many of the *terrils* that were not worth exploiting are thus now covered in greenery and, in the case of Liège province, are part of the *Route des Terrils*: a transnational touristic and natural route which unites former Belgian and German coal basins (Aachen).

Standing at the feet of Gosson was Maison des Terrils, a coalmining museum (*Centre d'interprétation du site minier de Saint-Nicolas*) inaugurated in 2008. Maison des Terrils occupies the old building of the Gosson mine's *lavoir*, the washing place where coal was cleaned right after pitmen dug it out from mine shafts. The museum hosts a *bistrot*, a small but well-equipped environmental library and a tourist centre from where excursionists and conservationists begin their trips in the natural park. The most striking feature of the centre is the *salle des pendus*, the changing room of the old coalmine. *Pendus*

24 Valisena and Armiero, 'Coal Lives'.

25 Actually, two touristic routes merged there: the Liège province-based *Route du Feu* (the fire route) and the European Route of Industrial Heritage. See <https://www.laroutedufeu.be/la-route-du-feu.php>; <https://www.erih.net/>.

26 Raes and Boostels *Terrils*.

**Figure 2.**

Terril du Gosson, 2015. Source: Veronica Mecchia.

in French-Walloon mining jargon both refers to coat hangers and to hanged men, perfectly embodying the perilousness and precariousness of coalminers' lives. The same precarious condition now survives in the environment of the landscape park. *Terrils* are very unstable techno-natural assemblages. The coal and industrial waste that constitutes the large part of spoil tips' mass is held together artificially through the reforestation projects that interested Wallonia from the 1960s onwards. Wind action, massive rains, the cumulation of snow or simply walking in the wrong place might result in landslides modifying the unstable structure of the hills. Perhaps the roots of the orderly birch trees I noticed were holding the whole hill flank. Also, the very ground on which Wallonia stands is very unsteady. As I discovered during an interview with some second-generation Italians living in Saint-Nicolas,<sup>27</sup> it is not uncommon for new-build houses or roads to suddenly collapse into one of the thousands of abandoned underground mine shafts piercing the region.

27 Interview with Anna Gagliardelli and William Ferrari, Saint-Nicolas 5 March 2018. Valisena 'Coal Lives', 302–03.



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Exiting the visitor center, Gosson 2 hillside emerged in the background. A big part of the hillslope was completely free of any verdure, revealing a black ruler-cut lining of seemingly burnt material. In fact, the *terril* is still burning: the internal combustion of coal-waste materials has not ceased yet, nor will it for the next few decades. *Terrils* internal temperature can reach up to 1,000°C and 1,300°C at their apex.<sup>28</sup> As a result, *terrils*' surfaces have a slightly higher temperature than the surrounding areas and a different microclimate. As one of the visitor centre's workers told me, it was not uncommon to see *terrils* smoking, especially in the early years after their formation. In the nearby French mining region of Nord-Pas-de-Calais, it has been calculated that one out of three *terrils* used to combust, as did many others in Polish Silesia, Russia, Portugal and Wallonia.<sup>29</sup> The same process can even lead to the bursting of spoil tips. In 1975 *terril 6* in Calonne-Ricouart in Nord-Pas-de-Calais exploded, provoking the fall of 11,000 m<sup>3</sup> of burning schists and ashes onto the nearby mining town, killing five Polish workers and injuring of four more.<sup>30</sup>

In front of the *lavoir* some scrap metal had been repurposed to make a dragonfly sculpture, whose legs turned into a rusty rail track with a few wagons crammed full of coal briquettes. The sculpture symbolised the ecological continuity between the coaling landscape and the natural park environment. This would not be the only dragonfly I encountered that day. Right behind the *lavoir* I found two trails. They were carved out in the coal rubble of Gosson hill. For the first time I could clearly see the layers of coal waste the spoil tip was made from. A reshuffling of geological and human history materialised right in front of me. Fossil plants dating back to the carboniferous era had been dug out from the coal seams and the shale layers in which they had been enclosed for millions of years. Mixed with those, I could see the orange shades of baked shale minerals, glass-like elements and pyrite nodules scattered along the slope. The complex aesthetic of the minerals signalled different temporal and material stages of the elements' transformation inside the hill. The presence of old cracked bricks and scraps of metal tools signalled the transient moment in which the industries of Southern Belgium were massively excavating coal through the labour of thousands of mine workers.

Together with the spoil tip's flank, I saw layers of soil and wasting materials with roots, blades of grass and flowers. Among those I spotted quite a large plant

28 Thierry et al. 'La combustion des *terrils*', 23–25.

29 Ibid.

30 See Archives de l'INA, Médiathèque, 'Explosion d'un terril à Calonne-Ricouart, FR3, Journal Télévisé, 26 août 1975', <https://fresques.ina.fr/memoires-de-mines/fiche-media/Mineur00151/explosion-d-un-terril-a-calonne-ricouart.html>.

with yellow flowers, reminding me of a big yellow daisy. The name of the plant was *seneçon du Cap*, or *Senecio* — as one of the guides working at the museum kindly told me. *Senecio inaequidens* had travelled across oceans and continents to put its roots in that greening landfill. The common name for *Senecio inaequidens* is in fact *Seneçon du Cap* in reference to its origin in the area of Cape Town, in South Africa. The alien plant is believed to have travelled to Belgium via the fleece of South African sheep that used to be worked by local textile industries. Furthermore, *Senecio inaequidens* is toxic to most insects, herbivores and even to many native plants in Wallonia. Coal miners were not the only migrants in the layered history of Wallonia, nor were humans the only species exposed to the *longue durée* of the coaling business' hazards.

Continuing my walk, I was enticed by the numerous brown and black spots that I encountered now and then along the trailside. Was this coal or not? How could I tell? Deceived by my sight, I opted for my other senses, starting from smell. Yes, it smelled like wet coal. But the more I touched the fine grains of coal sand emerging amid the grass, the less I was sure about the odour of coal. The fact that I wanted to find coal might have worked as an unconscious form of autosuggestion, sabotaging my genuine sensorial experience of place. But was it really so? Does such a genuine sensing of place exist at all? Of course not. As environmental historians such as Bill Cronon<sup>31</sup> have rightfully pointed out, the environments we live, dwell and move in are always social and natural, cultural and material at once. Although coal was clearly part of the materials composing *terril* du Gosson, it amounted to only around twenty per cent, as I later discovered.<sup>32</sup> Most of what I saw, smelled and touched was thus elicited by what I wanted to find. While the geo-historical layers that make *terrils* — as well as any other landscape — are the result of complex geographical, geological and historical processes which are immediately there to be seen, smelled, touched and traversed by all wayfarers, there is an inherently subjective component to those landscapes. In fact, as per all sites of memory, the post-industrial scars<sup>33</sup> embedded in *terrils* might elicit very different memories, senses and significance depending on the relationship between those who are traversing those sites and the stories they convey. It is not so much a matter of singular or collective experiences, but rather a question of positionality towards the memories unearthed through the geo-historical wayfaring.

Reaching the plateau that divided the two peaks of the *terril*, the black

31 Cronon *Uncommon Ground*.

32 Bedoret et al. 'Le site du Gosson'.

33 Storm, *Post-Industrial Landscape Scars*.

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surface of the hill became more distinct. Human and animal footprints marked the path, as well as the chirping of Eurasian blue tits (*mésange bleue*) and blue-winged grasshoppers. Following the trail, I could not help but notice many little balls of dung. Trying to avoid stepping on those, I began to ponder about what kind of animals could have produced them. A hare maybe? A little dog? For sure it was not a horse. After spending a good five minutes trying to figure it out, I heard a bleating, or at least, I thought I did. In the very instant that I heard the animal's sound I realised that the trail was fringed by a fence, a long stockade that encircled all the table land. A few seconds later, I saw them. 'Moutons!' I said out loud. Sheep here? Yes, they were. Those were Luciano Casanova's sheep. Casanova is an *enfant de mine*, a mine's son as they are called in Wallonia. His father came to the Walloon coalfields in the late 1940s following the 'men in exchange for coal' agreement between Italy and Belgium that brought over 300,000 Italians to Southern Belgium.<sup>34</sup> In 2008, the municipality of Saint-Nicolas asked him to bring his sheep onto the *terril* as part of its transformation into a natural park and, since then, the flock has been spending half the year up there. Thinking about the example of *seneçon du Cap*, I began to wonder about the kind of plants that Luciano's sheep could eat. Apart from poisonous flowers, even normal grass and other weeds would probably be filled with toxins dug under the surface of the *terril*. Covering a landfill with greenery did not suffice to remediate centuries of highly toxic wasting practices. That hay might be dangerous to sheep, as it probably was for many other animals living in that deceptively green wasteland ecology. Under a shallow layer of organic soil and plants sit tons of scrap materials, heavy metals, spent oils, industrial soot, rubber, ashes and various other wastes. While metallophyte and non-native plants such as *seneçon du Cap* and their companion insect species prosper in such a disturbed ruderal environment, *milieux calaminaires* (calamine landscapes) are hazardous for many other native species. Green *terrils* did not mean salubrious parks for all species.

Leaving Casanova's sheep behind, I reached the peak of the spoil tip. Before me, lying at the centre of a stage-like plateau, another giant dragonfly installation was dominating the flat top of the hill. The body of the sculpture was built from the same shale stone that for millions of years enfolded the coal deposits that made the economic fortune of the region. The black crag of the half-forested coal slagheap still rimmed the schist stones, as it did underground for millennia. The four wings of the insect worked as rainwater recovery pools, forming four small ponds in which the pale blue sky was reflecting. Frogs and dragonflies

34 Morelli 'L'appel à la main d'oeuvre italienne pour les charbonnages'; Valisena 'Coal Lives'.

**Figure 3.**

'Libellule' by Daniel Steenhaut, Terril du Gosson, 2015. Photograph by Daniele Valisena.

crowded the sculpture, using the gutters as watery roads that disappeared within the edgings of the tableland. Slowly moving around the edge of the cliff separating the dragonfly from the promontory, my gaze encompassed the city of Liège: its southern industrial hub strewn around the industrial periphery of Seraing; the coal power plants and the rusty blast furnaces of Ougrée; the Ardenne forest before the bend of the Meuse river and the medieval old town; and the forested *terrils* that intersperse the scattered mining towns encircling the *métropole*. There it was, the socio-ecology of coal that is Wallonia.<sup>35</sup> I was still there, in the industrial hub of Liège, but I was also somewhere else, in a natural park with sheep and alien metallophyte species thriving in the polluted terrain, and somewhere else once more, in a continuously transforming environment on the top of a burning landfill.

35 Valisena 'Coal Lives'.

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## Conclusions

The ruderal ecology of post-industrial Wallonia is not the result of a free re-appropriation by nature of the former coaling region of Belgium. Rather, it is a material testimony of the long-lasting heritage of the toxic legacy of industrial activity, even in a time when industrial buildings and infrastructures are mostly crumbling away in Wallonia. Furthermore, this process is not happening aside from human control, since most *terrils* have been purposely reforested by the same coaling companies that created them as landfills, or by Région Wallonie, mostly to improve the *terrils*' structural stability and for aesthetic reasons. What I find extremely valuable in those liminal places is that they never tell a single story, but rather embody the often-contradictory storying of very different actors, be they capitalist coaling companies, mine workers, sheep, ruderal flora blooming in toxic (for humans) environments, or insects engaged in a lively relation with those species and otherwise wasted places. The heterogeneity and the richness of ruderal ecologies is given by the crossing of different trajectories of inhabiting these liminal spaces which have been left behind by capitalist exploitation as wasted areas. But in order for these places to work as a sort of compasses in the history of industrialisation, they need to account for all the processes and the materials that produced them. By relating with the various narrative, material and ecological layers that compose *terrils*, it might be possible to apprehend the complex entanglement of those changing landscapes in their lively relation with their industrial past and their ruderal present. By bodily immersing oneself in an itinerant exchange with *terrils*, the geo-historical assemblage of industrial and post-industrial history might acquire a new meaning, one where non-human actors and more-than-human affections and stories matter.

Understanding post-industrial sites in less anthropocentric ways does not imply revaluating positively the meaning of toxicity and capitalist-driven extractivist activities. The repercussions of slow violence,<sup>36</sup> in its unfolding between invisibility and temporal discrepancies, still emanates from the legacy of industrial activities in Wallonia. Although some species might prosper in such polluted environments, many other animals and plants are threatened by the soil contamination and the new ecological regimes produced through the reforestation of *terrils*. At the same time, *terrils* are places of amazement; material and cultural testimonies to the continual ecological transformation of urban and industrial sites' environments. New relationalities spur from *terrils* in that new stories push forwards the apparently blocked historical narra-

36 Nixon *Slow Violence and the Environmentalism of the Poor*.

tive of de-industrialisation, but not in a historicist and clearly delineated way. In order to make visible the historical geographies of toxicity, industrialisation, and ecological transformation that inform the environmental history of Wallonia, I argue that we need denser accounts,<sup>37</sup> narratives that make visible the contradictory and conflating historical trajectories of industrialisation. With this essay, I wanted to show how following the industrial toxicity embodied within *terrils* as a geo-historical trail enables various subjects to unfold, allowing a retracing of the layered meanings, stories and ecologies of industrialisation. The significance as movement heritage of the paths I walked and retraced in the essay lies in their undefined and ambiguous heritagisation value<sup>38</sup>, and in the latent ecological toxic continuity of an industrial past that is still haunting as an Anthropocene ghostly presence the memory, the human and non-human bodies and the environment in Southern Belgium.

While coal mines might be dead in Wallonia, *terrils* are very much alive. If we want to understand how so-called post-industrial processes affect societies and environments, we need to change the traditional historicist narrative of progressive economic and social history, making space for non-anthropocentric narratives accounting for permanence, ruination and toxicity.<sup>39</sup> The material and cultural heritage of industrialisation and its complex history can be mobilised as storied-places that counter the historicist narration of industrial progress by showing its inherent linkages with toxicity. At the same time, the more-than-human ecologies that have surged in the former industrial interstices of Wallonia can help in rethinking the heterogeneity of techno-natural assemblages in the ruins of European capitalism, mobilising place-making practices of conviviality,<sup>40</sup> caring and multi-species lively ethnology.<sup>41</sup> To travel back and through the history and the geographies of post-industrialisation in Wallonia means to retrace the *longue durée* of the capitalist-driven ecology of coal extraction in Southern Belgium and to merge it with the present and future history of ruderal ecologies now populating and resignifying *terrils*.

37 Zimmer *Brouillards toxiques*.

38 Storm *Post-Industrial Landscape Scars*.

39 DeSilvey *Curating Decay*.

40 *Ibid.*, p. 20.

41 Van Dooren and Rose 'Lively Ethnography'.

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