

Book Review

Farrier, David. *Footprints: In Search of Future Fossils*. 4th Estate, 2020.

The Present as a Fossil to Be

What will our far descendants tell about us when they discover the legacy we have left behind in the rocks of the earth? What are they to make of the Anthropocene layer, filled with traces of nuclear waste, remnants of plastic, and the sudden disappearance of so many species? In *Footprints*, David Farrier, who teaches English Literature and The Environment at the University of Edinburgh, develops an exploration of the legible marks that the present will leave many thousands or even millions of years from now. This geological perspective allows him to interpret the objects around us as possible “future fossils.” *Footprints*, which was awarded the Royal Society of Literature’s Giles St Aubyn Award in an unpublished version, patiently follows plastic bottles, bridges, roads, and even entire cities on their hidden trajectories into the strata of the earth.

One of Farrier’s core insights is that there is a contrast between the material persistence of future fossils and their appearances in our daily lives, where they often go by unnoticed or just appear for several moments. A plastic bottle, for example, after it has served its purpose to contain a liquid for the short timespan between purchase and consumption, will lead a turbulent afterlife. When cast into the environment, it will enter on a multi-million year rugged journey through rivers and oceans, through fish and microbes. Such slippery future fossils like plastics thus “cross over us without any trace of where they have come from or where they are going to”, but still they “have a story that not only reaches back into the deep recesses of the past but also pushes forward into a future only dimly perceived” (104). It is Farrier’s aim to perceive this future more clearly and to work out what the obscure material legacy of today tells us about ourselves as beings living in earth’s deep time.

Farrier’s work thereby contributes to a growing body of research into the relation between humankind and geological deep time, both in philosophy and the humanities. Especially close to his approach are the works of authors like Christopher Schaberg, whose *Searching for the Anthropocene* (2020) explores the notion of place in light of geological time and, of course, Robert MacFarlane’s *Underland* (2019), which is both thematically and structurally akin to what Farrier does. These works feature personal anecdotes of visits with different (scientific) experts, intertwined with references to world literature, summaries of journal articles, landscape descriptions, and an occasional philosophical detour. But unlike these similar books, Farrier does not focus on specific places or sites, and he instead opts for a thorough, thematic approach centered around different objects, such as paved roads, large buildings, and nuclear waste.

Footprint's eight main chapters thus take the reader on a future fossil Odyssey, from the massive remains of cities and the network of roads that spans millions of miles to the delicate worlds of bleaching corals and human traces on the microbial level. In all the chapters, literature and myth intermingle with science to help the reader imagine the dawning future, to see the world not just as it is but as it could become, and, as Farrier claims, "for that we need poets as much as we need paleontologists" (23). This is why we find references to Jorge Luis Borges' *The Library of Babel* interspersed with explorations of the archives formed by glacial ice and why references to the *Kalevala*, the national Finish epic, are woven through a description of Onkalo, Finland's nuclear repository. The stories are used to provide meaning to Farrier's foray through the world of future fossils and often their plots are scattered through the chapters in order to pull the reader forward through the elaborate explorations of the inhumane future that already haunts our all too human present. Therefore, the book offers more than a dry overview of recent geological inquiries, and it draws from all possible registers to meditate on our effects on our world separated from us by millions of years.

Because of this thematic and rich approach of the "deep time" problem, *Footprints*, at times, offers something that has not been done before. For one thing, within the environmental humanities, it is one of the most thoroughly researched contributions to the discussions about the Anthropocene. A chapter on extinction, for example, combines the well-known *IPBES* reports with lesser known studies about jellyfish blooms in oceanic dead zones. This helps the reader to give meaning to the abstract jargon of "phylogenetic diversity" and "eutrophication." Another major contribution of *Footprints* is the patience with which Farrier follows the future fossils as far into time as he can, which displays a willingness to imagine what lies ahead for earth *beyond* our worlds of concern. For example, the aforementioned voyage of a plastic bottle from river to sea, from arctic ice to ocean sediment, is worked out in such detail that one cannot but look differently at other seemingly innocuous plastic containers, such as toothbrushes and food wrappers. In Farrier's hands, these become objects that have stories of their own to tell.

However, despite these contributions, *Footprints* shows perhaps too much overlap with, especially, MacFarlane's *Underland*. Both explore nuclear repositories and the consequences of mining, both inject their narratives with literature and philosophy, and they both often use the same sources in their attempts to make the science become meaningful, such as Walter Benjamin's Arcade Project. Yet, where MacFarlane crawls, jumps, and scrambles through deep time like a kind of geological Indiana Jones, Farrier's research trips do not get more exciting than a tourist boat tour to the Great Barrier Reef. The largest anti-climax of the book is when Farrier describes an unfruitful trip to a uranium mine, which he is not even allowed to enter. "I took a few more pictures, then got back in my car and turned out of the car park" (185). In that respect,

MacFarlane's work offers much the same as Farrier's, but his engagement with the persons and places he visits is deeper and more lively.

Next to that, it is a shame that Farrier largely ignores the ethical consequences of his research. As a reader I would have been curious to learn how the shadow of the deep future should inform today's collective action on the institutional level, for example, in relation to future generations or to species that will go extinct due to contemporary changes. Even if Farrier had wanted to include such a discussion, his approach to the future might have actually prohibited him from doing so. The reason is that the imagined future from which Farrier studies future fossils is situated beyond human history. His analyses, therefore, tempt us to think that the human world will come to a sudden standstill, allowing the planet to bury our traces without our further mingling. Except for some remarks about the institutionalization of nuclear waste management, Farrier does not address the deep future of politics or social life, as if these will be removed from the face of the earth in a single blip. That assumption is problematic, precisely because Farrier's examples reveal that humanity will remain a geological force for a long time to come. Is it not imaginable that we will keep changing earth's archives, even reviving and altering our traces after they have been taken up by earth? Such a perspective would stress continuity with the deep future rather than disparity, and such a reading of future fossils would open the way to a serious engagement with what we should *do* with the data that Farrier excavates.

All in all, Farrier's work powerfully explores the way in which the future already lies enclosed in the present. Its patient investigations and *Footprints'* inspired use of literature offers something to both those new to the Anthropocene discussion and to those who want to deepen their understanding of what it means to be a geological agent on earth. However, the book calls for, but does not develop, an ethics of deep time, that stresses continuity rather than disparity with what is to come.

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Works Cited

Farrier, David. *Footprints*. London: 4th Estate, 2020.

Macfarlane, Robert. *Underland: A Deep Time Journey*. London: Hamish Hamilton, 2019.

Schaberg, Christoph. *Searching for the Anthropocene*. New York & London: Bloomsbury, 2020.