

**Book Review: Robert Macfarlane (2019), *Underland: A Deep Time Journey*, Hamish Hamilton (Penguin), 496pp, ISBN: 9780241143803, RRP: \$45.00, available as hardback and as e-book.**

**Reviewed by David Gillieson**

In *Underland*, the author explores natural and artificial spaces deep within the Earth for what they have to tell us about the long history of the Earth, and for what these insights might mean for our future as a species. This is a book filled with great adventures, quite deep wisdom and a touching concern for humanity. Across many cultures, and over Deep Time, people have used underground spaces for “Shelter (memories, precious matter, messages, fragile lives). Yield (information, wealth, metaphors, minerals, visions). Dispose (waste, trauma, poison, secrets).” Deep Time provides a framework with which to consider how our species (and closely related species) have related to the Earth and modified it to suit its purposes.

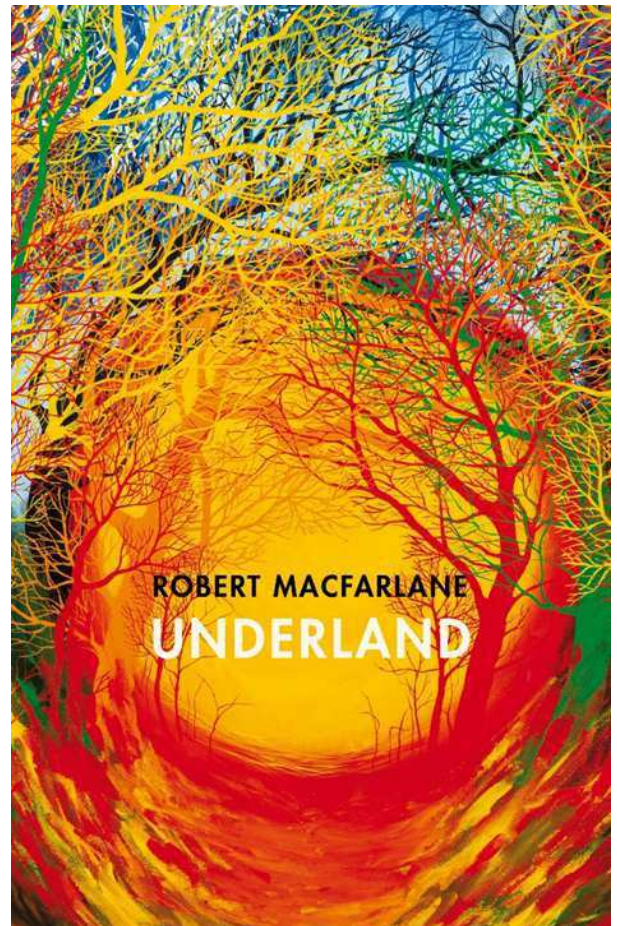
Macfarlane brings the full weight of his scholarship to the task. He quotes a dazzling range of poets, novelists and academic writers on geology, archaeology, mythology, morphology and glaciology, as well as on nuclear science, “dark matter” physics, and art history.

He moves smoothly from the ancient myths of Gilgamesh and Orpheus in the Underworld, to the latest ecological research on the fine network of fungal hyphae in the soil that transfer nutrients between trees and may even aid a form of communication between them, then considers the minds of the Neanderthal artists who created cave art in northern Spain 65,000 years ago.

In his first book, *Mountains Of The Mind*, Macfarlane was obsessed by the fear and fascination generated in the human psyche by climbing, and the addictive adrenaline rush termed “feeding the rat” by Al Alvarez. This theme is continued in *Underland*.

Under Paris, exploring the vast networks of catacombs with a group of anti-establishment punk cavers, he becomes stuck in a narrow vertical shaft as “the stone that encases me, the stone that is measuring me up like a coffin, starts to vibrate ... The thought of continuing is atrocious. The thought of reversing is even worse. Then the top of my head bumps against something soft ...” The select and secretive community of speleonauts under Paris is highly organised, with links to like-minded troglaphiles, in places as far away as Brisbane, creating a global network of invisible underground cities.

As he continues his explorations of the underground realm, we are taken to deep shafts descending the classical karst of Slovenia to the black sand banks of the underground Timavo River, emerging at springs near Trieste. Later, he explores limestone caves and tunnels excavated in the Julian Alps by partisans in World War II, and shafts used for the disposal of bodies by both sides. There is a claustrophobia-inducing account of negotiating loose boulder piles in Mendip



caves and of a solo winter expedition to caves with prehistoric art in the Lofoten Islands of Norway. Plus, a great chapter describing descents into glacial mills or moulin on the rapidly melting Greenland Ice Sheet.

One of the most harrowing chapters in the book describes his visit to an underground nuclear waste repository at Olkiluoto Island off Finland, where 6,500 tons of spent uranium will be buried until it becomes safe at the end of its half-life, millions of years from now. The various governments responsible for this vault have enlisted the aid of anthropologists, architects, graphic designers, ethicists and linguists to design symbols and messages which will communicate the danger of this place to whatever species may come here in the distant future. What might have been this book’s last sentence instead arrives on page 402: “This is the way the world ends, this is the way the world ends, this is the way the world ends — not with a bang but a visitors’ centre.”

In all of Macfarlane’s books, the adventures are really a point of departure for discussions of much deeper concerns: the relationship between people and landscape, the mutability of time and place, and the fragility of all that we are and all that we create. In his compelling prose, Macfarlane is effectively using the experience of the *Underland* to offer deeper and more shifting ideas about our world. “Time feels differently reckoned” after going underground, “further deepened, further folded”.

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He is greatly concerned with the nature of the Anthropocene. In a geological sense, the artefacts of our civilisation will be the Lead-210 from nuclear fallout preserved in lake sediments; the bones of millions of intensively farmed pigs and steers; billions of crushed plastic bottles and other containers which will provide precisely dateable strata with reference to the product-design archives of multinationals.

In Hawaii, geologists have identified a new kind of rock which may define the start of this Age of Unintended Consequences. A sediment of recent history, the rock displays milky-blue flecks, small patches of dull green, and fibrous orange twists. It is known, because of its unique properties, as “plastiglomerate.” This forms where plastic marine debris is subjected to high heat and melts, wrapping together particulates such as shell grit or sand. It then solidifies as it cools. Campfires are one source of that high heat. Plastiglomerate may also emerge along the scorched trail of a bushfire, or it might be cauterised into the ground by flowing lava.

Macfarlane’s main contribution to an emerging body of popular ecological writing is to demonstrate clearly how the ground beneath our feet - the Underland - is profoundly affected by our activities on the surface.

Whether by:

- the rapacious gouging by multinational corporations; or
- by ongoing extraction or pollution of groundwater by industry and urbanisation,

human activity now extends deep into the earth.

Regional lowering of karst groundwater levels in Europe transcends national boundaries.

Falling water levels in a spring-fed river in the Czech Republic reveal engraved “hunger stones” placed there to commemorate the worst droughts and starvation of the distant past. One stone reads: “If you see me, weep.”

His messages are not all negative and he is adamant that we should not see the present environmental crises as a justification for apathy.

*“We should resist such inertial thinking; indeed, we should urge its opposite – deep time as a radical perspective, provoking us to action not apathy. For to think in deep time can be a means not of escaping our troubled present, but rather of re-imagining it; countermanding its quick greeds and furies with older, slower stories of making and unmaking. At its best, a deep time awareness might help us see ourselves as part of a web of gift, inheritance and legacy stretching over millions of years past and millions to come, bringing us to consider what we are leaving behind for the epochs and beings that will follow us.”*

This is both an entertaining and thought-provoking book which provides some good insights into why we go into caves, as well as providing long-term perspectives on ecology and reminding us that humans do not represent any point of culmination in the story of the planet.

## **Ken Grimes Award—ACKMA 2020 Conference**

**Grant funding is available to support attendance at the May 2020 Biennial ACKMA Conference in Jenolan.**

**The Honorary Life Members Fund will support one to two attendees with their conference costs. The fund is open to members and non-members. Students and researchers are welcome to apply, as well as others (such as leaders in guiding and interpretation) and attendees from neighbouring countries. There is no set format for application. Applicant must describe:**

- **how attendance will benefit them (eg professional development),**
- **how their attendance will benefit ACKMA (eg a paper), and**
- **detail of the funding level sought.**

**For more information, please contact Dave Smith ([dave.smith.nz@gmail.com](mailto:dave.smith.nz@gmail.com)).**

**Applications will close 31 January 2020. Applications are to be sent to the above email address.**

**ACKMA members are asked to circulate this information to students and researchers working at their local cave or karst site.**