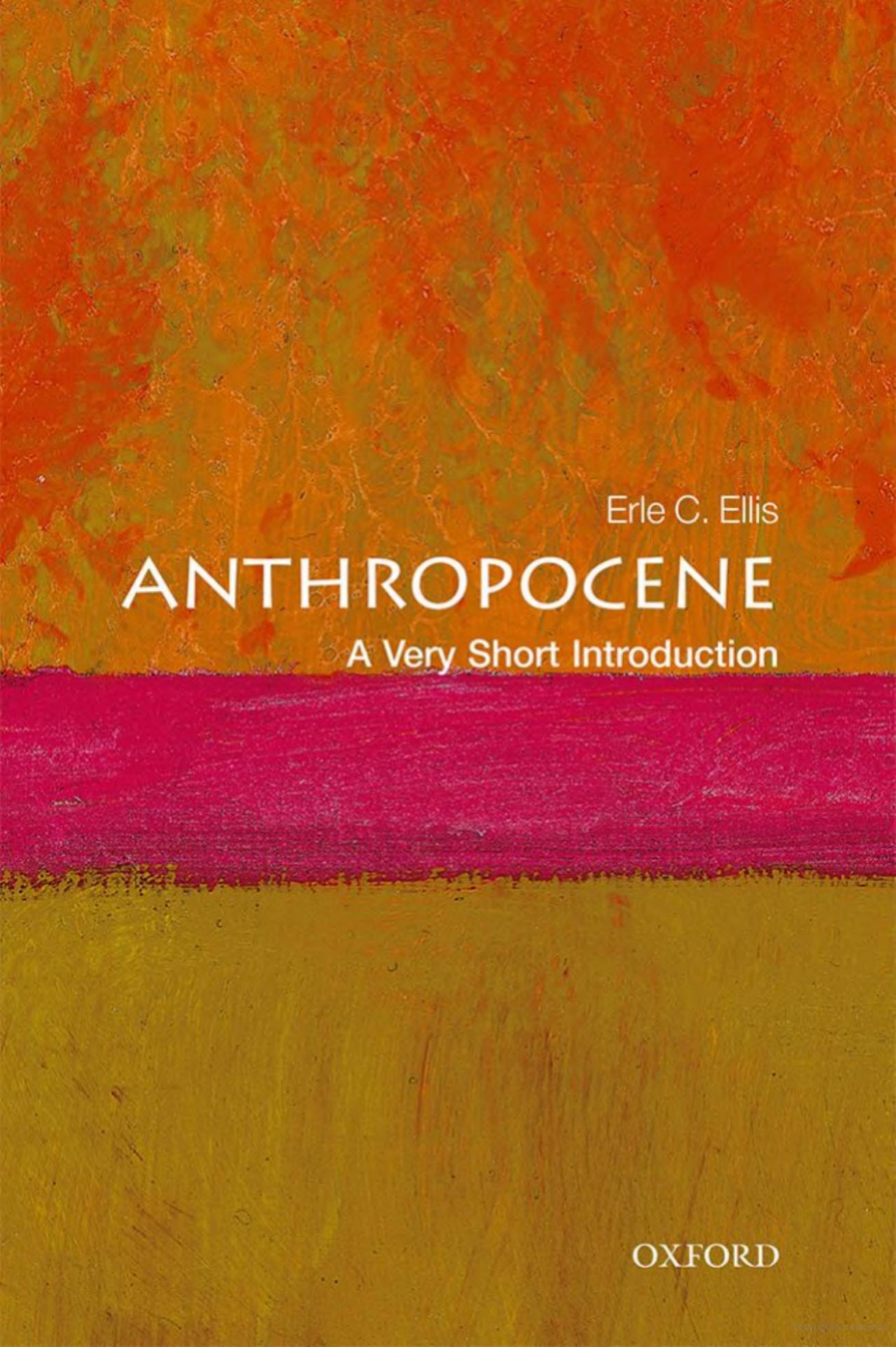
Erle C. Ellis
ANTHROPOCENE
A Very Short Introduction
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Preface

Rewriting history is an ambitious project. Even more so when this involves an entire planet and features a new leading actor. But that is precisely what this book is about.

The history of your planet and your role in it is being rewritten to include a new chapter; a chapter in which you play a leading role. We humans, the Anthropos, have so greatly altered Earth's functioning that scientists now propose to recognize this with a new interval of geologic time: the Anthropocene. Unlike prior geologic times, the proposal to mark an interval in which humans have become a 'great force of nature' has exploded across the scholarly world and beyond.

The future of the Anthropocene remains unsettled. Scientific debate still swirls among the various proposals to define an 'age of humans', including the option of rejecting the Anthropocene outright. As a work in progress, no book can provide the final word on what the Anthropocene is or will become. My goal here is simpler; to provide you with the background needed to understand the Anthropocene as a scientific proposal and to explain why it has become so broadly influential. In the process, I hope you will become as inspired as I am to more consciously and proactively shape a better future for the age of humans.

Acknowledgements

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List of illustrations

Chapter 1
Origins

'We are in the Anthropocene!' exclaimed Nobel-prize winning atmospheric chemist Paul Crutzen in frustration at a conference in 2000. Why were his colleagues still calling our time the Holocene? Humans had so clearly reshaped Earth since the last ice age ended, the beginning of the Holocene Epoch. From this moment on, the proposal to rename Earth's current interval of geological time after us, the *Anthropos*, has been gaining extraordinary traction—and critics—both inside and outside the academy.

Why did such an esoteric geologic term rise so quickly to become a flashpoint of scholarly discussion and a popular phenomenon around the world? To understand this, it will help to look deeper, beyond the science, into the origin stories told across human societies since time began.

From prehistory to present, the human role in nature—as progeny, partner, steward, gardener, or destroyer—has been defined and redefined by narratives explaining human emergence on Earth. Origin stories gave humans a privileged place at the centre of divine creation in the Abrahamic religions. Copernicus and Darwin built new narratives from scientific evidence and humans became just another animal on just another planet orbiting just another ordinary star.

The Anthropocene demands an even greater adjustment of our perspectives. As geologists and others struggle for and against various proposals to formalize the Anthropocene, it should come as no surprise that their efforts have become entangled with both age-old worldviews and contemporary debates on the role of humans in nature and even what it means to be human.

A great force of nature

Crutzen's outburst was rooted in his experience investigating human-caused changes in Earth's atmosphere and their profound global consequences: the hole in Earth's protective ozone layer and global climate change. To hear his colleagues speak of Earth's current state without reference to these profound anthropogenic changes was just too much to bear. It was time to accept that the relatively stable conditions of the Holocene Epoch were over.

Crutzen was not alone. Ecologist Eugene Stoermer had been using the term Anthropocene informally with students and colleagues since the 1980s. In 2000, the two published a brief note in a scientific newsletter, the first formal appearance of the term in print—though *New York Times* writer Andy Revkin had used 'Anthrocene' in his book on climate change in 1992. In this first publication, Crutzen and Stoermer linked the Anthropocene with carbon dioxide emissions from fossil fuel combustion and dated it to the start of the Industrial Revolution at the end of the 18th century. In so doing, they were building on a mass of earlier work describing anthropogenic environmental changes. With Crutzen's proposal, these many threads had finally come together in a proposal to mark human emergence as a 'great force of nature' in the historical record of Earth.

Changing history

Overwhelming evidence now confirms that humans are changing Earth in unprecedented ways. Global climate change, acidifying