

Seeding the Positive Anthropocene

Preface

James Duffy

*Oh, mercy, mercy me
Ab, things ain't what they used to be, no, no, no
Radiation underground and in the sky
Animals and birds who live nearby are dying¹*

In recent decades, myriads of people living in various parts of the world have witnessed unprecedented flooding, ravaging bushfires, oxygen-poor 'dead zones' along coastlines, and a record-setting number of hurricanes. Unprecedented changes to the Earth's biosphere and its local ecosystems have landed us in a dire situation of *climigration* due to flooding, unbearable pollen seasons, and frequent warnings of risks due to UV radiation exposure. Human activities such as deforestation, burning fossil fuels, and manufacturing chemical compounds have been damaging the environment, and Earth System scientists claim we have crossed a boundary not just with respect to climate change, but also with respect to biodiversity loss, land conversion, and fertilizer use.² In these four areas we are now on the other side of the threshold of stability. There is something of a consensus that 'things ain't what they used to be,' and the window of opportunity for mending our ways is shrinking.

What do we do now?

The question is ambiguous. Who are we? We are quite a diverse crowd, spread out geographically and historically, as well as by age, temperament, formation, gender, experience, and creed. Currently the world population is approximately 7.9 billion people. What are we doing? Too many things to list, and in any case the list would have to be interpreted, storied, and evaluated.³ What

¹ Marvin Gaye, *Mercy Mercy Me, What's Going On?* (Motown Records, 1971). Marvin Gaye wrote this song about the environment. It is the second single from his 1971 album, and it won a Grammy Award in 2002.

² Johan Rockström and Mattias Klum, *Big World, Small Planet* (New Haven: Yale University Press, 2015).

³ These three tasks are represented by the letters I, H, and Di in the staircase diagram in McShane's Helsinki essay "Structuring the Reach Towards the Future" on page 107 below. See also "interpretation, interpreters"; "story, story checkers"; and "dialectic,

have we, an estimated 117 billion members of *Homo sapiens sapiens*, been doing *lately*?⁴ What are we not doing that might be worth doing, “not merely to survive, but to thrive; and to do so with some passion, some compassion, some humor, and some style”?⁵ Given the dimensions of the predicament we are in, how might we move beyond well-intentioned moralizing to making policies, planning, and implementing plans that are Earth-friendly?

A growing concern about the Earth’s future underlies a proposal to apply the term *Anthropocene* to the current geological epoch. In 2000, Paul Crutzen and Eugene Stoermer introduced the term, after Crutzen had grown tired of hearing the current geological epoch referred to as the *Holocene*.⁶ Eight years later, the British geologist Jan Zalasiewicz, who chaired the Stratigraphy Commission of the Geological Society of London, proposed that *Anthropocene* be used to name a formal geological interval. Together with three colleagues, he wrote “The Anthropocene: a new epoch of geological time?”⁷ which led to the creation of the Anthropocene Working Group (AWG) one year later (2009).⁸

Advocates of “deep history” encourage anthropologists, archaeologists, linguists, geneticists, and primatologists to include in their narratives about human beginnings “prehistory,” a term that some claim is an arbitrary boundary. While you do not need to be a professional geologist or paleobiologist to appreciate that the emergence of human laughter and longing were relatively recent events in the

dialecticians” in the index and Henman’s essay in chapter II, “Thinking About New Ways of Thinking.”

⁴ How you or I read the word *lately* is a personal matter having to do with what time it is. *Lately* might mean roughly the last 260,000 to 350,000 years of mating, singing and dancing, making art, tattooing and applying makeup. See also my comments about *nowadays* in note 12 Of “Humans Impacting Earth Systems” on p. 14 below.

⁵ “Maya Angelou: In Her Own Words,” *BBC News*, May 28, 2014, sec. US & Canada, <https://www.bbc.com/news/world-us-canada-27610770>.

⁶ Paul J. Crutzen and Eugene F. Stoermer, “The ‘Anthropocene,’” *Global Change Newsletter* 41 (May 2000), 17–18.

⁷ Jan Zalasiewicz et al., “The Anthropocene: A New Epoch of Geological Time?,” *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences* 369, no. 1938 (March 13, 2011), 835–41, <https://doi.org/10.1098/rsta.2010.0339>.

⁸ Crutzen and Stoermer proposed the latter half of the 18th century as the beginning of the Anthropocene, noting that the date coincides with Watt’s invention of the steam engine. Geologists now believe that the significant indicator is plutonium from nuclear weapons testing. This moves the start date to the mid-20th century. See also note 20 below.

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story of the Earth,⁹ it is no laughing matter that during the last 70 years “it’s gotten worse and worse, faster and faster.”¹⁰ Nor is it a laughing matter that the window of opportunity to mend our ways is closing.

Individuals and groups who are not geologists are also concerned about human behaviour and the Earth’s future. People as different as Greta Thunberg, Pope Francis, and David Attenborough have been imploring us to reflect upon how future generations will survive. These and other individuals may or may not be interested in the efforts to formalize the Global Boundary Stratotype and Section Point (GSSP, or ‘golden spike’) for the Anthropocene. Likewise, those involved in the search may or may not be interested in what Greta Thunberg, Pope Francis, and David Attenborough say or write.

The “we” who are the four authors of the collection of essays in this book are part of a growing number of people concerned about what individuals and groups might or should do to mend our ways and live more responsibly so that our great-grandchildren find the planet in a better condition than we currently find it. We are not geologists, paleobiologists, or Canadian film makers,¹¹ but we are

⁹ The origins of human laughter can be traced back 10 to 16 million years, while organic tools found in Ethiopia that might have symbolic meaning and reveal acts of reverence are approximately 1.4 million years old. Rounding off the age of the Earth to 4.5 billion years, cooperative and competitive behaviour encouraged by tickling has existed for approximately .003% of Earth story, while conscious longing has existed for approximately .0003% of Earth story. Marina Davila Ross, Michael J Owren, and Elke Zimmermann, “Reconstructing the Evolution of Laughter in Great Apes and Humans,” *Current Biology* 19, no. 13 (July 14, 2009), 1106–11, <https://doi.org/10.1016/j.cub.2009.05.028>. Ran Barkai, “Lower Paleolithic Bone Handaxes and Chopsticks: Tools and Symbols?,” *Proceedings of the National Academy of Sciences* 117, no. 49 (December 8, 2020), 30892–93, <https://doi.org/10.1073/pnas.2016482117>.

¹⁰ Todd LeVasseur, “It’s Getting Better and Better, Worse and Worse, Faster and Faster,” Pasi Heikkurinen, ed., *Sustainability and Peaceful Coexistence for the Anthropocene* (Abingdon, Oxon: Routledge, 2017), 87–100. Hereafter *Sustainability*. Philip McShane reviews this essay on pages 55–58 below.

¹¹ Nicholas de Pencier, Jennifer Baichwal, and Edward Burtynsky directed the documentary “ANTHROPOCENE: The Human Epoch,” a “meditation on humanity’s massive reengineering of the planet” (<https://theanthropocene.org/film>). The film was released on September 13, 2018, in Toronto.

Philip McShane (1932–2020) was trained in mathematical physics. He wrote extensively in diverse areas, including evolutionary theory, linguistics, economics, and methodology. Terrance Quinn has published in pure and applied mathematics, science

interested in what they say, write, and produce. We are also interested in the contributions of others who share our concern. Finally, our interests include how all those concerned might proceed to ask and answer questions efficiently.

In the late fall of 2018, we took a specific interest in reading and reviewing the essays published in *Sustainability and Peaceful Coexistence for the Anthropocene*.¹² Our focus on this co-authored book was strategically limited, as we were intent on generating discussion and engaging the authors in dialogue.

At the time of writing the essays in this collection, two conferences were planned—*The 3rd Peaceful Existence Colloquium* in Helsinki, Finland, June 13–14, 2019, and *The Positive Anthropocene* at the University British Columbia, Vancouver, Canada, July 8–12, 2019.¹³ Emails were exchanged, McShane submitted an abstract for the June conference in Helsinki,¹⁴ and soon after the organizers of that conference invited him to participate in the colloquium. The essay “Structuring the Reach toward the Future” is his contribution to the conference in Helsinki. McShane provides an image of the Anthropocene stretching thousands of years before 1950 and after 2050.¹⁵

education, and philosophy of science. In recent years, he has been doing work in economics and has published on ecological economics. Robert Henman did his graduate work in philosophy of education and has published articles in psychotherapy, meta-neuroscience, and ethics. I did graduate work in philosophy and have published on foundations in probability theory, economics, and the ethics of collaboration. More extensive biographies are provided on the last pages of this book.

¹² *Sustainability* is divided into four parts, and each of the four of us read and reacted to the essays in one of those parts: (I) Concepts, Causes, and Consequences (reviewed by Duffy); (II) Capitalism and Neoliberal Governmentality (reviewed by Quinn); (III) Thinking and the Non-Human World (reviewed by McShane); (IV) Post-Growth Societies and Organizations (reviewed by Henman). Our respective review essays are found in parts I–IV of this book.

¹³ See Appendix B on page 163.

¹⁴ See Appendix A on pages 159–161.

¹⁵ The “central problem” of McShane’s intervention in Helsinki is discussed in note 3 on p. 116. See also his description of axial humanity on 134–136. In note 12 of “Humans Impacting Earth Systems” (p. 14), I comment on the word *nomadays*. A stretching of the imagination is also intimated in “Anthropocene or anthropocene?” “The Noosphere,” “For Openers, What’s Going On,” “Economics in the Anthropocene: Blue, Green, and Other Colors,” “Managings of History: Governings in the Positive Anthropocene,” “Down and Out on Planet Earth,” “Crecycling *Sustainability*,” and “Crecycling *Insight*.”

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The authors of *Sustainability* approached the challenge of understanding sustainable development from various fields of study, including geosciences, economics, law, organizational studies, political theory, and philosophy. In the words of Pasi Heikkurinen, the editor of the collection of essays, “the ideas presented in this volume are to work as an early invitation to a transdisciplinary dialogue under the rubric of the Anthropocene.”¹⁶ He goes on to describe the contribution the various authors make in these words: “The contributors provide important signposts from diverse perspectives on how things can, and should, be transformed.”¹⁷

The essays in this collection also provide important signposts on possible transformations. Most of the essays originally appeared in the end of 2018 and beginning of 2019 as part of a website *Openers of the Positive Anthropocene*. There already existed and still exist various Anthropocene websites among the approximately 1.93 billion websites in existence (as of March 2022), but they were not and are not coordinated. A minor reason for the lack of coordination is the simple fact that websites serve different purposes. Static websites might inform, disseminate technical reports, announce events, preserve materials (archive), and/or digitalize a portfolio. Dynamic websites typically host forum discussions, instruct visitors to do something such as subscribing to a newsletter or downloading a document using a call-to-action (CTA), market and sell a product or service, gather information from possible clients, and/or organize a movement. Many websites combine static and dynamic elements. In addition, it is common for individuals to have web sites on which they do many of the aforementioned and, in some cases, provide a CV and social media links, for example a Twitter feed.

The four authors of this collection of essays maintain that the major reason for the lack of coordination is the not-so-simple fact that there does not exist an operative framework for collaboration, although there is an increasing number of people who are interested in figuring out whether and how it is possible to manage all the moving parts—a multitude of questions, methods of inquiry, time scales, disciplines, and worldviews. The lack of coordination is one of the pain points of our efforts, all our efforts.

The pain point might be felt in asking oneself, myself, ourselves: Where is this book, this essay, this colloquium, this formal definition, or this student

¹⁶ *Sustainability*, 4.

¹⁷ *Sustainability*, 4.

protest¹⁸ “going” in the next few years, decades, or centuries? To whom is it going? How is it going? If it gains traction, might it be a small but important step, something that transforms the Earth for the better? Might it shift probabilities of seeding an “effective and resolute intervention” in world process?¹⁹ These are some the questions raised in the essays in this book.

* * *

For many writers of essays and books, the term *Anthropocene* designates a period that is negative. There might be disagreement about when the “bad times” began,²⁰ but the wreckage is undeniable, and humanity must somehow get past the Anthropocene and jumpstart another, later period.²¹ So, for most scholars, adding the qualifier *negative* is redundant, as the Anthropocene is a negative predicament. “Our planetary system is affected by a magnitude of force as powerful as any naturally occurring global catastrophe, but one caused solely by a single species: us.”²² For others, adding a value judgement *negative* or *positive*, while questionable, is tolerable, as long as such an evaluation is not confused with the

¹⁸ In the spring of 2019, students around the world skipped classes to protest what they believed are government failures to intervene against global warming.

¹⁹ Bernard Lonergan discusses the possibility of a “resolute and effective intervention in the dialectic” (historical process) in Bernard Lonergan, *Phenomenology and Logic: The Boston College Lectures on Mathematical Logic and Existentialism*, ed. Philip McShane, *Collected Works of Bernard Lonergan 18* (Toronto: University of Toronto Press, 2001). 305–307.

²⁰ Proposed beginnings of the “bad times” include: the advent of agriculture, colonialism and plantation agriculture, the rise of capitalism, the Industrial Revolution, and the Atomic Age.

²¹ See, for example, A. Fremaux, *After the Anthropocene: Green Republicanism in a Post-Capitalist World* (Cham, Switzerland: Palgrave MacMillan, 2019); A.Y. Glikson, *The Plutocene: Blueprints for a Post-Anthropocene Greenhouse Earth* (Cham, Switzerland: Palgrave MacMillan, 2017); E. Priyadharshini, *Pedagogies for the Post-Anthropocene: Lessons from Apocalypse, Revolution & Utopia*, *Cultural Studies and Transdisciplinarity in Education*, 14 (Singapore: Springer 2021); P. Heikkurinen, T. Ruuska, O. Rantala, and A. Valtonen, *After the Anthropocene: Time and Mobility* (Basel, Switzerland: MDPI, 2020); L. Young (ed.), *Machine Landscapes: Architectures of the Post Anthropocene*, (Oxford: John Wiley & Sons, 2019).

²² Edward Burtynsky, “Artist’s Statement” posted on “Photographs: Anthropocene,” <https://www.edwardburtynsky.com/projects/photographs/anthropocene>.

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value-free search for a golden spike or the practice of doing geological science or Earth science.

One way to reduce possible ambiguity would be to establish a convention: use capital “A” *Anthropocene* to designate a geological epoch—assuming it is eventually approved by the ICS and later by the International Union of Geological Sciences—and small “a” *anthropocene* to designate other meanings.²³

Or should it be the other way around? Or ...?

In this collection of essays, we distinguish between a *positive* and *negative Anthropocene*. While this may seem to be something of an anomaly, caring for the globe by removing *anthropos* from the scene would be a strange, not to mention unethical way of expressing care. A hermeneutics of suspicion about what has been and is going on, or not, might help diagnose the dire situation, but proposing a remedy requires a hermeneutics of recovery.²⁴ The dire situation complicates a possible recovery insofar as it makes it exceedingly difficult to fantasize grouped groupings of *anthropos* efficiently and beautifully flying together,²⁵ collaborating to “liberate many entirely and all increasingly to the field of cultural activities.”²⁶ As

²³ See also “Anthropocene or anthropocene?” below, 3–5. In the Afterword I comment at greater length on well-intentioned efforts to manage meanings.

²⁴ The distinction between the two hermeneutics is found in the writings of Paul Ricoeur. A basic presentation of the distinction is given by Don Ihde, *Hermeneutic Phenomenology: The Philosophy of Paul Ricoeur* (Evanston, IL: Northwestern University Press, 1971), 140–143.

²⁵ On the front cover of this book, there is an image of starling murmuration, an amazing phenomenon that involves psychic adaptation in the flock. Each starling adjusts speed and velocity to that of its neighbors. See Andrea Cavagna et al., “Marginal Speed Confinement Resolves the Conflict between Correlation and Control in Collective Behaviour,” *Nature Communications* 13, no. 1 (May 10, 2022), 2315, <https://doi.org/10.1038/s41467-022-29883-4>. This article focuses on statistical field theory. A more complete explanation would draw on and in genetic method to investigate, for example, the phrases “the essence of control, a fundamental problem of natural behavior” and “when the group is under perturbation.” Ibid, 2. “What is history to tell us about the murmuration of starlings, a biodynamics that baffles present sciences? What is a later zoology to tell us about the subtle interbirding neurodynamics?” Philip McShane, “Questing2020C: The First Mansions,” 2020, 4, <http://www.philipmcshane.org/questing2020>.

²⁶ Bernard Lonergan, *For a New Political Economy*, ed. Philip McShane, vol. 21, *Collected Works of Bernard Lonergan* (Toronto: Toronto University Press, 1998), 20. See further Quinn’s essays in chapter III, “Beginning Economics” (41–52) and “Part Two: Remembrance of Times Past and Future” of McShane’s essay “Structuring the

intimated in various essays in this collection, a bit of clarity regarding “what’s what” and “what’s what might be” could help seed the *positive Anthropocene*. Such luminosity might also help coordinate the various efforts of data collectors, interpreters, story makers, evaluators and criticizers, policy makers, city and country planners, executors of plans, bloggers and journalists, science fiction writers, film makers, and other artists, and the millions of teachers and preachers around the globe trying to communicate pragmatic truths and hoping to implement timely precepts.

Reach Towards the Future” (127–133). See also Philip McShane, *Economics for Everyone: Das Jus Kapital* (Vancouver: Axial Publishing, 2017); Terrance Quinn, “Anatomy of Economic Activity,” *American Review of Political Economy* 13, no. 1 (December 31, 2018), <https://doi.org/10.38024/arpe.157>; and James Duffy, “Minding the Economy of Campo Real,” *Dinyadaan: Journal of Philosophy and Education* 29, no. 1 (2018), 1–24.

