



# Touchstones for Deterritorializing Socioecological Learning

The Anthropocene, Posthumanism and  
Common Worlds as Creative Milieux

*Edited by* Amy Cutter-Mackenzie-Knowles  
Alexandra Laszcik · Judith Wilks  
Marianne Logan · Angela Turner  
Wendy Boyd



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## Touchstones for Deterritorializing Socioecological Learning

“This important book comes as daily news cycles consistently report “catastrophic” events in Earth’s new geostory—the Anthropocene. Amy Cutter-Mackenzie-Knowles and her team of editors gather leading educational thinkers to contemplate an uncertain future. In the face of epochal change they assert that we will not adapt by using old habits of mind and old ways of being. As touchstones, the anthropocene, posthumanism and common worlds guide educators into a creative learning milieu: examining new relationships with Earth; permeating boundaries that separate human and more-than-human worlds; moving beyond stewardship ethics; enacting flatter more equitable ways of being; developing new forms of literacy to decode today’s world. A vital book for our times.”

—Professor Emeritus Bob Jickling, *Lakehead University, Canada*

“Often we come across terms that challenge us to re-think the touchstone ideas that shape how we can live, think, and be in the world. Terms such as *Anthropocene* and *Posthumanism* are some of the more illuminating and perplexing of our contemporary world. Having a text that explores these terms set in the contexts of teaching and learning in our social and ecological challenges has to be useful and instructive for those who want to re-think (and deterritorialise) the learning opportunities we frame for our students and ourselves. Thank you to the authors for coalescing around these obligatory and unpalatable ideas to help us find intentional acts of resistance and ways towards respecting the interrelationship of all things.”

—Dr Peta White, Faculty of Education, *Deakin University, Australia*

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Editors

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ISBN 978-3-030-12211-9

ISBN 978-3-030-12212-6 (eBook)

<https://doi.org/10.1007/978-3-030-12212-6>

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# Foreword

In my final year as a secondary school student in the late 1970s in South Australia I was fortunate enough to be able to study Geology. Mr Ingram's classes were as much experiential as they were theoretical. Every class had us examining rock samples and fossils – studying their crystal structure, touching (and even tasting) them to try to learn what they were as we thought about where they came from and what they could teach us. We handled 500 million year old Cambrian quartzites and made landform models to look at tectonic plate movements, folding and erosion. We studied geological eras, periods and epochs. We went into the field on numerous occasions to learn about specific geological formations and how the Earth had formed and changed through time. Geology taught us about Deep Time, that the Earth was always in a state of change, and that change was a natural process. But geologists also recognised the last ten thousand years as the Holocene, an epoch in which the impact of humans through agricultural land use, species extinction and increasing negative impacts on local ecosystems had begun to change the world. Geologists are now arguing about whether we have recently entered another epoch called the Anthropocene, a time when the impact of human activity is so profound that it is even changing the very nature of the Earth's processes and geology.

Since the Industrial Revolution, and especially since World War II, the world has experienced the Great Acceleration, where humans have

become the dominant species, instigating radical changes to the composition of the atmosphere, rises in sea levels and sea temperatures and where wide scale destruction and disturbance of vast ecosystems – even whole oceans – now occur at a speed not previously evident in the whole geological record. It now seems routine that daily news coverage will include stories close to home about wildfire and megastorms, droughts and floods as well as reports on the meetings of world economic leaders and inter-governmental panels to discuss climate change and the now very real challenges it poses for the future of humanity. So entangled are human-induced problems and catastrophes that it seems reasonable to say that we have entered what we might call the Great Uncertainty. All of us as individuals, and each profession, are now called upon to respond. So, what happens when environmental educators and educational researchers enter this uncertainty? What arguments must be made, what assumptions need disrupting, and how will thinking and practice need to change? These are absolutely crucial questions, for how we educate the current and coming generations will surely be amongst the most crucial responses humans make to the many challenges we face.

This is the territory that the editors and writers of *Touchstones for Deterritorializing Socioecological Learning: The Anthropocene, Posthumanism and Common Worlds as Creative Milieux* have entered. The book commences by carefully examining the Anthropocene, its origins and the extent of its impacts. The challenges raised here have their parallel in education, from micro to macro scales; for the individual learner and teacher through to their society and their supporting ecosystems. The book develops a searching examination of the ‘saturation of humanism’ and what may be required to clear away persistent assumptions and habits, to make room for new ideas and actions. Readers will be asked to consider a flattened ontology, where humans are no longer positioned as the centre. *Touchstones for Deterritorializing Socioecological Learning* addresses this possibility from a deeply pedagogical position, discussing what it might mean for the learner to learn and the educator to educate in such a common world.

Each chapter of the book examines, provokes and debates aspects and examples of socioecological learning. The chapters may be read independently with detailed discussion that addresses unlearning the dualisms (or

delearning as the editors phrase it) that have led to the onset of the Anthropocene, or an analysis of the lived experience of learners in institutions beset with tensions between creativity and compliance. There is discussion of the essential characteristics of the socioecological learner and how this challenges dominant beliefs about voice, authority, decision-making. Provocative discussion of Big History, collaborative arts and the learner as activist will challenge the reader to consider antidisciplinary boundaries and how to foster more relational approaches and community connections. But the real power of the book, I feel, is when we gather these collective provocations, visions and discussions into a larger, coherent and louder pedagogy of hope.

We cannot return to the dawn of the Holocene when, it is argued, humans first began to live apart from nature as they begun the domestication of crops and stock. We cannot even return to unmake the steam engine and curtail the radical trajectory that it launched. But the message that this book makes most clear is that we can, from today, seek more ethical relations with our fellow inhabitants on this beautiful, but troubled, planet. *Touchstones for Deterritorializing Socioecological Learning* will help us disassemble a human-centric education and raise a new pedagogy of dwelling with the more than human world – with other species and the rocks, oceans, ecosystems and atmosphere which we call Earth – *our only home*.

Mount Helen, VIC, Australia

Brian Wattchow

Author – *A Pedagogy of Place: Outdoor Education for a Changing World and Song of the Wounded River*.

Lead Editor – *The Socioecological educator: A 21st Century Renewal of Physical, Health, Environment and Outdoor Education*.

# Acknowledgments

The idea of this book sparked at a writing retreat at the Angourie Rainforest Retreat on the North Coast of Australia in 2016. Huddled together in a dark, dim-lit cabin the idea took hold as we troubled education—what it was, what it could be, what it is for and what we could not even yet imagine. This led us down a concentrated conversation path about the focus of our writing at ‘this writing retreat’. The question was posed ‘what book have you always wanted to write?’ As ideas circulated with passion, frustration and intensity, sparks knocked together and we found ourselves immersed in a rich dialogue about socioecological learning. It was that collective energy and passion of Southern Cross University’s Sustainability, Environment and the Arts in Education (SEAE) Research Cluster that made this book a possibility. The editors and authors are indebted to its many members for providing reviews, much support and camaraderie throughout the writing process.

We are especially grateful to the School of Education for its financial and scholarly support of our writing retreats, which make books like these imaginable.



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**Philemon Chigeza** is an experienced school teacher and academic at James Cook University. He has a broad interest in the interaction between cultural and cognitive representation and systems of representation. Philemon's earlier research focused on developing capacity building pedagogies that affirm students' lived languages, experiences and knowledge in their learning. His work explores the notion of agency and students' negotiation of language and culture in mathematics and science classrooms. Philemon's present research is focused on emerging technology-based curriculum innovation designed to enhance engagement and learning, particularly for blended and virtual spaces. Philemon is also passionate about issues of environmental sustainability and how schools, electronic media and the home can be productively used to work towards a more sustainable and just society.

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# 1

## Touchstones for Deterritorializing the Socioecological Learner

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**Abstract** The opening chapter of this book orients the reader through the introduction of the concept of the socioecological learner. In so doing the chapter *clears the ground* through a diffractive untangling of the

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socioecological learner drawing upon research vignettes and the touchstone concepts of the Anthropocene, Posthumanism and Common Worlds as Creative Milieux (In this collection, the authors engage the French plural of milieu: milieux, not milieus). This ‘clearing of the ground’ is an ontological and epistemological approach of de-territorializing the learner for a post-Anthropocene world. It opens up the space for de-learning and de-imagining (*de’ meaning ‘from’ in Spanish*) the learner as a socioecological learner.

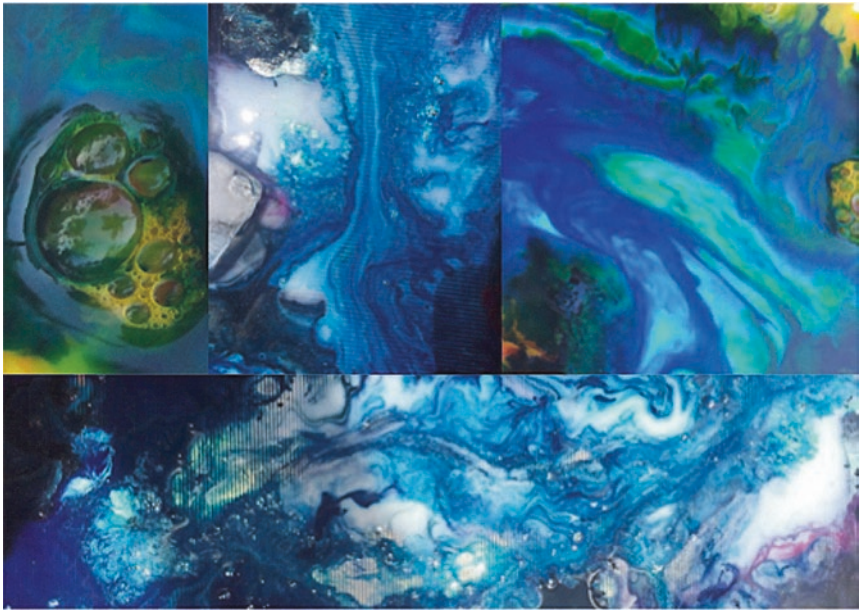
**Keywords** Anthropocene • Post-Anthropocene • Posthumanism • Common Worlds • Creative Milieux • De-learning • De-imagining • Deterritorializing

## Clearing the Socioecological Ground

Clearing the ground seems like an overtly ‘human’ endeavour, but this clearing is in fact an unhumanising process in an attempt to generate new ways of thinking and being as ‘a learner’. Some may describe this as a process of re-learning, but we see it as de-learning and de-imagining (*de’ after the Spanish word for ‘from’*) what it is to be human on a planet where humans are one of many species rather than ‘the superior dominant species’. This book embraces a flat ontology, which rejects human privileging and dominance over nonhuman subjects and objects. A flattened ontology requires humans to radically and actively live carefully, thoughtfully and ethically.

Snaza and Weaver (2015) argue that given the saturation of humanism “it is not even remotely possible at the present moment to conceptually or practically lay out a theory of posthumanist education or outline the contours of a posthumanist pedagogy” (p. 3). It is for this reason that the Editors resisted calling the book ‘The Posthumanist Learner’. By doing so though it is important to acknowledge the complexities between the theories of the socioecological and of posthumanism, indeed an enduring tension is provoked throughout this collection, which is purposeful and useful.

This brings us to the *touchstone concepts* of what it is to be a socioecological learner, for the purposes of this collection and the thoughts and actions that stem from it. By touchstones, we mean to work the concepts as an assaying apparatus. The notion, *socioecological*, in and of itself is problematic in that some may see it as saturated, disassembled, humanist. Yet we argue that at the centre of socioecological learning is a posthumanist ethos. There is a dualism automatically established between socio and ecological, but we believe it is crucial to dwell in these tensions and spaces as a process of dissembling human dominance in education. As such, this requires a deterritorializing of the socioecological, in the context of the Anthropocene. We now turn to a de-imagining of the socioecological, before presenting the touchstone concepts, namely the Anthropocene, Posthumanism and Common Worlds as Creative Milieux.



**Vignette 1** Socioecological – A fluid yet intertangled mesh. (Image by Authors (Lasczik and Cutter-Mackenzie-Knowles). Reproduced with permission)

## De-imagining the Socioecological

A socioecological framing is grounded in a post-anarchist theoretical orientation (Bookchin, 1994), yet supported by an experiential learning framework (Dewey, 1916, 1938; Merleau-Ponty, 1945). It is antidisciplinary whereby fields of research operate as collectives rather than as silos (Wattchow et al., 2014). In the book *The Socioecological Educator*, Brown, Jeanes and Cutter-Mackenzie (2014) identify four foundational concepts central to a socioecological framing, namely: (i) lived experience, (ii) place, (iii) experiential pedagogies/learnings, and (iv) agency and participation. These concepts are helpful in thinking through the complexity of the educator or pedagogue, although problematic insofar as these concepts retain an explicit focus on the human, albeit in place.

At the core, *socio* is thought of as ‘social, sociological or society’. Such concepts are readily human-saturated and imbued. *Socio* alludes to Latin etymologies of *socius*, which translate as companion, associate, ally – all very humancentric concepts. In our conceptualisations, we are expanding *socio* to embrace the nonhuman in subject and object, so that the ‘companions’, ‘allies’ and ‘associate’ relationalities transcend human boundaries.

*Ecological* is relating to or concerned with the relationship of subjects and objects to one another. Traditional definitions of ‘ecological’ however have tended to frame it through the connections of ‘living organisms’ and their relationship to the ‘physical environment’. In this chapter, and indeed in the collection, we view ecology as the entanglement of everything – common and uncommon subjects and objects.

Applying such a socioecological framing is fluid rather than developmental, and its components are not conceived as systems. Rather, they are approached as interpenetrating fields of relationships which come to shape emergent and dynamic processes of socioecological learning. Throughout this book we use the three touchstone concepts to illustrate the fluid and interrelational character of learning, viewed within this socioecological framing.

Of particular focus in the de-imaginings of the socioecological learner is the premise that the Anthropocene, Posthumanism and Common Worlds operate as Creative Milieux. By this we mean that these touchstone concepts reverberate and resonate as milieux – places, environments, conditions and events (Rousell & Cutter-Mackenzie-Knowles, 2019a) with and through which we put them to work in the assemblage of socioecological learning. The touchstones are entwined, and do not necessarily have to be engaged evenly or simultaneously in socioecological learning. Rather, it is understood that as each touchstone is engaged it is implied that so do the others in lesser and greater ways implicit in their assemblage. This is how they engage as milieux creatively, affectively and in synergy with the Anthropocene, Common Worlds and Posthumanism. What follows is an exploration of these touchstone concepts and how they may be engaged.

## Touchstone 1: Anthropocene

According to scientific estimates, the Earth is 4.5 billion years old and has undergone enormous change since its evolutionary beginnings (Gaffey & Steffen, 2017, p. 53). The universe is approximately 13.7 billion years old. The Earth's age can be evidenced within the Earth's crust 'iridium layer', which evidences the existence of fossilised plant and animal life over time. Figure 1.1 displays land and sea split into specific periods, rounded as time estimates (US Geological Survey Names Committee, 2010).

The Anthropocene is also referred to as the Capitolcene, Chthulucene and the Gynocene (among other names). While not yet officially approved, a formal geological timescale is currently under consideration by the International Union of Geological Sciences (IUGS).<sup>1</sup> It is important to note that in 2018 the International Commission on Stratigraphy (2018) (a subordinate body of the IUGS) introduced the Meghalayan Age within the existing geologic era of the

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<sup>1</sup> While there is wide consensus of the Anthropocene, Baskin (2015) contentiously argues that the Anthropocene is a value or worldview rather than geological epoch. He positions the Anthropocene as a radical reconceptualisation of the human-nature relationship, acknowledging that radical shifts in human-nature values are urgently needed.