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**Special Issue:**
Teaching Geography for a World in Transition - Powerful Teaching in Uncertain Times

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*Short Communication: Geographic Insight in Brief*

# Experience and Education in the Anthropocene: Conversations with the Non-Human

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**Abstract:** In the Anthropocene we are inescapably embedded in the planetary, such that we cannot experience the scales of our impact nor keep analytical or critical distance to it. This new position requires a new pedagogy for geography education in the Anthropocene, able to relate to the fragmentary experiences on a wounded planet. In this short communication we argue for developing a compassionate distance through ecological dialogue with the non-human. We explore four story-based examples that dialogically cross the boundaries between us and this other world, and present concrete hands-on activities that may support teachers to explore relation, positionality and meaning with students in the Anthropocene classroom.

**Keywords:** compassionate distance; dialogic education; hope; positionality; storytelling

**Highlights:**

- Geography education in the Anthropocene requires thinking about changing human positionality *before* action-oriented deliberation.
- Storytelling is a way to transcend dualistic representations, allowing more openness to the wounded planet we are embedded in.

## 1. Introduction

Learning to navigate the immense global environmental change of the Anthropocene puts demands on the young and old that seem to move beyond our ability to comprehend. The traditional duality of 'Man' and 'Nature' does no longer hold as anthropogenic action has become and set off a force itself, irreversibly impacting both people *and* the environment. This reciprocal interaction between the human and non-human puts us into a fundamentally new position, especially since it occurs at multiple scales. For example, global warming, a typical Anthropocene issue whose effects clearly manifest in our lives and daily practices, also operates at and through scales that are both impossible to experience nor to keep an analytical or critical distance to. We are inescapably embedded in the planetary and as such, lack the complete overview necessary to fully comprehend the Anthropocene.

Despite this deep embeddedness, most geography education on sustainable development addresses the issues of the Anthropocene as if they were just another external environmental or even technical problem (Favier et al., 2024; Gan & Pizmony-Levy, 2025; Mitchell, 2022). For example, a growing body of research asks related questions: how can students identify fake news on issues like climate change (e.g. Lämmer & Ohl, 2026), or

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what is the role of climate justice in education (Trott et al., 2023). A peculiar study in this regard describes perceptions of climate change among generations (Divasson-J et al., 2025), uncovering a tendency of increased externalisation of the blame among younger generations. The few curriculum programs that do relate the climate change problems to human (re)action and attempt to modify student behaviour, often focus on consumption pattern change (e.g. Favier et al., 2024). Sometimes also a push for activism and/or belief in technological progress can be detected. As the sustainability challenge is huge and too large to handle or even comprehend, in practice many teachers tend to break it down to more easily relate to student's daily lives and experiences. Also, formal sets of skills and competences considered relevant or even vital to climate change or more general sustainability education focus on analytical and critical skills (e.g. Bianchi et al., 2022; Cambridge International Education, 2026).

While these approaches have (symbolic) value, they are also problematic as they do not acknowledge the inescapable interaction inherent of global environmental change. Hence, geography education runs the risk of leaving students locked in either unbearable hopeless guilt or the false hope of regaining (partial) control by behavioural changes or even more technology. However, in the meantime, maybe the world feels lonely too? A recent book (2024) edited by Irish academic in geography education Anne Dolan, entirely focused on teaching Sustainable Development Goals to young children, addresses just that. Her approach, characterized by hope, respect, empathy and advocacy, is best illustrated by the title of one of her own chapters: "*You, me, and mother nature: we are all connected*".

In this conceptual paper we argue that we need to fundamentally rethink our ways of addressing issues typical of the Anthropocene in geography education. We do so through the experiential lens: how we can make sense of the fragmentary and embedded experiences that are so typical of these times, to reconnect to and redefine our position in the Anthropocene world? In our attempt to answer this question and relate it to students' thinking, we contribute to this Special Issue's focus on powerful geography teaching in the current uncertain times of transition.

## 2. Experience in the Anthropocene

Environmental philosopher Timothy Morton describes the global environmental change of the Anthropocene in terms of his concept of hyperobjects (Morton, 2013). These cannot be experienced in a normal or appropriate way. As Morton (2013) puts it, we can only experience effects (phenomena in Morton's terminology) of global warming, not global warming itself. We don't really know what is happening, how it will work out, and we have lost control over the systems that are causing it. We might try to discuss the issue at a meta-level, but our understanding will always fall short; it is simply too big. The concept of hyperobjects deforms traditional geographical concepts, such as the key concepts advocated by Taylor (2008); diversity, change, interaction, and perception and representation. That is, the nature of an observed diversity, change, interaction and perception or representation becomes unclear. For example, it becomes unclear whether a flood is just a high-magnitude low-frequency event (diversity), part of a trend towards more intense weather extremes (change), a striking result of anthropogenic climate change (interaction) and/or primarily noticed because of an ongoing transition from traditional to modern worldviews (perception). When thus the boundaries between these key concepts become unstable, geographies are predominantly driven by representation. The way in which we understand the spatiality of a phenomenon primarily depends on how it is framed.

Hence, a fragmentary experience of global environmental change will leave people vulnerable to framing, i.e., representing the empirical world in such a way that it supports a desirable outcome for particular groups. An example of such framing is climate denial, which does not directly benefit the material interests of its supporters, but provides a psychological defence by protecting the old worldview of the man-nature divide. On the other side, climate alarm, techno-fix and consumer framings reflect an apparent need of control by and constant stress among activists.

A more encompassing overview of the complex interrelations between man and nature confronts us with a fundamentally different logic, in which disturbance or damage is rather rule than exception, and recovery and healing are constantly ongoing processes rather than aimed-for endpoints (cf. Haraway, 2016). It is like boundary crossing (Akkerman & Bruining, 2016) – to leave the well-known comfort of apparent control and enter the unknown realms of interaction, uncertainty and the terrifying roar of a living planet.

Yet, this experience is not new. The value of life is more than the ability to plan and carry out life as if life itself is just another project. Rather is life a way of taking deliberate action, making stupid mistakes and surf on top of the big waves you did not plan for. It is, in Haraway's (2016) words, *to stay with the trouble.* In a more positive phrasing, it is about appreciating the ups and downs of life with a kind and mild tenderness, and to decorate future plans and hopes with a perhaps childish imagination that combines scaredness, courage and naivety.

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## 3. Ecological dialogue

Both staying with the trouble and free imagination require a kind of distancing different from the analytical or critical. Rather, it is what might be called 'compassionate distancing' (cf. Kellermann, 2021). Being aware of the inability to oversee and/or control the issue, it is possible to identify the boundary that has been crossed, to embrace the infinite connectedness of the ecological and to accept the vulnerability of both Earth and ourselves. In Kellermann's (2021) analysis compassionate distancing relates to the position of a witness when confronted with the overwhelming experience of trauma and affect. The response is contiguous with what is happening, but does not attempt to replicate it; it waits to be in relationship, rather than claiming it. In the Anthropocene such a compassionate response to the wounded planet seems more appropriate than an analytical, critical or affective one.

We may conceptualise such a distancing approach as a kind of dialogue, through which we can experience a hyperobject as an 'other being' across a conceptual and existential boundary. This dialogue is an ecological dialogue, in which the non-human can retain its elusiveness and still get a voice – to even raise it (cf. Levinas (Duyndam & Poorthuis, 2003)). It should clarify some of the damage done and yield the meaning this damage may carry. It is a matter of palpation (cf. in Deleuzian thought (May, 2005)) or mindfulness ("*taking note of what is going on within ourselves and outside in the world, without shying away from information or feelings that we do not like or do not wish to be true*" (Ericson et al., 2014, p. 74)) that notices without judgment, while rediscovering what is truly at stake. The challenge in climate change education is to live (with) the question of how to respond to our fundamentally changed position on Earth and in the universe. To accept that there is no easy answer to that question, and to embrace the question instead of disregarding it.

With respect to the practice of climate change education, seeds of hope and change were observed by He et al. (2024). They identified the existence of humanistic and posthuman perspectives in some realms of geography education, aware of the importance of meaning and repositioning the non-human. To do so, we may turn to the ancient wisdom embedded in stories and poems (cf. Goodbun, 2019). Here good and evil are just daimons or spirits, competing for dominance, rather than clear-cut categories of those pro or contra particular environmental actions. In such stories moral thinking is embedded in an understanding and making sense of inevitability. As indicated by Richter (2025), this dialogic interacting requires a fundamental openness, allowing 'the other' to unfold, even if that is painful and terrifying. From there new, yet thus far weakly understood meanings may arise.

## 4. Towards a pedagogy of the Anthropocene

How can we address this dialogic interaction in the classroom? We believe that using stories, visualizations, and broader imaginations of non-human creatures and phenomena, can help learners in crossing and even blurring the boundaries between us and the other: our (planetary) threats (cf. Finn et al., 2026; Hammersley et al., 2026). Below, we give four story-based examples.

An early attempt to what might be called ecological dialogue is Carl Sagan's *A pale blue dot* (Sagan, 1997). Here Sagan describes the Earth as the pale blue dot visible from the edge of our solar system, where all of our lives take place, including all the stupidities and cruelties man has committed. It is an address to young people to take a compassionate distance to the Earth, not an analytical or critical, to understand that the planet they are embedded in, is their only home. A home that needs to be taken care of, not like maintaining a bridge or airplane, but like taking care of a wounded elephant. This elephant tends to be very kind, but may in confusion or shock accidentally step or sit on you, if it is not properly taken care of. When *A pale blue dot* was read by a student at the start of a sustainability day at an international school in The Netherlands, it created the perspective that would frame all activities that day.

A 2016 NASA visualization of the yearly flow of carbon dioxide taken up by trees all over the world suggests that the world is breathing: The Earth has lungs. Watch them breathe (Krulwich, 2016). Although the video clearly has an activist and hopeful message (more trees are needed), its tone is mild and soft: *"So yes, plants aren't the only ones cleaning the air – but it wouldn't be a bad thing to have more of them*". This closely relates to a 2022 animation by Markus Reichstein actually picturing the world as a lung itself – which might appeal to an even wider audience: Earth inhales and exhales carbon in mesmerizing animation (Pappas, 2022). The world is a living creature – just as we are. These animations can be integrated into a regular class on understanding the causes of global warming. They illustrate the natural dynamics that are being distorted by human action and allow students to appreciate that intervening in a living system is very different from intervening in a mechanical system.

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Another example of compassionate distance is presented by the Princess Mononoke animation story (Miyazaki, 1997), in which traditional divides between humanity and nature are blurred. Natural monsters and forest spirits are both fearful and vulnerable, awesome and majestic but with undoubtably human smiles, bears and wolves have human eyes, and mythical forest creatures resemble little children. This unexpectedly leaves the main actors and the animation spectators with a mildness and kindness towards seemingly frightening beasts and angry daimons in a dark forest. It is about reaching out carefully – but in faith. Fragments of the movie can be integrated into classes on policy making and leadership in climate change mitigation and adaptation. They flesh out the realisation that true leadership has very little to do with control, but rather with tact.

An experimental attempt to relate to the complexities of the Anthropocene through poetry has been recently published as *Blue: a lament for the sea* (Figure 1; MacWhirter, 2025). The poem's main threads are geological evolution, deep time and the history of life; the Anthropocene and sea level rise; ancient stories and wisdom; ecological intimacy and animism; and transformational presence. It weaves a lyric story of environmental and societal change, of changing stories that still carry their meaning, into a reflection on the origins and impacts of global sea level rise and an appropriate response. What emerges is not a 'solution' or 'action plan', but an invitation to radical openness and rediscovery of the intense beauty of diverse life. It embraces embeddedness, rather than cutting it short to meet high-stake targets. The special quality of poetry is that it allows the readers to have their own imaginations, leaving the ambiguity and mystery of reality intact. It can be read and analysed as part of an interdisciplinary science-humanities project on the Anthropocene, where students begin to understand the concept of compassionate distancing or witnessing at an advanced level.

On the sand where the blue inks into the bay
I steady myself,
this isle, at the earth's edge
so old, it rose from the waters
before a single creature ghosted into a rock

**Figure 1.** First five lines of the lyric epic *Blue: a lament for the sea* by Liz MacWirther (2025).

Please note that adopting this pedagogy of the Anthropocene, i.e. humanizing nature (or naturalising human experience) and defragmenting reality (or attentively responding to the fragmentary nature of our experiences) via culture, imagination, courage and compassion, may actually be more challenging for the teacher than for the student. Young children tend to easily attribute agency to the non-human world, for example telling that water 'wants' to flow downhill. Teenagers are probably more open to new ideas and less socialised in the modern worldview than the teacher. And probably, young people are used to a limited control of their life, simply because their parents take care of many of their needs and decisions. Within these boundaries, youth's imagination easily beats fragmentary realities – as probably also their gaming experiences witness (avatars, no gravity, multiple lives). So, introducing reconnection and repositioning in climate change education may well urge teachers to open up their worldviews.

## 5. Conclusions

In this conceptual reflection we have made a very first attempt to rethink how we address issues of the Anthropocene in the classroom. It is important to move beyond the action agenda, not just because it is not education's place to push for a particular kind of action, but primarily because the Anthropocene tells us a story about who we are, a story that *precedes* action-oriented deliberation. This story needs to be retold time after time in accessible and perhaps even multiple imaginary and multisensory ways, to invite young people to rethink their ways of approaching and understanding the world they live in. Paradoxical embeddedness does not have to suffocate, rather can it invite for intimate interaction (connecting) and living presence (redefining our position). Such an awareness can make sense of the fragmentary experiences of the Anthropocene. This paper hopefully adds a compassionate perspective to the spectrum of perspectives currently used in geography education. This new perspective may represent a quake for geography as it deforms many of its key concepts. Hence, it also provides a way to reflect powerfully with students on the very central tenets of geographical thinking.

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**Contribution to the Special Issue Topics:** This paper contributes to the understanding and development of new pedagogies for complexity. It explores the role of dialogue, narrative, inquiry and imagination to navigate epistemic complexity and uncertainty. In doing so, it broadens the scope in teaching controversial and polarising issues and helps decolonise geography education by interrogating the dominant dualistic man-nature narrative. The paper offers new perspectives on teacher agency in times of uncertainty.

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