Introduction:
Ecological Perspectives on English Language Teaching

Questions of sustainability will be key factors of successful education for decades to come. In a sense, the process of identifying and formulating sustainability-related pedagogical objectives and the endeavour to revise extant educational theories and methodologies has been long in the making. Environmental education gained traction in the second half of the 20th century, when both the general public and policy makers such as UNESCO took notice of a growing scientific consensus on the demand for change and what is today known as a 'Great Transformation' of societies the world over. Famously, the Club of Rome's book *The Limits to Growth* (Meadows et al. 1972), but also more locally impactful publications, such as Rachel Carson's *Silent Spring* (1962) in the United States or the German debates on *Waldsterben* in the 1980s, contributed to a general concern with the detrimental environmental impact of the affluent first world's lifestyle and the effects of past and ongoing industrial and technological 'modernisation.'

Scholarly inquiry into ethics and histories of the environment also gained foothold during those years and after. Drawing on prior work on conservation and restoration biology as well as ancient and modern debates on the value of the nonhuman, Arne Naess, Murray Bookchin, or J. Baird Callicott helped establish environmental issues as relevant concerns in philosophy and ethics and have inspired other scholarly disciplines, such as environmental history and literary and cultural studies, to add their critical tools and understanding. As a result, environmentalism itself was critiqued and diversified, with regard to the racist subtexts of conservation policies, for instance, or by highlighting the cultural narratives underlying national identifications with forests (Germany), rural areas (UK), and the 'wilderness' (USA). The 1990s saw the emergence of expressly literary and cultural approaches to what had by then already been dubbed 'ecological crisis' in the form of the critical approach now known as ecocriticism, including the founding of learned associations and the publication of landmark books such as Cheryll Glotfelty and Harold Fromm's *The Ecocriticism Reader* (1996), Jonathan Bate's *Romantic Ecology: Wordsworth and the Environmental Tradition* (1991), or Lawrence Buell's *The Environmental Imagination: Thoreau, Nature Writing, and the Formation of American Culture* (1995).

This selection indicates that early ecocriticism operated largely in a traditional, national-literary framework, even though non-Western voices and global takes on environmental issues have played a formative, if sometimes less readily acknowledged, role in establishing the field (Crosby 1986; Guha 1999). Another formative role has to be assigned to pedagogy. As Greg Garrard remarks, ecocriticism "has been preoccupied with pedagogy since its inception" (2012, 1). 'Pedagogy,' in the sense in which Garrard uses it, however, means mostly third-level education in colleges and universities where scholars not only advocated the role and importance of environmental issues in literary
and cultural research but also experimented with place-based or ecocentric teaching
formats and objectives. Pedagogical research in the more comprehensive sense of
German Fachdidaktik — that is, covering educational settings from primary to
secondary and tertiary education — have only started to become a regular staple of
eccriticism in the field’s flagship journal ISLE as well as in collections and
monographs after the turn of the millennium (Mayer and Wilson 2006; Matthewman
2011; Bartosch and Grimm 2014).

Besides these more specifically philological approaches, pedagogic debate has
undergone a similar development. Since its recognition by UNESCO (1978),
environmental education has become a matter of debate across disciplinary divides and
is one of the cornerstones of what was later termed ‘sustainability education’ and, after
UNESCO’s formulation of seventeen Sustainable Development Goals in 2015,
‘education for sustainable development.’ 2013 moreover saw the launch of UNESCO’s
Global Action Programme, and together with the more recent suggestions for ‘global
learning’ and the inclusion of education into the "social contract for a great
transformation" (WBGU 2011; our translation), sustainability has been rendered a
crucial term for modern educational theory and practice. It encompasses peace
education, global citizenship education, and intercultural learning; and it is now
implemented in national educational frameworks and specific curricula.

It should therefore not be difficult to follow UNESCO’s call for transformative and
sustainability-related teaching and to address, in our own ways, curricular demands for
environmental learning in English and Foreign Language classrooms. A closer look at
these curricular frameworks as well as the teaching resources published by the large
players in the field, however, indicates that even after 30 years of research into the
literary and cultural dimensions of environmental issues, (too) little is being said about
the normative, discursive, and largely cultural aspects of sustainability education. That
is to say, while there exist numerous models and suggestions for the acquisition of
scientific and climate literacies (Shepardson et al. 2017), the role and significance of
language, literature, and culture has enjoyed less curricular and conceptual attention.
Recent work on critical environmental literacies (Deetjen and Ludwig 2020), the role
of storytelling and creative writing (Beach et al. 2017) and what has been called a
humanities-based ‘educational ecology’ (Bartosch 2020) notwithstanding, frameworks
and materials too often still conceive of literary and cultural learning as something that
occurs additionally, after the basic scientific facts have been established. While such
basic scientific literacy as outlined, for example, in the Next Generation Science
Standards have by now gained foothold, an assumed educational chronology that
prioritises science over the ‘softer’ subjects overlooks in how far climate is a cultural,
rather than a purely scientific, issue and to what extent ways of narrating climate shift
and determine the significance of its meanings (see Hulme 2009, xxvii).

Our point is of course not to call into question the importance of the sciences when
it comes to climate change; nor do we disparage the importance of scientific literacies
by treating the looming catastrophes as something that could be domesticated by calling
it a cultural construction. We are, on the contrary, convinced of the utmost importance
of disciplinary as well as inter- and transdisciplinary responses to the many challenges
climate change, biodiversity loss, climate migration, and potential as well as manifest
social conflict and harm for individual and communal well-being pose and will increasingly continue to pose. It is for this very reason, however, that we believe sustainability education in English Language Teaching ought to focus on the key assets and very specific potentials of language and literature pedagogy and take the lead when it comes to the cultural dimensions of climate. English Language Teaching can in fact draw on rich resources for framing the challenge of sustainability education as an opportunity for literature and culture pedagogy. Approaches in global citizenship education, transcultural competence, and transformative learning, to name but a few, hold numerous such potentials, and it is our hope here to further dialogues between these fields and to outline theoretical and practice-oriented implications of what we have called "ecological perspectives on English Language Teaching" – with regard to recent developments in (digital) media ecologies, and appropriate and innovative methodologies.

In a very general sense, this work draws on two major developments. The first one, hinted at above in our very brief history of ecocriticism and ecopedagogies, pertains to the role of literature (and other media) when it comes to environmental issues in the classroom. What has been described as a 'greening' of topics, texts, and materials (Volkmann 2012, 397) can in fact be seen as a continuation and recalibration of tenets of literary learning regarding the acquisition of critical literacies and discourse competences, for instance, as well as a call to reconsider ethics and ideologies underlying extant frameworks such as the ones of (highly mobile) interculturalist identities or (unsustainable) media prosumers. A second inspiration that deserves attention comes from the field of language pedagogy and applied linguistics. Here, 'ecological perspectives' on language teaching have attracted considerable interest and helped revise educational posits concerning monolingualism, diversity, as well as complexity and conflict.

In an influential publication, the applied linguist Leo van Lier drew on ecological research into complexity, autopoetic organisation and emergence, and he suggested we conceive of learning as an ecology, too (van Lier 2004). Claire Kramsch has taken up this suggestion and argued for the beneficial cross-fertilisation of SLA (second-language acquisition) and complexity research (2008). These approaches, she avers, help us describe the emergence of learning and understanding in multicultural and multilingual schools and societies better than the hitherto dominant stance of communicative language teaching:

The prototypical communicative exchange found in foreign language textbooks usually includes two or three interlocutors, who all conduct the interaction in the same standard (target) language, all agree on what the purpose of the exchange is and what constitutes a culturally appropriate topic of conversation, all have equal speaking rights and opportunities. But the reality is quite different. (2008, 390)

Like van Lier’s, her take on the ecological is not thematic and her concerns are not with greening language teaching practice. Instead, she aims at understanding and making use of complexity and diversity, arguing that this might lead to pupils and students acquiring "symbolic competence:"
Symbolic competence does not do away with the ability to express, interpret, and negotiate meaning in dialogue with others, but enriches it and embeds it into the ability to produce and exchange symbolic goods in the complex global context in which we live today. (2006, 251)

In other words, her understanding of the ecology of language learning and of the relevance of symbolic competence centres on the complexity of multimodal meaning: Learners, she maintains, need a much more sophisticated competence in the manipulation of social systems. Hence the renewed attention to discourse in a range of modalities (spoken, written, visual, electronic), the focus on semiotic choice, and the ability to interpret meanings from discourse features. (2006, 251)

We are quoting this perspective at length and despite the fact that it hasn't received much attention in ecopedagogical contexts yet because our point is exactly that ecological perspectives on English language teaching as we conceive of them are substantially built on the practice of translation: translations from literary and cultural studies into subject-specific pedagogies, translations of applied linguistics research into the frameworks of sustainable quality education, and reciprocal and ongoing translations of scientific and scholarly findings on climate catastrophe. It is therefore high time both understandings of ecological reconceptualisations of ELT entered into productive dialogues. This volume is a first attempt at multiple and reciprocal acts of translation germane to such dialogues.

Through this, we are sure, the humanities-based subjects and, more precisely, English language teaching can provide a number of useful tools and fruitful perspectives for the transdisciplinary tool kit. In particular, these tools and perspectives entail:

_Discourse competence and participation_

Understanding climate change and sustainability as cultural or cultured processes means understanding that "climate […] is given meaning through cultures" (Hulme 2017, xiii) and that this meaning-making takes place in narratives and other practices English Language Teaching engages with in its endeavour to support discourse competences more generally. A cultural understanding of climate change – or climate catastrophe, climate crisis, or global warming? – is substantially built on language awareness and requires literacy in the sense that, being ultimately an act of narration, climate change can only be critically discussed if this act is acknowledged: "Climate is an intuitive idea, familiar to all human cultures, which helps make sense of the world. And yet, while intuitive, it is an idea which can only be made tangible – made visible – through the creative and political work of representation" (Hulme 2017, 92). Climate or, in an even larger sense, ecology thus becomes what has been called a 'boundary object' (Star and Griesemer 1989) around which multiple disciplines revolve but whose implications differ according to the contexts in which it is evoked. A discourse-competent reader of climate change debates will therefore be able to distinguish whether climate change is narrated "as a battleground" over "ways of knowing;" if it is used for purposes of justification, for instance the commodification of carbon dioxide;
as an "inspiration for a global network of new, or reinvigorated social movements;" or "as a threat to ethnic, national and global security," to name just a few examples (see Hulme 2009, xxvii; emphases omitted). The ontological status of climate (change) thus is the result of illocutionary acts as much as of actual unsustainable behaviour – and since English Language Teaching is built on the insight of the importance of communicative action, it could be key for the understanding of different meanings and stories through which climate change is apprehended. Such a stance also plays a significant part in the context of media literacies and the critical understanding of misinformation campaigns and the role of digital media in the distribution, contestation, and recognition of scientific consensus and political negotiations of sustainability-related measures (not) taken.

Multiliteracies

The latter suggestion already points to another core concern of recent research on English Language Teaching: multiliteracies. The narratives that make climate change are not only made of stories alone but are significantly built on images, be they graphs and models (the hockey stick curve, for instance) or images and icons (polar bears and ticking clocks, Gaia and Greta). The emotional appeal and the semiotics of such forms of representation are pivotal when it comes to understanding climate and communication, and even a cursory look at the popular forms of climate communication – in memes, via Twitter, or by way of protest signs in demonstrations – not only underlines their relevance but provides a rich, almost inexhaustible source for authentic materials that could be used for multiliteracies education. Climate change as a discourse is made of metaphors we live by, and every understanding of the social, political but also scientific dimensions of sustainability must be preceded by an understanding of the power and appeal of rhetoric.

Ultimately, such a take on sustainability education will also allow for greater inclusiveness, since variety of media implies variety of differentiating opportunities. It is unfortunate and detrimental to the project of social transformation that so far, sustainability education is conceived of as a specialist programme for relatively few learners – in geography classes, advanced courses, or special modules. A truly inclusive education for sustainability will have to find ways of participatory engagement on all levels of competence, with all age groups, and in all educational settings.

Ecological ELT and applied philology

Approaching the multimodal nature of climate change as a storied and cultural phenomenon and the demand for more inclusive methodologies point to one of the gravest challenges when it comes to educational takes on the subject: its complexity and sheer magnitude. While narratives are attempts at ordering and making sense of a diversity of observations, experiences, practices, data, and predictions, the idea of climate change arguably defies any ultimate comprehension and, therefore, any clear-cut notion of an easily definable ‘climate change competence.’ Numerous pedagogic approaches note this complexity and suggest that learners need to engage with uncertainty and the limits of individual agency when it comes to sustainability
transformations. Add to the scientific complexity and the representational difficulties of climate change, which is marked by latency, the complex entanglement of human action and geophysical change, and a clash of scales because climate change “unfolds on very different spatial, temporal and quantitative scales” (Horn 2020, 160), the cultural complexities of classroom education in multilingual and multicultural settings, and we see that the task is daunting indeed. As Mike Hulme notes, the idea of climate change as a "mega-problem awaiting, demanding, a mega-solution" (2009, 333) might ultimately be doing a disservice to the project of social and ecological transformation:

We have allowed climate change to accrete to itself more and more individual problems in our world – unsustainable energy, endemic poverty, climate hazards, food security, structural adjustment, hyper-consumption, tropical deforestation, biodiversity loss – and woven them together using the meta-narrative of climate change. (2009, 333)

This not only goes beyond the comprehensive abilities of learners but of teachers as well. As our above remarks on the different genealogies of sustainability education have shown, however, there is ample research in a variety of fields in the Environmental Humanities – such as ecocriticism, posthumanism or human-animal studies – and subject-specific pedagogies – inter- and transcultural learning, global citizenship and multiliteracy education, or transformative learning – that provide points of access to this hypercomplex challenge and therefore need to find application and advancement in educational contexts. They will help approach the question of learning objectives and the role of education – but will, in turn, also have to affect extant ideas of individual learning success and competence acquisition.

Ethos and existential questions

The reason for this lies in the existential dimension of sustainability and climate change. Neither can sustainability education be a means of securing the status quo, nor do the questions of a great transformation sit easily with conceptions of competences and literacies that restrict themselves to equipping learners with the ability to make the right choices of consumption or with the most suitable environmental attitudes. As the Fridays for Future movement makes abundantly clear, the matter is at the same time individual, global and political. Sustainability education has to live up to the challenges of all three dimensions, and it has to ask serious questions about the (in)ability of extant frameworks to address the existential dimension of transformation. This also concerns the limits of established concepts such as intercultural competence, which largely ignore what is at stake in current controversies over the future of social and educational organisation. We believe that, again, modern English Language Teaching and its attention to non-European perspectives as well as its array of methods and meanings of cultural learning is an appropriate ground for starting the necessary conversation about our educational ethos and existential questions – but we acknowledge that this conversation will in all likelihood lead to radical reformulations of what successful learning implies (see Bartosch 2019).

We also believe that neither the currently dominant attempts at consciousness-raising (see Gerhardt 2006) nor the call for individual action will help solve these many problems and challenges. What is called for is a re-evaluation of learning objectives in
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the light of recent research on learner agency and the potential re-adjustment of claims concerning individual action with regard to the inclusive and cooperative flourishing of capabilities. This might (have to) entail acceptance of powerlessness and the engagement with grief and despair (Bendell 2019); and it calls for new and creative ways of learning as well as responsive and reflexive pedagogical action if schools are meant to become places where 'slow hope' (Mauch 2019) will eventually come to fruition.

A first step will be the re-appraisal of useful conceptual frameworks, such as the one underlying transformative learning theories and practices. The tripartite model of "awareness – analysis/evaluation – participation" (Pratchett 2009; Gabriel and Garrard 2012) and the almost similar conception of "Erfennen – Bewerten – Handeln" in the German KMK/BMZ framework on global learning (2008) appear to us as such a starting point. What research and practice have to specify, however, is what is meant by awareness (of what?), analysis and evaluation (on what grounds?), and participation (of whom and to what end?). In particular, we suggest the following questions as key concerns for future research and subsequent scholarly debate:

- What is the (receptive and productive) role of language when it comes to climate change and sustainability?
- In how far do language, culture, and narrative shape environmental awareness and understanding?
- What is the educational role of (digital) storytelling?
- How are understanding and attitude connected with action; how can we bridge the mind-behaviour gap?
- How can we support individual agency and well-being in a time when individual agency and well-being are so obviously in jeopardy?
- How can we translate relevant materials and findings for diverse groups of learners, from learning objectives to the pedagogical tenets of non-anthropocentric education, scalar literacy (Clark 2019), or environmental justice?
- What needs to be done in terms of revising, updating, or replacing extant models and concepts underlying (inter-/trans-)cultural learning in the ELT classroom?

In their different ways, the essays collected here address one or several of these questions and provide theoretical or conceptual points of entry as well as research reports from empirical projects in the field. In the opening essay, Ricardo Römhild and William Gaudelli target the very notion of easily identifiable targets – be they nations or cultures – and challenge us to rethink what cultural learning might be if properly understood to be geared towards sustainability and climate action. Their astute analysis of teaching objectives in policy and curricular documents leads them to reformulate key tenets of cultural learning and to a critique of currently practiced forms of intercultural education, demanding a better understanding and acknowledgment of the intricate connections between political and biological spheres. Martin Genetsch follows up on this and engages with the centrally important question of energy and its recovery through fracking by discussing cultural forms of engagement as well as theoretical points of departure for task designs that cater to the complex enmeshment of natures and cultures. This leads him to demand an ‘ecological discourse competence’
that is built on the translation of literary and scholarly understanding of ecological lifeworlds into everyday practices of teaching and learning. Grit Alter continues to probe the potentials of such literary ways of engaging with the state of the world and our potential futures, but addresses challenges of primary ELT. She argues for the better inclusion of picturebook biographies that she says will help young learners get a sense of agency and hope as well engender literary learning that we have argued will be central to the imaginative challenge that is climate catastrophe and ecosocial transformation. Irene Heidt approaches these current transformations differently and by grounding her own work on symbolic competence in the ecological understanding of language and culture, as discussed by Claire Kramsch and others and suggested by applied linguistic research. She shows that by analysing social media – especially the twitter politics of former US President Donald Trump – learners can critically engage with the transformative power of language and symbolic competence and gain insight into a still much overlooked aspect of (environmental) discourse. Karoline Thorbecke presents her empirical research results concerning critical literacy education in ELT contexts and discusses the potentials and shortcomings of planning schemes and adds a facet of criticality to such plannings. In the final contribution, Katrin Schwanke makes a case for employing sustainable development goals (SDGs) in ELT practices geared towards storytelling and digitality.

Such variety and the manifold fields of research with its divergent and sometimes contradictory intellectual histories and investigative protocols can be daunting and may leave the practitioner with a sense of unease about the implications for the actual practice of teaching. We are taking these concerns very seriously since it is 'in the field' where sustainability education, arguably the most pressing educational concern of the 21st century, succeeds or fails – and society with it. But as this collection shows, it is important and will continue to influence our practice that we get a better sense of the diversity of approaches to ecological ELT if we want to probe the full potential of theories, texts and methodologies for every learner and level of ability. We are keenly aware, however, that the academic study of sustainability (in) education can only go so far in exploring new perspectives on education and in assessing their validity and effectiveness. The real experts in education are the teachers. It is therefore up to them to find inspiration in the essays that we have assembled in the hope of committing to a lasting and fruitful exchange on language and literature teaching in the 21st century.

Works Cited


