

Ecologizing Bildung: (Re)Framing five questions for future environmental education practice

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Abstract

This paper develops a critical and ecological re-interpretation of Bildung, a German educational concept commonly translated as self-formation, but more accurately understood as the formation of persons in relation to culture, society, and the world. The paper is structured in three parts. First, we outline and “ecologize” critical-constructive Bildung, a particular strand of Bildung theory. We argue that this approach offers a generative framework for linking education to aims such as eco-social justice, cultural transformation, and mutually beneficial forms of human and more-than-human flourishing in an age of eco-social-cultural polycrisis. Second, we return to the work of the German educational theorist Wolfgang Klafki, one of the main architects of critical-constructive Bildung and revisit his five central educational questions. We re-read these questions through a lens that explicitly seeks to challenge anthropocentrism, human exceptionalism, multiple forms of injustice, and the extreme individualism of late modern humanism. In doing so, we propose an alternative, eco-democratic and dialogical orientation grounded in concerns for justice and flourishing across human and more-than-human worlds. On this basis, the third part points toward the kinds of environmental education practices that might be generated by these reframed questions and goals, while also attending to the forms of community, institutional culture, and ecological relations that would be required to sustain them over time. Together, the paper offers a theoretical contribution to environmental education by articulating how an ecologized concept of Bildung can reorient educational purposes, questions, and practices in the Anthropocene.

Résumé

Cet article réinterprète le concept pédagogique allemand de Bildung de façon critique et sous un angle écologique. Souvent traduit par « autoformation », ce concept se définit plus précisément comme la formation des personnes en relation à leur culture, à leur société et à l'ensemble du monde. L'article est divisé en trois sections. Dans un premier temps, nous tentons d'écologiser la Bildung sous sa forme constructiviste critique. Nous soutenons que cette approche offre un cadre pédagogique riche pour atteindre des objectifs de justice écosociale, de transformation culturelle et des formes d'épanouissement mutuellement bénéfiques pour l'humain et le plus-qu'humain à une époque de polycrise écologique, sociale et culturelle. Dans un second temps, nous nous tournons vers le travail du théoricien de l'éducation allemand Wolfgang Klafki, l'un des penseurs principaux du Bildung constructiviste critique, en revisitant ses cinq questions pédagogiques centrales. Nous en faisons une lecture qui se veut une critique de

l'anthropocentrisme, de l'exceptionnalisme humain, de l'individualisme extrême et des multiples formes d'injustice qui caractérisent l'humanisme moderne tardif. D'un même élan, nous proposons une autre approche, écodémocratique et dialogique, centrée sur la justice et l'épanouissement des mondes humains et plus-qu'humains. C'est à partir de ce socle que nous dressons, dans la troisième partie, les grandes lignes de nouvelles pratiques d'éducation à l'environnement, ainsi que les formes de communauté, de culture institutionnelle et de relations écologiques qui seraient nécessaires pour soutenir ces pratiques à long terme. En conclusion, l'article articule de manière théorique comment une Bildung écologisée peut réorienter les objectifs, les questionnements et les pratiques pédagogiques dans l'anthropocène.

Keywords: Bildung, Eco-bildung, Klafki, Environmental Education, values

Introduction

This paper acts as a continuance, a deepening, and a complexifying of a paper published in 2024 for CJEE (Blenkinsop & Wilhelmsson, 2024). In our reviews one reviewer suggested, quite generously, that we were onto something but that because of the restrictions of paper length we hadn't really been able to cover the discussion, particularly the move to practice, as completely as they would have liked. Thus, this paper is an answer to that invitation. Sadly, it is incomplete as well. Cultural change, from modernist humanism into something else, from democracy into eco-democracy, is complex and ever-shifting work.

To clarify the conceptual point of departure for this paper, we briefly introduce the German term *Bildung*, which has no direct English equivalent. While often translated as self-cultivation, self-formation, or self-development, *Bildung* refers less to individual achievement than to an ongoing process of becoming human in and through one's relation to the world (Brückner & Paulsen, 2026). In the modern educational tradition associated with thinkers such as Wilhelm von Humboldt and later Wolfgang Klafki, *Bildung* is understood as a transformation of the relationship between self and world, that is, a process in which the individual develops through encounters with what is other, unfamiliar, and beyond the self. Rather than denoting training, socialisation, or the acquisition of predefined competencies, *Bildung* names an open-ended, reflective, and relational formation of ways of knowing, being, sensing, and acting in the world. It is in this sense, as a theory of education concerned with how selves are formed in relation to the world, that we engage *Bildung* in this article.

Part 1: Ecologizing the theory of Bildung

In the previous paper, the focus was first defining Bildung for an audience that might not know that much about it and then doing an initial analysis of its historical arc to see if there might be components that were supportive of an educational project seeking eco-social-cultural change (Blenkinsop *et al*, 2021; Fettes & Blenkinsop, 2024). In terms of the latter, Bildung's history as allowing space for more radical cultural critique (e.g. freeing the individual from the enforced oversight of the church or from the enframement of reality by restrictive metanarratives) and as asking educators to engage themselves and their learners actively in these projects of change were rallying points for that work (Blenkinsop & Wilhelmsson, 2024). It is important to acknowledge that the Bildung tradition is at least 800 years old and likely older if we include its pre-cursors in the Greek and medieval periods – Paideia and Humanitas. It is a rich and diverse tradition (Paulsen, 2021) that is also steeped in worrisome pre-modern and modern western tropes and assumptions. As such, it is not accurate to suggest that the elements we focus on above are found across Bildung and throughout its history. In fact, even Bildung, as discussed today, means different things for different thinkers, nations, and educators (Tahirsylaj & Werler, 2021). Thus, here we follow Paulsen's (2021) work and turn to the critical-constructive strand of Bildung, a strand shaped by critical theory and later developments in continental philosophy. We focus on Wolfgang Klafki, one of the most influential twentieth-century Bildung theorists, because his critical-constructive didactics translates Bildung into a practical pedagogical framework and explicitly negotiates the tension between education, socialisation, and key questions of justice present at the time. This strand offers sufficient space for self-reflexive critique and for proposing educational reorientations beyond the tradition's worrisome modernist, Holocene-based (Paulsen, 2023) assumptions and ways of thinking. Moreover, Klafki is among the first major modern Bildung thinkers to explicitly identify environmental issues as an epochal key problem for education (Kvamme, 2021), making his work a particularly relevant point of departure for an educational project concerned with eco-social-cultural transformation.

We will start by deepening the exploration of the critical-constructive Bildung tradition (Klafki, 1995) with a focus on what it has to offer as it is and what it might offer if and when it is reimagined through an "ecologizing" lens (Blenkinsop & Kuchta, 2024). One of the central foci of the critical-constructive tradition is to name and explore the relationship and differences between socialization and Bildung itself. Embedded in this work was a critique of education for socialization and a particular interest in individual freedom, including educational encouragement and support of individuals to form and position themselves and their ways of being in the world. However, this was done from the critical standpoint of realizing the full potential of humanity (understood as including the widest possible range of understandings of

humanity). Thus, individuals should not be pressed or manipulated to adopt any narrow conception of what they should become, whether imposed from outside or above, or derived from narrow ideas about supposedly naturally given, internally fixed potentials that merely need to be cultivated (Paulsen, 2022b). Rather, individuals might best be supported educationally through encouragement and practices that help and motivate them to take up, how they might, could and should be in the world. This involves reflecting on the extent to which they should say “yes” to the culture and socialization they grow up in, and the extent to which they should say “no” and pursue cultural change. As such, *Bildung* becomes an educational project that is not comfortable with simply and unreflectively repeating the cultural status quo or pushing towards homogeneity across the population. According to this tradition human beings are born unfinished, vulnerable and radically open. Their essence is not fixed beforehand; they are, in this sense, “becomings,” and part of the educational project is to support learners to be a self (Biesta, 2013; Biesta, 2021) and keeping oneself open to what is other (Eckberg & Schwieler, 2020).

Alongside this interest in individual freedom the critical-constructive *Bildung* sees the larger culture as being both open for critique and change (Eriksson, 2019). For Klafki, this becomes part of his educational discussion in relation to epochal key problems (Klafki, 2001; Paulsen, 2021; Sörlin, 2019), large-scale cultural challenges being currently faced (e.g. climate change, social injustice, etc.). Further to this, critical-constructive *Bildung* understood humans to be growing up in particular social settings. Settings from which individuals necessarily take up the specific language, culture, interpretative frameworks, and ways of being (Paulsen, 2022b). As a result, none of us are ever actually independent, blank slates of development. Historically, in this tradition and much of Western educational theory for that matter, this has meant that developmentally one must first adopt one’s cultural frame and then be educated into a place where one can begin to reflect on whether these frames, lenses, ways of being, etc. are “the best” (remembering that determining “best” is marinated in one’s cultural frame) or whether and how they might, could, and even ought to be different (from the standpoint of humanity as such). Thus, in this conceptualization, though the aim might be the independent expressions of freedom by self-reflexive humans there is tension in this process as the educator must also support the child’s development into and then hopefully outside of and responsive to their culture.

For the critical tradition, all this implicit learning, adopted without the advantage of critical reflection, freedom, and an understanding of the other potential options comprises the “socialization” (Ryen, 2020). Intriguingly for the critical tradition, it is the very variety of such socializations – societal and cultural interpretative frameworks, languages, and ways of being (historically and cross-culturally) – that “proves” the flexibility of human possibility (Paulsen, 2022a). It is this “unfixedness” of oneself and the non-essential nature of human culture

that forms the shape of human history and becomes the heart of Bildung in this tradition (Uljen, 2014). This recognition of one's developmental flexibility through deep immersion in a more or less *given* but also *changing* social frame is what creates the impetus for a Bildung that stresses human potential and the ability to reflect upon how one is in the world. This context opens the space for questions about how oneself and one's community might, could, and should be in the world. That is, what are the range of responses available for these questions, and in what ways have we been socialized by the implicit curricula of the culture in which we are situated? To cultivate these questions is the main task of Bildung in this critical-constructive tradition (Lovlie, 2002).

Here, though, we should note two potential critiques, beyond the anthropocentrism, individualism, and human elitism we explored in the last paper, that we will take up in a little more depth in this paper. The first is related to the assumptions of human development that are baked in. The underlying aim of this Bildung tradition is to create independent, responsible, and free individuals – ideal citizens – which is likely not the “end point” of an ecologizing post-human (Taylor, 2017) since ecologizing is a more relationally focused and immersed developmental process. Put another way, our critique is that the independent, autonomous, individual citizen is a modern construct and the implied alienation, even if they are socially aware and responsible, is not necessarily what the mature adult looks like, developmentally and even ontologically, in an interconnected, dialogical, polyvocal, mutually beneficially flourishing (Blenkinsop & Morse 2017), multi-species eco-democracy of the future (Blenkinsop & Wilhelmsson, 2025). The second critique has to do with the linear assumption of the developmental process implied here. Why does educational theory assume that we are first socialized into our culture and then we can begin to critique things? Why is it not possible to theorize a more complex development that can be both socializing and undoing at the same time, or even socializing into undoing? Part of our response here has to do with the modernist trappings that are still attached to the critical tradition, but there is also an assumed gap between the individual and a generic culture or Humanity – the universal – that is not part of the theorizing. Philosophically this ignoring of the small-scale community, of the local, of the classroom, of the familial unit (in whatever form), of the myriad bio-geographical cultural spaces we all inhabit is deeply embedded in humanist thought. Here, modernist thought, given its belief in universals, focuses on either the specific individual or the abstract general/universal, and those tentacles have long been wrapped around environmental education and educational change as well. By recognizing the myriad intermediary places, communities, relationships, etc. that exist between singularity and the universal we seek to draw learners more explicitly into their relationality and suggest that change will likely only occur when education works at levels other than simply changing individuals in the hopes that will eventually change the general.

Yet, to be fair, it is important to consider how Klafki and other critical-constructive Bildung thinkers would respond to the questions we raise. From within the critical-constructive tradition, one response would be that critique is itself a social phenomenon, rooted in language, culture, and shared forms of life. As children, we are socialised into language and culture before we can articulate critical reflection. Growing up within a particular linguistic and cultural world, one learns that language and way of being first, and only later may encounter alternative languages, cultures, and perspectives that make critique possible. While contemporary conditions of multilingualism, migration, and globalisation complicate this picture, the basic argument remains that socialisation and language precede the development of explicit critical capacities. At the same time, critical-constructive Bildung would insist that education should encourage and support children, as early as possible, in beginning to question, reflect, and critique what they are socialised into. Critique, however, always presupposes participation in society, language, and culture, and thus cannot exist independently of them. From this perspective, education is neither reducible to socialization nor opposed to it. Rather, it entails both critically engaging with tradition and working to transform tradition, culture, and society in new and different directions. In this sense, the critical-constructive tradition would say that Bildung should not be identified solely with socialization but should also be understood as a project of educating into undoing. This may include forms of socialising into undoing, understood as cultivating a self-critical culture, but it also involves encouraging individuals to take up traditions reflectively and to consider whether, how, and to what extent they ought to be transformed.

So, at this point the critical-constructive Bildung tradition has positioned itself in such a way that the best the educator can do is to encourage, invite, and challenge the student to “think for themselves,” to begin the process of self-Bildung, of becoming a self, in a form of critical dialogue with the specific tradition they grow up within. Yet this is not an absolutely individual project. For although we are “unfixed” and possess “freedom,” our individual existence is essentially and intimately bound up with the collective. Not only in the sense described above, that individuals always grow up within specific socio-cultural and linguistic settings, but also in a normative sense. According to Bildung thinkers, everyone’s self-development can and should be understood as part of the development of humanity as such. This involves encouraging individuals to evaluate themselves, their ways of being in the world, and the particular culture and society they grow up in from what modern Bildung theorists describe as the highest horizon, namely what is possible and best for humanity as such, rather than, for example, what is best for a particular family, corporation, or state alone. Thus, the critical tradition focuses predominantly on the generality of human history, implying that individual development must go hand in hand with the development of a true Humanity (Paulsen, 2022b). This leads to a second task for the Bildung educator. Alongside encouraging self-Bildung, the educator must

challenge learners to evaluate every possible way of being in the world from the perspective of how it contributes to the maintenance and further development of what is best for all (i.e. humanity), a way of being that actualises “living well” together in the world as human beings. Here, the reader can see elements that are clearly useful for our ecologizing project: supporting students in becoming critically reflective, in challenging the status quo, in living into ways of being that are relational and more authentic, and in recognising themselves as necessarily part of, and dependent upon, a larger community. At the same time, however, this framework also reveals its limitations: a predominant focus on the individual and on the human, with little reference to the more-than-human world or to the many cultures, communities, and diverse overlapping relationships that exist in practice between the individual and “humanity,” as well as a reliance on a particular form of rationalisation as the primary mode of critique.

Many things can be discussed here. But for our purposes we want to stress that it is this theoretical reflection about socialization and *Bildung*, individuality and society, and our fundamental possibilities, that is part of the core of what critical-constructive *Bildung* thinking has to offer; a rich tradition to consider today in this time of deep social and ecological crisis because these crises are calling us to reconsider who and how we are, as humans, in the world. Yet on the other hand, as noted above and in our previous paper, it is exactly this core and its premises that need to be rethought if this tradition is possibly going to be helpful today. So here are three key re-thinkings which we will play out in the next part as we return to five questions that Klafki proposes as important to ask, aligning content and form, in any educational activity:

1. Human beings are not – or ought not – *only* to be defined by being born unfixed (vulnerable) and with the potentiality for reflexivity (rationality, freedom). They are *also*, and before anything else, relational beings, co-existing with other beings, animate and otherwise, in a shared world. Human *being in the world* is therefore always and already being-together-in-the-more-than-human.

Thus, in the process of ecologizing *Bildung*, the horizon of inclusion, interpretation, and responsibility must be broadened well beyond humanity to include the more-than-human in a way that recognizes a shared co-existence; individual well-being and that of the larger communities surrounding the individual are intrinsically connected to that of each and every particular other being therein. The aim then becomes mutually beneficial flourishing for each and all. This all implies of course that the self-becoming work described above is not solely a human prerogative. Eco-Bildung assumes that each tree, each animal, each fish is also on a trajectory of self-becoming.

2. All beings are not – or ought not – to be considered as separate, or emancipated, from concrete, immediate, situational relationships. The work of undoing meta-narratives and restrictive cultural constructs is important

and should continue. Humans are *also*, which is often intentionally ignored, part of dialogical, local, communal, and unique living relational zones. In fact, this move, historically to separate humans from these relationalities, has made much of the destruction and violence perpetrated upon other beings possible.

Thus, in the process of ecologizing Bildung, the horizon of care, consideration, and relationality must expand to include the life zones where one lives. This includes not only the communities and ecosystems of relationships in which we all exist but also our physical bodies and engagement within place. Beyond this is the recognition that this is not a solely human-led endeavour, that extending care also means recognizing the rights and the ability to give and receive care of all those involved in whatever level of relationship in the actual places where they occur.

3. Humans are not – or ought not – to be considered the only location for thinking, ideas, creativity, and answers to these crises and, even more specifically, a particular form, stressed by the critical-constructive Bildung tradition, of human rational reflection must be decentred. This anthropocentrism and commitment to a particular form of abstract human rationalizing have allowed and often justified the marginalization and degradation of myriad humans and more-than-humans.

Thus, in the process of ecologizing Bildung the horizon for consideration with regard to challenges, questions, and answers must be expanded such that there is a polyvocality, deep listening, and multi-species engagement. And, room is made for inter-species dialogue, relational knowing and being, and an ecosystemic horizon of care.

With these three re-thinkings we are ready to move out of the theorizing phase and towards the practical, for Bildung, in whatever tradition, is always seeking to bring together theory and practice, connecting aims with the outcomes (Gustavsson, 2017; Biesta, 2009). Thus, we return to Klafki's five questions for educators—but with the intention of an ecologizing re-write.

Part 2: Ecologizing re-write of Klafki's Questions

In our previous article (Blenkinsop & Wilhelmsson, 2024) we walked through Klafki's five questions for educators seeking to align content with aims. Here, we do a similar thing but build on what we previously did through taking seriously the critiques of modernism explored above. This move allows us to hold the earlier work that de-centres the human, the individual, and the teacher while also taking up the challenge of the relational and the post-human. In more practical pedagogical terms, we are hoping to do two further important pieces of work with these new questions. The first, is to undo the, it is planned out beforehand,

assumption that appears in Klafki. For us, this mythical sense of human teacher in control is problematic and if ecosystems are dynamic relational places, then an ecologizing education project must leave room for the unplanned, the spontaneous, the wondrous and the unimagined (Biesta, 2017; Caputo, 2018; Jickling et. al., 2018). The second is to actively bring forward both the natural world and the local. Again, for us, this mythical sense that the world is the stage, background, upon which humans play and the provider of the resources that humans use and make meaningful is a deeply troubling cultural trope of modernist humanism and if the myriad other beings that along with humans make up the more-than-human have agency, value, and rights then ecologizing education can't further this instrumental and resourcist sense (Nørreklit and Paulsen, 2022). The upshot is that we rewrite the questions such that they can be considered throughout and alongside any educational encounter, experience, or process.

To do this, we offer an ecologizing re-write of Klafki's questions with the aim of posing frameworks for eco-Bildung in environmental education. Please note – rewriting these questions is tricky because they are in fact doing two things at the same time. They are seeking to ask design questions from a different, as yet unclear, context – framework – while at the same time critiquing the context from which Klafki was asking his. These critiques are in no way the final word, and we will try and take the questions up ourselves as environmental educators in part three. Finally, it is also important to mention that in our tentative rewritings, we have tried to make explicit that an important underlying aim of the educational encounter is to cultivate a caring, both giving and receiving, way of being-in-the-world that supports, and is supported by, a commitment to mutually beneficial flourishing for each and all living beings in the more-than-human world.

It may further be helpful to note that Klafki's five educational key questions (Klafki, 1995) are intended to encourage educators to reflect on the content they choose for teaching, both in terms of whether alternative content might be more appropriate and in terms of how to work pedagogically with the content they do choose. For example, a teacher who plans a unit on the Second World War might consider whether it would be useful to work with German newspaper articles from that period. Klafki's five didactical key questions are meant as resources to think with in such situations, making it more likely that both the selected content and the way it is used in teaching can support students' Bildung processes. In short, as outlined above, these are processes that simultaneously open the world to students in relevant ways, from the perspective of humanity, and open students to the world in ways that foster their own interest and engagement in the topic. As a brief reminder, the five questions are mutually interdependent. They are not necessarily answered in a fixed order, and the answers to each question are only fully understandable in light of the other four (Klafki, 1995). In our re-articulation, each section will therefore begin with Klafki's original question

as it is formulated in Klafki (1995), followed by a summary of our previous critique, which is in turn extended through further discussion. Accordingly, each section concludes by extending this critique through our proposed ecologized version of the question.

Question #1: Exemplifying what ...

Klafki's (1995) original:

I. What wider or general sense or reality do these contents exemplify and open up to the learner? What basic phenomenon or fundamental principle, what law, criterion, problem, method, technique, or attitude can be grasped by dealing with these contents as 'examples'? (p. 22)

In our first run through of this question, we allowed it to stand as the question that asks the human educator to take seriously the larger aims of the cultural change through education. In that case, the question is open enough to allow the ecologizing to come to the fore as educators work with nature as a co-teacher, enact ways of being in a classroom that more eco-socially just, and leave the work open for the spontaneous and unpredictable. These measures are still appropriate and yet, given the above critique of the critical-constructive – that it tends to focus on the individual in relation to the universal level – we might now also seek to undo the assumption that remains in this question: that general knowledge is in fact what education is after. The risk here is that we overlook the concrete place, the community immediately around and amongst the learners, the actual relationships and interconnectednesses of this group, and the unique realities of a particular locale. Not everything is or needs to be applicable to some larger universal or detached knowledge. Importantly this move to include place also undoes an assumption that any part is really just an instance of something that can be generalized. This also pushes against deeper epistemological assumptions that every question is somehow answerable and every tension potentially resolvable. These assumptions, often written onto the universe, tend to channel what knowledge is into measurable, fragmented, and progressively expanding forms. This, in turn, does two things that are troublesome in this context. First, the universal, generalizable, becomes ultimately more important than the particular, communal, and messy. And second, the intermediate groupings, entanglements, and assemblages that exist, the messinesses and incompletenesses of knowing are, at the very least, found to be lacking – understood as a weigh-point on the trajectory towards “true” knowing – or worse, ignored completely. As the reader can tell, this prioritizing of the universal, the exemplary, and ignoring of the unknown and under-known, messy middle, is simply a sneaky form of meta-narrativism that has been carefully undone over the last 25 years of activist theorizing. And so, if we want to take seriously the ambition of reimagining Bildung in a time of

ecological crisis and social inequity, in this case by opening it up to situational, incompleteable, and relational thinking, we have to significantly re-articulate this question.

Our ecologizing Bildung re-write:

A. What inspiring forms of caring and being-together-in-the-more-than-human-world might this educational opportunity point towards as open-ended, relevant, and *generative* for the learners? What phenomena, traditions, approaches, challenges, attitudes, or interpretive frameworks that sustain, support, and/or undergird, either explicitly or implicitly, themselves, their relationships, their community, and their ways of life can be seen, valued or devalued and explored by dealing with these encounters and these contents, in these ways, with these beings, and in these places? What ways of knowing and learning, both planned and unplanned, embodied and imaginative, might this educational work honour and situate as possibility for the learner/s, their communities, and their becomings? Where is the space for the polyvocal and mutually beneficial flourishing in this work?

Question #2: Involving and Engaging the Learners

Klafki's (1995) original:

II: What significance does the content in question or the experience, knowledge, ability, or skill to be acquired through this topic already possess in the minds of the children in my class? What significance should it have from a pedagogical point of view? (p.24)

In our first run through of this question, we noted its progressive nature in relation to finding ways to include the learner as knower and contributor. Unsurprisingly, we challenged the question to also include the natural world as knower and to be careful with the interpretation of "significance," moving it beyond the often narrow view of "for humans" (or even just a particular form of human). But with this second re-reading it is also important for us to recognize that the positioning of knowledge "in the minds of the children" not only ignores the natural world as knower and teacher but also ignores the physical and emotional body as knower. More subtly, knowledges that might be better considered as shared knowings (e.g. traditions, cultures, interactive ways of being in the world) slide into obscurity, disuse, and/or disrepute. There is a very real way that leaving Klafki's question as it is causes the educator to further the colonization of knowledge and continuation of a global cognitive injustice (Zembylas, 2017). And if part of the work of ecologizing Bildung is to find ways to undo the focus on humanist and, at times, unjust forms of knowledge and include more relational and culturally diverse epistemologies, then care should be taken with questions being asked along with opportunities for being surprised. For questions can, in and of themselves, foreclose on possibilities and thrust care, place, the more-than-human and relationships into the background (Plumwood, 2002).

Our ecologizing Bildung re-write:

B. How are the teaching's intended caring forms of being-together-in-the-more-than-human-world – and/or its invitations to explore certain phenomena, traditions, knowledges, approaches, challenges, attitudes, or interpretive frameworks related to the relational lives of the learners and their communities and thus, received, engaged with, and even enacted by the different learners involved in these educational encounters? What opportunities, gifting reflections, could these local educational experiences – all their possibilities and challenges – bring (if framed, offered, and flexed in this or that way) for developing and furthering knowledge/s, ways of being, and an educational praxis and community where both humans and more-than-humans are involved, learn and flourish?

Question #3: Addressing the Future

Klafki's original:

III. What constitutes the topic's significance for the children's future? (p. 24)

In our first response to this question, we knocked at it pretty hard after first supporting the vision of education as something other than recapitulating the status quo. Key points we made were around how much of the practice of current public education in Canada and many other countries appears not to take into account either the present as it currently exists, filled with uncertainty and injustice, or the future that is going to need a different set of skills and ways of being than the humanistic tradition envisioned or prepared for. The one piece we want to add here is how intertwined the fates of all beings are in relation to the future. For current human children to flourish in the future they are necessarily going to need to be situated in flourishing communities, ecosystems, and cultures. They are also going to have to be able to learn and enact their learning in a multiplicity of relational ways. And given this, we sense that educators are going to be tasked with offering/facilitating educational experiences and a diversity of learning encounters that can bring out concrete opportunities for working towards a better tomorrow. This might include learning encounters that focus on supporting local life, giving more than taking, furthering regeneration and generative collaboration. Ultimately this is about improving the conditions of mutual co-flourishing at all levels, and recognizing, maintaining, and even extending all the good life of today, so it can continue into the tomorrows that are coming. Here we are pushing back against the critical-constructive Bildung tradition that relies on modern developmental premises that students should become "world citizens," members of a "universal" humanity, and that only happens by emancipating themselves from the local. This is also a move towards conceptualizing a political, living, framework that includes all denizens of the more-than-human world. Thus, the ecologizing project is pointing towards an eco-democracy filled with the voices, needs, and becomings of diverse and

different flying, swimming, photosynthesizing, and patiently crumbling citizens – citizens beyond the anthropocentric.

Our ecologizing Bildung re-write:

C. How can these teachings, topics, educational experiences and encounters – with their intended forms of caring and being-together-in-the-more-than-human-world and/or their invitations to enter into relation with certain phenomena, traditions, knowledges, approaches, challenges, attitudes, or interpretive frameworks support learners to become co-able (together with others) to imagine, support, learn from Bear, Birch, and Salamander, and re- and co-generate futures where humans and more-than-humans can co-flourish, locally and globally, in the near future and far futures? What makes these educational experiences significant for acknowledging relations “in and between” individual – local – global, human and more-than-human, the present and the future, the known and the unknown? How is this work concretized in place, in varied concepts of time and space, and in the lives of all the myriad of beings involved in these diverse and different learnings?

Question #4: Structuring and Re-structuring

Klafki's (1995) original:

IV. How is the content structured? (which has been placed in a specifically, pedagogical perspective by questions I, II and III)? (p.24)

As pointed out previously, this is the classic practical teacher question. Our proposed ecologizing moves were reminders that education is not simply content but also pedagogy, and that often in projects of education for change, challenging and invigorating “whats” are undermined by stayed and traditional “hows” of delivery. We also asked about the who involved in the structuring and seeking to include the more-than-human and decentre the human teacher as overseer, designer, and expert. Here we might even push the latter a bit further as we consider knowledge in relational and more diverse ways. Historically, humanism has assumed a fragmentable and propositional knowledge that can be located in an orderly fashion in books or educational content. The educator simply needs to line the fragments up and feed them to the learner in the correct order and education is happening. But what happens if knowledge is not simply fragmented and orderly? What if it is interlinked, overlapping, and oddly complex? And what if some knowing isn't reached through a process of building but appears as a whole, a blinding insight as it were (Zwicky, 2019), or remains paradoxical or somewhat unknown? And what if some knowledge is deeply relational, tied to community and place in ways that attempting to abstract it makes it disappear like so many clouds on a windy day? Also, the assumption that “good” teachers can structure everything beforehand is worrisome in terms of the implied need for control (Jickling et al, 2018) and because it suggests learning is a kind of universal project, a set structure that makes individual learners, places, educators, quite strangely, easily interchangeable and therefore

ignorable. This upfront fixedness and structure to educational planning leaves out a diversity of educators, humans and more-than, and makes it unresponsive to the spontaneous, the unique, the local, and the changing needs of the learners as they engage with each other and the world in their own projects of self-becoming.

Our ecologizing Bildung re-write:

D. What are the possibilities in this local context for *structuring* and *restructuring* the teaching in ways so that it accords with the aim of developing caring forms of being-together-in-the-more-than-human-world – and/or cultivate invitations to critically and imaginatively explore certain phenomena, traditions, questions, knowledges, approaches, challenges, attitudes, or interpretive frameworks that can bring out important knowledges about how to support flourishing of human and more-than-human life? Who is/is not involved in these structuring and restructuring processes? And what restructuring possibilities, imaginaries and creativities can perhaps emerge, given what is happening in place, who is present, how each is being held beyond the assumption of human exceptionalism, where the learning is occurring, and when all involved are listening carefully to each other while supporting and sustaining differences to emerge and be honoured? What are the assumptions that underpin the choices being made in content selection and structuring process?

Question #5: Knowledge/s Present in the Teaching

Klafki's (1995) original:

V. What is the body of knowledge which must be retained ('minimum knowledge') if the content determined by these questions is to be considered 'acquired', as a 'vital', 'working' human possession? (p. 26)

In our previous examination of this question, we focused on trying to undo the individualistic, competitive, hierarchical, and narrowly focused assumptions that undergird this question for Klafki while also confronting the challenge of assessment which can, at times, actually drive the content and the form knowledge takes in learning opportunities. To this discussion we might further the previous question in seeking to undo the pre-planning and linear time assumptions built into this work and think about inverting that process entirely. For example, where the educational encounter or experience – with a snow drop in the spring or a dead mouse (Heggen et al, 2019) near a tree – leads the process. Then, through good questioning, thoughtful engagement with the learners, an awareness of what possibilities for learnings and dialogues between the students and teachers exist nearby, and careful observation of the goings on the educator can bear witness to the learnings that are appearing here and now. Concepts like “minimum knowledge” and “human possession” are troublesome for many reasons considered throughout these two papers.

Our ecologizing Bildung rewrite:

E. What life important knowledges and values are sought, received, exchanged, or created through engaging with this place while also expanding experiences and caring being-together-in-the-more-than-human-world explorations and encounters of phenomena, traditions, questions, approaches, challenges, attitudes, or interpretive frameworks? What is happening in this time and place? What is drawing the attention of the learners, who is asking to be attended to, who is not being heard from but still needs attending, and how are all the members of this community engaged in their own and their overlapping projects of self-becoming? How might these experiences and encounters be connected to rich learnings that support and further the educational, individual, communal, human and more-than aims? And what forms of assessment do justice not only to those aims but also to the range of knowledges being present in every moment concerning both human and more-than-human life, resulting from this work together?

Part 3: Eco-Bildung in action

In this section we are proposing to employ these rewritten Klafki questions to ecologize an educational example, something more practically concrete that can be used as a reflective device, though not as a standard of any kind, but as inspiration to think further and differently. Note, however, that our purpose is neither to bad-mouth educators nor to offer this example as poor teaching. In fact, this example is edgy, pushing against the norms of the current, humanistic, modern framework in which it is operating, just as many in environmental education are doing right now. What needs recognizing is that ecologizing education is about creating, finding, and re-creating a different underlying frame. Thus, the search is for pedagogical and curricular possibilities that rise from, are sustained by, different ways of being/becoming, knowing, learning, and valuing in and with the world (Biesta, 2021): toward a potentially post-humanist and more eco-socially just world and an education that supports, sustains, and paradoxically, arises from it. As such, we are not even sure if our offerings, the ecologizing re-framings, would be considered good teaching if and when that new frame becomes more common. The hope is that they might serve as a conversation starter, an offering that we can think with, push against, and return to, as a vector for thinking differently about how to nurture life.

An Example: The River of Relationships

This is a tale of a high-school biology teacher and their desire to both cover the required curriculum related to rivers and share their love and concern for the actual river that flows right past the school's doors. The plan is to create an arc of learning, start indoors, get through some of the key ideas, and then move to the river for more immersive, experiential learning to occur. The class gathers and the teacher opens the space for a shared discussion that seeks to find out what is known by the group in relation to the river. How it works? Why it is important, ecologically,

socially, culturally, etc.? The conversation is rich and the teacher notes key ideas and important facts on the blackboard as they arise. Throughout this process the teacher is getting a rich sense of what is not known and also, what might need correcting. It is odd how much is wrongly or incompletely known. At a certain point this discussion runs its course, so to speak, and the teacher takes the lead, filling the gaps on the board, explaining some of the deeper nuances of how the river works, and undoing some of the misguided thought threads. Some points from the discussions are ignored completely because there are just too many rabbit holes. One of the key points that the teacher hopes to make is to outline how the river, when polluted or overly managed, is less able to fulfill some of its key functions and that that in turn affects lots of beings connected to the river and that humans are at least partly responsible for this.

The next day starts with a perfect blue sky and the excited voices of students wandering along and even in the river doing some of the assigned tasks. They are collecting water, insect, and plant samples, seeking examples of human influence along the way, and documenting their findings in their "researcher" notebooks. Time is starting to run short, so the students gather up their belongings and findings and return to the classroom, where they are divided into groups. Each group is tasked with different projects that will continue over the next few classes. Some analyze the water, looking for chemicals, various pollutants, and other contents. Some try to identify the plants and insects and do further research into where they come from and what their presence might indicate about the health, or not, of the river. Still others are asked to find out as much as they can about the river as it "used to be" so they get a sense of biodiversity baseline and something of the human history of the area. Eventually each group will present their findings to each other and, more officially, to the teacher as written science reports. As a final activity the whole class will gather to consider and debate their shared findings and come up with suggestions on how the river's water environment can be improved.

It is our sense that from a critical-constructive didactical analysis (Klafki, 1995) the above example is a positive one. The students work with an epochal key problem, namely environmental issues, which is relevant for both Humanity as such and each of the individuals in the class. The concrete river, the field trip, and the various activities are used as mediating tools by the teacher to open up the world (i.e. questions about the environment) to the students, and at same time, turn the students (e.g. building knowledge and care) towards the world. Further, we think this kind of rich lesson might arise as a result of planning in concert with Klafki's five questions *before* they are ecologized. There is a connection built to the students using a local river and exploring knowledge already possessed. The topic is important for the learner's future and there is a desire to emancipate the students from not-knowing such that they can actually work towards a sustainable future. The content flows towards achieving general knowledge, it follows the well-known problem-solving form and there is a clear

sense of what the teacher thinks students should know about river and how to answers questions. And yet . . .

What happens to this example when explored using the critiques of modern humanism, the ecologizing lens, and the 5 eco-re-questions offered above? How might these lessons be changed, tweaked, or seismically overhauled? Can Bildung actually become an ecologizing project all the way down?

Discussion

We will now attempt to thread the questions and challenges that we have raised in a reflective back and forth with the above example. In order to keep this work contained a bit, we have chosen to focus on three key discussion points relating to values, knowledge, and being. We ask the reader to remember three things as this discussion progresses. First, that this not about suggesting the above example is bad. Second, that, at best, we are simply pointing in the direction of a new, different, more eco-socially just cultural frame out of which, and in support of, this eco-Bildung ecologizing education might appear. And third, although these points are separated for the purposes of discussion, they are interconnected and overlapping in much the same way as Klafki's questions, and life itself for that matter.

Point #1: The Epochal Challenge: Prioritizing of Values

This first point is a bone-rattler because it is about the very heart of education. What are we doing it for? And our question then, in this context, is what happens to education if the explicit ends change? What if the epochal change that is sought in the ecologizing Bildung project is to change the very frame upon which Western, modern, humanistic education has been built? In the example, the aims of education are likely about supporting the development of thoughtful and engaged human citizens. As we have discussed this has ecologically and socially problematic explicit assumptions (e.g. anthropocentrism, species elitism, universalism, etc.) and dangerous implicit assumptions (e.g. patriarchy, Western humanism, rationalism, etc.). Thus, the ecologizing project is both one of new ends – we have proposed mutually beneficial flourishing – and of new means – education that helps, not hinders, this project of eco-social-cultural change. In our five ecologized questions for such an enterprise, we have articulated this project as very much about forms of caring being-together-in-the-more-than-human-world. This is not just about flexing the culture as it currently exists by noting a sustainability problem, it is about changing it – what it values, what its assumptions are, how those choices, decisions, and priorities are made manifest.

As the reader has likely noted, there are sets of values and normative ethics that adorn these choices under the umbrella of mutual beneficial flourishing. Nature has intrinsic value, rights, agency, knowledge, and wisdom. Humans

are part of the more-than-human and not ontologically, axiologically, or epistemologically above and separate from. Community, place, situationality, and relationality are part of, and important to, the way we are in the world. And ultimately it is this onto-epistemo-axiological field that clatters into the example above from all kinds of directions. For, where is River and its community in the planning and enactment of these lessons? The human teacher might start with River, opening an equitable dialogical space for the human learners to engage, allow for the questions that this place is interested in to come forth. What happens to the educational process if the rights of all beings are honoured and decisions about what can and can't be done, can and can't be asked, can and can't be prioritized are made with a view to those rights? In the example, we see the rights of humans to learn, and likely not even learn that much, out-weighing the rights of others to not be disturbed, moved, and even killed. Hereby the human learners are encouraged to treat the life in and of River as objects and resources for their own learning processes, extracting knowledge of a particular kind and centering the human learners as the only creatures who have value in themselves. River and the entire community are reduced to being treated as mere resources (Paulsen, 2023). The humans involved in this learning project might instead be supported to pedagogically model the honourable harvest (Kimmerer, 2013) to start from a place of humble respect and, over the course of the lessons, enact both reciprocity (i.e. honouring that which is offered by River and their community) and responsibility (i.e. actively engage in having their learning be of benefit to all). This might include careful listening to River, foster imagination that helps deepen that understanding, ongoing recognition of what is being offered and taken, opening space for wonder and questions to appear and then developing the collective capabilities and wherewithal to follow those that are the most (re)generative. In the example, we also have a final gathering that is all human, even though there is clearly an agenda of advocacy, River is not even present. In response, this gathering could take place near River with lots of activities that include the voices of those living in the Riverine community (Seed et al, 2017), bringing the unique needs and rights of this place, "home" to the human students. One of the challenges is to include River throughout the educational process, as teacher, as community member, as interlocutor, and as a being immersed in the wild process of its own becoming alongside the human learners. This move then challenges the humans in the equation to better understand their responsibilities in relation to their neighbours and to notice how their learning and self-becoming, self-Bildung, is sustained and supported by the health and self-becomings of the myriad beings in their community. What does a mutually beneficial flourishing eco-democracy look like in action, and not at the universal theorized level but at the messy, incomplete, "we have what we have" level of the communities in which these kinds of challenges are necessarily played? How, for example, do voices get heard (particularly those that don't speak the way humans do), or does consent exist or might kindness

get offered throughout the community with this lesson? Here, education and educators might start to understand themselves as in support of what Simpson (2023) calls world-building – understood to be about doing what we can with what we have right here and right now.

Point #2: The Knowledge Challenge: Undoing the Singular Colonial Form

The second point is subtler than the first but no less substantial. The example above is rife with a particular form of knowledge, and the corollary particular form of learning, that has, for a long time, been the bread and butter of the modern humanistic West. It has been wonderful in some ways, but it has also been a weapon used in colonization as other knowledges, ways of learning and educational practices are denigrated, denied, and disappeared (Zembylas, 2017). In the example, we see the prioritizing of a rational, scientific way of knowing. We also see assumptions about what learning is and of how knowledge is built (by humans), of where knowledge is located (hint: not at, with, or through River), of its colonial extractive nature (human learners have a right to know about the other and they may gather that knowledge in whatever way they wish). There is no consent being sought or offered. River has no right to choose how to be known or to choose to not be known at all, and of its resolvability, generalizability (i.e. answers are sought and found, there is no sense that they might not be found, might not actually resolve, or that they might be ever incomplete). We can see this most explicitly in the debate activity. Here, humans share the answers they have found based a particular form of questioning, information gathering, and argumentation and then they work to show how theirs' are right while others are not.

An ecologizing human teacher could suggest that the class engage in a dialogue sitting next to, or even in, River where the express purpose is to try to come to an eco-sharing-caring about what has been learned, what is now known and not known, by and in this gathering. In leaving space for the place and community to be heard, knowledge takes on different forms. Forms that are more relational, shared, incomplete and located across the community in various forms both within individuals (e.g. Human, Duck, Water-strider, Cottonwood) and between and amongst members). This would include asking questions from a more-than-human perspective, even if those questions don't have any answers, and thereby acknowledging undoing and the unknown. Knowledge might even, at times, becomes a celebration of all involved and what is being brought to the table. Being able to step through the epistemological restraints of subject/object, solely human, and totally knowable makes the educational project much more expansive, inclusive, equitable, unknowable, spontaneous, and wondrous. This also means that particular answers, interests, and perspectives are of value in and of themselves without needing to be resolved into larger issues applicable to all of Humanity. Here the educational work is about creating communities of learners that are re-generative, that allow the space for self-Bildung – self

creation, and that are filled with care in both its giving and receiving forms. Also of note, is that the ecologizing educator is not necessarily restricted to the assumed developmental model (i.e. critique and self-creation is happening before socialization is complete) so central to the critical constructive Bildung tradition and much of progressive education.

Point #3: Being in the World filled with Difference Differently: Care and Self-Bildung in Flourishing Communities

This third point is about being and becoming and the recognition that how each becomes is related to the freedom and possibilities afforded to all other beings. For rich and authentic becoming requires support, examples, and the kinds of communities that are generous in allowing the widest range possible for all. When the rights of other beings are ignored in the educational project the implicit learning is about humans as more important than, but more diffusely, it also lets the learner know to whom to attend, one is not allowed to learn patience from Granite or Blue Heron for example, and this in turn narrows the range of encounters and possibilities those same learners experience and can choose from. For who is to say that witnessing and engaging with River, Duck or Cottonwood living their best lives, or difficult ones as a result of human negligence, might not challenge, touch, and teach human learners? Might these exchanges provide them options, insights, and imaginative gifts (Sheridan and Longboat, 2006) that expand the range of experiences and encountered possibilities that they can embody, feel into, and think with as they play with creating themselves in the midst of their communities? Ultimately, any singular becoming, project of self-Bildung, is meaningless if it is the only one allowed.

This point is also about digging deeply into relationship. Not just as a facile “we are all one” universalized concept but as a living, breathing, messy, spontaneous, confusing, confounding, caring, working project that each is always and already involved in the right here and now, a now where past and future are equally present. In the example, there exists a sense of individuality and separateness in how activities are framed and enacted. River is a separate entity rather than many varied relationships entwined, entangled, and physically engaged together and the human learner work focuses predominantly on determining, at a detached mind-based level, River’s health in relation to the human community. Here the ecologizing educator might lean into having learners think, feel, sense, bodily be with Duck, Cottonwood, Trout, and Water-strider to differently know River and to recognize how changes to River change how they live and be in these spaces. For what is it like to glide across the surface of the water or eat the sun or eddy through water in three dimensions and how do these encounters change what we know about water, air, or sun? Or more politically, what is it that Duck does when they are sickened by River filled food they are eating, and how are they letting the world know of this? Or, who does Trout become in waters

that are too warm for its best functioning? Pragmatically we can see elements of the arts, the language skills, the mathematics, and the sciences appearing in this discussion, but we also see the more-than-human as participant, teacher, and fully fledged interlocutor celebrating unknowing. Beneath this, there is also an importance placed on a wider array of knowings which hopefully open up more ways of being human adding questions of care to the core. This move to consider the becoming of Trout or Duck is part of education in a post-humanist world as we decentre the human and reach for more equity across difference. This is also where the human educator becomes a facilitator of relation, creating the space for re-generative caring community, for the polyvocality of rich local ecosystems and for being able to choose to be differently.

In this way, we think that teaching (in the example) could perhaps be reframed more into “just being there” in careful listening ways in and with River and its myriads of lives, attentive to this specific unique multitude of life, trusting that it might have something important to say when listened to. Approaching life in such a way, as a potential dialogue partner, the human learners might begin to learn both *from*, *through*, and *with*, and not only *about* this life (Paulsen, 2023). When and if River and any of its myriad beings choose to share of themselves, offer up what they care for, how they live and relate, perhaps they will offer humans a range of lessons, inspire them to wonder, take care of, or be more attentive to this place and these beings, but also their own life and their own aliveness, and perhaps also develop a deeper relationship to this place and its singular life critters, bringing out a sense of the wonderousness of life, this place, and themselves.

And so ends this next offering. Take it as something to think with, push against, and feel into. There is so much left to do but maybe that is the way of a more eco-socially just, eco-democratic mutually flourishing world. Where the focus on care, respect, justice, eco-self-Bildung, ecologizing community, and relationality grows is right where finding the answers, perfecting Humanity, and being socialized into modern humanism will ever remain undone.

So, to sum up our little collective journey in this paper: What we have tried to do is to take some initial steps into possible ways of ecologizing Bildung thinking and practice – searching for answers to what could be offered and gained by interrogating the long and rich Bildung tradition, if it is renewed from ecological ways of thinking. In the first part of the paper, we have done this by offering 3 rethinkings of the *theory* of critical-constructive Bildung thinking. In the second part of the paper by suggesting how the five didactical key questions offered by Klafki could be re-written to push ourselves as educators in an ecological direction, where we do not think so much of teaching *practice* as something we plan and then carry out, primarily in classrooms, setting nature in the background (and only enter now and then on excursions), but more as an ongoing educative interaction imbedded *within* and together *with* the more-than-human-world, taking place in local life settings we care for. In the third and last part of the paper

we have tried to take these steps further into a discussion of how to ecologize a specific example of *how to do* teaching that begins to undo Modern Humanism and re-do a more – from our point of view – sensible, careful, and life-friendly way of being-human-together-with-and-within-a-more-than-human-world.

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