

Digging into the Anthropocene – finding way to a cautious educational practice

Paper to the symposium “Global challenges – rethinking education”, 19-21th March 2019, Bergen

© Michael Paulsen
University of Southern Denmark
mpaulsen@sdu.dk

Abstract

In this paper I want to argue that *the Anthropocene* is not a new problem among others. Speaking with Klafki it would not be adequate to treat the Anthropocene as a mere *epochal key problem*. The Anthropocene is not “only” about climate *or* human impact and its relevance is not restricted to some school subjects and not others. Rather it should be understood as a *re-description* of the whole age we are now living in, separating us from modernity – and thus demanding a reinterpretation, reevaluation and reidentification of *all* of our ultimate concerns. This redescription of our world, our basic situation – and who “we” are – calls for a rethinking of the aim of educational practice *as such*. The Anthropocene demands a new kind of educational responsibility. However, this does not mean that we are now living in a totally new world. The world we have today stems from the layers of pre-modernity, modernity and late-modernity. The best we can do, I think, is therefore to *rethink* and *remake* our educational practice, rather than create something completely new. In this paper I would start this necessary turn in educational thinking by reconsidering the inherited western humanistic tradition of *Paideia* (antiquity), *Humanitas* (middle ages and renaissance), *Bildung* (enlightenment) and *Becoming* (postmodernism). This reconsideration leads me to the proposal of a new educational concept – *Cautiousness* – describing both *what* education should be about and *how* it should proceed in the Anthropocene. Based on this, I will try to outline main features of an educational practice that is able to respond cautiously to the call of the Anthropocene. Yet, this whole project is crazy and cannot be handled within one paper. The aim is therefore not to *complete*, but *only to start* the outlined rethinking.

Keywords

Anthropocene, Education, Paideia, Humanitas, Bildung, Becoming, Cautiousness.

Introduction

“We are in the Anthropocene!”,
Paul Crutzen, outburst, at a conference 2000

The 26th of April 1952, a Saturday morning, the “Grauballe Man”, a well-preserved “bog body”, was found in Central Jutland in Denmark. The leading archaeologist P.V. Glob claimed the body to be more than 2000 years old. However, a local woman insisted that it was not a man from Iron age, but a local called “Red Christian” who drowned a half of a century earlier. Carbon-14 dating was only invented a few years before (in the late 1940s) and problems in the laboratory in Copenhagen with increased radioactive dust in the atmosphere from Nuclear tests (in Russia and other places) made the dating difficult. Finally, however, it was determined that the Grauballe Man was actually from the Iron Age (about 300 BC).¹



Fig. 1. The Grauballe Man

Why is this story relevant for this paper? Because it tells about Man’s obsession with his own past and future. What matters *in* the story, presented in newspapers in the 1950s, is only the dating-affair of the Grauballe Man. Everything else is seen as means or obstacles. The nuclear tests for instance, are only seen as *disturbing* the possibility of dating the Grauballe man correctly. Today, we begin to realize, that the nuclear tests, the development of new advanced technology and a lot of other things taken place in the years after 1945, marked the beginning of what is now called the *great acceleration*, *the sixth mass extinction* or *the Anthropocene age*.² Yet, all this is only in the *background* of the story of the Grauballe Man in 1952.

Likewise, educational thinking and practice, at least in Denmark and similar countries, has not to this day significantly acknowledged that we have been living in the Anthropocene since 1945. Rather it has been assumed that we live in a *late-modern* or even *postmodern* purely human-made society, “at the end of history”, without the need or wish for any grand narrative, but with the possibility of making *indefinitely* many language games separated from and “above” brute nature.³ Of course, there has been teaching dealing with environmental issues, climate, biology etc. Yet in a more fundamental way, it has been assumed that school teaching

first of all is situated in a society with the aim of making students become good citizens. Schools have not basically been seen as situated in the biosphere with the task of taking care of biodiversity and co-existence among humans and non-humans. Schools have been comprehended anthropocentric. As a purely human-made place for humans only and with the aim of taking care of only human interests (society and/or individuals). The main view has been that the school should transform human beings into full members of human society. The life of other species in the life-critical zone, slightly below and slightly above the surface of the earth, has been seen as a resource or a stage for human unfolding, without intrinsic value.⁴ Thus: the school prepare for society and culture, not for living with non-humans in a shared world. An even more basically: the school is thought for only humans.

As a consequence, school education has contributed systematically to discrimination, mass extinction and world-destruction. Yet, all this does not imply that non-humans are totally excluded from human schools, society and culture. Rather, as Latour has suggested, what happens *in practice* is that humans and non-humans have become more and more intertwined, but in highly destructive, uncomprehended and careless ways. Also, in practice there has never been and will never be something like “purely human”.⁵ Thus: the purification strategy is doomed to fail. Like in the novel *One hundred years of solitude* of Gabriel Garcia Marquez, the ants will sooner or later take over the houses. And besides: it is impossible, also for human beings, to live outside the biosphere. Humans are mixed with non-humans the whole way down: through bacteria culture in the intestinal system etc.⁶

In the following I will develop my thoughts on the relation between the Anthropocene and Education through three steps. In the first part of the paper I will unfold my argument that the Anthropocene semantic may be considered needed as a redescription of the age we are living in and education takes place in. Based on Klafki's theory of Bildung I develop the idea that the Anthropocene should not be seen as an epochal key problem among others but as a new world horizon, calling for a reinterpretation of all epochal key problems, but also a rethinking of the concept of Bildung and the idea of school education as such. The upshot is a critique of Klafki for his not thoroughly acknowledged humanistic presuppositions. In the second part of the paper I will extend this critique to a reconsideration of the whole western educational tradition. I argue that 4 major pedagogical ideals have been developed in this tradition: Paideia (antiquity), Humanitas (middle ages and renaissance), Bildung (enlightenment) and Becoming (postmodernism). I call these ‘the main strata of western philosophy of education in the late Holocene’. In each case, a new layer has been added that has precluded the possibility of understanding the school as a place where human beings can explore and practice being together in fertile and caring ways with non-humans. In the third part of the paper I outline a new pedagogical ideal, matching the ambitions of Paideia, Humanitas, Bildung and Becoming, but designed to respond educationally more responsible to the call of the Anthropocene. I name this ideal *Cautiousness*. It both denotes what education in the Anthropocene should be about and how it should proceed. Based on this I try to reinterpret the western educational tradition and sketch out main features of a cautious educational practice. The central idea is that schools should care about being a place, where humans can

practice and develop a cautious (e.g. caring, responsible, curious, openminded, patient, thoughtful, collaborative, robust, sentient, nonviolent, dialogical, ecological aware) way of being together and co-create with other entities in a shared world (characterized by the care for the greatest number of possible ways of alternative ties to the world).⁷

Part I. Education in the Anthropocene age

I assume that we are now living in the Anthropocene and have been doing that at least since 1945.⁸ This imply, that it is not something out in the future we should begin to prepare for. The catastrophe has happened. We are in it.⁹ This however, does not mean that we understand all the implications or that it is something undisputable. Dating the beginning of the Anthropocene is for instance highly disputable. Like the Grauballe Man. Perhaps even more difficult. It is like asking: when did modernity start? Or *end*? Or when did the Holocene begin and end? Who dare to point out one year? For the time being it is assumed that the Holocene began approximately 11500 years before present, after the last glacial period, but one could argue that it depends on where on earth one looks and what parameters matters the most. In the context of this paper the important thing is not the many disputable facts about climate, the sixth mass extinction, human impact, decreased biodiversity, increased pollution, the great acceleration, the damage on global ecosystems and the biosphere, the destruction of habitats, the consumption of animals as resources etc. etc. All this is part of the Anthropocene, and horrible enough, but does not in itself say much about how to understand the Anthropocene philosophically and educationally. To contribute to the latter, I would suggest 3 aspects of an educationally relevant understanding of the Anthropocene.



Credit: Elizabeth Hajek

Fig. 2. Cross section of the critical zone in the Piceance Basin

First of all, the Anthropocene denotes an *ecological awareness* of how we humans *affect* and are *part of* the biosphere or what could be called *the life critical zone* slightly below and above the surface of the Earth.¹⁰ We do not primarily live in a human society, we *live* in a biosphere together with other living beings, forming a complex and fragile shared life. Man has become a geological factor comparable to the asteroid that probably caused the 5th mass extinction. But we are not *only* like a cold asteroid. We are *also* living *in* the biosphere, and

being affected ourselves, by strange feedback loops. We are like the detective in a film noir, that finds out that the one he hunts is himself; calling for a *reorientation* of his project.¹¹ Part of this is the recognition that the negative impacts on the biosphere, is related to how we think and situate ourselves in the world. How we in the Holocene has comprehended the world as divided into humans, culture, language and society on the one hand and nature as a resource and Stage for our *expanding* activities on the other hand. All what we do, all what we think and all the technologies we have developed (writing for instance) are (more or less) tuned in to this our most basis understanding of who we are and how we relate to everything in the world.¹² Ideas about “the common good” and “the public sphere” has been restricted to mankind, and school education has been conceived (especially in the west¹³) as only taking place on the human side of the great division between man and nature, as part of the stratification of society and culture – on “top of nature”.

Secondly, the Anthropocene should not be seen as a boxing match between Man and Nature; such a picture continues the understanding prior to the Anthropocene acknowledgement. To comprehend Nature as something in one corner and Man in another, as two separate monoliths, miss the whole point. As I argue in the introduction: there is no such thing as “purely human” and neither (especially not in the Anthropocene!) a human-free nature. To think of the current situation as a confrontation between two mega systems – Man and Nature, Homo Sapiens and Gaia – is not only an abstraction, but also *terribly* wrong.¹⁴ This is the way the Holocene man thinks, when he does not really think, not the way the Anthropocene detective begins to understand himself and his role in the world. The understanding appearing in the Anthropocene is that we are all today part of a *double nexus*.¹⁵ On the one hand *humans and non-humans* today are more interwoven than ever. It is impossible in the present biosphere to point to something not being part of this interweaving. When I look out of my window, I see a world manipulated by humans (and even if a bird looks natural to me, I’m *aware* that its whole life is affected by human doings). If I look at myself, I’m using non-human things like computers, food, satellites etc. (shaped by humans). On the other hand, *humans and humans* are also more interwoven in their activities than ever before. All human localities are now in contact with each other. Through internet and other tools people can affect each other. Strange “global” phenomena arise (e.g. someone in New Zealand buy houses in Copenhagen). Further, the *two entanglements*, the one between humans and non-humans and the one between humans and humans, are also interwoven. Thus: *living in an Anthropocene age means that we become aware of the double entanglement as the perhaps most important factor at present for the life in the critical zone on Earth.*

This imply, that an understanding of human-human-activities also has to take into account the relations between humans and non-humans, and similarly must an understanding of the dynamics between humans and non-humans co-grasps the human-human-relations. This breaks with the sharp division between Humanities and Natural Science. Such a distinction does not help but produce the problems of today. Let say for instance, that some people only learn to take account of intercultural problems as something purely human. As far as I now such studies attract very careful women, while engineering studies, limited to taking account

of non-human-aspects attract less careful men. The problem with such a divide is, that the *connections between* the two entanglements are not brought into focus. Yet, it is exactly the *interface problems* that matters most in the Anthropocene. The environmental calamities for instance, are related to the way humans relate to humans, through their entanglement with non-human beings. And again: the entanglement continues the whole way down, there is no such thing as a pure human being. Human being-in-the-world modulates different kinds of being-together-with non-human-beings. The non-pureness on both sides also mean that the human being is able to *become* something *new* in-between human and non-human.¹⁶ Education should empathize this and make it the focal point of education to make it possible to become aware of and taking care of these possibilities of becoming.¹⁷

Thirdly, the concept of the Anthropocene functions as an *incomprehensibility receiver*. By this I mean that it generates a new sensibility, making it more likely and possible to expect and recognize Anthropocene incomprehensibilities, which would otherwise only be dark clouds or not recognized at all. Thus, the Anthropocene is not so much a problem than a *horizon of understanding*, making it possible to ask questions anew and achieve better understanding of the age we are living in, with all its problems.¹⁸ Without an Anthropocene outlook, incomprehensibilities will not show up and gather together *as* anthropocene. They will look differently, like problems of late-modernity, or they will not show up at all. Thus, the Anthropocene is not the name of a problem, a thing or an answer; it is a *name on the epoch* we are living *in* as our *total* horizon. It has a temporal structure: we are *already* in the Anthropocene and it is unavoidable our *future*. It is not something wanted, it has *happened* to us. It is an *event* in our destiny, *refigurating* our understanding *of our past and future history*, of *who* we are, what we have done and our possible roles in the world. Like a rainfall it makes old problems shine anew, with new aspects, and also it makes new problems visible. Yet, it is an ambiguous term, coming from geology, and not as usual from humanities or social sciences, and not from the arise of a new linguistic community and human culture.¹⁹ The term transgresses all such demarcations; it has a translinguistic and transcultural arrival format. In the Holocene new world horizons only appeared in relation to the occurrences of new linguistic, cultural and societal human orders. ‘Modernity’ for instance did not denote anything else than a new human order. The Anthropocene on the other hand, arrives as delivered by the Earth, as an intrusive Other, communicating to us translinguistically.

All this suggest that the Anthropocene is not what Klafki in his theory of “*algemeine Bildung*” calls an *epochal key problem*. Rather it is a redescription of the age we are now living in, demanding a reinterpretation of our ultimate concerns, including detecting and selecting the most important ones.²⁰ According to Klafki education should aim for “*algemeine Bildung*” that encourages students to think and act qualified in solidarity with all humans. The ideal should be that all humans become able to and want to negotiate, co-create and reshape society in the interest of “all” (humans). This ideal can be realized, according to Klafki, if *all* students in public schools (throughout childhood and youth) every week work with epochal key problems. Each problem should be relevant to all human beings (and thus also play a role in the life of the students in the class). The students should learn to *understand* the problems,

and the connections between them, from multiple angles. Furthermore, they should suggest solutions and consider if these will be in the interest of *all* humans or only a tiny fraction with *specific* interests. Thereby they are encouraged day by day, year by year, to argue and co-act from a general humanistic perspective (and not from a particular egoistic one).

Klafki states five exemplary key problems: (1) The question of peace, 2) the question of environment and pollution, (3) social injustice and inequality, (4) the possibilities and dangers of new technologies (5) experiences with love, human sexuality and the sexes.²¹ All five are framed by Klafki as *human problems* – peace among humans; solidarity with humans etc. It never occurs to Klafki that injustice can be directed towards non-humans. Also, it is only human possibilities and dangers Klafki talks about. It is presupposed that human love and sexuality should be foregrounded and separated out as something purely human. When it comes to the question of environmental issues, non-human aspects appear, but solely as a problem by and for humans. The upshot is that the five key problems it not at all understood in relation to the world we now live in. They might have been convincingly in the 1980s, where Klafki developed his idea, within a late-modern horizon of interpretation, but not today, not in the Anthropocene. Thus, Klafki's selection and preunderstanding of the key problems presuppose an interpretive framework consisting of a humanistic horizon. He presupposes that a consensus of problems can be worked out, but this will demand a shared worldview characterized by *human exceptionalism*.²² Klafki assumes that environmental issues can be understood adequately by treating them as one of many key problems, that have an exemplary educational value. However, seen from the age that we now live in, the problems must be reconsidered and the relation between humans and non-humans cannot any longer be thought as a problem among others: it is something *all* educational activities should care about (there is no environment-free issues). One could also argue that students should become *co-creators of the already existing compost of human and nonhuman creatures and their waste*.²³ Also they might be encouraged to develop *solidarity with non-human people*.²⁴ But more importantly: We have to rethink *how* we think about the key problems that matters most, not only for humans but for the biosphere as such, by letting more non-human voices be heard, but also helping all people in the widest sense to cope cautiously with the probably fragile, insecure and unstable life of the Anthropocene.

Part II. The humanistic layers of the western educational tradition

I now move to the second part of my inquiry. In this part I want to broaden the perspective to the whole western educational tradition, which I will argue, is humanistic biased and thus has contributed to the problems, we face today. In contrast to the western educational tradition Reagan argues that many non-western educational traditions have developed sensitivity to environments and has pass over to their children knowledge about how to coexist in the natural world in a manner in which sustainability can be achieved. Yet, as Reagan also argues, today the western tradition has become dominant in government-sponsored schooling, all over the world.²⁵ I take this as a reason to shed critical light on the western tradition.²⁶ My

aim, however, is not to *delegitimize* western educational beliefs *completely*, but to point out what has to be *rethought*, to make it possible to *continue* part of this tradition in better ways. My assumption is, that it is not possible, nor desirable, to dismiss the tradition altogether. Rather I think it would be better to improve the ground we now stand on. In this context I will argue that the western educational tradition from antiquity to late-modernity consist of strata, where humanistic ideas of education has been developed in conflicts with anti-humanistic ideals. All this is very complex.²⁷ In the following I will only discuss what I take as the 4 most important layers/ideas. As it will be clear Klafki and his theory of *algemeine Bildung* is part of layer three. But to rethink and adjust for the humanistic bias, we must take all four layers into account. Every layer has something important to tell.

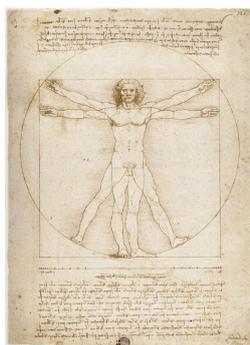


Fig. 3. The Vitruvian Man, by da Vinci.

The first major layer in the tradition of western educational thinking is the development of the concept of *Paideia* in Greek antiquity. Originally *Paideia* meant *child education*. However, the concept gradually gained several meanings. For a long time, it denoted the task of shaping an aristocratic male youth. Here, *Paideia* concerned gentleman's activities such as sports, gymnastics and fencing. In the fifth and fourth centuries BC, the concept got a broader meaning, signifying a lifelong project, understood as *becoming a good citizen*. *Paideia* thereby became a key concept in ancient Greek culture.²⁸ The question of *paideia* was taken up and treated more than anyone else by Plato. According to Werner Jäger, one can understand Plato's philosophy as an attempt to give *Paideia* a new foundation.²⁹ Here I can only highlight the main points put forward by Plato.

The first important point is, that *all* human beings imitates and take over language, opinions, customs etc. from the society they grow up in. The basic human situation is therefore characterized by *limited Paideia*. In this situation we try to be good citizens, but we cannot actually look *behind* our perceptions and actions. We can try to do good things but cannot articulate *clearly* what goodness as such is. That is, we cannot *clearly* see the concepts and ideas we use to identify and distinguish good and less good actions (and other things) with. According to Plato we do not in such a situation act in *totally* blindness. We try to do what we think is good. And we actually succeed in some way – to identifies horses, build cities etc. But it is like an iceberg, where we only have *limited knowledge* about the conceptual framework *behind* our activities and perceptions. Such knowledge, *imbedded* in our daily life,

can be thought as a *more or less* distorted interpretation of a conceptual framework, we *all* share, because it is the deep structure of the order of cosmos. If there were not such an order, our ideas of good and bad, justice and injustice etc. would be arbitrary. If that were the case, it would be meaningless to discuss whether something is good or bad. And it would be meaningless to try to do something good. Instead Plato argues that differences between different people and societies is a relative one, more or less close to the same ideal structure. Yet, if all we realize, is only the top of the iceberg, our life will be *superficial* and without the possibility to really say what are more or less close to the good itself (the basic ideal of goodness, something being good and only good and nothing else than good). Then it will be a matter of only *persuasion*. If we live like that, we attain to what Plato calls *limited Paideia*.³⁰

The second point is that *Paideia can be extended*, from this basic situation, but only by means of a difficult *dialectical and dialogical process*. For most people this will only be initiated and seen as rewarding if they get pedagogical aid from someone who have already started the expanding process, going from the top of the iceberg, to the deeper conceptual structures behind our daily life. This can only develop as a detective process, where we use our limited knowledge, the top of the iceberg, *as clues* of the existence of the concepts and ideas lying unnoticed behind. To start this process, we must first acknowledge, that what we in the basic situation has taken as our whole reality, is in fact only a very limited part of reality. We must realize that what we think we know, we do not know. That is: we must *become free* of the prison, where we take opinions as knowledge. Only then we will begin to be motivated to look down into the deeper regions of the iceberg and pursue the difficulties of obtaining a clearer understanding of the ideas behind. This can only be done through raising questions like: what is goodness? And then dare to put forward suggestions, that is not taken as final answers but as clues and further clues, we must investigate, to get to new and even better clues, coming closer to the presupposed goodness in itself. This *emancipative* process, where we become *free from* opinions we grow up with, and *free to* develop our own insight into the ideals that guides our activities, is not comparable to *learning skills* like fencing or persuasion. It is not something that can be *transferred* from one person to another. It demands a process, in which I *realize* what it means to be good. Only then will I be motivated to *change* my life and the society, in accordance with the new deep insight – a *clearer grasp of goodness*. And only then will I also want to *emancipate others* to deeper insight.

The third point is, that when we have attained a deeper personal insight and thus become motivated to change our life and society, and also help others with being emancipated, in a personal way, we realize, that it is difficult to actualize our new insights. All experiences we possess, have been collected through another (more unclear) interpretation of what goodness is. We are therefore without experience with actualizing the new clearer vision of a good life. This mean that we have to “start all over” and practice and probably will fail a lot, especially “in the beginning”. Also, we will meet resistance from others, but also become doubtful and perhaps give up. All this to say, that also *practical Paideia* is needed, and this is as difficult as the emancipating part. Also, this is inherently linked to the former, because as said before: most people will only begin the emancipating movement if they get pedagogical help, but this

help requires educators with not only insight, but also practical Paideia, experience with being a good teacher. This points to the most important thing in Plato's theory of Paideia, namely that the basic structure of Paideia is *circular* and bound up with *social life*. Thus, the emancipation from mere opinions presupposes help from people who have already been emancipated, but at the same time, no emancipation can be absolute, and the life of the society will always be based on interpretations *more or less* close to goodness. No one will be absolutely without Paideia, and no one will reach full Paideia. It is an indefinite circular human project; where we can only gradually improve (and fall again). Finally, Plato himself has the intuition, that both man and society is composed of different conflicting parts, forming a whole that can only be good, if the different parts become *harmonized*. Paideia is therefore not about optimizing only the rational part but should address the composite and complex nature of man and society and focus on how to bring forward harmony.

These 3 educational functions within the concept of Paideia, (1) basic *socialization* through learning and imitation, (2) *emancipation* through dialogue and dialectical thinking and (3) *realization* of a more harmonic life through practice and perseverance, are exclusively related to the Polis. It is only addressing people living in the Polis and is only meant to optimizing human city life. When pre-Socratic thinkers (*the philosophers of physiologoi*) discussed whether everything moves (Heraclitus) or stay the same (Parmenides), they were addressing *physis* and *cosmos* as such. Plato made a synthesis of the different positions, but he reduced them into a logic of Polis. All what matters for Plato are questions of justice and other human phenomena *inside* the Polis. Plato is only concerned about distinctions like the difference between particular interpretations of being a good citizen (more or less diverse and "moving") and goodness as such (staying the same). Above I have used the metaphor of an iceberg to explain the thoughts of Plato, but obviously he does not talk explicit of icebergs. Instead Plato in his Cave Allegory³¹ distinguish between a cave life (corresponding to the top of the iceberg) and moving out into the sun (corresponding to the lower regions of the iceberg). Yet, what interests Plato is not caves or the sun; these are treated by Plato only as metaphors, to picture life in the Polis. It is never a matter of getting out into *the real sun!* Further, dialogue is reduced to taken place only among free men of the Polis. Emancipation is understood as liberation *from* social life to make it possible to *re-enter* and improve social life; nothing else. All the dialogues of Plato therefore occur within Polis, among men and is only about the Polis. His invention, *the Academia*, is an extension and reinforcement of the Polis.³²

The second major layer in in the tradition of western educational thinking is the translation of Paideia (and other Greek concepts) into Roman life, and the development of the concept *humanitas* in the middle ages. The Roman statesman Cicero (106-43 BC) was one of the first to translate Greek concepts into Latin. Paideia then became *Humanitas* and *Cultura animi*.³³ Cicero emphasized that poetry, literature and other high-quality linguistic phenomena could contribute to enhancing the individual's character. Thus, Cicero argues that a Roman statesman should carry out a *studia humanitatis*, thereby shaping himself humanly. Education then becomes a preparatory study to develop the particularly human sides, including linguistic abilities and moral judgment. Cicero hereby made the foundation for the notion of a cultivated

homo politician.³⁴ By dealing with literature, ancient moral philosophy, poetry and human history, one can become a better statesman. Or as it is formulated by Bruni (1370-1441), *studia humanitatis* is "the studies that perfect and adorn man".³⁵ By this Latinization, the emancipation function, outlined by Plato, change in character. The dialogical and dialectical process, where you are forced to think for yourself, is substituted by a process of dealing with human written texts. The socialization process of the roman city-life is thereby not countered by emancipative thinking, but another socialization process, that of *reading*. The goal is not to transform and make the statesman into a revolutionary person, like in Plato, but to *expand the horizon, in a throughout human-cultivated way*. In other words: it follows the logic of the imperium and colonization. An uncultured world must be cultivated and conquered.

Yet, this took a further *turn* in the Italian renaissance. Thus, it was first with the renaissance that one began to use the word *humanist*.³⁶ According to Vasari (1511-1574), who invented the concept of *la rinascita*, Petrarca (1304-1374) was the first renaissance person. Already in this formulation dwells a new view of man. A human being is not something you are, but *something you can become*. As an individual phenomenon. Characteristically, Vasari also proclaims his time as a special epoch - and a few people, including himself, as renaissance people, defining both the period and humanity. These people were multi-artists who learned several languages, built up libraries and art collections, wrote, invented, painted, composed, philosophized, and engaged in politics, architecture and church affairs. Behind it lay a new optimistic and aesthetic view of man and cosmos.³⁷ This *turn toward man* involves that *man comes into the center*, as a being that can create itself *without any outer given scale/order*.³⁸

This renaissance humanism, where Man is placed on a pedestal radically different from anything else, is highly manifest in Pico Mirandola's *Oration on the dignity of Man*.³⁹

Pico begins his *Oratio* by criticizing the arguments which have been raised so far on the merit of human nature – that Man compared to other creatures is *more rational, more intelligent* etc. Characteristic of such accounts is that they do not explain why Man is entitled to the *highest* admiration; the human being is only seen as an advanced animal, like a *political animal*, for instance (cf. Aristotle). Since ancient times the human being has therefore only been understood as a being (like all other creatures) equipped with a given potential that can over time become actualized. Instead Pico argues that God has created *the world as a Stage whereupon man has no particular function, position, task or nature*. The lion can only be lion, the plant only plant, the angel only angel, etc. Man, on the other hand, can become what it wants, if it uses its will-power. According to Pico, man has this openness in his being because he is created in the image of God (as a *deus secundus*, cf. Cusanus). To be human, is not to be destined for a particular way of life. This fact, that Man is the only creature, in this world, who can become anything it wants to become, is the reason that man should be admired higher than anything else (except God). Accordingly, "the world" should not be seen as a *place* (habitat) with its own order that man has to submit to. Instead the world should be seen as a *Stage* where man can choose different ways of life, implying that anything else in this world becomes props and resources for human performance. Finally, Pico link this idea to the roman concept of *studia humanitas*. Through being acquainted with different expressions of

human life (Greek, Roman, Persian, Christian etc.), one does not only achieve the possibility of inspiration from as many sources as possible, one also obtains the possibility to realize that different potentials can be created; that is, one is set free to create one's own way of life. Like in a theater, Pico suppose that we can only create great drama, deep roles and unique scenography's, if we *first* work with imitating the greatest productions from diverse traditions, and then work out our own plays.

With renaissance humanism, education is not any longer thought as living up to an order in the world. Instead, it is emphasized that it is man himself who *creates* his order, and in that sense, it is up to itself how it lives properly. The educational task now no longer consists of leading someone into the true and deep *vertical* order (like in Plato) it is supposed to actualize in concrete life. Rather education becomes a matter of becoming familiar with *the greatest creations of mankind*, because these can (1) indicate that Man is not destined to actualize a specific potential, but also (2) makes it possible for *the individual* to *create* its own life and unique expressions on the basis of this broad *horizontal* blanket for inspiration. Where the main idea in Plato where that education should lead people to improve their life in Polis according to one and the *same* standard, goodness as such, bringing harmony to soul and state, the ideal put forward by the renaissance thinkers, is that people should become creators of their own life, bringing as much human *multiplicity* to the world-stage as possible. By the same token, the difference between humanity and culture *and* everything else, understood as nature, is radicalized. Education becomes human-centered to the extreme. Only human products, that is written texts, are attributed educational value. Man is seen as the only free performer on the world-stage, able to give himself a unique determination *independently* of all other beings and radically more valuable than any other creature. Education is thought as purely human-self-development, absolutely free and indefinite.

The third major layer in in the tradition of western educational thinking is the arise of German thinking and the translation of Humanitas into the concept *Bildung*.⁴⁰ The concept develops in 13th century Christian mysticism. Here, concepts such as "Imatio Christi" and "Imagio-Dei" are formed. These are forerunners to the *Bildung* concept, that fostered the idea, that Man is created in the image of God, and should become as close as possible to its arch image. In this understanding *Bildung* signifies *the process in which Man gradually open himself to God and finally becomes one with God*. Such a figure is put forward by Eckhardt (1260-1328).⁴¹ This theological concept of *Bildung* becomes secularized in the 18th century enlightenment. *Bildung* now comes to signify the *educational* process, in which Man actualize the image that has been divinely laid down in him, that is unfold all his potentials, as fare as possible. *Bildung* then signify *educational perfection of human potentials*.

The modern concept of *Bildung* arises at the end of the 18th century as a critical response to vulgarizations of the educational *Bildung* literature. Kant and others argued that *Bildung* should not be understood as something initiated "top down" or from "the outside". Otherwise *Bildung* would be reduced to socialization and indoctrination. Instead *Bildung* should be thought as *self-Bildung*.⁴² Thus, *Bildung* modern understood signify *a process of self-realization*.⁴³ However, it was also thought that this self-realization should contribute to

humanity as such and take the form of singular unique *concretization of humanity*. Further humanity was seen as an indefinite human project, implying that each individual Bildung was inevitable based on prior human developments, but also contributed to move mankind a little step further. Bildung was therefore both a matter of taking up the whole human tradition so far developed *and* innovatively bring it further. In that respect Bildung is both an individual and a public process, situated historically, politically and socially. Only through being together with other people and being part of human history is Bildung possible. The autonomy of the individual Bildung presuppose the autonomy developed throughout human history (and vice versa). Thus, self-realizing individuals goes hand in hand with self-realizing humanity, developed *completely* by humans, including inventing human-made universal standards. The concept thus has a liberating aim by highlighting human inner freedom (from any external determination). Bildung therefore also extends beyond the given and the dogmatic. It is an anti-authoritarian concept.⁴⁴ Finally, Bildung is about *the whole person*, that is on the development of all human potentials, that can bring about a harmonious humanity. Focus is not only on reason, but also on moral and aesthetic aspects, as well as practical minds and craftsmanship. The modern concept of Bildung includes therefore emphasize on *practical exercise* in writing and reading, building, composing, etc. The upshot is that *self-realization* should be encouraged *as diverse and comprehensive as possible*.

However diverse, the Bildung-process and its results are thought to be, the Bildung concept introduce a linear progress logic towards an “end of history”. This linear way of thinking it inherits from Christianity. Further, both process and result become inherently human-made. Bildung is all about human history, human culture, human development, humanity, freedom and social city-life set in opposition to nature, necessity, animals and prehistoric time. Man is perceived as a double creature: it is born as an animal, part of nature, with instincts and a body. By discipline and cultivation, it can begin to master this animal part, and also begin to develop its other side, in truly human side, the potential to freely invent and develop culture, humanity and human history, as something different and surpassing natural history and being. The social and public life, making individual Bildung possible, is thought as only made up by humans and purely human activities. And only human Bildung is thought to being able to contribute to the further development of public life, in which democracy being one of its later trademarks (no animal has developed anything like democracy, we are told). Bildung as an educational concept implies therefore the realization of *the modern school*, in which humans are put into classrooms, forming purely human activities, closed off from the world outside, *representing* within through textbooks, blackboards, stuffed animals etc., the materials that each individual should develop self-Bildung through. The only difference between different Bildung thinkers, say Kant and Klafki for instance, is what kinds of *social forms* and what kinds of *knowledge materials*, they think promotes self-Bildung best. Also, they share the *paradoxical* believe, that education as Bildung-supporting should be carried out by teachers by affecting the student from outside with the aim of encouraging and supporting the student to determining herself from within, autonomously and *independently* from any exterior cause. Thus, education in the tradition of Bildung, is thought as making both the individual and

mankind as such *independently from exteriority*. In short: it is a paradoxical master-technique, caring for human independence (keywords: freedom, humanity, rationality, autonomy).

The fourth major layer in the tradition of western educational thinking follows in the slip stream of the arise of postmodern thinking and the linguistic turn in the 20th century. Hereby the grand narrative of emancipation, humanity and Bildung is questioned.⁴⁵ This questioning is made “from within”: instead of one metanarrative, many local narratives are preferred. Instead of one discourse, many discourses. Instead of one language game, many. Instead of Holocaust and rationalization, then pluralization and multiculturalism. Instead of one rationality, then many. Instead of being, then a multitude of becoming. Instead of identity-making, then difference-making. Instead of the vertical logic of Polis (Paideia), the horizontal logic of Imperium (Humanitas) or the linear progressive logic of enlightenment (Bildung), then the *Vulcanic logic of rhizomatic events (Becoming)*.

According to the postmodern critique of modernity, the idea that everyone should live up to one and the same ideal, the rational and independent human being, is violent and destructive and linked to the Holocaust and the like.⁴⁶ Instead the postmodern want to treat the question of what it means to be a human as radically open; *more human than in humanism*.⁴⁷ The problem with western humanism, so fare, has been that it always ends up with a *norm of humanness*, and in doing so excludes or violates those who do not live up to this norm. Thereby humanism educationally tend to degenerate into socialization, inserting newcomers into a preexisting order, putting restrictions on what it means to be human.⁴⁸ Postmodernism therefore questions the idea that education can or even should emancipate. But also, it questions the worldview that underlies the emancipatory *language* of education, that tends to make *rational mastery* of the social and natural world its end point.⁴⁹

While postmodern thinkers seem to praise education as an open, heterogenic and unpredictable event of becoming⁵⁰ and also points to the pedagogical potential of irregular nomadic spaces and the like⁵¹, the real implication of the *delegitimation* of the grand narrative of emancipation, enlightenment and Bildung, seems to be, that school education converts into a *marketplace of learning*.⁵² Already in his strange book “The postmodern condition” from 1979 Lyotard envisioned this.⁵³ According to Lyotard the new educational criterion in postmodern societies will be *performativity*. Education will then have to produce two kinds of skills. First, skills that tackle world market competition. Second, skills that fulfilling society’s own needs. This will substitute modern education’s focus on formation and dissemination of a general model of life, legitimated by the emancipation narrative. In the context of *postmodern delegitimation*, educational institutions will be called to create skills, no longer ideals. Neither will the goal be to educate an elite capable of guiding the nations towards emancipation, but to “supply the system with players capable of acceptably fulfilling their roles at the pragmatic posts required by the institutions”.⁵⁴ Thus education in postmodernity will move away from the principles of emancipationist humanism, that “offer little in the way of performance”. Further knowledge will not any longer be transmitted *en bloc*, once and for all, to young people, rather it will be served á la carte to adults, already working or expect to be, for the improving of their skills. This will disregard *any experimentation* because it brings disorder

and have little or no operational value. conversely, teachers will, when education ceases to be about the realization of the emancipation of men, be replaced by machines without deeper worries. What will matter, in the context of mercantilization and instrumentalization of knowledge, are: Is it saleable? Is it efficient? Yet, at the same time: If the problem not any longer will be to create new knowledge, but first of all to use “data banks” and combine existing knowledge in new ways, emphasize will also be on *connecting what was previously held to be independent*. Thus, the ability to make new moves or changing the rules of the game, will also be demanded, as in interdisciplinary studies for instance. According to Lyotard this is very different from Humboldt’s model of university: here each science had its own place. The idea of interdisciplinary approach is specific to postmodern delegitimation.

On the one hand the postmodern *thinking* advocates what I would call a *Vulcanic logic of education*. By this I mean that it prefers education that leads to *deconstruction* of established regimes, orders, hierarchies and the like. It wants education to *re-open* the ground, and revitalize, create a surplus of way of speaking, thinking, doing. It doesn’t want education to *bind* the students to specific master ideals or any particular language game. It wants education to support *marginal* thoughts, discourses etc. It is not only a matter of broaden the student’s horizons (like in the imperium); it is more a matter of re-evaluating and make things shatter and live, bringing the students into the open, the becoming, transgressing boundaries and fixed identities. Newness, uniqueness, strangeness and otherness, are the key values education should affirm. Education should be an experiment, an event, that challenges established hegemonic order and domination, but *without* re-binding the students. In this line of thoughts, we human beings *live in language*, in indefinitely many discourses, without any real boundaries other than those set up by arbitrary power, purely human-made and deconstructable. Also, the very linguistic distinction between culture and nature is problematized. Nevertheless, this thinking has a tendency to pay heed to human-made language, sense-making, discourses, social structures etc. *even more* than modern Bildung-thinkers. What is wrong with humanism, is “only” that it is not *sufficiently human*, according to the postmodern thinking.⁵⁵ Instead of one language game, they want many. In that respect they continue the humanistic biased western educational tradition, by expanding it; make it larger and more spacious. They want *the human to be indefinitely more*. It’s like a spider, making its net even more complex and wider; but nevertheless, a spider in the center.

On the other hand, the postmodern *situation*, is educationally characterized by delegitimation of the grand emancipative narrative of Bildung but substituting this not by the excitement of the Event advocated by postmodern *thinking*, but by nihilistic marked optimization with performativity and efficiency as empty criteria. What we get instead of the grand narratives is therefore not the Event, but what Postman already in 1992 called “false gods”, making *public* schools meaningless.⁵⁶ Yet, as dark as this seems, it is probably more true to say, that our situation today, is a mix of layers, the humanistic tradition is not totally out-ruled, neither is it totally dominating. What is lacking, I would argue, is a better educational answer, to the Anthropocene we are now living in, than the answer delivered at the “end” of the humanistic western educational tradition combined with marketization of education. The real drama is

not a bipolar conflict between (post)humanists and global market (advocates), but a *triangle*, including the former *and* a third pole, *the non-humans* (and their voices). The context, where this drama is played out, is not only the arena of language games, but first of all the life-critical zone slightly beneath and above the surface of the earth. Now, let's enter this world.⁵⁷

Part III. An educational answer to the Anthropocene

In this final part of my paper I'm going to sketch out a new educational concept and ideal, that function as a reinterpretation of the humanistic western educational tradition (and its four major layers so far: Paideia, Humanitas, Bildung and Becoming), situating the tradition anew in the Anthropocene. I call this pedagogical ideal *Cautiousness*. It denotes both what education should be about and how it should proceed in the Anthropocene. Yet, I'm not going to give specific educational answers or advices concerning "what to do". My aim here is much more limited. I only want to sketch out a possible direction and construct a feasible conceptual bridge, to this new unknown. In other words: this is the beginning, not the end.



Fig. 4. Look!

Let's start with the 'about question'. Cautiousness as an educational ideal means that education should encourage and support first of all, the practicing and development of ways of being in the world, that incarnate values like carefulness, thoughtfulness, attentiveness, prudence, farsightedness, practicality, kindness and compassion. None of these values implies, that education should produce certain kind of people. What is implicated is only, that activities that embark on the development of – and experimentation with – such values should be at the center of Anthropocene education. Why? Because the Anthropocene recognition (as argued in part I of this paper) points out that the main problem of the age we are now living in is *how humans and nonhumans and humans and humans connect to each other*.⁵⁸ This means that education should not only be about human-human relations, but always about the *double entanglement*. To separate the two sets, is not to be cautious at all. Further, there are no given answers to how relations (that is being-in-the-world) are established in a cautious way. In other words: it is not a matter of mere socialization (or learning didactics). The problem should be addressed as an open-ended question. Different matrices of humans and non-humans should be tried out. Non-cautious entanglements of the present world, embedded in

the socialized behavior of the students, should be challenged. Thus, education in the Anthropocene should *emancipates* students away *from* non-cautious being-in-the-world *to* pursuing more cautious ways, developed on the way. This ideal is broad enough to make rooms for indefinitely many unique exercises, experiments and personal developments.

One could perhaps object: this is nothing but a romantic phantasy, completely unrealistic; what matters is that students in schools becomes prepared to the hard reality of global market-economy. To this I will say several things, first of all: the preparation for market economy is not a valid end in itself; it is what Postman calls a false God.⁵⁹ Further, the market is not the highest context, that is the critical life-zone we share with many non-humans. It is not cautiousness that is an unrealistic phantasy, but the present global market economy. Education should not support and reproduce this mass destruction but contribute to a transformation of the state of the affair in the direction of a more a cautious market economy. Yet, some readers might be alarmed, that the direction we are moving, if we accept this talk about cautiousness, is all too ideological. To this I will reply: do you have a better alternative, taking seriously the state of the earth? And again: the ideal does not imply a reduction of education to socialization or indoctrination, that will be even more clear in a moment, when I come to the “how to proceed question”. Here I only want to stress that education is not at all able to function educationally without ends/ideals. Yet, as in the tradition of Paideia, Humanitas, Bildung and Becoming, it is preferable if the ideals are *self-reflective* – that is can be used critically on themselves.⁶⁰ Cautiousness is evidently such a self-reflective concept, because one is fully able to cope with this ideal in a cautious way; that is keeping the ideal open, letting students, teachers and others experiment carefully with it, in personal ways, being thoughtful about the dangers and limitations of the ideal, not pushing too hard in only one direction. The ideal of cautiousness so to speak works on all levels and invites to cautiousness “the whole way down”; it is not a militant concept but puts restrictions on itself. It implies that we are all invited to be careful with what we stick to and what we do not stick to. It’s not a hard, but a smooth concept. It is organic.

Now let’s look at the ‘how to proceed question’.⁶¹ To proceed educationally in a cautious way means first of all that we hesitate and becomes attentive to who and what is included and who and what is excluded in the educational activities. Much of postmodern critique on the modern school project has focused exclusively on the exclusion of human beings and human discourses. In the Anthropocene we should extend this to being aware of the exclusion and unawareness of the non-human beings. This imply the very simple but far-reaching thought that school education should not any longer be carried out as only a closed interaction between human beings (dealing with only or mainly human expressions), un-acknowledging the non-humans (that always are part of the game anyway, but as overlooked, repressed, reduced, excluded, exhibited, manipulated; in short treated in non-cautious ways). Every school setting, every lesson, every school subject matter, etc. should therefore be rethought, in the direction of including explicitly and cautious the non-human-pole (and down-emphasizing the market-pole and its neoliberal advocates). What students should *do* in school is to experiment carefully with the *double entanglement* and achieve experiences with how to co-

exist with others, also non-human beings, in cautious ways. Teachers should *encourage* and *support* students to this end, not indoctrinate them. This in three dimensions, simultaneously:

First, teachers and schools should encourage and support students to *practice* and *experiment cautiously* with *what* the students really *know* about their way of being in the world as part of the double entanglement. Do the students really know what they think they know, and is what they know *sufficient* to think and act cautious together with all others? It is an educational task to make these questions “alive”.

Secondly, teachers and schools should encourage and support students to *practice* and *experiment cautiously* with *how* they *relate* to other beings and to themselves. This dimension is perhaps the single most important in the Anthropocene. The student should be encouraged and supported to evaluate their way of making relations – do they for instance relate altruistic or egoistic? Could other relations be established? Are they at all aware of their attitude and the way they relate? And do they choose between alternatives? To paint the cow is for instance not the same as eating the cow. But as *speculative realism* has pointed out, there are indefinitely many ways of accessing other beings.⁶² Also, do students (and all of us, we are all students in the Anthropocene!) have the abilities to relate the way they wish to relate? Again: this should not exclusively focus on human relationships, but always addresses the *triangle* that includes relations to non-humans, perhaps especially living ones and habitats.

Thirdly, the teachers should invite the students to *practice* and *experiment cautiously* with *who* they *become* when they established different kinds of relations and seek different kinds of knowledge. That is, invite students to thoughtfully develop their own singular voices, personal stances and their unique contributions and expressions, in attentive dialogue with others, both humans and non-humans. If this third dimension is not incorporated, education degenerates into mere engineering and fabrication.

In relation to this, it is necessary to reinterpret the “public” and “common good”. In the humanistic tradition it was important, that education encouraged students to think and act in the interest of all human beings.⁶³ Kant for instance developed the idea, that each educated person should ask herself in every situation whether the moral maxim of a possible action could also function as a *general* moral law. In the Anthropocene this must be extended thoughtfully to non-humans, implying that the world horizon is not only humankind, but the life-critical zone and its unique beings. Yet, this should not be understood as it is actually possible to know absolutely what is best do to for all. Neither should it be understood in utilitarian terms, implying a kind of eco-engineering totalitarianism. Rather I suggest a new conceptualization of “the common good”.⁶⁴ First, ‘the common good’ should be understood as a *claim* rather than a term for something actually present; It is not certain that there is a common interest, it is only assumed as something one should cautiously consider. Secondly, the notion of “the common good” should be perceived as a *shift of interest* where we *try* to rise above particular interests. Thirdly, one should think “the common good” *pluralistically*, so that it consists in an obligation to think about the common good of all living beings (also not yet living beings) in a given case, but from an infinity of singular perspectives (this is the

postmodern invitation).⁶⁵ Fourth, “the common good” today should be thought of as the planet as such, and thus as an overall hybrid of the human world and the non-human world.⁶⁶ This fourfold concept of the common good, understood as 1) a claim, 2) to take an interest in the common good, 3) from infinitely many unique perspectives, 4) in relation to life on the planet as such, gives us a sufficiently fertile point of departure to rethink *public* education.

Concluding remarks

I will end this paper by specifying how the new ideal of *a cautious educational practice* reinterprets, and on some points, also diverge from, the western humanistic educational tradition, outlined in part II of the paper.

First of all, the ideal and concept continues the tradition in paying heed to the idea of education as something that not tries to manipulate or indoctrinate students, but rather try to encourage and supports them to begin to explore, think and participate in the creation of their own life and the shared world as well. Already Plato saw that education was a matter of making distance between socialization and emancipation, liberating students from being determined by custom, and also liberating them to develop personal insights into what a good life could be. Yet, we realize today that sociality must be understood differently, not only as the life of the Polis but as the collective life in the life-critical zone slightly beneath and above the surface of the Earth. Education must today on the one hand liberate students from being determined by the actual (most likely non-sustainable) habits in this zone, on the other hand encourage them to cautiously experiment practically with developing “as good as it gets” ways of coexisting in dialogue with both humans and non-humans in this shared life-zone. A good life must today include this broader horizon. Perhaps, also, there are not only One sun, that is one idea of the good life, staying the Same, for everybody. Perhaps it is more difficult. At least, we have learned, after all these years since Plato, that we should handle ideas carefully; they are one of the most dangerous things. But we cannot do without them, so again: a cautious way to go, seems the most advisable.⁶⁷

Further, the deep vertical thinking of Plato should be complemented by the horizontal thinking of Latin humanism; but without *human exceptionalism*.⁶⁸ Instead of comprehending the human as the most admirable creature on a Stage, where everything else is seen as props, education should encourage *ecological awareness*, that is pay heed to all kinds of beings and possible relations in the critical life-zone, where we all live and produce waste. This horizon is indefinitely wider than the small human-all-to-human one. Further it should not only be about self-realization at the expense of others but about establishing relations of care and co-existence in solidarity.⁶⁹ Also, *Bildung* has to be reshuffled. It is true that we are *situated* beings, but not only in human history, but in a much larger shared life-history. The educational ideal today should not be to produce independent and rational people that master the social and natural world. Rather the educational ideal in the Anthropocene should be to encourage and support experimentation with establishing habits characterized by “carefully connected plurality”.⁷⁰

We cannot do without images, of ourselves and our mega-projection(s), but from the time of dawn we have also made images in our caves and other places as well of non-human-beings, and perhaps it's time to consider these also as educational guiding. Perhaps there are stronger reasons now than ever to become-an-animal or other more vital becoming's in-between.⁷¹ At least, it's time to *co-create* within a broader horizon. Finally, the *becoming*, that education should encourage and support, cautiously, should not be legitimized only by the idea of many small language games, discourses etc. The postmodern was right to criticize the grand human narrative, but their solution where a disaster educationally speaking. Instead of one grand narrative, we should value a set of non-exclusive gods, that can function as legitimizing in the only one world we are living in today and have been living in for quite a time.⁷²

Literature

- Andersen, Ø. (eds.) (1999). *Dannelse, Humanitas, Paideia*. Sypress forlag.
- Arendt, H. (1979). *The recovery of the public world*. St. Martin's Press.
- Biesta, G. (2006). *Beyond Learning*. Paradigm Publishers.
- Bauman, Z. (1991). *Modernity and Holocaust*. Polity Press.
- Beck, S., et. al. (2014). *Klassisk og moderne læringsteori*. Hans Reitzels forlag.
- Bennet, J. (2010). *Vibrant Matter*. Duke University Press.
- Caputo, J. (2013). *Truth*. Penguin Books.
- Caputo, J. (2018). *Hermeneutics*. Penguin Books.
- Cassirer, E. (1963). *The Individual and the cosmos in Renaissance philosophy*. Barper & Row.
- Cassirer, E. (1970). *An Essay on Man*. Yale University Press.
- Deleuze, G. & Guattari, F. (2000). *A Thousand Plateaus: Capitalism and Schizophrenia*. Continuum.
- Ellis, E. (2018). *Anthropocene*. Oxford University Press.
- Gadamer, G. (2003). *Truth & Method*. Continuum.
- Grønkjær, N. (1999). *Huleudgange – aspekter af Hans Blumenbergs tanker om dannelse*. I Andersen, Ø. at. al. (1999). *Dannelse, Humanitas, Paideia*. Sypress forlag.
- Gustavsson, B. (2017). *Bildningens dynamik*. Bokförlaget Korpen.
- Haraway, D. (2016). *Staying with the trouble*. Duke University Press.
- Heidegger, M. (2002). *The essence of truth*. Continuum.
- Jaeger, W. (1973). *Paideia: De formung des grechischen Menschen*. De Gruyter.
- Kant, I. (1993). *Formodninger om begyndelsen på den menneskelige historie*. I Oplysning, historie og Fremskridt. Slagmark.

- Khaldun, I. (1967). *The Muqaddimah: an introduction to history*. Bollingen Foundation.
- Klafki, W. (2001). *Dannelsesteori og didaktik – nye studier*. Forlaget Klim.
- Korsgaard, O. et al. (2017). *Pædagogikkens idehistorie*. Aarhus Universitetsforlag.
- Koselleck, R. (2007). *Dannelsens antropologiske og semantiske struktur*. I Slagmark Nr. 48.
- Larsen, J. (2014). *Dannelse eller kompetence?* I Kognition og Pædagogik nr. 94.
- Laugesen, M. (2018). *Det antropocæne paradoks*. I Turbulens: forum for samtidsrefleksion.
- Laugesen, M. et. al. (2019). *Dark Pedagogy*. In Environmental Education Research.
- Latour, B. (1993). *We have never been Modern*. Harvester Wheatsheaf.
- Latour, B. (2004). *Politics of Nature*. Harvard University press.
- Latour, B. (2017). *Facing Gaia*. Polity Press.
- Latour, B. (2018). *Ned på Jorden*. Informations Forlag.
- Lin, H. (2010). *Earth's Critical Zone and hydrogeology: concepts, characteristics, and advances*. In Hydrol. Earth Syst. Sci., 14, 25–45.
- Liotard, J. (1979). *The postmodern condition*. Manchester University Press.
- Løvlie, L. (eds.) (2003). *Educating Humanity – Bildung in Postmodernity*. Blackwell Publishing.
- Moore, J. (eds.) (2016). *Anthropocene or Capitalocene*. Kairos.
- Morton, T. (2007). *Ecology without Nature*. Harvard University Press.
- Morton, T. (2010). *Ecological Thought*. Harvard University Press.
- Morton, T. (2016). *Dark Ecology*. Columbia University Press.
- Morton, T. (2017). *Humankind – Solidarity with Nonhuman People*. Verso.
- Morton, T. (2018). *Being ecological*. Penguin Books.
- Nielsen, J. (2007). *Indledning* I Pico, M. (2007). *Om Menneskets værdighed*. Museum Tusulanum.
- Pico, M. (2007). *Om Menneskets værdighed*. Museum Tusulanum.
- Postman, N. (1992). *The End of Education*. Vintage Books.
- Reagan, T. (2018). *Non-Western Educational Traditions*. Routledge.
- Roy, K. (2003). *Teachers in Nomadic Spaces*. Peter Lang.
- Sellberg, E. (1999). *Renæssanshumanismen mellem bildning og utbildning*. In Andersen, Ø. (ed) (1999). *Dannelse, Humanitas, Paideia*. Sympress forlag.
- Sløk, J. (1974). *Cusanus' dialog om visdommen*. Platonselskabets skriftserie 2.
- Sløk, J. (1996). *Opdagelsen af mennesket*. Centrum.

Smith, G. & Williams, D. (eds.). (1999). *Ecological education in action*. SUNY Press.

Straume, I. (eds.). (2013). *Danningens filosofihistorie*. Gyldendal.

Sørlin, S. (2017). *Antropocen*. Weyler.

Notes

¹ See <https://www.moesgaardmuseum.dk/en/exhibitions/permanent-exhibitions/grauballe-man/>.

² For details about the Anthropocene and the other concepts, see Morton 2016:7-25, 2018:39-67, Ellis 2018, Latour 2017:111-145, Sørlin 2017, Laugesen 2018. Moore 2016 and Haraway 2016:30-57. Various different start dates for the Anthropocene have been proposed, ranging from beginning 12,000–15,000 years ago, to as recent as the Trinity test in 1945 or even later. See <https://en.wikipedia.org/wiki/Anthropocene>.

³ Lyotard 1979.

⁴ Shakespeare and many before him: https://en.wikipedia.org/wiki/All_the_world%27s_a_stage.

⁵ Latour 1993.

⁶ Morton 208.

⁷ Latour 2018.

⁸ See <https://en.wikipedia.org/wiki/Anthropocene>.

⁹ Morton 2016.

¹⁰ Cf. Lin 2010 for the concept “Critical Zone”, also Latour 2017.

¹¹ Morton 2016 and his concept *Dark Ecology*. See also Laugesen et al. 2019 for the idea of *Dark pedagogic*.

¹² Morton 2016 has suggested that all this is tied to what he calls *agrilogistics*, the inherent way of understanding in agriculture, started in Mesopotamia (and similar places) and now spread out on the whole globe as the expense of nomadic lifeforms. See also Ibn Khaldun 1967, Kant 1993 and Deleuze and Guattari 2000 on the battle between nomads and settlers.

¹³ Reagan 2018.

¹⁴ Haraway 2016 calls this dichotomy between Man and Nature an expression of *human exceptionalism*.

¹⁵ Latour 1993.

¹⁶ Deleuze and Guattari 2000: Animal-becoming etc. This line of thought does not mean that the human actually becomes in all its components an animal, a copy of the Other it tries to become. Rather it has the possibility to become something new, that is something other than itself, but also other than the other, transgressing the fixed boundaries that marks the difference between the two parts. Also, the Other, one tries to become (but not be) should be a minority, because minorities indicates constrained potentialities. By becoming something in-between majority (Man, thinking etc.) and minority (Animal, Plants, Non-thinking etc.), virtual potentialities are *released*, and a broader life-horizon is opened-up. The implication is: education should not try to make humans even more human (cf. the humanistic tradition, Kant for instance), and thereby exclude, dominate and displace the non-human; rather it should emphasize that humans are already also non-human, and have the potential to become something different, something in-between human and non-human, something new, more vital than the fixed, in solidarity with the oppressed (who are not seen as poor, but as *potentialities* that should be released).

¹⁷ Roy 2003.

¹⁸ Caputo 2018: Understanding is not possible without a framework, a horizon of understanding.

¹⁹ That was the theory of Humboldt.

²⁰ For discussion of objections to *the word* and *concept* ‘Anthropocene’ and alternative candidates, see Morton 2016:7-25, 2018:39-67, Latour 2017:111-145, Sørlin 2017, Moore 2016 and Haraway 2016:30-57.

²¹ Klafki 2001.

²² Haraway 2016.

²³ Haraway 2016.

²⁴ Morton 2017.

²⁵ Reagan 2018:351-352.

²⁶ Another possibility would be to look into *non-western educational traditions*, cf. Reagan 2018 and Smith & Williams 1999. In my view this is as valid as looking into the western educational tradition, but nevertheless a different project, at least for me, growing up with the western educational tradition as the main framework. It would mainly take the form of looking for *inspiration*. This could be helpful but is beyond this paper.

²⁷ Beck et. al. 2014.

²⁸ Andersen 1999, Straume 2013, Korsgaard 2017.

²⁹ Jaeger 1973. In his famous *allegory of the Cave* Plato depicts his theory of Paideia. However, this allegory has been misunderstood so many times. For instance, Latour 2004 got it all wrong. In Latour's account, the cave is *dark*, which is not the case. Further Latour argues that there is an *absolute* difference between inside the cave, resembling a social and political life where people are kept in *total tyranny of ignorance*, and outside, resembling *the world of Truth*. This is as wrong as it gets. As I explain in the main text, according to Plato there is *continuity* between inside and outside (there is never in Plato two worlds). Latour totally misses this and also the *circularity* of the allegory. According to Latour it is only a privileged group, the Scientists, who are able to go *back and forth* between outside and inside, and thereby correct the ignorant people in the cave and stop their chatter. Yet, the whole point of the allegory is to describe *the fundamental human situation* (cf. Heidegger 2002). Thus, it is *not* as Latour put it a matter of a few "*handpicked experts*" who without further ado are able to go back and forth. It is a matter of making a *basic human problem* clear: how it is at all possible to *become* able to and want to move beyond the given? Latour is so obsessed with showing that the allegory illustrates a wrong picture of the relationship between *Politics* (the cave) and *Science* (the outside), that he forgets that the allegory is not about science, but of *Paideia*, which *include* science and politics, yes, but also *education* and *philosophy*. Latour thinks the outside represents the absolute insights of *natural science* regarding *the world as it really is*. But in Plato, this is not at all the case. At stake is neither *Nature*, nor *Physis* (who hides, cf. Heraclitus). It is *the difficulties of becoming a good citizen*, within the walls of Polis (Cassirer 1963). What Plato describes is only *movements within Polis*, between the political marketplace and the philosophical Academia (everything takes place on the Agora, down in the harbor etc.). Yet, it is true, that this implies the rise of the in western educational tradition important difference between *socialization* (Paideia through being part of practical life) and *formal schooling* (Paideia through not being part of practical life).

³⁰ In some way this is an unavoidable fate of human life. By language it is only possible to indicate something *as* something else. To say good is good, does not bring us any further. We will therefore never be able to do anything else than try to articulate more or less accurate *interpretations* of goodness, justice, love etc.; the ideal itself is presupposed but cannot be articulated. In the language of Derrida: it is something *not deconstructable*, cf. Caputo 2018, whereas all the interpretations, of the same reason, always are *deconstructable*. In the renaissance this leads to *the educational ideal*, put forward by the nonplatonian thinker Cusanus, that what we as humans should strive for, is *knowledgeable ignorance* (where we know, that we cannot know absolutely, only God can), cf. Sløk 1974.

³¹ Plato: *The Republic*, Book 7.

³² With Aristotle, it becomes a little more complicated, but even when Aristotle seems to be highly interested in nature, it is only a matter of collecting data about nature, and within the center of the Polis, ordering and generalizing these data, so it becomes possible to overlook and master the surroundings. See Cassirer 1970.

³³ Korsgaard 2017:41-42.

³⁴ Sellberg 1999:78.

³⁵ Nielsen 2007:28.

³⁶ Sellberg 1999:77.

³⁷ Cassirer 1963.

³⁸ Sløk 1996. The mix of Greek thought and Christianity is more important than I have emphasized.

³⁹ Pico 2007.

⁴⁰ See Koselleck 2007:11-48; Klafki 2001, Gustavsson 2017, Straume 2013, Løvlie et. al 2003 and Andersen 1999.

⁴¹ Eckhardt being a Dominican, who influenced nonplatonian circles of the Renaissance, including Pico, but also himself can be seen as part of the nonplatonian movement and thus continuing and translating the Italian renaissance humanism into German Bildung thinking.

⁴² Gadamer 2003.

⁴³ Or as Kergel puts it in this volume: Bildung can be defined as an *unfolding of the subject*, producing a self-/world-relationship, which is based on the interwoven experience of power and freedom.

⁴⁴ Larsen 2014.

⁴⁵ Lyotard 1979.

⁴⁶ Bauman 1991.

⁴⁷ Biesta 2006:5, who defines humanism as the assumption that it is possible to know and articulate the essence or nature of the human being and use this knowledge as a foundation for our educational and political efforts.

⁴⁸ Biesta 2006:6-8.

⁴⁹ Biesta 2005:15.

⁵⁰ Caputo 2013 and 2018.

⁵¹ Roy 2003.

⁵² Cf. Biesta 2006:17-18; "Postmodernism implies the end of education; what can be left but learning?"

⁵³ Lyotard 1979:47-52.

⁵⁴ Lyotard 1979:48.

⁵⁵ Biesta 2006:8.

⁵⁶ Postman 1992.

⁵⁷ Cf. “the material turn” in the 21th century, for instance *political ecology* (Bennet 2010), *speculative realism*, *Dark ecology* (Morton 2007, 2010, 2016).

⁵⁸ Epochal key problems, in the plural should all be deduced from this main problem, otherwise, they are not, by definition, present *epochal* key problems. Cf. the discussion of Klafki 2001 in part I of the paper. A start could be to discuss the five problems proposed by Klafki. Reinterpreted in the Anthropocene context they could be articulated like this: (1) The question of peaceful co-existence among humans and non-humans, (2) the question of the sustainability of the shared life-zone, (3) injustice and inequality in the life-zone, (4) the possibilities and dangers of different forms of entanglements (5) the experiences with love, sexuality and care in the life-zone.

⁵⁹ I cannot here go into the details with the critique of the market as an educational end. Many has criticized this. Postman 1992 is for me very convincingly on this point.

⁶⁰ See Straume 2013 elaborating on this point of reflexive educational ideals.

⁶¹ Because this paper is on school education, I will restrict my thoughts here to the school setting, and not comment on the important difference between formal and non-formal education, cf. Reagan 2017.

⁶² Morton 2018.

⁶³ Cf. for instance Klafki 2001 and his concept “*allgemeine Bildung*”.

⁶⁴ Arendt 1979. The traditional concept of the general good is based on the assumption that it is something generally true and correct (a “common good” or a “common interest”) that can and should be recognized and become the basis of politics and pedagogy. Yet, his assumption is merely a fiction, at worst a totalitarian thought figure. According to Arendt, it implies that one thinks the political as a great household, that is, as a private sphere in mega-format, as if society were one large family, an organism, with one interest. Social Engineering. In doing so, you are assuming that all are just limbs of one and the same body, one and the same subject. In the western humanistic tradition, the idea of ‘the common good’ (tokoinei sympheron, bonum commune, common good, le bien commune, etc.) has led to such a substantiation of the concept.

⁶⁵ This third component where plurality of perspectives is combined with a trans-perspective, must not be confused with *cultural relativism*. The only requirement is that each and every one is given the opportunity to give unique suggestions on what may be the common good. Some suggestions may coincide; others contradict, but together they open up a nuanced proposal as possible.

⁶⁶ Where the thinkers of early late modernity, such as Arendt, thought the political and hence the general well-being purely human, then later thinkers like Serres and Latour argued that the political must be rethought so that the focus is on the *collective* of humans and non-humans; because the cleansing of the non-human from the political sphere has proved to be fatal, in short: led to the ecological crisis we are in the midst of today and which threatens the very existence of life on earth.

⁶⁷ Cf. Blumenberg, see Grønkvær 1999 for a discussion.

⁶⁸ Haraway 2016.

⁶⁹ Morton 2017 for further on these points.

⁷⁰ Cf. Biesta 2006 and many of his later publications.

⁷¹ By becoming-animal I allude to Deleuze and Guattari 2000.

⁷² That is the solution suggested by Postman 1992 and his critique of postmodernism and the neoliberal erosion of the public school, but also his alternative, five narratives, that can revitalize public schooling. I cannot here go into the details of this, but the main point is that if we want to recreate a meaningful *public* school, we need narratives that can tell stories that invites to a shared world, in which we are together as co-beings. Some of these narratives can show up to be even older than the Grauballe Man. Others can be more recent; and others not told yet. The central argument by Postman is that public school is only meaningful if it is based on founding narratives (gods) *that do not exclude or leads to separateness*. The five narratives suggested by Postman, are all based on the idea that public school should be about “the good life for all”. Shortly put they are: (1) We are all on *the spaceship Earth*, our shared home that we all have a responsibility for, depending on each other, thus solidarity and global awareness is needed and should be encouraged in school; (2) We are like *fallen angels*, always making mistakes but also trying to correct them, thus we are not gods; we never achieve absolute knowledge and truth, yet humans throughout history tends to end up in dogmatism, being a danger to everybody – school should vaccinate against this tendency; (3) Human destiny is *a great experiment*, we will never be able to develop final answers to the big questions about “the good life”; rather the school should engage new people in this great experiment, in an open way; (4) Everybody and everything develops through *meeting with that which is different*, the public school should therefore bring the students into contact with different ways of being in the world; especially confront them with all the great masterpieces of human history – different music, different novels etc. (5) *Though language we becomes word-weavers and world-creators*, thus language is not only a tool, it is rather trough language that we live, and language also leads us, therefore school should make students aware of how different languages (and media) makes us into different kinds of beings.