

Chapter 12: What does the Anthropocene hold for citizenship?

Nathanaël Wallenhorst

▶ To cite this version:

Nathanaël Wallenhorst. Chapter 12: What does the Anthropocene hold for citizenship? Political Education in the Anthropocene, Springer International Publishing, pp.157-168, 2023, Anthropocene – Humanities and Social Sciences, 10.1007/978-3-. halshs-04543627

HAL Id: halshs-04543627 https://shs.hal.science/halshs-04543627

Submitted on 12 Apr 2024

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers. L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Wallenhorst, N. (2023). What does the Anthropocene hold for citizenship? In N. Wallenhorst, R. Hétier, J.-P. Pierron, C. Wulf (Eds) Political education in the Anthropocene. Springer, 157-168, https://doi.org/10.1007/978-3-031-40021-6 13.

Chapter 12: What does the Anthropocene hold for citizenship?

Nathanaël Wallenhorst¹

Abstract This paper takes note of the anthropic alteration of the Earth system and asks what kind of citizenship is required when we consider education in the Anthropocene. We look first at Daniel Curnier's thesis on the learning of a citizenship that is critical of neoliberalism in schools and then explore Christian Arnsperger's concept of the 'existential citizen'. We conclude with a presentation of the work of the German philosopher and biologist Andreas Weber with his thesis of life as a sharing between humans and non-humans, leading to the idea of convivial citizenship, which is characterized by a coexistence with those other earthlings, the non-humans.

Keywords: Anthropocene, political education, citizenship, existential citizenship

Debate continues as to exactly when it happened, but there is no longer any doubt that the Earth has entered a new geological epoch, caused by human activities. We are still in the transition from the Holocene to the Anthropocene, so the characteristics that distinguish the new age are yet to be fully appreciated. Our aim now must be to allow the Anthropocene to stabilise into a state that still supports human life and society all over the globe. The further into the Anthropocene we go, the hotter the climate becomes, the more densely the atmosphere is polluted with CO₂ and methane, the higher the levels of acidity in our oceans, and the more of the planet's surface is underwater. As a result, there is less dry land available, the ecumene (i.e. the portion of Earth's surface which is habitable for humans) is shrinking, biodiversity is greatly diminished, and heatwaves are increasingly intense and increasingly frequent, causing certain regions to become uninhabitable for humans.

In a 2012 study in the journal *Nature*, "Approaching a state shift in Earth's biosphere", American biologist Anthony Barnosky et al. show the percentage of ecosystems that have been directly altered by human action, and the possibility that when a certain percentage is reached, the biosphere will switch from one state to another. This threshold is estimated at between 50 and 90%, in view of the observed changes of state in local ecosystems. There is much uncertainty as to the type of state to which Earth's biosphere could shift, but Barnosky and his colleagues feel we are very likely to see such a shift (Barnosky et al., 2012, p. 55). In 2012, 43% of Earth's ecosystems had already been significantly affected, and in their view, it is 'highly plausible' that we will see another global-scale change within the coming decades or centuries (Ibid., p. 57).

nathanael.wallenhorst@uco.fr

¹ N Wallenhorst UCO - Catholic University of the West Angers, France

Six years later, in an article published in 2018 in the American journal *PNAS*, "Trajectories of the Earth System in the Anthropocene", the American chemist Will Steffen and 15 other scientists (including Barnosky) point out how close the Earth system is to tipping point (Steffen *et al.*, 2018). Rather than direct ecosystem transformation, the reference indicator they use for their prospective study is the global temperature increase. They postulate that the threshold lies at around a +2°C increase in surface temperature with respect to pre-industrial levels (at the end of the 19th Century). To date, the levels have increased by 1.1°C, and in view of climate inertia, were we to halt greenhouse gas emissions completely and immediately, we would still see it increase to around +1.6°C within the next few decades.² If the threshold of +2°C is reached, a chain reaction is likely to be triggered. Thus, independently of any further GHG emissions from human activities, the planet's temperature will probably stabilise at around +5°C. This would make it impossible for human society to exist, and much of the globe would become uninhabitable for humanity. Broadly speaking, then, we have only around +0.4°C room for manoeuvre before turning our planet into 'hothouse Earth'. The dawn of the Anthropocene brings the survival of the human adventure into sudden and immediate jeopardy.

This emergency renders any long-term educative action nearly impossible - it is immediate action that is needed. However, it is crucial to continue to think - particularly about political education (amongst other things, the Anthropocene is indicative of the decline of politics, with neoliberal economic approaches becoming widespread - Wallenhorst, 2019, 2020, 2021, 2022, 2023; Wallenhorst, Wulf, 2023). Therefore, this article examines what type of citizenship should be used as the basis for political education in the Anthropocene. It takes the form of a theoretical journey, exploring a number of recent publications on the subject. The first section offers a critical discussion of Daniel Curnier's 2017 thesis in environmental sciences: What role for the school in the ecological transition? Esquisse d'une sociologie politique, environnementale et prospective du curriculum prescrit (Curnier, 2017). Curnier's work leads us on to a discussion of Christian Arnsperger's proposed concept: the existential citizen. In turn, Arnsperger's thinking feeds into a discussion of Andreas Weber's idea that existence should be shared between humans and nonhumans. Continuing in this vein, we propose convivial citizenship, characterised by coexistence with other terrestrial beings (nonhumans), which can be used as a reference when thinking about political education in the Anthropocene.

I. THE PURPOSE OF CITIZENSHIP: TO ENSURE SOCIETY'S CONTINUED SURVIVAL

Daniel Curnier is among a group of thinkers who view education as the way to bring about sustainable development, on the basis of strong sustainability. In his writing, he frequently refers explicitly to the Anthropocene. Curnier's work brings together the Anthropocene, prospective educative thinking and the concept of politics.³ As such a combination is particularly rare, it is helpful to begin with a critical discussion of this writer's thinking. Curnier's research is highly stimulating. He proposes knowledge that needs to be conveyed (in today's Anthropocenic context) to facilitate the transition to a society founded on strong sustainability, by modelling a prescribed curriculum (Ibid., p. 189). ⁴ Curnier's prospective work

-

 $^{^2}$ One example of climate inertia is that of glaciers and permafrost, which take many years to melt and release the CO_2 and methane they contain, but those substances then contribute to global warming, fuelling the problem.

³ Curnier believes that one of the functions of school is to facilitate the emergence of societies founded on the strong sustainability, by instilling a sense of citizenship in the students. In his view, strong sustainability 'requires us to observe and respect the ecological limits on the development of human activities' (p. 192). Therefore, the adoption of strong sustainability 'necessitates the rejection of productivism, whether unrestrained or structured' (p. 192).

⁴ The prescribed curriculum is defined as the educational policies 'which set out the framework and structures in which the pupil's experience will take place, throughout their schooling' (p. 20). If these set policies are apt, the

is deliberately radical.⁵ He has a high regard for the potential of school to bring about the transition necessary to ensure the human adventure survives the Anthropocene: one of the functions of school is to ensure society's future, by imparting knowledge to the students.

1. Citizenship that is critical of the school system's neoliberalism

Curnier identifies the failure of sustainable development as dating from the 'Earth Summit' in Rio in June 1992, because of the subsequent decades, which have been marked by neoliberal ideology (e.g. financialization of the economy, and maximisation of individual interests). Thus, we now urgently need to break with the neoliberal paradigm, "A transformation of the school system that contributes to the ecological transition can only take place if there is a major paradigm shift in society as a whole" (Ibid., p. 388). Curnier's educative ideas, founded on a model of long-term sustainability, break away from the usual concept of sustainable development, which he says legitimises the modern paradigm, marked by "a Cartesian view of the world, and the productivist concept of development" (Ibid., p. 97). Curnier categorically states that the role of school "will be to contribute to a paradigm shift" (*Ibid.*, p. 125). Here, we see the importance of the political purpose of education: it is a political tool to guide choices and effect change in society.

Before addressing content (the prescribed curriculum), Curnier discusses the attitudes and behaviours needed to instil long-term sustainability in our society. His thinking about the curriculum includes political and existential reasoning that goes beyond conventional disciplinary knowledge. Curnier's approach stands in opposition to an educational paradigm whose purpose is to shape individuals who are ready to join the job market - preparing students for integration into the contemporary neoliberal market. In this regard, Curnier shows how the guidelines published by institutions like the European Commission, or the OECD, establish educational approaches "explicitly driven by the need for global competitiveness, rather than the need to instil responsible citizenship" (Ibid., p. 276). Here, we see how problematic it is to refer to the OECD's PISA study. The OECD's assessment practices, which focus on the utilitarian aspect of schooling such as competition between countries, greatly discourage schools from contributing to the ecological transition. Education systems are standardised on the basis of skills acquired by a certain age (15, in this case), to optimise job prospects in a global employment market. However, this narrow focus is problematic from the standpoint of developing other skills that will prove crucial in the Anthropocene, which do not fit with the contemporary neoliberal job market. These guiding principles partly contradict those of UNESCO.6

-

schooling system will truly be able to contribute to the ecological transition. The prescribed curriculum is distinct from the real curriculum, which is the way in which educators actually implement the prescribed curriculum on the ground.

⁵ Curnier puts forward the bases for an alternative education system. In his prospective work to define such a system, he identifies the modern paradigm - from which we need to break in order to survive - as having the following set of characteristics: 'rationalism, reductionism, anthropocentrism, the ideology of progress, the specialisation of knowledge, the subject-object duality, and the domination of technology' (p. 112).

⁶ Curnier demonstrates that axiological neutrality in education systems is a fallacy. On the question of whether it is possible to have conceptions of education that are axiologically non-neutral, Curnier states that it is 'illusory that education can be politically neutral. Nevertheless, an educational project can respect religious, moral and political convictions, provided its political intentions are acknowledged, and civic debate replaces the imposition of a predefined agenda' (pp. 291-292).

2. Citizenship as the raison d'être of education

Curnier discusses four concepts that are central in the definition of school content: the Anthropocene, development, the biosphere and socio-economic systems. He is also careful to put forward potential solutions on how to live in the Anthropocene. However, in addition the knowledge that needs to be transmitted Curnier's work discusses our relationship with knowledge (which is primarily political) through the learning of citizenship: "Learning to think critically, with complex, prospective and transformative reasoning, ethics and the transition to action, are integral parts of the civic and humanist concept of education, rather than tools to specifically deal with issues of sustainability" (Ibid., p 217).7 For Curnier, education for citizenship "should be the goal of all disciplines" (Ibid., p. 295). Thus, he expounds a political view of education for sustainable development, far beyond simply learning standard ecofriendly actions - his vision is subversive, and would help bring about a new way of coexisting in the world.⁸ As Curnier states, "the challenges presented by the Anthropocene necessitate collective political mobilisation, far beyond encouraging individuals to change their behaviour" (Ibid., p. 353). It must be the goal of education in the Anthropocene to spark such collective political mobilisation. The education system must guard against "the individualist view which is at the root of the personal fulfilment". Such personal fulfilment is offered by personal development activities, allowing people to find individual happiness more effectively. This selffocus is anchored "in certain pedagogical discourses centred on the students' needs" (Ibid., p. 353). This component is undeniably present and regularly recurs in education to instil a sense of citizenship.

We agree particularly strongly with Curnier's educative views - for example, his statement that "Acting on attitudes with a view to instilling citizenship is not simply a matter of forming minds and expanding the use of eco-friendly actions at school. It is a matter of enabling students to understand the world, and the challenges facing humanity in the 21st Century. It is also a question of encouraging them to reflect on the ethical and philosophical issues surrounding humanity's self-imposed plight, and developing their capacity to make decisions and take action" (Ibid., p. 162). He continues, "There are two opposing views in defining education for sustainable development. The first is that a student needs to be 'formatted' to become a docile social agent (Croché and Charlier, 2016). The second is that the acquisition of skills such as critical awareness and the ability to put ideas into action will produce socially and ecologically responsible citizen-actors." At its heart, Curnier's approach is reformative and transformative, with a certain degree of radicality. The educational shift that he proposes breaks away from the conformative approaches that are usually developed, as he is critical of discipline-specific knowledge, and proposes that education should be based on interdisciplinary knowledge, to help effect a societal transformation. For Curnier, a portion of the knowledge passed down in school should relate to topical social matters - i.e. matters that excite public debate, and have a bearing on politics. Such topical social matters are opposed to the typical decontextualised, segmented and discipline-specific knowledge typically transmitted at school.

_

⁷ His view of knowledge is interesting: knowledge is not viewed as the students' only means of relating to the world, but also includes the experience-based, emotional and cultural aspects (p. 203).

⁸ Curnier indicates the need to identify 'consensual measures' (p. 27). Such a quest for consensus in the Anthropocene is particularly interesting. Indeed, there is a burning temptation, which can be seen in Earth System researchers, to decide for others in the name of scientific expertise, which negates any political component. Whilst the search for consensus is important, it is particularly pressing because without a certain degree of radicality in the organisation of contemporary societies, it seems difficult to believe that humanity will have a future. Indeed, the actors must have the knowledge that will be structurally crucial in the long term.

3. Extending the proposed paradigmatic shifts to bring about an anthropological one

Curnier's concept of education has a political aim, to build societies based on foundations other than the drive to maximise individual interests. He proposes to rethink the schooling system as a whole - i.e. "the material and organisational conditions in which learning at school takes place" (Ibid., p. 237) (doing away with strict disciplinary boundaries, reshaping school hours, outdoor learning, layout of the classroom furniture in class, and so forth). It is worth discussing Curnier's work in some depth. Whilst political, his approach is still founded on the dominant developmental paradigm in educational sciences, focusing on the subject of the learning (the individual pupil), rather than on other people, or a sense of group membership (referred to as between us). He does not go as far as he could in replacing that developmental paradigm with a different one, on which to base an education system for the Anthropocene.

Thus, we feel Curnier's ideas ought to be critically extended. In today's world, plainly, it is no longer citizenship which is at the heart of participation in society, but consumption (Latouche, 2010; Hétier, 2021, 2022). The logic of maximising profits irrespective of the environmental context is self-destructive, and ultimately threatens the very existence of the human adventure. The challenge we face in the Anthropocene is to conceive of a human race that is transformed and reshaped. The anthropological challenges which the Anthropocene presents can only be solved by a far-reaching anthropological shift - continuing in the same vein as Didier Moreau's idea of education as metamorphosis (Moreau, 2011). While Curnier briefly touches on the idea of such a shift, he does not go into depth. The next part of this paper continues the discussion of what type of citizenship should be used as a reference when designing education in the Anthropocene, beginning with an examination of Christian Arnsperger's idea of the 'existential citizen'. The goal is to bring about the anthropological recasting that is so clearly needed.

II. LEARNING CONVIVIAL CITIZENSHIP - BETWEEN HUMANS AND NONHUMANS

1. Responsibility and existential citizenship

For political scientist François Gemenne, one of the main issues we face in this new geological era is cosmopolitanism, in that the concept of the Anthropocene generates the "false impression of humanity as a unified whole, in which all human beings are, in equal measure, responsible for the changes occurring on our planet". However, inequality is growing in the Anthropocene, and "the actions of some are responsible for the suffering of others" (Gemenne, 2015, p. 238-239) Gemenne is joined in his observation of the scale of the inequalities in the Anthropocene by physicist Jean-Paul Deléage, who feels it is crucial, in this context, to rethink the social contract that exists in societies - for example, between northern and southern-hemisphere countries. In addition, the dawning of the Anthropocene leads us to think beyond the usual growth-based paradigm (which may or may not have a 'green' aspect to it) because that system of values carries Promethean greed and "disregard for the quality of human relationships" which have led us to our present peril (Sinai, 2013). We need to learn a new relational habitus is marked by responsibility and hospitality. Cosmopolitics is a central ingredient in a form of citizenship for the Anthropocene - cosmopolitics in both senses: kindness and hospitality to all (humans and nonhumans alike) and the physio-biological (cosmic) materiality of practising politics. In the view of Robyn Eckersley and similar thinkers, only by judicious practice of

_

⁹ The term 'Anthropocene' may give the illusion of a unified *anthropos*, which is responsible for the planet's entry into this new geological epoch. This is absolutely not the case, though, and it is possible to assign different levels of blame to certain figures and certain socio-historical periods. For this reason, the term 'Capitalocene' has been proposed - it highlights the significance of capitalism and its tycoons in this new geological era (notably, that of thermo-industrial capitalism).

citizenship will a democratic society be able to survive the Anthropocene (Eckersley, 2017, p. 11). On the other hand, political scientist and educator Pierre Statius believes that the profound crisis that democracy is currently facing is anthropological in origin, and must be addressed through making changes in education (Statius, 2015, p. 10-11).

To instil us with a new form of responsibility for the world which has been sorely lacking in recent centuries (and especially in recent decades), which have catalysed the onset of the Anthropocene, Franco-German economist Christian Arnsperger calls for a new type of citizen - a so-called existential citizen¹⁰, to "restructure the principles of life (Arnsperger, 2011, p. 75). Arnsperger emphasises the importance of existential learning in civic life; such learning is the foundation on which to build a viable future for generations to come. The practices of reflexivity and awareness of one's own motivations - which Arnsperger calls anthropological experimentation - are viewed as cornerstones of political engagement. Arnsperger envisages an alternative type of citizen, based on a new way of experiencing the human condition, far removed from the experience in capitalist societies (Ibid., p. 79). Existential citizens are driven to break away from capitalist alienation - they are missionaries and militants. Fundamentally, Arnsperger's ideas shift where growth takes place - instead of economic growth in businesses, he champions growth within each human existence. To make this transition, a twofold condition is necessary - there must be "enough goods and services, but not too many or too much" (Ibid., p. 86). Frugality, i.e. etymologically, 'full and fruitful use of resources', is a necessity. Of course, this must not be confused with the depletion and ultimately exhaustion of natural resources (anthropological or environmental).

The notion of an existential citizen is connected to that of *Bildung*, as Arnsperger himself notes: 'we must promote the idea of *human existence as experience, as a search for oneself, as a form of freedom*' (Ibid., p. 76). In the work of Arnsperger, who is of German and French extraction, we see the characteristic traits of the idea of value that is *Bildung*, experiencing one's existence. Existence is thought of as the predominant experience upon which to base one's actions. However, existential citizenship has a very different purpose than experiencing one's existence and finding one's own freedom. The notional connection of the existential universe that *Bildung* represents with the more political facet of citizenship allows us to accept political responsibility for the world and understand the intimate nature of our existence. The notion of existential citizenship is particularly fertile, in that it includes the existential component in the context of political education, and helps organise it in relation to our participation in the world.

However, even with the notion of existential citizenship, we are still operating within an anthropocentric frame of reference. How can we move past the dualism of nature and society that is so present in today's world and is a notable cause of the Anthropocene? It might be sensible to extend some of the paradigmatic shifts that are necessary in the Anthropocene, to apply to education as well. What about the earth, and its nonhuman inhabitants? Can they have a 'voice', and enjoy rights? Is it possible to share conviviality with nonhumans? Indeed, one of the main questions raised by the Anthropocene is how humans and nonhumans can coexist on the planet we share. Nonhumans cannot bear any responsibility for the future of the biosphere, and it would be difficult to perceive them as 'citizens', as such. Notwithstanding, it is crucial that they be considered true political subjects who have inviolable rights - extending Michel Serres' *Natural Contract* (Serres, 2018), Valérie Cabanes' *Homo natura* (2017) or Corine Pelluchon's *Animal Manifesto* (Pelluchon, 2017) From this perspective, the kind of citizenship

-

¹⁰ The term 'existential citizen' carries the risk of excessive essentialisation, so we prefer to work with the notion of existential citizenship. However, it is the notion of convivial citizenship that we adopt, because it is open to nonhumans as well as humans.

that humans need to learn may be a kind of 'convivial citizenship' marked by political coexistence with the whole of the living world. ¹¹

2. Convivial citizenship rooted in the vitality of the biosphere

The idea of convivial citizenship (based on Arnsperger's existential citizenship) involves taking on board certain constraints and limits: the limits of the biosphere, the finitude of individual existence, the finitude of our Promethean model of civilisation, and the finitude of the human adventure itself. To acknowledge these constraints flies in the face of the limitless emancipation that the modern era promises - not least, the emancipation of the human adventure from the constraints of its environment. Here, educating in the Anthropocene is partly linked to the existential anthropological roots that are discussed, for example, by Hartmut Rosa in *Resonance* (2018) or *The Uncontrollability of the World* (Rosa, 2020), David Abram in *The Spell of the Sensuous* (1996), or Andreas Weber in *Sein und Teilen* (*Being and Sharing*) (Weber, 2017). The latter, for example, writes: 'The image of reality that we learn at school tells us nothing of the feeling of being alive, of why relationships are important and how they can be constructed - relationships with oneself, with others, and with all nonhumans, such as animals, plants, fungi, bacteria, stones and rivers, the air, the sea' (Ibid., p. 19).¹²

Andreas Weber can be considered a critical theorist, given his references to Max Horkheimer, Theodor Adorno and Herbert Marcuse, and the similarity of his thinking to that of Hartmut Rosa. His work, which has been translated into English, is particularly interesting because he assesses the most prominent literature about the Anthropocene in his anthropological and political thinking. In his philosophical stance, Weber holds that the Anthropocene may represent an opportunity for the human adventure. His anthropology for the Anthropocene is conveyed by poetic language and a confident attitude, but it never descends into a technomodernist paradigm. ¹³ The Anthropocene presents us with the opportunity to integrate more closely with the fabric of the living world, and grow in solidarity, both with humans and with nonhumans. 14 By doing so, we can become more alive, more cooperative, more sensitive, poetic and creative. Weber sets out the anthropological shift which the Anthropocene requires of us. Solidarity with all beings is fundamentally important, "In order to become human, we must become animal, stone, water, and yes: the world". (Weber, 2016, p. 137)¹⁵ The Anthropocene can help us break away from the sterile dichotomy between nature and culture. How can we learn to modify our representations and strengthen our sense of belonging to nature, which is one of the key points if we are to survive the Anthropocene?

The creativity and vitality of the living world are at the heart of Weber's anthropological views. He attaches a great deal of strength and importance to the paradigm of life, viewed through the lens of interaction with all living things. Life is possible only through sharing. Weber's approach is philosophical and based on biological knowledge, as shown by the following quote: "The sea, the ocean, with all its creatures great and small, which regulates the climate and supplies

¹¹ Here, the idea of conviviality refers to Ivan Illich's school of thought, and convivialism, as developed in the *Second Convivialist Manifesto* (2020), which champions conviviality as opposed to *hubris*.

¹² Das Bild der Wirklichkeit, welches in der Schule gelernt wird, sagt nichts darüber, wie es sich anfühlt, am Leben zu sein, warum Beziehungen wichtig sind und wie man si aufbauen kann - Beziehungen zu mir selbst, zu anderen Menschen, und zu allen, die keine Menschen sind, zu Tieren, Pflanzen, Pilzen, Bakterien, Steinen und Flüssen, der Luft, dem Meer' (Weber, 2017, 19)

¹³ Here, it is opposed to the *Great Anthropocene*, as spoken of in the *Ecomodernist manifesto* (2015).

¹⁴ In that sense, his thinking is particularly valuable and interesting in devising political anthropology for education - hope is a necessary condition for thought in education.

¹⁵ 'Um Mensch zu sein, müssen wir Tier werden, Stein, Wasser, ja, Welt.' (Weber, 2016, 137).

our continents with water, is the very incarnation of a being that can only exist through sharing" (2017, p. 16)¹⁶ Bodies are viewed not 'in and of themselves', but on the basis of their interaction with the environment or their surroundings.

Weber's anthropology includes the idea of an omnipresent whole. Individuals are viewed as members of a coherent whole: "Like it or not: through our metabolism, which requires us to draw nourishment from other living beings, and incorporate the atmosphere into ourselves, making it a part of us, we are a part of the biosphere as a whole" (Ibid., p. 27). 17 Not only do we incorporate the elements which surround us and make them part of ourselves; on the basis of that very simple observation of bio-physical exchanges, Weber goes further: we in turn become part of the environment: "The tissue which we create at a time 't'will become air again the next moment; then it will become part of a plant or a shell, and one day, become sediments of limestone, rocks or sand. From the standpoint of matter, this world is one large body; individuals merely represent momentary outgrowths therefrom" (Ibid. p. 27). 18 This leads Weber to state that "our singular capabilities are an almost-meaningless variation of the whole" (*Ibid.* p. 27). ¹⁹ We are at once far less and far more than the *homo oeconomicus* of the modern age, who is an individual with the capacity to grow by pre-emption. Weber's anthropological concepts are opposed to *homo oeconomicus* but he does not discount the feelings and sensations that make homo oeconomicus cocoon himself and seek to maximize his own interests. Rather, Weber demonstrates that, fundamentally, we are not the isolated actors we think we are. Sharing is a crucial part of what makes us who we are; rather than diminishing us, it enriches us. Without exchange with our environment, no life is possible. 20 "We are both: the world and individuals" (Weber, 2017, p. 29)²¹ Also, in Weber's thinking, though we are the world, it remains an external entity too, with which we can form a relationship, heed it and understand it.

In Weber's view, it is crucial to find, or to rediscover, a relationship with nonhuman entities: "We must preserve nature because we are, ourselves, nature; and also because nature is everything that we are not" (Ibid., p. 29).²² Weber, whilst preserving the singularity and uniqueness of the subject, shifts the boundary between the subject and the world, by showing that the subject is also the world. He weaves his theoretical framework around relationships of sharing that he describes as necessary and vital, between the world and the subject, through the acts of respiration and nutrition. Respiration, for example, is viewed as an act of sharing with the biosphere - ecosystems are based purely on exchanges. The process of becoming what we

_

¹⁶ 'Das Meer, der Ozean mit seinen kleinsten und gigantischen Wesen, der das Klima reguliert und die Kontinente mit Wasser versorgt, ist der Inbegriff eines Seins, das sich nur im Teilen realisiert.' (Weber, 2017, 16).

¹⁷ 'Ob es uns gefällt oder nicht: durch unseren Stoffwechsel, der verlangt, dass wir uns von anderen Lebewesen ernährend und die Atmosphäre in uns hineinziehen und in uns verwandeln, haben wir an der Totalität der Biosphäre teil'

¹⁸ Aber der Stoff, aus dem wir in diesem Moment bestehen, wird im nächsten wieder Luft sein, dann Körper einer Pflanze oder Schale einer Muschel, und eines Tages Kalksediment, Felsen, Sand. Stofflich ist diese Welt ein Großer Körper, von dem die Einzelnen momentane Auswüchse darstellen.'

¹⁹ Unsere besonderen Fähigkeiten sind nur eine sehr unbedeutende Variation des Ganzen.'

²⁰ The idea of viewing the body social from a different perspective on the living world, and involving the body politic in that interaction with the biosphere, has much in common with recently published works, quoted frequently herein. We find it in the work of French biologists Pablo Servigne and Gauthier Chapelle, "Mutual Aid: The Other Law of the Jungle (Polity Press, 2021), or in Le vivant comme modèle: la voie du biomimétisme by Gauthier Chapelle and Michèle DecoustParis, Albin Michel, 2015). This same approach was employed by French anthropologist Flahault in 2018 in L'homme, une espèce déboussolée - Anthropologie générale à l'écologie (Paris, Fayard). This dynamic was also addressed, from a philosophical standpoint and without reference to biology as a science, by Corine Pelluchon in Nourishment (Paris, Seuil, 2015).

²¹ 'Wir sind beides, Welt und Einzelner.'

²² 'Wir müssen Natur bewahren, weil wir sie selbst sind, und wir müssen Natur bewahren, weil sie alles ist, was wir nicht sind.'

are is a bio-geo-physical process of interaction with our environment: "Parasol pines and bluegreen algae in the water in an aquarium are also part of the vast alchemy of existence (Dasein) that permeates our being as our chests rise and fall. They absorb what they are, their external space, their environment, and transform it into something that is integrally themselves. It is a completely natural, physical process" (Ibid., p. 26).²³

In his opposition to capitalism, Weber notably builds his arguments upon a poetic component, or the metaphysics of the link with nature. Elsewhere, Weber takes the 'self' into consideration, whilst breaking away from the individualism of homo oeconomicus and the logic of predominance attached to the emancipation of the individual. In that sense, his work is fertile in the development of a concept of citizenship for the Anthropocene. The characteristic feature of Weber's work is that it opens up the philosophy of intersubjectivity to nonhumans, highlighting the fact that sharing conviviality with nonhumans is an important part of rediscovering our own humanity.

Abram, D., The Spell of the Sensuous, Pantheon, 1996. .

Arnsperger, C., L'homme économique et le sens de la vie, Paris, Textuel, 2011.

Barnosky, A. D. et al, Approaching a state shift in Earth's biosphere, Nature, vol. 486, 2012.

HutsV., Homo natura - In harmony with the living, Paris, Buchet Chastel, 2017.

Chapelle, G., Decoust, M., Le vivant comme modèle: la voie du biomimétisme, Paris, Albin Michel, 2015.

Curnier, D., Quel rôle pour l'école dans la transition écologique? Esquisse d'une sociologie politique, environnementale et prospective du curriculum prescrit, Doctoral thesis in Environmental Sciences, University of Lausanne, 2017.

Eckersley, R., 'La démocratie à l'ère de l'Anthropocène'. lapense ecologique.com, 1(1), 2017.

Ecomodernist, An ecomodernist manifesto, 2015, http://www.ecomodernism.org/manifestoenglish.

Flahault, F. L'homme, une espèce déboussolée - Anthropologie générale à l'écologie, Paris, Fayard, 2018.

Gemenne, F. 'L'Anthropocène et ses victimes: une réflexion terminologique', in F. Gemenne (ed.), L'enjeu mondial, Paris, Presses de Sciences Po. 2015.

Hétier, R., L'humanité contre l'Anthropocène. Lutter contre l'effondrement, Paris, PUF, 2021.

Hétier, R., La liberté à corps perdu, Paris, PUF, 2022;

Internationale convivialiste, Second Convivialist Manifesto, Arles, Actes Sud, 2020.

Latouche, S., Sortir de la société de consommation, Paris, Les Liens qui Libèrent, 2010;

Moreau, D., Education et théorie morale, Paris, Vrin, 2011.

N. Wallenhorst, Qui sauvera la planète? Arles, Actes Sud, 2022.

Pelluchon, C., Les nourritures, Paris, Seuil, 2015.

²³ Auch die Schirmpinien und die Blaualgen im Aquarium Wasser beteiligen sich an der umfassenden Alchemie des Daseins, die uns durchherrscht, während unsere Brust auf und ab geht. Sie nehmen das, worin sie sich aufhalten, ihren Außenraum, ihre Umwelt, in sich hinein und verwandeln dieses Äußere in etwas, was sie selbst sind. Das ist ein Prozess, der auf einer ganz natürlichen und körperlichen Ebene stattfindet.'

Pelluchon, C., Manifeste animaliste, Paris, Alma, 2017.

Rosa, H., The Uncontrollability of the World, tr. J.C. Wagner. Wiley, 2020.

Rosa, H., Resonance, ASociology of Our Relationship to the World. Tr. J.C. Wagner. London, Polity Press, 2019

Serres, M., Le contrat naturel. Paris, Le Pommier, 2018, [1990].

Servigne, P., Chapelle, G. Mutual Aid: The Other Law of the Jungle, London, Polity Press, 2021.

Sinai, A., Le destin des sociétés industrielles, in A. Sinai (ed.), *Penser la décroissance*, Paris, Presses de Science Po, 2013, pp. 23-48.

Statius, P., 'La transition écologique et la démocratie: quelques remarques philosophiques, politiques, et anthropologiques', *lapenseeecologique.com*, 1(1), 2017.

Steffen, W., et al, Trajectories of the Earth System in the Anthropocene, *Proceedings of the National Academy of Sciences*, vol. 115, no. 33, 2018, pp. 8252-8259.

Wallenhorst, N., L'Anthropocène décodé pour les humains, Paris, Le Pommier, 2019.

Wallenhorst, N., La Vérité sur l'Anthropocène, Paris, Le Pommier, 2020.

Wallenhorst, N., Mutation. L'aventure humaine ne fait que commencer, Paris, Le Pommier, 2021.

Wallenhorst, N., A critical theory for the Anthropocene, New York, Springer.

Wallenhorst, N., Wulf, C. (Eds), Handbook of the Anthropocene, New York, Springer.

WeberA., Enlivenment. Eine Kultur des Lebens. Versuch einer Poetik für das Anthropozän, Berlin, Matthes und Seitz, 2016.

WeberA., Sein und Teilen - Eine Praxis schöpferischer Existenz, Bielefeld, Transcript Verlag, 2017.

Nathanaël Wallenhorst is Professor at the Catholic University of the West (UCO). He is Doctor of Educational Sciences and Doktor der Philosophie (first international co-supervision PhD), and Doctor of Environmental Sciences and Doctor in Political Science (second international co-supervision PhD). He is the author of twenty books on politics, education, and anthropology in the Anthropocene. Books (selection): *The Anthropocene decoded for humans* (Le Pommier, 2019, *in French*). *Education in the Anthropocene* (ed. with Pierron, Le Bord de l'eau 2019, *in French*). *The Truth about the Anthropocene* (Le Pommier, 2020, *in French*). *Mutation. The human adventure is just beginning* (Le Pommier, 2021, *in French*). Who will save the planet? (Actes Sud, 2022, *in French*). *Vortex. Facing the Anthropocene* (with Testot, Payot, 2023, *in French*). *Handbook of the Anthropocene* (ed. with Wulf, Springer, 2023, *in English*). *A critical theory for the Anthropocene* (Springer, 2023, *in English*).