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Steffens' early outlook reconsidered

Nature conceptions of the industrial-age Anthropocene[1]

Abstract
In this chapter, I draw on example passages from Henrik Steffens' *Indledning til philosophiske Forelæsninger* [Introduction to Philosophical Lectures] to treat connections between Steffens' work and the contemporary Anthropocene discourse. While the lectures are – at least apparently – framed as philosophical, they also deal extensively with natural science and history. These themes resonate with main topics of the Anthropocene discourse, particularly when Steffens treats humans and nature in conjunction from a historical perspective. This contributes to understanding how humans understood their place in nature around the time when many claim the Anthropocene started, in the wake of the industrial revolution. I conclude by summing up and assessing Steffens' outlook on humans' relation to nature, history, and the human condition.

Introduction

In earlier work, I have addressed "Steffens' ideas about organic meteorology: From the Totalorganismus to Planetary Health?" (Tønnessen, forthcoming), noting that discussion of humans' place in nature has received renewed attention in the two to three last decades following the rise of the Anthropocene discourse. After its coinage and framing in 2000 (Crutzen and Stoermer 2000), the 'An-

1 This chapter draws on the conference presentation "Reconstructing the nature conceptions of the industrial-age Anthropocene" which I held at the conference "Henrik Steffens – The Prophet of the Anthropocene?" (University of Stavanger, Stavanger, Norway) September 9th, 2023.

thropocene' has increasingly been referred to as a proper designation for our current geological time period characterized by massive environmental changes induced by human agency. This reframed context for theorizing on humans' place in nature reactualizes Steffens' work. In this chapter, I treat relations between Steffens' work and the contemporary Anthropocene discourse more in-depth. Particularly, I ask in how far Steffens' work can be informative with regard to understanding how humans understood their place in nature around the time when many claim the Anthropocene actually started, in the wake of the industrial revolution.

Steffens' lifetime (1773–1845) by and large coincides with the industrial revolution. The steam engine is often said to represent the single most important factor in the industrial revolution and is emblematic of the technological progress that is a key feature of the industrial age. While steam engines existed earlier as well, important improvements in the design of steam engines were made around the time of Steffens' birth. Over the next decades steam engines were taken into use to power mills, factories, trains and boats. The new uses of steam engines first occurred in the United Kingdom but were gradually adopted in continental Europe as well. In 1824, Steffens got a sense of this new reality as he travelled with a steamship for the first time, from Stralsund in Germany to Ystad in Sweden (Møller 1948, 162–163).[2]

With his renowned philosophical lectures held in Copenhagen, Denmark, in 1802–1804, Steffens is credited with having introduced romanticism, with origins in Germany, to the Nordic countries. Influenced by impulses from central German thinkers including Schelling and Goethe, Steffens was at the time developing his own brand of philosophy of nature, which also drew on his ongoing experience as a natural scientist. Steffens emphasizes that he and Schelling came to philosophy of nature from different angles, as it were.

2 The rapid adoption of steam engines around this time is linked to exponential growth in the use of fossil fuels, which would eventually lead to anthropogenic climate change. From 1800 to 1850, global use of fossil fuels increased more than fivefold. Since then, fossil fuel use has increased many times over, with our contemporary fossil fuel use amounting to about 200 times as much as around Steffens' death and more than 1000 times as much as around Steffens' birth (Ritchie and Rosado 2017).

> Schelling was the one who was closest to me [...] He had advanced *from* philosophy to nature [...] I, on the other hand, had early on been drawn to nature by inclination and external circumstances [...] (Steffens 1967, 17, translation by M.T.)[3]

Steffens' work in geology in its early stages as a science, including the doctoral dissertation he had written a few years earlier (Steffens 1797), makes it particularly relevant to contextualize his work with regard to the Anthropocene discourse, which has a geological issue concerning periodization of Earth history as its starting point.

As Johnny Kondrup observes, Steffens' interest in geology was driven by scientific curiosity and a desire to understand nature.

> Steffens […] sets up his own line of disciplines, which is freed from the consideration of practical mine operations that has so far determined the study. For Steffens, mineralogy is a pure science whose purpose is knowledge, not utility. (Kondrup 1996, 165)[4]

This contrasts with the considerable role that what is today called applied geosciences, which Steffens (1797, 107) called 'ökonomische Mineralogie', have played in facilitating increased resource exploitation throughout the industrial-age Anthropocene, from Steffens' lifetime and onwards. With this said, it should also be noted that Steffens' views on geology were informed by contemporary industrial developments. Around the turn of the century, for an extended period he studied and stayed in the mining town Freiberg in Sachsen, which was known for its *Bergakademie*. This technical university, in modern parlance, had been established in 1765 and was oriented toward applied science related to mining and metallurgy. This is where Steffens was educated by the German geologist Abraham Gottlob Werner (1749–1817), who inspired his outlook and his later development of his own perspectives (Steffens 1967, 185).

Somewhat in parallel to Steffens' versatility and wide range of interests, from natural science to philosophy, poetry and religion, the 'Anthropocene' discourse has triggered discussions and reconsideration of basic perspectives in natural sciences (in geology and beyond), and the term has become a buzzword in the humanities

3 "Schelling stod mig nærmest af alle [...] Han var skreden frem *fra* Philosophien til Naturen [...] jeg derimot var ved Tilbøielighed og ydre Forhold aller tidligst blevet hendraget til Naturen [...]".

4 Translated from Danish to English by M.T.

and social sciences (Furuseth and Hennig 2023, 35–36). The concept has triggered debates on worldviews and global history and had an impact on our basic understanding of history, nature and humans. It has led to a reassessment of natural history and human history alike, with more attention paid to interconnections between the two. That is no small feat for a word.

Steffens acquired an interest in natural history early on in his life. In the text "Hvorledes jeg blev naturphilosoph" [How I became a philosopher of nature] (Steffens 1967, 9–20), which was compiled, edited and given a title by Emil Boyson and composed from fragments of Steffens' autobiography (Steffens 1840–1844), Steffens states that he already in childhood learnt "that the Earth was hiding entire annihilated genera of animals and plants within itself" (Steffens 1967, 13, translation by M.T.).[5] Already at this point, Steffens was intrigued by connections between geological developments and the development of living beings, exemplified by fossils. This made him curious about transitions and 'metamorphosis'[6] from one form to another, in geology and biology alike (Steffens 1967, 14). Steffens even relates this to reasoning about different ages of the Earth:

> It was as if for the first time I had succeeded in reading a period, even if quite short, yet in itself, complete and comprehensible, in the infinitely rich text of nature." (Steffens 1967, 14)[7]

Around the turn of the century, Steffens had been working on approaching humans as "a product of the development of nature" (Steffens 1967, 18)[8]. In this way, he thought, humans could be understood as succinct expressions of the mysteries of nature. He refers to natural science as "the most important of all sciences" and acknowledges it for being "foundational for the human species' entire spiritual future" (Steffens 1967, 18).[9]

As Alexander Myklebust (2017) observes, a central part of Steffens' message in the lectures he held in Copenhagen in 1802–1804

5 "[a]t Jorden skjulte hele tilintetgjorte Slægter af Dyr og Planter i sig".
6 'Metamorphose'.
7 "Det var mig, som om det første gang var lykkedes mig at læse en, om endog nok saa kort, saa dog i sig selv, afsluttet og forstaaelig Periode i Naturens uendelig rige Text."
8 "et Produkt af Naturudviklingen".
9 "Natur-Videnskaben [...] den vigtigste af alle Videnskaber [...] Grundlaget for Menneskeslægtens hele aandelige Fremtid [...]".

is that humans are fundamentally related to the Earth and other living beings, and that different aspects of existence are interrelated. The recognition of humans' natural relation to the Earth and other living beings implies a rejection of dualist worldviews according to which human affairs are seen as distinct from natural phenomena. As Myklebust also remarks, Steffens is first and foremost looking for the organizing principles that can explain developments in the material world as well as in the realm of the living. With such a perspective, Steffens developed a sort of evolutionary thinking long before Darwin did.

The beginning – and the end? – of the Anthropocene

There are different views on when the Anthropocene began, ranging from several thousand years ago to around 1950. As a term, it has tended to extend our perspectives deeper into history, into the deep past and the deep future (Furuseth and Hennig 2023, 35–36). Generally, three major proposals have been made, namely the 'early Anthropocene hypothesis' which suggests that the Anthropocene started about 8.000 years ago with the first extensive agriculture and deforestation, that it started with the industrial revolution around 1750, or that it started with or around 'the Great Acceleration' of the post-war period following World War II (Steffen et al. 2011).

Personally, I favour a deep historical perspective, since the exponential growth in resource use that is highlighted as characteristic of 'the Great Acceleration' can also be observed applying a perspective of hundreds or thousands of years. There is no doubt, however, that many developments have escalated in contemporary times.

With his intense interest in geology and Earth history, Steffens would probably have been intrigued to learn that "Climate has shifted the axis of the Earth" since the 1990s through human-induced melting of glaciers, which has affected 'polar drift' (the oscillations of the magnetic North and South poles) and literally tipped the balance of the Earth (American Geophysical Union 2021, Deng et al. 2021). Or to learn that as of today "Global human-made mass exceeds all living biomass" (Elhacham et al. 2020, cf. also Chure et al. 2021). Concrete alone accounts for about half of all human-made mass, and

along with gravel and other aggregates, bricks, asphalt, metals and plastic, the human-made mass in use grows exponentially, doubling every 20 years or so. Currently the *weekly* production of anthropogenic mass surpasses the bodyweight of all humans on the planet. Meanwhile, global plant biomass has been halved since the advent of humans (Elhacham et al. 2020), whereas the abundance of many animal species has been heavily affected by human activities. Most outrageously, livestock and humans now together account for 96 % of terrestrial mammalian biomass, with wild mammals accounting for a mere 4 %, and poultry held for food production purposes outweighing all wild birds on the planet (Bar-On et al. 2018).

Finally, Steffens would likely be captivated by the fact that humans now move 15 times as much mass of sediment as is moved naturally by all the world's rivers (Chure et al. 2021, 4, 18, 24). This happens through mining, construction, and agriculture, and results in "rapidly increasing erosion rates, leading to increased topsoil loss and turnover, ultimately perturbing natural biogeochemical cycles" (Chure et al. 2021, 24). This is particularly relevant for stratigraphy as a branch of geology that studies sedimentary layering.

As Whitney K. Autin (2016, 1) observes, the Anthropocene as a term "has developed a varied set of connotations among scientific and non-scientific advocates", resulting in "multiple dichotomies of the Anthropocene" in various disciplines which allow people "to reinforce and perpetuate preferred views about the implications of human interaction with the Earth System". This includes philosophical dichotomies centered around "good versus dystopian outcomes of Anthropocene and whether or not humanity is part of what historically has been called nature", and scientific dichotomies concerning "the need for formal or informal definition and the recognition of a modern versus historical onset of the Anthropocene" (Autin 2016, 1). Similar polarized dichotomies in the Anthropocene discourse have arisen in the arts and in politics, reverting to nostalgia or apocalyptic visions, conservatism or liberalism.

As for the scholarly treatment of the Anthropocene as a formal designation, in Spring 2024, the International Union of Geological Sciences (IUGS) and International Commission on Stratigraphy, the IUGS's main scientific body, announced that it had concluded with "a decisive rejection of the Anthropocene proposal" (International Union of Geological Sciences and International Commission on

Stratigraphy 2024). The term would "not be recognised as a formal geological term but", the advice went (ibid.), "will more usefully be employed informally in future discussions of the anthropogenic impacts on Earth's climatic and environmental systems." The organizations acknowledged that "the Anthropocene as a concept will continue to be widely used not only by Earth and environmental scientists, but also by social scientists, politicians and economists, as well as by the public at large. As such, it will remain an invaluable descriptor in human-environment interactions" (ibid.).

The news about the IUGS' rejection of the Anthropocene as a formal geological term were covered broadly in science magazines and news publications worldwide. "Geologists reject the Anthropocene as Earth's new epoch — after 15 years of debate", read the headline in *Nature* (Witze 2024). *Science*'s headline highlighted the continuing appeal of the term: "The Anthropocene is dead. Long live the Anthropocene" (Voosen 2024).

Overture on the temporality and facticity of the human condition

Several scholars have called for reassessing the human condition in the Anthropocene (Chakrabarty 2016, Shinohara 2020, Tønnessen 2024). My own perspective on how the human condition should be understood in light of the ongoing environmental crisis involves approaching human ecology by emphasizing the agency of living beings and systems (Sharov and Tønnessen 2021). In this perspective, all organisms, and all living systems, have a form of agency which implies that they have a degree of autonomy and self-regulation. This contextualizes the 'free will' and adaptable behaviour of human beings while simultaneously framing the capabilities and vulnerability of any other lifeform in related, agency-centered terms.

Owing to a deeply ingrained anthropocentrism, we have tended, at least in the modern era, to see the world of humans and the world of nature as distinct realms, and to think of our own species as exceptional in terms of our significance and value. Such anthropocentrism must be overcome if we are to achieve environmental sustainability. Our greatest sin, or wrongdoing, in the Anthropocene is that we have treated other living beings as mere resources – that

is, as if they had nothing but instrumental value. This pattern of behaviour has been inspired and justified by an anthropocentric outlook according to which only human concerns matter (Tønnessen 2024). By acknowledging the agency, interests, and ways of life of non-humans, we can take steps towards a more sustainable and respectful future.

A key question concerning the human condition is to what extent it changes over time. Are we forever the same? Or have humans and the world we live in changed so profoundly over time that our basic conditions for being have changed fundamentally as well?

Framing the issue in this way may seem neutral, but in fact reveals a modernist mindset which draws on a linear conception of time (Tom, 2025). As soon as you assume that time is linear, seeing things change over time is to be expected – progress may be hoped for, decline feared, and so on. In a modernist perspective, the human condition is quite obviously subject to change, at least to some degree. If on the other hand time is conceived of as cyclical or non-linear in some other way, it might perhaps make more sense to regard the human condition as principally unchanging in the long run.[10]

Presuming that the human condition does change over time, a further question is what events are pivotal enough to change it. What changes to the human way of life are so groundbreaking that they "change everything"? In her classical work *The Human Condition*, Hannah Arendt (1958) problematized humans' condition of being 'Earth-bound' in the aftermath of the Soviet Union's launch of the Sputnik, the first human-made artificial satellite, on October 4th, 1957. This has been used as a reference point for demarcating the beginning of the 'space age' and is also known as a significant event in the so-called Cold War, where it is often referred to in terms of

10 I write this with some hesitation. I claim that only a modern mind can ask whether the human condition is subject to change. Implicitly, the pre-moderns would say that it isn't subject to change. In fact, they wouldn´t even raise the question. Once you raise the question, you will be inclined to answer it positively. This draws a clear distinction between a modern and a pre-modern understanding of the human condition – perhaps too clear. Part of the trouble is that such a distinction lumps all pre-modern worldviews together. In doing so it hides them from view so that we can neither assess their originality nor their resemblances with current views properly.

'the Sputnik moment'. From USA's perspective, the Soviet Union's launch of the first satellite was proof of the communist regime's leadership in technological advancement and required immediate action to catch up in what was soon labeled the 'space race'.[11]

A central feature of the Anthropocene discourse is the realization that human powers have turned out to be much more impactful for nature at large than we thought possible. We used to think about oceans, for example, as being so vast that anything we could do to them would make no practical difference for their functioning. Today we know better. Framed this way, the increasingly unprecedented powers of human agency is a factor that has "changed everything" in recent Earth history. If this is to be construed as an 'event', it would have to be a drawn-out one. Be that as it may – it is anyway established by now that intended and unintended consequences of these powers ripple through the natural world, and that by doing so they are also ripping the carpet from under our feet, as it were, given that the Earth we exploit for our more-or-less well-intended purposes is and remains our only natural habitat. The human condition cannot be isolated from the condition of the Earth.

The facticity of the human condition relates to the fact that it is in one sense inescapable – we have no choice but *have* to relate to our living conditions as humans. Attempts of changing the human condition are motivated by a natural desire to transcend our circumstances, to improve our lot. Such hopes for transcendence may take a secular form, or a religious form, and may aim for change in this life, or the afterlife. The existentialism of Jean-Paul Sartre exemplifies the secular kind of transcendence. In his view, giving in to facticity implies doing what others expect of you, whereas making authentic, individual choices in matters of value means transcending facticity (Sartre 1956). By exercising our free will, we can live authentically. That is in itself a liberating message. However, in the context of the human condition, the question is how far it takes us. On an individual basis, we can choose how to live in the circumstances we find ourselves in, but generally we cannot choose what choices we get to make. We can collectively strive to improve the human

11 The question of how fundamentally artificial satellites have changed human ways of life remains open to discussion. Many daily activities including use of internet, cell phones and TV often depend on satellite communication. However, many of these activities could have been supported in other ways.

lot, but there are practical and physical and biological limits to what we can do. Death itself is part of the human condition, and is overwhelmingly likely to remain so, despite transhumanist dreams of cryonics and resurrection. There are aspects of being human we are likely to carry with us for as long as we exist as a species, and many of these relate to the simple but sometimes suppressed facts that we are an Earth-bound, mammalian species living in the environments of Earth.

Even if visions of 'space colonization' came to fruition, it wouldn't change core features of the human condition such as corporeal vulnerability, mortality and a need for food, shelter, and intimacy. In a few years humans will likely set foot on Mars – this will be the first time humans are present at another planet than Earth. But terraforming Mars – i.e., transforming the Martian environment to an Earth-like one – is not practically feasible (Verseux et al. (eds.) 2025). Depending on how wealthy states and individuals choose to prioritize their resources, a limited number of people might one day settle permanently on Mars – at great cost, given the life support systems that are constantly required in an unreceptive, otherwise lifeless environment. Even if this materializes, for all practical purposes we will remain Earth-bound. Firstly, because the vast majority of humans would remain on Earth. And secondly, because even the Martian settlers would have been shaped by Earth and remain dependent on constantly recreating Earth-like conditions.

Example passages from *Introduction to Philosophical Lectures*

The book *Indledning til philosophiske Forelæsninger* [Introduction to Philosophical Lectures] contains the nine first lectures Steffens gave in Copenhagen in the Autumn of 1802, at the start of his lecture series which spanned over two years, in written form.[12] The rest of the lecture series has not been published. While the lectures are – at

12 *Indledning til philosophiske Forelæsninger* [Introduction to Philosophical Lectures], which was first published in Danish in 1803 (Steffens 1803), has been published in several editions in Danish, most recently in 1996 (Steffens 1996). The book has not to date been translated to English but has appeared in Ger-

least apparently – framed as philosophical, they also deal extensively with natural science (lectures 3–6) and history (lectures 7–8) (Kondrup 1996). These themes resonate with some of the main topics of the Anthropocene discourse, and particularly when Steffens treat humans and nature in conjunction from a historical or developmental point of view.

Whether or not the lectures are actually philosophical in nature is worth commenting on. As Myklebust (2017, 130) remarks, in the introductory lectures, Steffens states that what he presents in them is not philosophy, but preparatory investigations intended to prepare the audience for a proper understanding of philosophy. He claims to start with facts, mostly drawn from natural science – though as the lectures proceed, this is complemented with historical and eventually also theological and some sort of cosmological perspectives. Given the wide array of fields of study Steffens draws in, not everyone will agree about what claims can legitimately pass as 'facts'.

Myklebust (2017) further remarks that throughout the lectures, Steffens balances idealism and speculation with realism and reference to empirical evidence, at some points stressing that neither philosophy alone, nor science alone, can result in a comprehensive understanding. In Steffens' view, a comprehensive understanding can only be achieved by combining factual knowledge with the right philosophical perspectives.

As many of his contemporaries, Steffens thought human existence involves a struggle against nature. This perspective sets the stage in the first lecture.

> Everyone seeks with equal right to compel nature to obey, and makes it, as far as his strength allows, a slave to his egoism... (Steffens 1996, 19)[13]

In this pre-moral, original position, subsistence takes priority, and egoistic behaviour is the norm. However, the demands of the situation require collaboration and ingenuity.

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man translation (Steffens 2017). Quotations from the lectures in this article have been translated from Danish to English by me (M.T.).

13 "Enhver söger med lige Ret at tvinge Naturen til at tiene sig, giör den, saavidt hans Kraft formaar til en slave af sin Egoismus..."

> The expression for the common struggle of the human race against nature is *industry*. They must unite for this fight... (Steffens 1996, 20)[14]

The Danish word 'industrie' – which is in modern Danish spelled 'industri' – has its origin in the similar French word 'industrie' and ultimately the Latin word 'industria', meaning 'flid, virksomhed' in Danish (the latter in the sense of 'arbeidsomhet') and 'diligence, industriousness' in English (Det Danske Sprog- og Litteraturselskab 2025). According to *Online Etymology Dictionary* (2025), while 'industry' started referring to "a particular trade or manufacture" already in the 1560s, the "main modern meaning 'pertaining to the manufacture of commodities, connected with the application of industry to manufactures' is from 1830" and started as a connotation in French.[15] In other words, at the time Steffens held his lectures, the modern meaning of the term had not yet emerged. It is also worth noting that 'industry' became much more frequently used in the 20th century (ibid.), a hundred years and more after Steffens' use of it in the context of this article.

While the sense of 'industry' applied in Steffens' text is as we see in all likelihood that of great effort or hard work, it is curious that Steffens frames humans' struggle against nature in these exact terms which for a modern reader gives associations to the growing economic manufacture that has characterized the industrial-age Anthropocene and been a major driver of ecological and social change.

In Steffens' narrative, egoism and collaboration both inspire human behaviour, and sometimes in conflicting ways.

> [M]orality demands an absolute annihilation of the selfish drive in every case of collision. … We must fight for ourselves ... we must fight for the whole (Steffens 1996, 22)[16]

Implicitly, he seems to suggest that struggles for a common cause are moral by nature.

In the second lecture, Steffens relates the industriousness that is required in humans' struggle against nature to a national perspective.

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14 "Udtrykket for Menneskeslægtens fælles Kamp mot Naturen er *Industrie*. De maae foreene sig til denne kamp ..."

15 What I quote is stated about the derived word 'industrial'.

16 "[...] Moraliteten fordrer en absolut Tilintetgiörelse af den egoistiske Drift i ethvert Collisions-Tilfælde. ... Vi maae kiæmpe for os selv ... vi maae kiæmpe for det Heele".

> If a nation exerts all its energy in its struggle with nature, in order to secure its ultimate existence, then its impression on [the material world] merely shows a higher animal instinct – necessary as our physical existence – that is *industry*. (Steffens 1996, 36)[17]

Here, Steffens can be read as suggesting that there is a continuum between human and animal capabilities, and that industriousness is found in other 'higher animals' as well, explained by the same necessity that applies to humans.

In the same lecture, Steffens also raises a question that evokes a deep historical perspective and is reminiscent of similar questions raised in the Anthropocene discourse.

> One imagines our age having disappeared. What eternal monument has it left behind? (Steffens 1996, 37)[18]

In the third lecture, in contrast with the suggested continuum between human and animal capabilities, Steffens draws a sharp line between humans and animals in the context of his understanding of history:

> [T]he phenomena produced by the interplay of the actions of all rational beings constitute *history* […] unchangeably determined laws whose forced and absolutely necessary interplay constitute *nature*. (Steffens 1996, 39–40)[19]

Here, Steffens expresses a stereotypically anthropocentric understanding of history as a field of study according to which only human actions are relevant for history. While this was and remains a common view, it diverges from modern calls for more-than-human perspectives in history, anthropology and other humanities disciplines, and recognition of non-human agency in these contexts.

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17 "Yttrer en Nation sin hele Energie i sin Kamp med Naturen, for at sikre sin endelige Tilværelse, saa viser dens Indtryk på Massen blot et højere dyrisk Instinkt – nödvendig som vor physiske Existenz – det er *Industrie*." In the lectures, the term "Massen" is used ambiguously by Steffens – altering between alluding to matter, mass, inorganic nature, undifferentiated matter, and mass phenomena in the sense of collective or holistic entities.

18 "Man forestiller sig vor Tidsalder forsvunden. Hvilket evigt Monument har den sat sig?".

19 "[D]e Phænomener, som frembringes ved Vexelvirkningen af alle Fornuftvæseners Handlinger, constituere *Historien* [...] Uforanderligen bestemte Love, hvis tvungne, og absolut nödvendige Vexelspil constituerer *Naturen*."

Instead of acknowledging e.g. animal agency as relevant for history, Steffens draws a simplified distinction between the free actions of humans, which determine history, and the allegedly "unchangeably determined laws" which constitute nature – or, phrased more concisely, the *freedom of humans* versus the *necessity of nature*. In this scheme, animal industriousness has no place.

In the fourth lecture, Steffens returns to portraying continuity in the living realm.

> [...] that all animals, from worms up to man, form a continuous series in which irritability increases in proportion as the power of reproduction decreases, and sensitivity also increases in proportion as irritability decreases. (Steffens 1996, 60)[20]

> Instinct shows the first imperfect disposition to nature's perfect awakening, the first disposition to *reason*. (Steffens 1996, 76)[21]

The latter quote is both a succinct expression of Steffens' belief in continuity between humans and non-humans, and of his anthropocentrism, which is evident in seeing humans as "nature's perfect awakening" through our capacity for reason. Somewhat similarly, while seeing humans as animals, and all animals as forming "a continuous series" appears to emphasize continuity, Steffens nevertheless held that humans stand out as the most sensitive creature on Earth (Steffens 1996, 61). Birds and mammals resemble us, in this view, by being quite sensitive, but they are not quite as sensitive as us.

In the fifth lecture, Steffens discusses geological developments and compares them to the development of different lifeforms.

> Does this not show a constantly increasing individualization of the processes by which these residues are deposited? [...] that the succession

20 "[...] at alle Dyr, fra Ormene af og op til Mennesket, danne en continuerlig Række, i hvilken Irritabiliteten stiger, i samme Forhold som Reproduktionskraften tager av, og Sensibiliteten ligeledes stiger i samme Forhold, som Irritabiliteten tager af." Steffens attributes the observation of these patterns to "Kielmajer", which must refer to the German biologist Carl Friedrich Kielmeyer (1765–1844), who is known for having influenced Friedrich Schelling.

21 "Instinktet viser det første ufuldkomne Anlæg til Naturens fuldkomne Opvaagnen, det første Anlæg til *Fornuft*."

> of mountains in primeval times and their change is a tendency towards organization. (Steffens 1996, 93)[22]

The idea presented here is that the natural world tends to develop more complex forms over time. This is consistent with an evolutionary perspective on life as well as with a contemporary scientific understanding of the historical development of the universe as we know it. In Steffens' perspective, the "tendency towards organization" among different kinds of rocks adds to his understanding of continuity in nature, spanning from the abiotic to the biotic world.

In the sixth lecture, Steffens combines his ideas about individuation understood as emerging from the (undifferentiated) mass with an anthropocentric value statement about human cultural creations.

> […] reason. Even the mass is refined by it, and art and poetry manage to produce gestalts higher, nobler, more infinite, more significant than even Nature. (Steffens 1996, 114)[23]

Apart from providing a contrast to individuality, 'mass' must here be understood as the physical matter of the Earth. It is an open question whether Steffens would regard today's prevailing human-made products such as concrete and plastic as "more significant than even Nature", as economists and consumers seem to do, or whether he would reserve that badge of honor for more artistic uses of Earthly matter.[24]

In the seventh lecture, Steffens reverts to ancient history.

> All history begins with the gods. […] Call this mythological time what you want […] The childhood of the human race […] (Steffens 1996, 120)[25]

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22 "Viser dette ikke en bestandig tiltagende Individualisering af de Processer, ved hvilke hiine Residuer afsættes? […] at Biergernes Følge i Urtiden og deres Forandring er en Tendenz til Organisation."

23 "[…] Fornuften. Selv Massen forædles ved den og Kunsten og Poesien formaaer at producere Gestalter, höjere, ædlere, uendeligere, betydningsfuldere, end selv Naturen."

24 Judging by the quote, it is not clear what Steffens thinks about the material basis of art and poetry, though the initial reference to refinement of mass appears to indicate a connection between materiality and art and poetry.

25 "Med Guderne begynder al Historie. […] Man kalde denne mythologiske Tid, som man vil […] Menneskeslægtens Barndom […]".

As we know, Steffens does not restrict the role of religious beliefs to mythological times. This will also become evident in the final lecture.

In the eighth lecture, ancient history is coupled with nostalgia and the promise of a glorious future based on the ideas and genius of romanticism.

> Why does the old age contain *everything* in the higher sciences, in poetry, in art, in philosophy […] like a sacred sprout […] (Steffens 1996, 131)[26]

> We […] had to glimpse into the bygone era through the petrified figures of the gods, as into a shimmering sea of light, and the poetic germ was awakened by Goethe's genius. The new, awakening philosophy promises a more glorious era. (Steffens 1996, 142–143)[27]

The image of the sprout supports the idea that classicism can renew and regenerate culture while being consistent with an evolutionary perspective in which there is continuous progress over time. The reference to Goethe exemplifies Steffens' belief in geniuses as the peak of individuation in general and of the human spirit in particular.

Lastly, in the ninth and final of the introductory lectures, Steffens appears to question whether anything is meaningful at all if the eternity promised by religiosity doesn't come through.

> Since everything perishable is ultimately nothing, its reality fades under our hands, and if the eternal reality from which everything else is derived does not reveal itself, then a deadly skepticism is necessary. (Steffens 1996, 153–154)[28]

Rather than concluding with skepticism, however, Steffens embraces the idea that human freedom is compatible with the necessity of natural laws and has its origin in 'the Deity' (Steffens 1996, 154). In this way, in Steffens' outlook on history, everything comes back to the beginning again.

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26 "Hvorfor indeholder den gamle Tid i de höjere Videnskaber, i Poesien, i Kunsten, i Philosophien *alt* […] som en hellig spire […]".

27 "Vi […] maatte ved Gudernes forsteenede Gestalter skue ind i den svundne Tid, som i et glinsende Lyshav, og den poetiske Spire var vakt ved Goethes Genie. Den nyere vaagnende Philosophie, lover en herligere Tid."

28 "Da alt endeligt er intet, saa svinder dets Realitet under vore Hænder, og aapenbarer seg ikke den evige Realitet, af hvilken al anden er afledt, saa er en dræbende Scepticismus nödvendig."

Concluding remarks – Steffens on nature, history, and the human condition

Steffens's outlook on humans' relation to nature is multifaceted. On the one hand, he stresses continuity from the abiotic to the biotic world, and from non-humans to humans. This results in a gradualistic perspective on humans' relation to nature. On the other hand, his outlook is clearly hierarchical, placing human beings as the most superior beings that exist by far. This relies on an anthropocentric view on nature.

Steffens' understanding of history as uniquely human, and the alleged uniqueness of humans' free actions (Steffens 1996, 39–40), speaks to his anthropocentrism. Drawing such a sharp contrast between the freedom of humans, and the necessity of nature that supposedly rules the lives of all non-humans, obstructs our chances of developing more comprehensive and inclusive fields of study in history and beyond which also account for the agency of animals and other non-humans. It also resonates poorly, in my view, with researchers' attempts to reassess history by seeing human history and Earth history in context – a central project in the Anthropocene discourse. By being left out entirely as historical actors, not only are animals and other non-humans disrespected in terms of the agency and individuality they actually have – their whole existence is rendered insignificant and inconsequential. Moreover, in failing to recognize what difference non-humans make generally in the context of history, we also fail to see what difference they have made in our lives. For example, many today think of domesticated animals as having originated from a process of co-domestication in which humans became 'domesticated' or 'civilized' while adapting to forming new social bonds to animals.

With this being said, I must admit that Steffens's perspective on history as uniquely human – while out of touch with developments in environmental humanities – remains a common or even predominant view among many contemporary historians, philosophers, and other scholars.

Lastly, Steffens' take on the human condition, as expressed in the introductory lectures, can be summed up as follows: Humans are exceptional in terms of reason and sensitivity; human existence involves a struggle against nature; subsistence requires industriousness

and collaboration; in collaborating for 'the whole' we develop morality; and as individuation generates geniuses and cultural creations, we engage in something that is "more significant than even Nature" (Steffens 1996, 114). This implies an outlook on the human condition in which our conditions are subject to change over time, mostly progressing towards the better.

As for how representative Steffens's views are for his time, we can at least conclude that his influence on romanticism in the Nordic countries makes his ideas as expressed in the introductory lectures be of broader interest. At the time, however, the anthropocentrism he expressed was more prominent than his thoughts about continuity between humans and non-humans. On that background, we can conclude that he probably contributed to developing a more holistic, curious and respectful attitude to non-humans and nature in his own time.

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