Review of Mark Coeckelbergh (2021). *Green Leviathan or the Poetics of Political Liberty: Navigating Freedom in the Age of Climate Change and Artificial Intelligence*

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**Freedom, the Climate Crisis, and Artificial Intelligence Between Scylla and Charybdis**

In *Green Leviathan or the Poetics of Political Liberty: Navigating Freedom in the Age of Climate Change and Artificial Intelligence*, Coeckelbergh (2021) guides us through the several meanings of freedom exempliﬁed in the possible multiple risks and impacts of both a climate crisis and a possible technology — artiﬁcial intelligence (AI) — crisis. The book shows the limits of libertarian politics based on a conception of absolute unconstrained freedom and the limits of authoritative politics in which a higher form of governance is perceived as necessary. Unconstrained freedom seems to only lead to an exacerbation of negative effects reaching a tipping point which makes ‘collective action in the form of global governance’ to ‘appear as the only way we can deal with this problem’ (Coeckelbergh 2021: 20).

Coeckelbergh (2021: 128) constructs his idea of freedom and AI as a “third way” since it attempts to navigate between two monsters: the Scylla of authoritarianism and the Charybdis of radical libertarianism’. He proposes a positive relational freedom and an idea of AIs as ‘sympoietic technologies’ which are ‘integrated in [a] positive and relational poetic-political project of liberation and democratization’ and which ‘contribute to the making of a more inclusive collective and the building of new common world’ (12).
Book Overview

Coeckelbergh provides a western conceptual history of the idea of freedom characterized by a dynamic of broadening. It is a stepwise shift from a negative conception of freedom to a positive conception, increasingly including more principles, values, and parties (such as non-humans). The dynamic of broadening the concept of freedom is joined with a dynamic of narrowing the concept of authority, avoiding the negative effects of radical interpretations of both concepts. The reason for this is that Coeckelbergh’s conception of relational and positive freedom avoids a too atomistic interpretation of freedom in which every other (e.g. human person, government, animal) is considered a possible threat. Instead, his conception is based on the recognition that these others are constitutive parts of a person’s freedom and not necessarily a threat to it.

Negative Freedom

In Chapter 2 and Chapter 3, Coeckelbergh focuses on the concept of negative freedom. The concept is presented by relying on Hobbes’ and Plato’s idea of a governmental political body that can keep a human community in bounds. When all individual members live in absolute freedom, solely relying on private judgement and the instinct to survive, individual and societal life ends up in chaos. This ‘state of nature without political authority is a state of competition and conflict’ (Coeckelbergh 2021: 17). For Hobbes, this political authority’s sole function is to keep all members of society safe and keep society’s internal peace. Political authority in Plato’s work goes beyond this function of guaranteeing people’s safety and peace. For Plato, a political authority also needs to have inherent virtuous characteristics. It needs to be knowledgeable, virtuous and wise. This authority is ‘an aristocracy ruled by a philosopher-king (473d), who doesn’t love money (485e) but has knowledge … of the forms of justice and goodness’ (Coeckelbergh 2021: 22). The good society, beyond peace and safety, is the end goal of any governmental body.

Related to the climate crisis and AI, Hobbes’ Leviathan can be conceived as a necessary authoritative global government ending the amalgamation of policies, directives, measures etc., drafted on national, regional and local levels [see for example the inventory on AI ethics guidelines made by AlgorithmWatch (2020)]. This governmental body can rely on AI systems to take correct actions without much debate. Moreover, the idea of an AI becoming this authority is never far away. In Plato’s philosophical aristocracy, Coeckelbergh reads a technocracy of experts that know what a community needs in the face of the climate crisis. AI has ‘no virtue, since it is not a moral agent with mental properties such as consciousness’ (Coeckelbergh 2021: 23), so it can only have a supportive role to this technocracy.

In Chapter 3, Coeckelbergh shows how such a technocracy could look like by discussing the practice of nudging as a form of social engineering. To nudge is to ‘affect behavior but also respect freedom of choice’ (Coeckelbergh 2021: 37). Instead of acting upon people’s choices, the environment in which people make their choices is acted upon, so that they are influenced into making ‘better’ choices. It is
not difficult to see that nudging could be used to achieve particular climate goals. For example, AI could help with this green nudging by providing insights into people’s transport behaviour so infrastructure can be acted upon to positively change this behaviour.

Coeckelbergh criticizes nudging as grounded in a fundamental mistrust in people’s capacity to make good decisions for themselves and society. This capacity seems only to belong to a specific group of people, the nudgers or experts. Coeckelbergh seeks recourse in Rousseau’s account of the ‘general will’ to counter this mistrust. This ‘will’ is based on people’s trust in one another by which freedom ‘is not guaranteed by a Leviathan but by a community of free and equal citizens who are themselves sovereign and practice self-rule’ (Coeckelbergh 2021: 42).

Here, we see a first glimpse of freedom as a shared democratic practice. For Rousseau and Coeckelbergh, freedom is not something people naturally have, but something that needs to be created and maintained. Nevertheless, to reach a good society, it seems that the sole focus on freedom falls short and other criteria and conditions need to be accounted for. If ‘liberty is important at all, then perhaps it is not only freedom from restraint (negative liberty) alone we should care about. … What are the conditions for liberty and, indeed, democracy?’ (Coeckelbergh 2021: 45)

**Positive Freedom**

In Chapter 4, Coeckelbergh’s focus shifts towards positive freedom. The distinction between negative and positive freedom goes back to Berlin’s *Two concepts of liberty* (1958/1997). However, Coeckelbergh disagrees with Berlin’s description of positive freedom as a notion of *freedom from*. Whereas, Berlin conceives positive freedom as an individual act of self-mastery; Coeckelbergh conceives it as *freedom to* do something or become someone. This enables Coeckelbergh to link political freedom with ethics by relying on Nussbaum’s 10 central human capabilities such as the ability to live with and toward others, to imagine the situation of the other and to respect the other (Nussbaum 2006; Coeckelbergh 2016).

Coeckelbergh’s question becomes how the climate crisis and AI impact the conditions to live a free and flourishing life. What are the impacts of the climate crisis on individuals’ ability to relate to the natural environment or to live healthy? How can AI-technologies support individuals in planning their life? According to Coeckelbergh (2021: 70), we can ‘demand that any use of AI and any way we deal with climate change should preserve negative liberty but also promote positive liberty’.

The positive idea of freedom also leads to a critical assessment of conditions that enable us to develop freedom. Coeckelbergh proposes democracy as the most applicable governmental form of furthering Rousseau’s idea of self-rule. He interprets democracy as a Deweyian open-ended social experiment including all human individuals. Moreover, a democratic system enables us to balance out freedom with other political values. Indeed, as Coeckelbergh argues, when considering the climate crisis and AI, other political values such as social justice and equality need to be accounted for. For example, when considering the climate crisis, it is clear that many countries in the global south have endured the negative impacts of this crisis much
harder than western countries. When considering AI, bias in used historical datasets to train applications has ended in enforcing biased and discriminatory assumptions regarding acts against individuals and groups. These issues are primarily related to social justice and equality. Nevertheless, one’s freedom is also impacted in these cases, because when one is discriminated against, also her freedom is impacted.

The Broadening of Freedom

In Chapter 5, Coeckelbergh (2021) continues his broadening of freedom by way of including other political and moral values in relation to the climate crisis and AI. This leads him to argue that the climate crisis and AI are inherently political. Who will gain and lose from the development and use of AI? Who bears the negative consequences of the climate crisis and who can escape them? These questions push the argument towards distributive and intergenerational justice, equality etc. Following Winner (2017), Coeckelbergh (2021: 79) argues that current debates on the Anthropocene hide the fact that ‘some people contribute far more than others and some generations more than others’ to the current climate perils. The concept of the Anthropocene shows that the climate crisis and AI are global political problems which require a global governance.

This broadening of the meaning of freedom is not only a matter of but also including more principles and values. It is also a matter of redefining the body politic and going beyond anthropocentric perspectives. Inspired by Latour and Haraway, Coeckelbergh (2021: 101–125), argues for the inclusion of non-humans in the body politic. But who has the authority, the knowledge, or the experience to represent these non-humans (scientists, technology developers, NGOs)?

The inclusion of non-humans requires a rethinking of principles and values such as equality and justice (Coeckelbergh 2021: 110–112). To truly understand each other, renewed attention to communication and transdisciplinarity is necessary. The separation between science and politics needs to be perceived as just a narrative that structures and so also partially obscures, our perception of reality. Both have always been intermingled, making the body politic about ‘what actually happens to, and between, people and things, but also about the stories we tell each other’ (Coeckelbergh 2021: 108). This broad body politic amounts to a relational view on reality, in which separations between humans and non-humans, between culture and nature, between politics and science etc. need to be conceived as representations that structure reality.

For Coeckelbergh, this relational view on freedom and the body politic leads to the observation that humans are not standing outside the climate crisis. We do not stand in confrontation with the climate crisis but are an inherent part of it. Moreover, AI needs to be conceived as a mediator of our relations in reality, our relations to each other, society, nature, non-humans and also the climate crisis. The main political problem regarding AI and the climate crisis is then not ‘a kind of battle between human technological agency and “nature”, but a question of tuning the human–environment relation, which is already technologically mediated and shaped, and which is already connected with many other entities’ (Coeckelbergh
Towards a Sympoietic Politics

In the concluding chapter, Coeckelbergh offers an idea of how this sympoietic politics can concretize itself in what he calls sympoietic technologies. First, sympoietic technologies extend their socio-techno-natural environments. Second, sympoietic technologies need to support our positive freedom while infringing our negative freedom as little as possible. Third, sympoietic technologies need to be democratic and arise out of a body politic which represents both humans and non-humans. Does AI, in light of the current climate crisis, comply with this ideal of sympoietic technologies?

AI can create ‘new sympoietic and relational opportunities … for dealing with the climate crisis’ (Coeckelbergh 2021: 133) (emphasis from the original). It can reveal interdependence between humans, non-humans and planetary ecosystems and support our search for solutions to the climate crisis. AI can also create opposite effects, producing ‘more fragmentation, … less fairness, less transparency, etc., threaten the flourishing of humans, and also negatively impact non-human lives such as the lives of non-human animals’ (Coeckelbergh 2021: 134). If AI is integrated in a ‘relational political-poetic project of liberation and democratization by having them contribute to human and non-human flourishing, the making of a more inclusive collective, interdependent self-rule, and the building of new common worlds’ (Coeckelbergh 2021: 135), it can create opportunities to democratically deal with the climate crisis.

Can Technological Inclusion Have a Blindspot?

Based on concepts such as sympoietic technologies and positive relational freedom, Coeckelbergh (2021) develops a scale critique. With the concept of ‘scales’, Clark refers to the fact that our experiences, concepts (e.g. freedom, equality, justice) and structures that order our experiences (e.g. political, ethical), are always bounded to a specific location in time and space. A scale ‘is not part of a world in the sense of … some recognized nexus of significances or field of meaning; rather, it inheres in any world as a dimensionality that is all structuring. … It eludes and conditions normative concepts of consciousness as self-presence.’ (Clark 2018: 82). Crises, such as the climate and possible AI crisis, confront us with the limits of our concepts and the incalculability of reality. They force us to reinterpret our political and ethical vocabulary ‘so that even the most enlightened seeming progressive social argument may have one in agreement on one scale and reaching for a conceptual brick on another’ (Clark 2012: 163).
Coeckelbergh’s interpretation of freedom as a scale critique invites questioning whose freedom and whose AI he is arguing for. It is also questionable whether Coeckelbergh’s concepts of freedom and sympoietic technologies include all socio-techno-natural relations that are impacted by the climate crisis and AI. Despite his awareness that AI is hybrid technology consisting of multiple technical objects and socio-techno-natural relations, Coeckelbergh (2021: 112) seems to underestimate how broad AI’s hybridity is.

Coeckelbergh’s understanding of AI as a sympoietic technology leaves many questions untouched. How to account for the sometimes-miserable conditions of miners who extract necessary raw materials to develop technological elements and the related human rights abuses (Marks 2014)? How to account for the negative health and environmental impact of mining and also recycling of technological elements, which disrupt social and ecological dynamics (Bolger et al. 2021; Navas et al. 2022)? How does the development and use of AI affect local biodiversity, which is reciprocally related to climate change (ten Have 2019)? How to account for the uneven distribution of technologies, including AIs and their positive and negative impacts throughout the world? A possible reason why Coeckelbergh leaves aside these and other possible effects of AI on the natural environment and the climate crisis is his exclusive focus on energy consumption and carbon emissions.

Moreover, Coeckelbergh (2021: 122) posits that all relations between human and non-human entities entail a weak form of anthropocentrism, admitting that there is a specific kind of violence inherent to the concept of relationality. As Zylinska (2012: 207) argues, a violence that is a ‘structuring and inevitable condition of all relationality’. Nevertheless, Coeckelbergh’s idea of sympoietic technologies and his idea of the body politic consisting of all entities in the world and the world itself, seems to occlude this inherent violence while there remains a human power, in many cases a power in the hands of a few, who decides who and what can (not) enter the body politic.

But are we able to present all natural species on earth? According to ten Have (2019: 24), ‘there are approximately 1.800.00 known species. But we do not know the actual number of species; it is estimated that in reality there are between 5 and 30 million species.’ Do we not need to admit that we are not able to relate with these unknowns and that we unavoidably risk harming them? Do we not need a politics and ethics of AI that takes this unavoidable violence into account?

Hence, it seems that Coeckelbergh’s political philosophy misses a critique of the political-economical system of AIs, leading to the obscuring of these vulnerable populations and their local natural environments. By not developing this critique, ongoing development and use of AI, even in its sympoietic form, could reify current practices of exploitation.

**Conclusion: Beyond Local Perspectives on the Climate Crisis and AI**

Finally, what seems to strengthen Coeckelbergh’s blind spot is his explicit sole recourse to a western philosophical discourse on freedom (Coeckelbergh 2021: 6). His
focus is understandable, yet the western discourse needs to be placed in dialogue with other discourses. There is a need to develop a global theory of technology consisting of an interplay between the global and the local. This theory can be inspired by Hui’s (2017, 2020) concept of cosmotechnics and ten Have’s (2016, 2019, 2022) global bioethics discourse. The latter simultaneously emphasizes the global ethical dimensions of ‘health, healthcare, health science and research, and health technologies and policies’ (ten Have 2016: 243) and the need to ‘consider each human being as a citizen of his or her own community or state (polis) as well at the same time a citizen of the world (cosmos)’ (107). To deal with this interplay, we need a global policy and global ethical perspective in which ‘[h]uman rights and global principles are used to challenge local practices while local knowledge feeds back into the global framework’ (ten Have 2022: 43).

Hui’s cosmotechnics points to a similar interplay between the global and the local dimensions of technologies such as AI. To ‘open the question of technology is to open the question of locality … Globalization is that which ignores locality’ (Hui 2020: 100) and has ‘blinded us of seeing the multiplicity of cosmotechnics; rather it has obliged us to identify all cosmotechnics as part of a universal technological lineage’ (Hui 2017: 335). Hui’s cosmotechnics emphasizes that each culture has its own technological history, which does not necessarily need to fall together with the western and homogenizing, calculative interpretation of technology (Hui 2017). The discovery of local technological histories opens new ways of thinking about technology and nature together.

Within the interplay between the global and the local, Green Leviathan or the Poetics of Political Liberty: Navigating Freedom in the Age of Climate Change and Artificial Intelligence (Coeckelbergh 2021) needs to be understood as an important local fundament and conceptual tool that can lead us towards a global theory.

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