

Notes on the Politics of an Expanded Body

Christina Varvia

Starting from a philosophical provocation that reimagines the human body not as a distinct object but rather as an expanded field where matter flows through a series of threshold conditions, this essay follows the political aftermath of the conception of an *expanded body* and situates it within feminist and posthuman theory. The effects of such thinking demand a redrawing of biopolitical theory, as well as suggesting a collapse between the fields of human rights and environmental rights. If we are to consider every material bit that is ever consumed, inhaled and excreted by a human body as a fundamental part of the body, then violence against human subjects needs to be rethought: any attack to the environments that sustains human life needs to be addressed within the human rights discourse and as part of any biopolitical commitment to protect human life. This reshuffle helps us address the complexity of the politics of liveability, but also offers new challenges in making claims and demands new strategies of political activation against violent practices. The essay suggests that thinking with scale—from the molecular to the planetary—and using border epistemologies will become key methods in addressing the work against violence in the posthuman era.

How much space does my body occupy in its lifetime?

I wish to take a long exposure photograph of myself from the moment I am born, until the moment I die. My shape will change rapidly at first, more slowly later on, quicker again at the end. It will be the result of countless exchanges with the environment. Air will inflate me, food will energise me, water will allow matter to flow within me.

So, I imagine this version of my body: one that includes the memory of all material bits that ever came to be it, every bite of food it ever consumed, every drop of water that ever quenched its thirst, every molecule of oxygen it ever breathed, and all the excrement it ever produced.

Layers of skin, membrane, cell barriers filter through the world.

Ingest, digest, excrete.

Salad, bread, yoghurt. How much do I weigh?

In this longue durée of my body, I am also the 35 tons of food I consume in my lifetime.

At a given moment, I am 60–90% water. But that means that 62,400 litres of water will come to be me at one point or another. Those gestational waters give me form, give me life, and allow me to communicate with other plasmas.

If I make it to 73 years of age, my body will have taken in 242.2 million litres of air, 12.1 million of which are oxygen I will consume and turn into energy.

I will also be particulate matter, pulverised concrete and forest, airborne lead, soot.

I will have breathed in sulfuric acid, ammonium sulphate, ammonium nitrate, sodium chloride, metals, and dust, pollen and mould.

And then I will leave behind 3.4 tonnes of excrement, and 37,300 litres of urine. These harder parts of me will become material for roadbeds, and fuel for energising wastewater plants.

The rest of me will merge with the ocean where I bathe. And then I will become mist, and cloud.

I flake, I peel, I drift with wind and get carried away together with dust. I get absorbed by the ground beneath me, I get consumed by microorganisms that feed the animals I eat.

I am 590 miles of hair.



Figure 1: Christina Varvia, Portraits of an Expanded Body, in progress, macro image of human skin, still from video

In this script from a short video that is currently in progress, I introduce the notion of the *expanded* human body, which started as a thought provocation. In this experiment I attempt to map out the amount of space a single body occupies in its lifetime in real terms, what would a human body look like if we were to quantify all material bits that comes to be it.^[1] By researching the average amount of matter that is ingested and excreted by a single body from birth until death I wish to render an image of the human body that extends beyond the skin. This sort of measurement is provocative in its intentions, as it is meant to expand and spatialise what is often understood as a distinct and precious body. The integrity of the human body is commonly understood to be sacred. What happens when we focus on the body's permeability?

In this short essay, I would like to explore how this conception of an *expanded body* could be helpful in thinking about violence. By opening it up and undoing the traditional limits of the material body, do we relativise it? Does everything become body and does the suffering, sensing, feeling body therefore not matter anymore? Is an expanded body dehumanised and do we lose the critical focus that helps us identify patterns of violence that could lead to accountability? These notes will attempt to address the political affordances of an expanded conception of the human body.

A note on methodology: to research this spatialised rendering of a human body I had to draw numbers from statistics, calculations and conversions that overly simplify individual patterns. The intention was not to normalise what an average body *should* measure, but—quite to the contrary—to trouble the traditional monolithic understandings of a body defined by the boundary of the skin. By opening up the notion of the human body to include the vastness of matter that flows through and is produced by what we call a human animal—in line with other feminist neo-materialist scholars^[2]—I hope that we can rethink our relationship with other earthly beings that are co-constitutive of our corporeal existence.

Body Becomes World

To begin to map out every molecule of matter that has come to be part of a body in its lifetime is an absurd undertaking. Yet as an exercise it enforces a certain type of proximity, or even intimacy with a big portion of the world that comes to be part of that very specific flesh. Focusing on the flows of matter between bodies invites us to consider a relational subject that in Rosi Braidotti's words "becomes-world".^[3] "Becoming-world" for Braidotti is "based on the awareness and the acknowledgement of a structural interconnection among subjects that are complex and material singularities in process."^[4] Braidotti challenges the cosmopolitan function of the universal, mostly male subject that travels the world through a distinct body, and asserts instead that we should think of a cosmopolitanism of nomadic subjects. She invites us to consider moving bodies that are connected with planetary geographies through material flows. They don't just travel the world; they are the world. This provocation resonates with my experiment. A spatialised, expanded body includes an ecosystem of living and non-living matter that through their nomadic motion and interaction become part of a human constellation.

Braidotti develops the framework of nomadology and the concept of "becoming-world" by partially depending on Gilles Deleuze and Felix Guattari's notion of a "body without organs".^[5] In *Anti-Oedipus* (2013), the body without organs is described as an "undifferentiated fluid", as matter in motion resisting any form or structure. Deleuze and Guattari assert that "[t]he full body without organs is the unproductive, the sterile, the unengendered, the unconsumable."^[6] The body without organs is considered pure matter in flux. As such the "body without organs" contains its own philosophical and political potentialities. It invites us to open up the tight knot between body and power, or as Braidotti describes it to "de-link from the codes of phallogocentric functional identity [...] as a way of scrambling."^[7] Power is no longer the ability to affect one's bodily integrity but rather one of movement, power as dormant potentiality, as relation. De-linking the body from an individualist understanding of identity challenges most forms of political organisation that require a concrete political subject, i.e. the body of a citizen, to carry out or receive political action. In other words, the conception of the "body without organs" helps us rid of the normative way in which the body has been considered as the centre of power and the subject as well as object of violence. It does, however, leave us with a body that is unproductive, undifferentiated. As a philosophical concept the "body without organs" offers a fascinating provocation that scrambles the traditional politics that depend on the unit of a body for the evocation of rights, yet its political application is hard to map out.

The concept of an expanded body, on the other hand, needs to learn from the body without organs and the dissolution of traditional political motifs, but also has a different political responsibility. Although the expanded body uses ballpark metrics to quantify matter, it does not consider matter to be neither undifferentiated nor unproductive. It rather wishes to take advantage of this conceptual scrambling suggested in the formulation of the body without organs, to tune in to matter in flux, but also to start situating the way organs, structures and machines organise that flow. For example, undoing the skin as an absolute border should not suggest undermining the role of the skin as a structure that does significant work in managing

flow. It rather means situating the skin as one among many threshold apparatuses that regulate the course of matter.

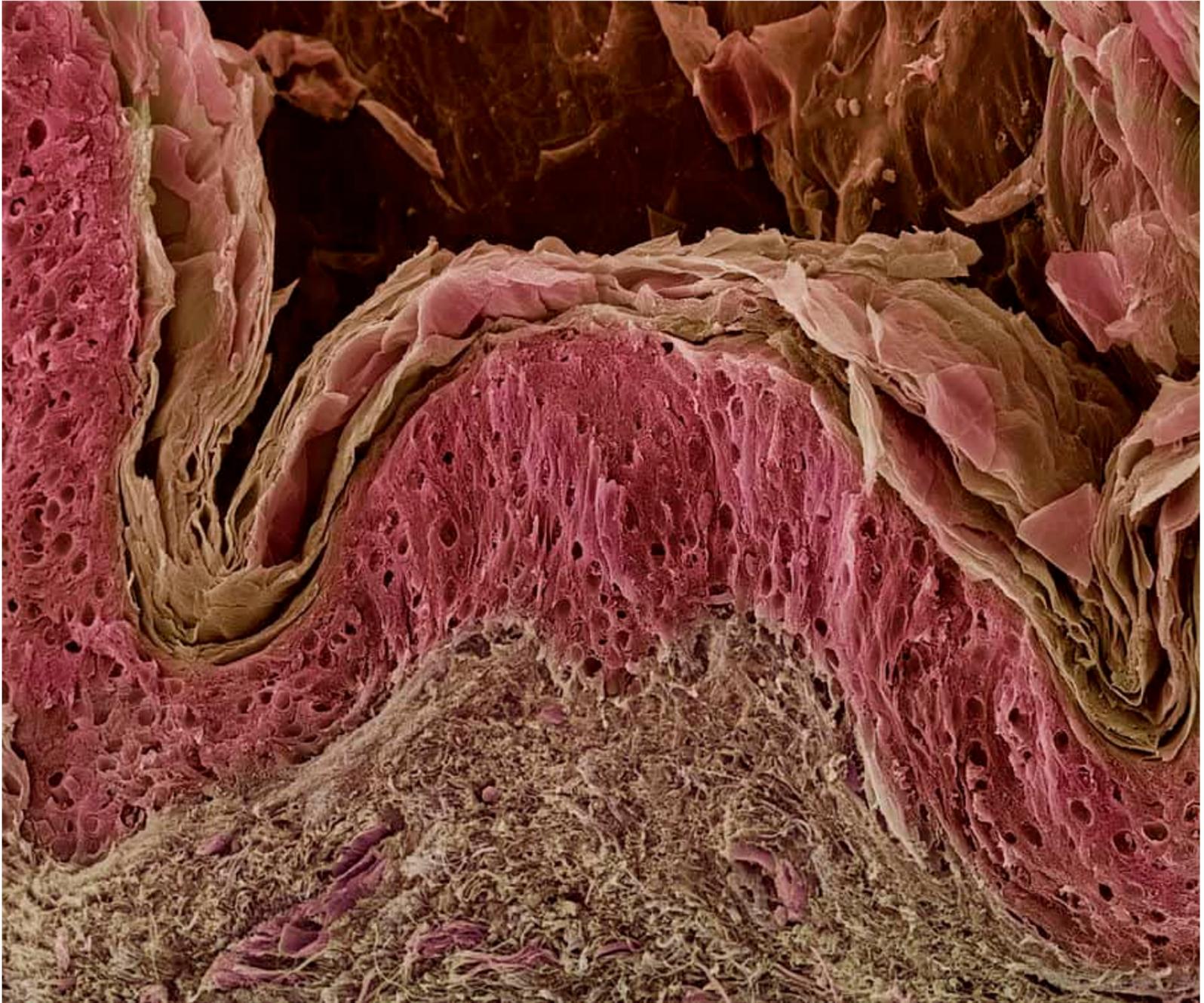


Figure 2: Coloured scanning electron micrograph (SEM) of human skin. Image: Stephen Gschmeissner

Dermatologists refer to it as the skin barrier, alluding to military bordering narratives.^[8] But the skin barrier can also be understood as a simple thickening of biological matter, or a sudden shift in the structure of molecules. Reading the microscopic image of a section of human skin, we can see peaks and valleys, foam-like pink flesh and rhizomatic fibres, as well as flakes layered on top of each other seemingly detached, simply resting on each other, yet magically still glued together. When one of these flakes is scratched away from this large organ, it floats into the atmosphere. Is it still part of the human body? How far will it carry the human DNA? And what metabolic process is necessary to make it into something else?

Violence across Expanded Bodies

Violence is often thought of as a threat to the bodily integrity of a person or a thing. Yet its definition remains abstract within discourse, and even further challenged with notions of environmental or slow violence.^[9] In her latest book on *The Force of Nonviolence* (2021), Judith Butler outlines this difficulty of defining violence. She specifically questions which types of violence are justified by considering the notion of self-defence. In order to define when a person has the right to defend themselves, we must first define what is that self that is being threatened with violence to begin with. Does the self include relatives and others belonging to someone's community? Does it only consist of one's individual material body? And what sort of body would that be? "Without that overarching sense of the interrelational, we take the bodily boundary to be the end rather than the threshold of the person, the site of passage and porosity [...] The threshold of the body, the body as threshold, undermines the idea of the body as unit."^[10] The threshold of a body in biological terms could be considered the skin as a lateral organ. But it can also be the nostrils, the lungs, the mouth, the stomach. It can, furthermore, be a

river basin, a cloud of toxic air, the roots of an edible plant.

When we consider an expanded human body, the differences between human and environmental rights collapse. Political struggle, then, happens across a series of threshold conditions, borders or organs that filter through material flows and determine critical proximities. Responding to Butler's call for a reconceptualisation of an interrelational body that aims to achieve equal human rights and the conditions of "livability", I propose to use the concept of a spatialised expanded body as a means to visualise the material interactions with its environment.

^[11] By doing so we can reframe the debate around violence in concrete terms. Violence inflicted upon expanded bodies includes the type of toxicities that environmental activists advocate against. The architectural scholar Adrian Lahoud, in his essay *Floating Bodies* (2014), remarks: "Though they do not touch the body directly, environmental violations affect the milieu that bodies depend upon for their survival."^[12] In fact, tracing material flows shows that environmental violations not only touch the body, but actually come to be experienced intimately; not as attacks that are extrinsically deployed on a body but rather as acts of violence that affect us from within. The interiority of such harm may just be the way to politically counter the elusive nature of environmental violations and the difficulty of litigating against them. As Nina Gualinga from the Kichwa Peoples in the Equadorian Amazon says: "in our language there is no word for nature, because we are nature."^[13] This continuity between the bodily space and the rest of the environment reflects multiple Indigenous positions that claim that there are no human rights without environmental rights. Activists cry: "We don't defend nature. We are nature defending itself."^[14] Thus, the reframing of an expanded body allows the rendering of a large, yet intimate political field of action; a heterogeneous space of conflict that does not exist at a distance, somewhere far away, but that is present in our very material being. We fight against environmental violence from within.

What is then left is the necessity of identifying sites of conflict within this expanded political space. There we can return to Butler and think along what she suggests as "body as threshold", or better yet, the body as multiple thresholds, or junctures where politics manifest in biomatter.

Border as Method—Scale as Method

Understanding thresholds/borders materially means zooming in on the components that compose what is often diagrammatically represented as a solid line dividing inside from out. Fences, walls, skins, atmospheres all consist of material formulations that operate as barriers to certain material bodies passing. Rather than being hermetic they are always porous and thus can be thought of as filters. A feminist approach to border as a method of investigation, seeks to problematise a binary condition of in or out, and instead engage with spectra of transitory conditions, where matter flows, or finds obstacles but always leaks through, and always creates dynamic conditions in its passing.^[15]

Within the conception of an expanded and perhaps even dispersed body, the space that each body occupies reaches multiple sites at once, with multiple intensities of presence. Privilege can then be measured according to the levels of intimacy a body has to suffer with more or less safe material substances. Proximity to toxic pools decrease the conditions of liveability, while

keeping a good distance from them secures a more carefree life. In that sense some “critical zones”—as Bruno Latour introduces the term to describe the thin layer of the Earth’s crust that sustains life on the planet—are more critical than others.^[16] Some zones are more liveable than others. The intensity of their precarity does not fit neatly within national borders, nor can it be mapped simply on a geographical scale. It is rather inscribed by time-sensitive geochemical maps, documenting the levels of heavy metals, plastic by-products, pesticides, teargas, or on the positive flipside, levels of oxygen, vitamins, proteins.

Critical zones are also scalable. They can be found in conditions of different scales, with lenses that capture objects of different sizes. They can be mapped not only within ecologies, but also within organisms. Similar to Latour’s proposition that the planet is more than one unified whole, and rather a heterogeneous assembly of zones, so is the body (human or other) not one, intact, contiguous unit.^[17] Annemarie Mol teaches us that the body is multiple, firstly in the way it is discussed and treated by medical practitioners but also one would argue in its material composition.^[18] The body for Mol and other feminist scholars is not a monolithic unit but rather contains an interiority that is often neglected. Disease does not occupy the whole body equally, neither does illness affect the whole mind and psychic world at once. Some organs might be in a more critical condition than others and some illnesses may create zones of precarity, connecting symptoms across vital functions, while others remain completely undisturbed. Moreover, undoing the absolute threshold of the skin as the definition of the body’s extent, and focusing on the porosity of bodies allows us to connect *zones* of bodies to *zones* of landscapes.

Each of the internal structures of a body might be more or less bound to environmental structures elsewhere. For instance, the site of conflict may be the moment where an industrial pipe leaks out to a river, or the moment that a liver might absorb the toxins resulting from this spillage. Liver and pipe are both sites of violence connected by the act of intoxication. This type of thinking follows closely Stacy Alaimo’s formulation of *trans-corporeality*. By focusing on material interconnectedness, *trans-corporeality* reframes questions of environmentalism by making it urgent and personal to human subjects. Alaimo references “the pancreas under capitalism” and the “proletarian lung”, highlighting how different organs are the receivers of violent labour structures.^[19]

This scalar understanding of political effect also demands a recalibration of the field of biopolitics. Biopolitics presupposes a body politic that governance and governmentality can be exercised upon. As a philosophical category it already utilises bordering as method and depends on both the scale of the human body as a political unit and that of the nation-state as a spatial delineation.^[20] Yet, what happens if we scramble both these categories? If we do not rely on the sovereign borders of the nation-state but start considering biopolitics within a complex understanding of transnational material flows? To think of bordering from the perspective of toxicity requires us to consider the biopolitics of the molecular. According to Nikolas Rose, “contemporary biopolitics has become molecular politics.”^[21] Rose traces the shift of pastoral care from something that is traditionally the responsibility of the state in classic biopolitical

thought to now being predominantly found within the fields of biomedicine and the healthcare industries. Although his analysis suggests that the “politics of life itself” are no longer happening on the scale of the population—or flock as he describes it—but rather on an individualised scale, molecular biopolitics may still have effects on the level of large number of bodies or populations, albeit not necessarily those fitting neatly within national borders.^[22] The constant movement of molecular matter does not respect the notional lines of a border. Molecular flow draws us together; not only as a human body politic, but rather as a political ecology. It is in this “molecular intimacy”, that Heather Davis sees a possibility of imagining a different type of commons.^[23] She argues that “the molecular offers what is radical and urgent in our engagement with ecological crisis—that there is no possibility of barricading, containing, or sealing ourselves off. We are radically open, inherently constituted by the molecular outside.”^[24]

In that framing, the molecular carries the promise of redrawing units of political subjecthood. The expanded body as the material soma of an extended political subject is co-constitutive with other non-human bodies that vary in scale: oxygen, carbon, iron, but also bacteria, microbes, dust, parts of plants and animals that may be ingested and metabolised or interfere with our bodily functions. These are not abstract material configurations but rather specific dynamic conditions that constitute the very essence of our complex being. To advocate for human rights in this posthuman formulation requires an epistemology that transverses scales and focuses on material intensities. Frontier zones or organs that manage the fluidity of matter would then become the sites of conflict that would need to be investigated in order to derive accountability for dispersed forms of environmental violence.

Positioning ourselves within the border as an epistemological standpoint, but also recognising that different scalar realities exist within these borders, requires non-anthropocentric perspectives.^[25] Simply put, we cannot analyse how human skin filters through atmospheres and nutrients with our human eyes. In order to understand the thresholds that determine which toxic substances will be allowed to flow within a body, we need to shift to a microscopic scale, adopting a vision that is more familiar to insects or microbes, to use machinic eyes and to even attempt to know beyond vision, to know by feeling acidity, pressure, electric currents. Thus, scalar thresholds not only determine the way environmental violence translates into a series of material conditions, but also the investigative tools we need to acquire to analyse this violence across a series of organs that regulate flow and that determine the conditions of liveability. This, then, is the task of engaging with the real politics of an expanded body.

Footnotes

1. Varvia, Christina. "The Space of a Body: A Working Definition". *AA Files*. No. 78. 2021. pp. 2432. ↑
2. See Braidotti, Rosi. *The Posthuman*. Cambridge: Polity Press. 2013; Mol, Annemarie. *Body Multiple: Ontology in Medical Practice*. Durham, NC/London: Duke University Press. 2003; Grosz, Elizabeth. *Volatile Bodies: Toward a Corporeal Feminism*. Bloomington, IN: Indiana University Press. 1994; Coole, Diana and Frost, Samantha. *New Materialisms: Ontology, Agency, and Politics*. Durham, NC/London: Duke University Press. 2010; Alaimo, Stacy. *Bodily Natures: Science, Environment, and the Material Self*. Bloomington /Indianapolis, IN: Indiana University Press. 2010. ↑
3. Braidotti, Rosi. "Becoming World". In *After Cosmopolitanism*. Edited by Rosi Braidotti, Patrick Hanafin and Bolette Blaagard. Abingdon: Routledge. 2013. pp. 8–27. ↑
4. Ibid. ↑
5. Deleuze, Gilles and Guatari, Félix. *Anti-Oedipus: Capitalism and Schizophrenia*. London/New York, NY: Bloomsbury. 2013. p. 19. ↑
6. Ibid. ↑
7. Braidotti, "Becoming World", p. 20. ↑
8. Haftek, Marek et al. "Evolution of Skin Barrier Science for Healthy and Compromised Skin". *Journal of drugs in dermatology: JDD*. Vol. 20. No. 4. 2021. pp. s3–s9. doi:10.36849/JDD.2021.589a. ↑
9. Nixon, Rob. *Slow Violence and the Environmentalism of the Poor*. Cambridge, MA/London: Harvard University Press. 2011. ↑
10. Butler, Judith. *The Force of Non-violence: An Ethico-Political Bind*. New York, NY/London: Verso. 2020. p. 12. ↑
11. Ibid. ↑
12. Lahoud, Adrian. "Floating Bodies". In *Forensis: The Architecture of Public Truth*. Edited by Eyal Weizman, Anselm Franke and Forensic Architecture. Berlin: Sternberg Press. 2014. p. 507. ↑
13. Tailor, Neelam and Chulani, Nikhita. "Indigenous activists on tackling the climate crisis: 'We have done more than any government'". *The Guardian*. 4 November 2021. Available at <https://www.theguardian.com/environment/video/2021/nov/04/indigenous-activists-tackling-climate-crisis-done-more-than-any-government-cop26-video> (accessed 2022-06-26). ↑
14. Stengers, Isabelle. "We Are Divided". *e-flux Journal*. No. 114. 2020. Available at <https://www.e-flux.com/journal/114/366189/we-are-divided/> (accessed 2022-06-26). ↑
15. Mezzadra, Sandro and Neilson, Brett. *Border as Method, or the Multiplication of Labor*. Durham, NC/London: Duke University Press. 2013. <https://doi.org/10.2307/j.ctv1131cvw>. ↑
16. Latour, Bruno. "Some advantages of the notion of 'Critical Zone' for Geopolitics." *Procedia Earth and Planetary Science*. No.10. 2014. pp. 3–6. ↑
17. Ibid. ↑

18. Mol. *Body Multiple*. ↑
19. Alaimo, *Bodily Natures*, p. 28. ↑
20. Lemke, Thomas. *Biopolitics: An advanced introduction*. New York, NY: New York University Press. 2011. ↑
21. Rose, Nikolas. "The Politics of Life Itself". *Theory, Culture and Society*. Vol 18. No. 6. 2001. pp. 1–30. ↑
22. Ibid. ↑
23. Davis, Heather. "Molecular Intimacy." In *Climates: Architecture and the Planetary Imaginary*. Edited by James Graham. New York, NY/Zurich: Columbia Books on Architecture and the City, The Avery Review/ Lars Müller Publishers. 2016. pp. 205–11. ↑
24. Ibid. ↑
25. Harding, Sandra. "'Strong Objectivity': A response to the new objectivity question". *Synthese*. Vol. 104. No. 3. 1995. pp. 331–49. <http://www.jstor.org/stable/20117437>. ↑