

From Peas to the Pulmonary Climate (and Back Again)

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In a Tortoiseshell: *In his paper for Anthropologies of Climate and Change, Liam Seeley argues that we can rethink our relationship to our changing climate by focusing on how it interacts with our lungs. Climate is not fully external to us, as air enters our bodies with each breath we take. Liam treats the lungs as a metaphor for the functioning of climate on a larger scale; the lungs offer a microcosm of the social and political facets of climate change. His essay has a particularly powerful **narrative**, driven by stories about how the lungs live in—and are damaged by—the world. Liam’s treatment of **narrative** is essential to his **motive, thesis, and scholarly conversation.***

Excerpt

I think often of the man who, while eating, accidentally inhaled a pea, which subsequently sprouted and grew into a plant inside of his lung.¹ Some legumbrious diagnosis. An unexpected vegetable garden. What is sensational about the insidious pulmonary pea is that it disrespects the commonly held conception of the lungs as an ‘inside-space’ of the human body. The lungs, as an interiority, are only meant for inhabitation by non-solids, for ‘air’ that the body must invite *in*—a fact we are made intimately aware of through the often self-inflicted violence of when things ‘go down the wrong pipe.’ Yet, the lungs don’t simply commune with the material ‘outside,’ whose entry upon inhalation violates the supposed ‘interior.’ The pea’s transgression is important for us because it makes visible the otherwise quotidian processes of incomplete containment, of both the constant spilling-into *and* out-of that the lungs are always performing. It is this dialectic that I am interested in. The lungs are not only an inside-space, but they also spatially implicate an ‘exteriority’ through their incessant relationship of mutual touching of those particles that so enwrap and emplace the body. They are the site where the body and the world can be turned inside-out and outside-in. This dialectical spatiality of the lungs, contained in the mimetic approaches and mutual grazes of inside/outside, is always resisting stillness and enclosure. It is through this initial pulmonary understanding that we might approach the problematic of living ‘within’ and ‘without’ a climatically changing ‘world,’ particularly when the paradigm of inside and outside is no longer functional.

Climate itself is no longer usefully conceptualized as the broadly planetary biosphere, as it lacks in politically identifiable and clear spatiality. As such, our reckoning with the processes driving ‘climate change’ must occur elsewhere. I’d suggest that this ‘elsewhere’ is, in fact, the lungs. The lungs are not the *site* where climate is sensed or otherwise apprehended, as might be traditionally understood— rather, I argue that the lungs are spatially and temporally *climate itself*. Lungs, while they certainly have a morphological existence within the body as the ‘breathing organ,’ ultimately produce, hold, and *are* the space through which all air moves. They are, at least while alive and breathing, emplaced within each human body, invisible to external gazes of mastery, belonging only to their respective diaphragm. At the same time that they resist ‘outsideness’ in their pertinent interiority, they are subsuming the ‘outside,’ touching it constantly, exchanging whatever ‘air’ is nearby in that particular moment, and responding reciprocally with their own byproducts, their own thoughts, their own potentially quickened anxieties or hopes. Lungs sigh, they cough, tighten, sing, grow cancer, or peas, give speeches and chants, they insist and impatiently wait. Lungs allow the breath to ‘breathe itself.’²

If we are ultimately concerned with ‘changing’ (toxic, burning, and withholdings-of) air, and with its variegated affects on different bodies, we must have a collectively shared space from which networks of solidarity—and the subsequent apprehension of the collective body—can emerge. Following Tim Choy’s conception of air’s subjects as ‘breathers’ (“and who is not a breather?”, he asks (Choy 146)), I’d identify this collective space of potential solidarity as the lungs. Reclaiming ‘climate’ from its original military-imperial intelligibility (Masco 2010), we will trace the lungs as the space of climate, radically pulling climate down from its diffuse planetary air in order to embody and breathe the contours of its volatile contents. I propose ‘pulmonary climate’ as a crucial political change-of-scale that helps us to avoid the imprecision of a generalized and unspecific ‘body’ that experiences climate change, pointing instead to the specific apparatus that enables both the breath and its apprehension. While the term ‘body’ generally implies a holistic sensorium capable of various attunements to its ‘outside’ climate in which it lives, a pulmonary or ‘lung-ified’ climate brings us away from hegemonic, gazing modes of vision, smell, or touch, and instead emphasizes the already in-corporated spatiality of air that we carry with us, produce, and know, productively deemphasizing the ‘wholeness’ of the body in space. It is my hope that this sort of analytical, morphological dissection is productive at identifying what is materially at stake in geographically specific, ‘changing’ airs.

Before moving on, I’d like to acknowledge that appealing to the lung as a collective space of solidarity perhaps dangerously teeters at the edge of an un-useful (anatomical) humanism

that smooths over drastically varied social topographies and different airs. I'd argue, though, that a pulmonary climate doesn't neglect these relations. Choy again helpfully reminds us that these spaces of difference are ever-crucial in the act of breathing: "gradients [...] move air through the spaces we live in *and through our bodies*" (Choy 169-170, emphasis mine). I'd extend that to be a breather necessitates that we not only 'live' in particular 'spaces,' as Choy points out, but also that we live *in* the space of our bodies— at the lungs. Thus, that the spatial assemblage of climate actually occurs at the lungs need not depoliticize or de-socialize the processes of power that the lungs in turn inhale, hold, absorb, and expel. In deconstructing the reifications at play in the outside/inside paradigm that so afflicts climate by understanding its mutual spatiality in the lungs, we don't gloss over what was once conceptually 'outside,' but, as we will later see through Povinelli (2017), lay active claim to it on our own terms, and hold responsible systems accountable.

Our first meditation into what 'lungs-as-climate' offers begins with Nicholas Shapiro's exploration of domestic formaldehyde in "Attuning to the Chemosphere" (2015). Exploring the volatility of ubiquitous chemicals within "late industrial material ecologies" (Shapiro 369), Shapiro pays particular attention to the way bodies come to understand prolonged, quotidian, domestic chemical exposures. Here toxic chemicals are geographically traced through to their removal point: "as formaldehyde vapors enter these bodies they are absorbed by the mucus membranes of the nasopharynx and lungs, bind to DNA and proteins, disrupt cellular functions, and are quickly dismantled." (Shapiro 369-370). Here, the lungs, in their absorptive intimacy with formaldehyde, come to quite literally contain the domestic space itself, this late industrial materiality—"their homes are decomposing into them as they decompose in their homes" (Shapiro 370). Shapiro goes on to explore this process as one proceeding broadly through somatic apprehension, but in locating the lungs as the actual site where climate is produced, we can recognize more explicitly that bodies don't just live *in* toxic domestic climates, but that the lungs actually *contain* toxic domestic climates. While we could certainly turn inside-out the body in any space to understand their mutually composite relationship, I again emphasize that it is important to recognize that it is the *lungs*, not simply the '*body*,' that is engaged in this enacting of climate. The lungs, as the site of absorption, enact climate *for* the body in ways highly specific to the breather, while also ontologically-implosively containing nearly *all* domestic spaces that are designed, constructed, and materialized within late capitalism.

The lungs don't just imply a *spatiality* of climate. In fact, we find that lungs absorb formaldehyde "at the *sedate speed* of chemical off-gassing and regular human breathing"

(Shapiro 379, emphasis mine), drawing attention to a different temporality at play in pulmonary climate. The morphological specificity of the lungs implies a temporality that is somatically different than one enacted through other parts of the sensorium, such as a hyper-chemically-sensitive hand (Shapiro 383), or a nose’s olfaction. Climate as understood through the lungs by necessity happens over long periods of time, involving temporalities far more directly tied to breath (life) and modes of production (social relations) than, say, a climate of touch (a momentary caress, for example), or indeed a climate of increasing global temperature measured through more disembodied and geologically-bounded variables. Although Shapiro doesn’t make it explicit, tending instead towards the ‘somatic’ label, he is effectively arguing *through* the pulmonary climate, productively arming it for us with charges of implosive spatiality and grounded temporal scale.

Having explored with Shapiro an initial spatialization and temporalization of pulmonary climate, we might now trace it in a less localized and domestic example: tear gas. Pulmonary climate finds perhaps its most obvious moment in this weaponized mode of the toxic, which serves as a mode of ‘explication’ of the ‘body’s’ vulnerabilities at first in war (Sloterdijk 33), and later on the streets of protest (Feigenbaum 2017). Despite the emphasis placed by Sloterdijk on the ‘body,’ and conversely, on the body’s “environment” in the 20th century (Sloterdijk 14), it still seems ambiguous *where* climate is to be actually found and re-phenomenalized. We do, however, receive a sort of clue: “A Canadian autopsy report on a gassing victim [...] stated: “A considerable amount of a foaming, light yellow substance streamed out of the lungs during removal” (Sloterdijk 13, citing Martinetz, *Der Gas-Krieg 1914-1918*). I’d contend against Sloterdijk that tear gas is not designed for the ‘environment’ per se, still to be ontologically left ‘outside,’ but is in fact designed for the climate that the *lungs* produce. We might now extend our apprehension of the implosive spatiality of the lungs from Shapiro’s domestic meditation—where the lungs contained, in a way, all domestic space in late industrial capitalism—to understand that the lungs contain, and indeed *are*, the environment, the whole of the ‘outdoor’ space of perpetually warring modernity, in intimate constellation with the violent logics of war, design, and terror. With tear gas, the temporality of climate is once again bounded to that of the lungs’ affect—gas clouds articulate with “concentration[s] high enough to damage the lungs and respiratory tracts *after long periods of exposure*” (Sloterdijk 10, emphasis mine). Pulmonary climate (which is to say, again, our more useful conception of climate) is always bounded on our own respiratory terms, even (and especially) when this ‘explication’ happens through violence. We discover through tear gas that the violence contained in planetary change—what we used to

index in our invocations of biospheric ‘climate’—is most effectively registered spatially and temporally *near* the breath.

I have thus far only hinted at the ways in which pulmonary (and not just somatic) climate is a politically more productive (re)definition of climate, but will now aim to be more specific. My insistence on morphological specificity lies precisely in Demos’ misidentification of climate as that which is ‘outside of’ our bodies and externally affecting us, or as that which disciplines and therefore subjectifies a radical political collective. Demos writes, “Such collective struggle is forged in the materiality of oppression, which tear gas, in its negative cast, enacts by chemically joining multiple bodies and geographies of violence, rendering diverse grievances interconnected” (Demos 16). Demos is arguing for an understanding of ‘climate change’ registered through tear gas rather than paradigmatic carbon, as the gas makes legible different relations of power enacted by petro-capital that are otherwise missed, while necessarily politicizing and em-bodying what is at stake. In other words, climate for Demos is tear gas. But what both carbon climate and tear gas climate miss is the opportunity to define struggle on our own specific terms, rather than by only that which disciplines. Making climate lung-ified allows us to move from a negative definition of justice, of ‘stop-tear-gassing-us,’ to a starting point of, as Demos invokes, “when we breathe, we breathe together” (16)—something that would be less explicit in a general appeal to bodily climate. Regardless of the ways in which petro-capital and regimes of tear gas adapt to our collective confrontation, we are through pulmonary climate always prepared to move forward as a still well-defined collective contingency, one forged not just from our shared identity as ‘breathers,’ but from our acknowledged and indeed variegated condition of being breathers *at the lungs*, our spatially and temporally grounded apparatus.

Certainly there are issues with a pulmonarily-conceived climate. Carbon and methane remain generally indescribable by the lungs except by proxy, as do those particles that don’t directly enact violence through the mucus membranes. The issues we confront with other conceptions of climate— too diffuse, not ontologically inclusive enough, or too particularized— aren’t necessarily solved in this new im/explosive Lung-space. What I hope it does usefully emphasize, however, is that climate is already part of each body, and can be claimed as such. We may not control the entirety of the ‘air,’ but we may attempt to claim this space for the collective social ‘body’ to breath air together, to complicate and construct its contained spatialities, to ground and redefine its temporalities, and to dissolve the stubborn paradigm of inside/outside that inhibits environmental thinking. After all, the lungs are always touching both. I close, then,

with Povinelli's reflections on the inescapable tension and innervation between the carnal and the elemental, a game that happens when climate is the lungs. She writes:

“It was a game we played—who could run the longest, the closest, to the nozzle spewing the pesticides in great clouds? The trick was not to breathe. To run at full speed without breathing, then to quickly veer away from the cloud *when your lungs gave out* and your heart began to explode. [...] These fires, fogs, and winds were a part of us. They were elemental to what we were because they were the elements that composed us.” (Povinelli 505).

If lungs are climate, they need not always partake of pristine air to be alive, though some lungs certainly do more than others, due to violent geographies, state and police violence, regimes of extraction, and global capital. Pulmonary climate doesn't obfuscate this. By claiming the lungs through our collective social body, collectives may effectively claim *all* that touches and is touched by them— claiming intimacies and desires with the toxic, getting closer to the damages while also staking the space that is close to us. Occupation of the parks and streets of inside and outside becomes the pertinent political strategy in order to breathe. We can thereafter think through the lungs, holding memory *and* future burnings, building homes on tiny aeolian grounds—just as how some plants and microorganisms find formaldehyde a “source of life-sustaining carbon” (Shapiro 369). The lungs are a wonderful, *inspiring* site of engagement to re-politicize climate, as it spills out and in of ourselves. We may perhaps find, then, that the pea has always been planting its fruitful garden in this pandemic, pulmonary climate.

Notes:

(1) “Pea Plant Grows inside Man's Lung,” *BBC News*, August 11, 2010, sec. US & Canada, <https://www.bbc.com/news/world-us-canada-10945050>. While the lungs remain an underdeveloped site for potential pea monoculture by ‘pesto-capital’ (Povinelli 509), they ground that insistent respiratory service which steadily provides for large mammalian lives.

(2) This phrase comes from the teachings of *ānāpānasati*—the Pali word for ‘mindfulness with in-breaths and out-breaths’— practiced within Thai Buddhist tradition. My exposure to this emerges from the teachings of Santikaro Bhikku, who translated the teachings of the Venerable Ajahn Buddhādāsa, and who guides meditation for the Princeton community in partnership with the Office of Religious Life. See Buddhādāsa Bhikku, *Mindfulness With Breathing: A*

Manual for Serious Beginners, trans. Santikaro Bhikku (Somerville MA: Wisdom Publications, 1997).

Author Commentary

Liam Seeley

I composed this piece as a midterm essay for Prof. Jerry Zee’s *Anthropologies of Climate and Change* in Fall of 2021. At that point—a few weeks into the first in-person semester in over a year, whose first day culminated in a literal tornado— the contents of ‘climate’ and ‘change’ were certainly on the mind.

The still ongoing covid-19 pandemic, an emergency that articulates itself through a social-respiratory register, certainly isn’t the first moment in which a ‘pulmonary politics’ presents itself. Centuries of anti-Black violence have rendered the respiratory the site of a pervasive and embodied dispossession that is foundational to the construction of colonial-capitalist modernity. Garner, then Floyd, and the mobilizations of 2020 have articulated as much.

And so the pandemic flashes simultaneously into the present breath with a history, and with an immense and disproportionate grief. Prof. Rita Segato has called the pandemic a “big scanner” that reveals the “tension points in the cracks of the present,” —a present of perpetual dispossession and loss of meaning. This is, I’d argue, knowable from the lungs. The imperative of speaking of and from a pulmonary epistemology, of knowing from the breath, is betrayed in the smallest of ways by the fog on our glasses when, in a tiny act of care, we step inside with our masks on. When I wrote of a pulmonary politics, all this was inevitably on my mind. And so the cultural-political narrative informed the written technology of narrative, and asked: in our variegated condition of respiratory unwellness, in the explicit logics of a ‘*diaphragmented*’ reality, what might it look like to breathe collectively?

Narrative is our search for articulating a politics in-the-making; it is a scalable mobilization of language towards the making-explicit of the world, towards the re-presentation of present but often obfuscated phenomenon. Here, the push of narrative is towards some re-knowing of the breath, or of the seeping violence of formaldehyde, a sensuous reorganization that at a different scale reveals a larger political-organizational imperative. But perhaps this appears to be a highly discipline-specific move. That is, certainly not all writing can participate in the technologies of cultural anthropology. Indeed, as a student of ‘language and cultural studies,’ I am lucky enough to find myself reading and citing pieces that actively acknowledge their participation in the world as vehicles for meaning-generation and ‘the political.’ For other fields—those in which ‘the political’ is disavowed or rendered invisible—perhaps narrative is

cordoned off and demobilized as the mere ‘storytelling.’ But every piece we craft is engaged in deep stories, and so too inherently their political contents. It is our job so long as we are communicating to understand our normative commitments, and to give language to them. For me, in this piece, narrative lies latent in the tiny cosmos of an invented and intimate lexicon of lungs.

Narrative is therefore a *cosmo*-political act, and one we mustn’t bear lightly. It is my hope that this piece, selected for ‘narrative,’ at the bare minimum conforms to this responsibility as I’ve outlined it. Perhaps it is what makes it successful, or so I’ve been told. Regardless of discipline, in writing and in being, we are all students of clouds, social power, sunrises, community, and respiration. To recognize as much whilst in Academia can be a profoundly humanizing and indeed necessary step in our writing, and perhaps towards our collective-beings.

Editor Commentary

Frances Mangina

When I read Liam’s essay, my first thought was that it was a wonderful piece of storytelling. The stories that he references—a pea flourishing inside a lung, the insidious effects of formaldehyde and tear gas upon the human body—remained in my mind long after I had finished reading. Why, exactly? Perhaps due to the level of detail, or the poetic asides (“some legumbrious diagnosis. An unexpected vegetable garden”), or simply my discomfort at imagining the boundaries of the body violated by foreign substances. If all I gleaned from a traditional academic paper was a compelling story, I would be unsatisfied and wonder whether the author had a **motive**, **argument**, and **scholarly conversation**. However, I soon realized that Liam had achieved these elements of the lexicon *through narrative*.

Take, for example, Liam’s **motive** and **thesis**. A traditional paper might have an **in-text**, **scholarly**, or **global motive**. Generally, this involves beginning with **evidence** (such as a written text, scientific data, or an academic theory) and then locating some puzzle, question, gap, or disagreement. For his **motive**, however, Liam begins not with traditional **evidence**, but rather with the story of the pea. He argues that the pea commits a “transgression” by countering the common assumption that our lungs are interior spaces sealed off from the outside world. Liam’s **motive** might be rephrased as follows: *our current stories about the place of the human body in our changing climate are insufficient*. His **thesis** responds to his **motive** by positing a new **narrative** about climate and the body inspired by the transgressive pea: *“the lungs are not the site where climate is sensed or otherwise apprehended, as might be traditionally understood—rather...the lungs are spatially and temporally climate itself.”* Finally, Liam engages with other scholars by critiquing and building on the **narratives** that they tell about climate. He draws stories from his scholarly sources and then reworks these stories to be more politically productive.

I was particularly struck by Liam’s use of scale and metaphor in the service of **narrative**. If we removed the metaphor of lungs as climate, the essay would lose its force. It would be making very abstract points about how we should approach climate: as something both external and internal to the body, something over which we have collective agency. While reading such an essay, I would nod along in agreement, and then promptly forget the entire **argument**. In contrast, Liam does not allow readers to forget, because he fashions a metaphor on an immediately perceptible scale. His **argument** is that political issues can be observed in

microcosm with every breath we take: “lungs sigh, they cough, tighten, sing, grow cancer, or peas, give speeches and chants, they insist and impatiently wait.” Liam therefore invites us to tackle climate change in our day-to-day life, rather than merely in an academic setting.

Narrative and academic **argumentation** are by no means mutually exclusive. In fact, **motive, thesis, and scholarly conversation** can be driven by **narrative**. Most importantly, weaving stories into your academic work will encourage readers to engage directly with your **argument** and apply it to their daily lives. The next time you write anything—no matter what the genre or who the audience—ask yourself how your **argument** might change the way somebody navigates the world, and try to bring this new point of view to life through storytelling.

Works Cited

- Bhikku, Buddhādāsa. *Mindfulness With Breathing: A Manual for Serious Beginners*. Translated by Santikaro Bhikku. Somerville MA: Wisdom Publications, 1997.
- Choy, Timothy K. “Air’s Substantiations.” *Ecologies of Comparison : An Ethnography of Endangerment in Hong Kong*, Durham [N.C.]: Duke University Press, 2011.
- Demos, T.J. “Climate Control: From Emergency to Emergence.” *e-flux Journal*, 2019.
<https://www.e-flux.com/journal/104/299286/climate-control-from-emergency-to-emergence/>.
- Feigenbaum, Anna. *Tear Gas : From the Battlefields of World War I to the Streets of Today*. New York: Verso, 2017.
- Masco, Joseph. “Bad Weather: On Planetary Crisis.” *Social Studies of Science*, vol. 40, no. 1, SAGE Publications Ltd, Feb. 2010, pp. 7–40. *SAGE Journals*,
<https://doi.org/10.1177/0306312709341598>.
- “Pea Plant Grows inside Man’s Lung.” *BBC News*, 11 Aug. 2010. www.bbc.com,
<https://www.bbc.com/news/world-us-canada-10945050>.
- Povinelli, Elizabeth A. “Fires, Fogs, Winds.” *Cultural Anthropology*, vol. 32, no. 4, Nov. 2017, pp. 504–13. *DOI.org (Crossref)*, <https://doi.org/10.14506/ca32.4.03>.
- Shapiro, Nicholas. “Attuning to the Chemosphere: Domestic Formaldehyde, Bodily Reasoning, and the Chemical Sublime.” *Cultural Anthropology*, vol. 30, no. 3, Aug. 2015, pp. 368–93. *DOI.org (Crossref)*, <https://doi.org/10.14506/ca30.3.02>.
- Sloterdijk, Peter. *Terror from the Air*. Cambridge, Mass: Distributed by the MIT Press, 2009.

Bios

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