

The Air Conditions of Philosophy of Education: Toward a Microsphereology of the Classroom

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INTRODUCTION

Educational theory — and critical educational literature more generally — has demonstrated an increased interest in the role of space in philosophy and education.¹ This follows a broader spatial turn in social science that has been galvanized by theorizations and processes of globalization, advances in critical geography, and more nuanced conceptions of the production of space. Interestingly, however, the subject of air has largely been absent from these theorizations in education and in the social sciences — at least in explicit formulations. This is surprising because air is such a fundamental element of life and thought, of speech and sound. It is that which, by filling space, makes space inhabitable. In this essay, I want to argue that philosophy of education should begin taking air and atmospheric conditions of the classroom and the globe into consideration. The entry point for this project is the recent work of Peter Sloterdijk, in which Sloterdijk has constructed a grand narrative of spatial ontologies. While Sloterdijk forefronts the constitutive role of space and common air, his analysis leaves open several questions about how air conditions subjects and spaces. To answer some of these questions, and to gesture toward some components of a microsphereology of the classroom, I turn to Luce Irigaray, Marshall Berman, and Teresa Brennan.

BEING IN SPHERES

The mention of grand narratives may no doubt cause some to squirm or sneer, and Sloterdijk has some sympathy for this position. The construction of grand narratives has historically been complicit in colonialist projects and Eurocentric frameworks, and they have likewise reproduced myriad forms of unjust and exploitative power relations. Sloterdijk agrees with this diagnosis, yet he holds that instead of rejecting grand narratives, we should push them further and make them even more grand. “The wretchedness of the conventional forms of grand narrative,” he writes, “by no means lies in the fact that they were too great, but that they were not great enough.”² Beginning with volume one of *Spheres*, Sloterdijk has been working to produce a grand spatio-ontological narrative that is both philosophical and historical. The impetus for this project is based on a reading of Martin Heidegger’s *Being and Time*, in particular Heidegger’s notion of *Dasein*, or Being. The *Spheres* project can, as Sloterdijk says, “be understood as an attempt to recover — in one substantial aspect, at least — the project wedged subthematically into Heidegger’s early work, namely *Being and Space*, from its state of entombment.”³ *Dasein* is, more specifically than being, *being-in-the-world*, and Sloterdijk works to investigate the *in* of this *being-in-the-world*. For, while Heidegger ultimately subordinates spatiality to temporality, Sloterdijk believes that being is primarily spatial and wants to ask, what is it that humans are *in* when they are in the world? It is this question that leads to

his sphereological study of globalization and history; being-in-the-world is always being-in-some-spherical-form.

One of the key aspects of being-in-spheres is that spheres provide protection. They are in essence immunological systems in which people cohabit:

for humans, being-in-spheres constitutes the basic relationship — admittedly, one that is infringed upon from the start by the non-interior world, and must perpetually assert itself against the provocation of the outside, restore itself and increase. In this sense, spheres are by definition also morpho-immunological constructs. Only in immune structures that form interiors can humans continue their generational processes and advance their individuations. (B, 46)

We are never just there; we are always contained in something, and we are always constructing interiors in which to contain ourselves and/with others. This is the primal situation, one that begins in the most intimate of spheres: the womb. In the uterine sphere, one resides with one's mother and one's double, or placenta. When one is born and "the cord is cut," one leaves this bubble and enters into a larger sphere, or series of spheres: hospitals, nurseries, houses, schools, and so on.

Yet to characterize spheres as a list of interiors is to present them as things when they are in fact processes. Spheres are most importantly constructions that both allow for and are the products of cosubjects. We can think of spheres as a pneumatic common in which we are particular kinds of subjects, ourselves only by virtue of the shared interior and others. Sloterdijk wants to theorize this "ecstatic entwinement of the subject in the shared interior, where those who actually live together wear one another out" (B, 87).⁴ A sphere, that is, is a space that "is containing, in so far as it absorbs and grasps other subjective elements, and contained, in so far as it is encompassed and devoured by the circumspections and arrangements of others" (B, 87–88). In the pneumatic common, we are radically impacted by others, literally *containing* them and their actions.

At the end of *Bubbles*, Sloterdijk calls on the concept *perichoresis* to explicate this radical relationality at the heart of his spatial ontology. *Perichoresis* is a theological concept used to describe the relationship between the Holy Trinity of the Father, Son, and Holy Ghost. In this nonhierarchical triunity, each element exists only in relationship to the others, and none is prior or primary. Each element is only created by and through the relationship with the others. Moving *perichoresis* out of theology, Sloterdijk brings to bear the fact that "places of co-subjectivity or co-existence or solidarity — are not things that simply exist in the external space. They only come about as sites of activity of persons living together *a priori* or in a *strong relationship*" (B, 607). Because of the constitutive primacy of relationality, we are not always aware of our relations to others. In fact, "one could say that they are as invisible as air to one another — but an air in which they lie for one another; each one inhales and exhales what the others are — the perfect conspiracy" (B, 607). Thus, being-in-spheres is always a being-*with*-in-spheres.

There are different scales of being-with-in-spheres: bubbles, orbs, and foam. Bubbles are intimate "microspheres," which are composed of at least two, but ideally more. These spherical relations are formative of the subject and the social in literal and temporal terms. Thus, Sloterdijk focuses heavily on birth in *Bubbles*: on

the womb as a bubble, the placenta as the primal companion in the bubble, and so on. While these are primary, they are not permanent: bubbles “live towards their bursting” (B, 64). Bubbles, in other words, are transitory and are constantly being cocreated. An example of bubbles that are in constant cocreation are interfacial bubbles, or bubbles that are formed through the facial encounter. The face points outward to others. Indeed, “one can say that humans have faces not for themselves, but for the others” (B, 192). Part of this has to do with the fact that the centrality of the mirror in Western society is a relatively recent phenomenon. The primary meaning, however, has to do with the fact that when I encounter another, I see the other’s face and not my own. The only glimpse I have into my own face is through my reading of their facial response. This is what Sloterdijk calls our “species-wide interfacial greenhouse effect” (B, 169) (and those who are blind appear not to be included in the human species, for Sloterdijk). We can also see *perichoresis* working in the interfacial encounter, for the face comes into being qua face in and through the exchange; prior to the encounter, the face is only open toward the possibility of encounter. Bubbles are only one form that the subject and, by immediate interconnection, the social takes. The spherical form of the bubble cannot be elevated “to the norm or the central icon for large communities,” and any attempt to do so necessarily fails and “the non-integrable face the threat of elimination” (B, 616). The world will not fit into one big bubble, although this is one way to read the (various) European universal project(s) of modernity.

Conceptualizing the space of the classroom as a microsphere is helpful because it turns our attention toward the productive and active roles that space and air play in the educational encounter. The classroom is a transitory sphere, one that enables and is sustained by the encounter. The classroom provides immunological protection from the outside at the same time as it lives toward its bursting and absorption into that outside. Year after year, multiple bubbles are created in the same absolute space of the classroom as different bodies occupy them and as social transformations take place within the school and society. Sloterdijk’s work on spheres, however, in its invocation of air as a metaphor, remains somewhat abstract. How is it that, as the interior of the classroom contains us, we also contain others? What is the relationship between the outside and the interior? Why is air such a fundamental aspect of the bubble of the classroom? What precisely is the role of air in constituting the subjects-in-spheres?

TOWARD A MICROSPHEREOLOGY OF THE CLASSROOM

Sloterdijk’s spatial ontology, I believe, is a key building block for a microsphereology of education. It asserts the importance of air conditions by insisting on the ever-present interior. Yet, while the importance of atmospheric conditions is foregrounded, the way that the air *conditions* the subjects and spaces of education is not specifically considered. This is what I would like to do in the rest of this essay. I want to gesture toward how philosophy of education might begin to think seriously about the way that air *conditions* education and educational spheres by briefly weaving together a few disparate theories of the atmosphere. I argue here that the air is something that (1) is a foundational element of life and thought,

(2) incorporates social change and presses in on us, and (3) communicates our affective states in the classroom. This investigation also helps us think more concretely about the air conditions that Sloterdijk intimates.

Luce Irigaray helps us recognize the importance of the element of air. Irigaray posits that air as not only an envelope that contains and protects, but also a *constituting* and *enabling* materiality. Her book, *The Forgetting of the Air in Martin Heidegger*, is framed as a critique of Heidegger's insistence on the ground as the base or foundation of Being and beings, as that which enables thought. Irigaray accuses Heidegger of forgetting a range of elements, most notably — and importantly — air:

But light comes about only in virtue of the transparent levity of air. Light presupposes air. No sun without air to welcome and transmit its rays. No speech without air to convey it. Day and night, voice and silence, appear and disappear in air. The extent of space, the horizons of time, and all that becomes present and absent within them are to be found gathered together in air as in some fundamental thing.⁵

Further, air plays a central role in organizing, or at least allowing for, encounters. Air, that is, “unfolds indefinitely and gathers all things together, relating them one to another and each to each” (*B*, 40).

Yet air for Irigaray both represents itself and comes to stand in for the feminine, maternal, and nature; Heidegger not only forgets air but also forgets she who first gives air as “fluid matter carried by the blood she gives” (*B*, 28), a gift that can never be paid back. Thus, the accusation is really that Heidegger forgets the sexual difference that founds Being and thought. There are a range of interpretations of this move: for example, Anne van Leeuwen argues that *forgetting* in the text is far more important than air, the maternal, or nature, while Ann Murphy claims that these different elements can be seen as being differently othered.⁶ I will put these debates to the side and instead focus on air as air, as a material necessity for life.

Debates on metaphysics, deconstruction, and poststructuralism have all revolved around the ability, or inability, to “ground” thought and the subject. By conceiving of air as constitutive of life, Irigaray posits air as a groundless element that legitimates thought. Indeed, thinking about air in this way allows for a materialism that is fluid, dynamic, open to change, alterity, and opacity. For air is a material necessity that sustains life, and Irigaray repeatedly emphasizes this; it has a chemical composition. We can trace it and the networks it cocreates. Yet as a groundless element, air constantly eludes us in several ways. This is what Irigaray emphasizes throughout her text:

But this element, irreducibly constitutive of the whole, compels neither the faculty of perception nor that of knowledge to recognize it. Always there, it allows itself to be forgotten. (*FA*, 8)

Air never appears. It gives itself and is received without demonstration. (*FA*, 48)

The being never enters into presence in the same air.... nothing ever occurs in the same place, that in each instant man changes his air, that he disappears-reappears all the time, that his becoming obliterates, and, moreover, corrupts, the air where he takes pace, the air thanks to which he entered into presence. (*FA*, 163)

Irigaray insists that air eludes us and is, at least to some extent, unrepresentable; it is both the “still silent space of speech” (*FA*, 73) and that which is breathed prior to speech. We can see in these quotes that Irigaray does naturalize air. She takes air

for granted as always-already there and never having to be produced. There are certainly times when air has not been there, when it has been withheld and sucked out, such as in a chemical weapons attack or in Boyle's air pump. Thus, while Irigaray helps us think about the role that air plays as a foundational element of thought and life, we have to turn elsewhere for the way that political economy and history are literally in the air.

Marshall Berman helps us understand the way that air literally and figuratively encompasses all sorts of social transformations. For Berman, air provides a figure for understanding modernity in all of its richness and contradictions, its promise and peril. Berman puts forward *The Communist Manifesto* as "the first great modernist work of art."⁷ Key to both his reading of Marx and his conception of modernity is this moment that occurs early in the manifesto:

The bourgeoisie cannot exist without constantly revolutionising the instruments of production, and thereby the relations of production, and with them the whole relations of society.... Constant revolutionising of production, uninterrupted disturbance of all social conditions, everlasting uncertainty and agitation distinguish the bourgeois epoch from all earlier ones. All fixed, fast-frozen relations, with their train of ancient and venerable prejudices and opinions, are swept away, all new-formed ones become antiquated before they can ossify. All that is solid melts into air, all that is holy is profaned, and man is at last compelled to face with sober senses, his real conditions of life, and his relations with his kind.⁸

From this admiration of the bourgeois mode of production, Berman extracts a "melting" vision, or a dialectic that, he argues, "pulls like an undertow against the more 'solid' Marxian visions we know so well" (*MA*, 89).

What fascinates Marx is not so much the actual commodities that the capitalist creates (he dismisses this as the "work of history" in the first paragraph of *Capital*), but rather "the processes, the powers, the expressions of human life and energy: men working, moving, cultivating, communicating, organizing and reorganizing nature and themselves — the new and endlessly renewed modes of activity that the bourgeoisie brings into being" (*MA*, 93). This constant revolutionizing affects not just the modes of production but also social relations. As Berman notes, "In order for people, whatever their class, to survive in modern societies, their personalities must take on the fluid and open form of this society" (*MA*, 95). It is this openness that can breed revolutionary potential, for if people are used to, and desire, constant change, then how can they be expected to endlessly conform to the roles assigned to them by bourgeois society? The normative good life for Marx, then, is not about perfection, but "a process of continual, restless, open-ended, unbounded growth" (*MA*, 98).

While this melting vision of Marxism — a Marxism of endless development — is opposed to the congealed forms of Marxism, Berman also identifies a contradiction between melting and fixed capitalism, for the same capitalism that melts all that is solid into air and demands permanent uprootings and rerootings has to present itself as stable, lest it allow its own rule to be challenged. Marx anticipated that the crises wrought by capitalist production and destruction would result in it melting into air, but Berman, with a good 100 years on Marx, sees it differently: "Given the bourgeois capacity to make destruction and chaos pay, there is no apparent reason why these crises can't spiral on endlessly, smashing people, families, corporations,

towns, but leaving the structures of bourgeois social life and power intact” (*MA*, 103). Berman also thinks that Marx’s vision of the proletariat and its prospects for revolution can be too solid. The most interesting example is Marx’s celebration of the creation of workers’ communities and associations that result from industrialization and the division of labor. Berman contends that, while this was true, “might not these collectivities turn out to be, like everything else here, only temporary, provisional, built for obsolescence?” (*BA*, 104). Still, there is hope: “and yet, in spite of it all, thrown together by the same forces that pull us apart, dimly aware of all we might be together, ready to stretch ourselves to grasp new human possibilities, to develop identities and mutual bonds that can help us hold together as the fierce modern air blows hot and cold through us all” (*BA*, 129).

This hot and cold air stands as a figure for endless change and revolution, for the overthrowing of productive forces, identities, forms of community, and other social relations. What happens if we consider air as an actually existing phenomenon, and not just as a paradigm, or a metaphor for change and annihilation? For how much Berman relies on air in this book, he leaves air itself relatively untouched, untheorized. If all that is solid melts into air, then where exactly does the air go? It does not disappear, and one of Marx’s quotes that Berman draws on in the introduction to *All That Is Solid Melts into Air* makes this clear. Marx here is speaking at the fourth anniversary of the *People’s Paper* in London in 1856: “But, although the atmosphere in which we live, weighs upon every one with a 20,000 lb. force, do you feel it?” (*MA*, 19). Berman stops here, but Marx continues: “No more than European society before 1848 felt the revolutionary atmosphere enveloping and pressing it from all sides.”⁹ Air, in other words, is not annihilation; it is something that envelopes and presses in on us. When capital insists on melting the present into air, it remains. Air pollution is a common example, one that impacts urban classrooms in particular. For example, a recent study found that different socioeconomic groups are exposed to different levels of nitrogen dioxide, an atmospheric toxin generated from the combustion process in vehicles and power plants.¹⁰ Factors such as race, class, age, and education level all affect the degree to which one is exposed to polluted air. This inequality is likely tied to the spatial expressions of racism and capitalism. But it points to one — negative — way that the history and political economy condition classroom air. Thus, Berman and Marx provide an angle from which to understand the relationship between the interior and exterior of the classroom bubble.

A third component of a microspherology of the classroom concerns the role of air in communicating affective states. To flesh this out, I turn to Teresa Brennan’s book, *The Transmission of Affect*. In this book, Brennan is concerned with how affects circulate and how they are transmitted. This is what “atmosphere” and “environment” generally denote in this book: the presence of affects. Thus, when Brennan asks in the book’s opening sentence, “Is there anyone who has not, at least once, walked into a room and ‘felt the atmosphere’?”¹¹ she is inquiring into the phenomenon of how one can unconsciously and unknowingly feel others’ feelings. In order to engage this inquiry Brennan turns to psychoanalytic and psychiatric theory and practice, theology, and scientific studies of chemical communication and entrainment. One

of the central premises of this book is that one does not only “feel” an affect/atmosphere; the affect/atmosphere actually *enters* the person. The idea here is that social interactions actually alter biology: “My affect, if it comes across to you, alters your anatomical makeup for good or ill” (TA, 74).

Air, as Irigaray noted, is the substance that carries the sights, sounds, and, most importantly for Brennan, smells by which affects are communicated and invade the body. In literature that has explicitly or implicitly addressed the transmission of affect, sight and sound have featured most prevalently. Yet Brennan insists that this implies a different operation than transmission: mimesis. The idea is that when one hears or sees something, one then becomes or acts like that person and, as such, “our boundaries stay intact” (TA, 10). Smell, by contrast, literally enters into the body through the nose or mouth; “Smell and various forms of neuronal communication are not such respecters of persons” (TA 10). As one paradigmatic example, Brennan turns to pheromones, which are faint excreted chemicals directed toward others that communicate various things like fear, excitement, or anxiety to others of the same species (pheromones are thus distinguished from hormones in that the latter act as *internal* communicators and the former are *external* communicators). These “act as direction-givers which, as molecules, traverse the physical space between one subject and another, and factor in or determine the direction taken by the subject who inhales or absorbs them” (TA, 75). Brennan’s utilization of pheromones to make this argument supports Sloterdijk’s conception of the breathed commune, in which we are “hollowed out” (B, 93) as subjects through inhalation.

The idea that the subject is invaded or traversed by others is one of the key arguments that Brennan makes. Brennan gives the example of walking into a room filled with the affect of anxiety. Upon entering this room, she breathes this anxiety in: “Something is taken in that was not present, at the very least not consciously present, before” (TA, 68). Through the breathing-in of affects, others and the social enter into one’s blood and one’s makeup (TA, 139). Turning to linguistics, Brennan writes of the Spanish sentence, *Lo siento*, which means both “I feel it” and “I’m sorry,” and the French verb, *sentir*, which means “to smell.” This may demonstrate, she claims “either that because we once knew that we felt the other’s feeling by smell or because the body knows it still and seeks the word that will best describe its operations” (TA, 149).

In visiting the history of the clinic, Brennan concludes that analysts have historically been acutely aware of the transmission of affect. She quotes Christopher Bollas’s reflections: “Or a patient may be so overwhelming, my anxiety so high, that *I am more a creature of my respiratory system*” (TA, 28, emphasis added). In linking his reception of affects to the respiratory system, Bollas is highlighting the central role that air plays in their circulation, linking the inhalation of the air to being taken hold of by others.

CONCLUSION

Sloterdijk’s spatial ontology — his sphereological investigation into being — helps us grasp the centrality of interiority in the encounter with others, and the importance of air conditions for being-in-spheres. In these spheres that contain us

we also contain others. By turning to Irigaray, Berman, Marx, and Brennan, we can think more precisely about what it is that we inhale and how it is that we exist in the breathed commune. We breathe in the affects of others, their pheromones and bodily compartments. The air that enters the sphere is drawn from the outside, from history and political economy, which presses in on us. This act of in-halation, which is repeated on average 20,000 times a day, is sustaining and primary. Through this act the social enters into our bloodstream, circulating through our bodies. The only way to stop being a container would be, as Brennan writes, “through a process of complete exsanguination” (*TA*, 139), and, therefore, death.

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1. See, for example, Robin Usher, “Putting Space Back on the Map: Globalisation, Place, and Identity,” *Educational Philosophy and Theory* 34, no. 1 (2002): 41–55; Kalervo N. Gulson and Colin Symes, “Knowing One’s Place: Space, Theory, Education,” *Critical Studies in Education* 48, no. 1 (2007): 97–110; Claudia Ruitenberg, “Deconstructing the Experience of the Local: Toward a Radical Pedagogy of Place,” in *Philosophy of Education 2005*, ed. Ken Howe (Urbana, IL: Philosophy of Education Society, 2005): 212–220; Derek R. Ford, “Toward a Theory of the Educational Encounter: Gert Biesta’s Educational Theory and the Right to the City,” *Critical Studies in Education* 54, no. 3 (2013): 299–310.
 2. Peter Sloterdijk, *The World Interior of Capital*, trans. Wieland Hoban (Cambridge: Polity Press, 2013), 5.
 3. Peter Sloterdijk, *Spheres I: Bubbles: Microspherology*, trans. Weiland Hoban (Los Angeles: Semiotext(e), 2013), 342. This work will be cited in the text as *B* for all subsequent references.
 4. For more on the “pneumatic common,” see Derek R. Ford, “The Pneumatic Common: Learning in, with and from the Air,” *Educational Philosophy and Theory* 47, no. 13/14 (December 2015): 1405–1418.
 5. Luce Irigaray, *The Forgetting of the Air in Martin Heidegger*, trans. Mary Beth Mader (Austin: University of Texas Press, 1999), 166–167. This work will be cited in the text as *FA* for all subsequent references.
 6. Ann V. Murphy, “The Enigma of the Natural in Luce Irigaray,” *Philosophy Today* 45, no. 5 (2001): 75–81; Ann van Leeuwen, “An Examination of Irigaray’s Commitment to Transcendental Phenomenology in *The Forgetting of the Air* and *The Way of Love*,” *Hypatia* 28, no. 3 (2013): 452–468.
 7. Marshall Berman, *All That is Solid Melts into Air: The Experience of Modernity* (New York: Penguin, 1988), 102. This work will be cited in the text as *MA* for all subsequent references.
 8. Karl Marx and Frederick Engels, “Manifesto of the Communist Party,” in ed. Robert Tucker, *The Marx-Engels Reader* (New York: W.W. Norton, 1978), 466.
 9. Karl Marx, “Speech at the Anniversary of the People’s Paper,” in ed. Robert Tucker, *The Marx-Engels Reader* (New York: W.W. Norton, 1978), 577.
 10. Lara P. Clark, Dylan B. Millet, and Julian D. Marshall, “National Patterns in Environmental Injustice and Inequality: Outdoor NO₂ Air Pollution in the United States,” *PLoS ONE* 9, no. 4 (2014): 1–8.
 11. Teresa Brennan, *The Transmission of Affect* (Ithaca, NY: Cornell University Press, 2004), 1. This work will be cited in the text as *TA* for all subsequent references.