

Emplaced care and atmospheric politics in unbreathable worlds

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journals.sagepub.com/home/epc**Alison Kenner**

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Abstract

This paper contributes to emerging theories of unbreathable space by showing how breathers with asthma engage environments and atmospheres as the *substrate* of their everyday lives. Drawing on in-depth interviews with more than 80 asthma sufferers living in the United States, I show how nonpharmaceutical care practices are used to breathe in place. First, I argue that attunement operates as a labor of care that engages with and creates the substrate of everyday life. Next, I describe a range of emplacement tactics that breathers use to navigate atmospheres and environments that are potentially risky, or that immediately produce asthma symptoms. Emplaced care involves situating oneself in ways that protect the breathing body within the sociomaterial spaces of everyday life. Finally, people with asthma are orientated differently than other breathers who may share the same atmosphere, but are not pathologically sensitized to it. These narratives of asthma care lend insight into emergent atmospheric politics by showing how differently attuned breathers care through environments by isolating, distancing, and barricading themselves from the world and others.

Keywords

Asthma, care, sensory politics, emplacement, atmospheres, attunement

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Close your eyes. I want you to imagine that you are with a friend, and you are going to a friend of your friend's house. You don't know the once removed friend, but when you arrive

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and come inside from the wooden porch – a sweeping porch that wraps an old Victorian home that has been broken into a multi-unit living space – everything inside is warm and cozy. There are maybe a dozen people between the entry way, the living room, the dining room, and hallway extending back towards the kitchen. There is talking and drinking and eating. The scene is relaxed, but playful.

You sit down on a couch with your friend, who introduces you to two people. One of them is quite attractive, and you are very happy you decided to come out with your friend this evening. A minute or two passes as you listen to your friend and new acquaintances talk about a band that's playing later. That's when it starts. You feel it creep from deep within your chest, starting from the center and moving out. It's a heaviness that weighs on your lungs. You know this feeling all too well.

You look down at the couch, then to the floor, and onto the coffee table in front of you. You see nothing. The lighting is dim in the lamp lit room—hair could be missed depending on the animal—but you don't need to see it to know it's there: you can feel it in your lungs.

You open your mouth to take a breath and before the air hits the tip of your tongue you feel that your throat has narrowed, just slightly, as you try to pull in a breath. It's not yet audible enough for the person next to you to hear your wheezing. Your friend is, of course, oblivious to your situation. They are very preoccupied by what appears to be a mutual attraction. They are not going to leave the party without a serious intervention, you tell yourself. You need to find a window to buy yourself some time. There is one behind you. You push it open, trying to act nonchalant so as to not attract too much attention. You sit back down, a bit closer to the window now. Your friend turns and asks you an inaudible question. You're distracted, listening to your wheeze and feeling the tightness in your chest, which is getting progressively worse. You can't remember the last time an asthma attack hit you so fast, with this much instant force.

You do not have your rescue inhaler with you. It's in your bag, at your friend's apartment, a 10-minute drive from here. You rarely need it these days. Packing it is more habit than intention. You need it now though. This is not an attack, not a situation, that you can just breathe through. You're going to need medication.

You still can't tell if it's a cat or a dog that's triggered the attack. You continue to look around for signs, as your wheeze becomes audible. You would have seen a dog, unless your friend's friend put it outside, but that would be strange in the middle of winter. There aren't any overwhelming smells either. No perfumes, or chemicals. It doesn't smell moldy or dusty. It must be an animal.

The room is getting crowded as more people show up. It's becoming quite the party. You lean into your friend and tell them you need to get out of here. They look at you as if you're crazy. "Seriously?" they ask, "We just got here." You tell them you're having an asthma attack and it's bad. "Relax. Just give me a half hour."

You get up and walk towards the door. Five minutes, you tell yourself, looking at your phone. Five minutes on the porch and if you still can't breathe, you're yanking your friend out of here. That's when you see it. It hops in short, rhythmic strides, out from the dining room table coming towards you in the middle of the living room: A large white rabbit.

* * * * *

By the time Greg and his friend left the party, Greg was unsure if he should have his friend drive him to his inhaler or the hospital. The decision was made to drive to the inhaler and everything worked out in the end, but it could have been otherwise. Greg had not visited the emergency department for asthma since childhood, but for many Americans, hospitals are a mainstay of asthma care. In 2013, for example, more than 1.7 million people used U.S.

emergency departments to control an asthma attack and nearly 440,000 were hospitalized because of the disease (Centers for Disease Control, 2015). Children and low-income asthma sufferers disproportionately use the emergency department to treat attacks, a dynamic that public health researchers attribute to poor access to preventative care and asthma medication (Meng et al., 2006), as well as greater exposure to environmental triggers (Brown et al., 2003; Wright, 2006). Sometimes an attack is misjudged, or the breather does not make it to medication or the emergency department in enough time. Asthma attacks still kill people at a rate of more than 3000 Americans a year (Murphy et al., 2017). Oddly, public health statistics such as these can easily obscure the low-level, mundane experiences of disordered breathing that happen each day, normalized to some extent by tacit care practices (Kenner, 2018; Mol, 2008). This is part of what makes asthma so terrifying: symptoms of disordered breathing that may normally be manageable can quickly escalate into an inability to breathe.

As Greg described in the above scene, which was conveyed to me during our interview, his sense of place shifted to focus on a different set of material details and social conditions once he felt that familiar heaviness in his chest; a heaviness that would “progress”—a term used by a number of those interviewed to describe an unfolding asthma attack—into wheezing. Greg’s embodied sense of disordered breathing became a barometer for sensing and surveying the house party: peering through a dimly lit room looking for signs of animal presence; attempting to smell perfumes, mold, and dust in the air; and listening to his own breath to gauge the severity of his asthma attack. I describe this kind of sensorial survey as *asthmatic attunement*, a mode of care whereby a person with asthma feels the breathing body in relation to the conditions of the surrounding environment. (See also Sara Ahmed’s work on *orientation*, 2006.)

A number of scholars have written about attunement as a mode of knowing the environment through its affects, emphasizing an embodied episteme based in sensation that makes one aware of being in the world (Ahmann, 2018; Anderson, 2009; Berlant, 2011; Calvillo, 2018; Shapiro, 2015; Sloterdijk, 2009; Stewart, 2011). Asthmatic attunement builds on this work and describes how such sense stems from past symptom experiences to respond to the present atmospheres. A key difference is that, where attunement has sometimes been used to describe an awareness of the qualities of shared atmosphere or collective conditions (Choy and Zee, 2015; Degen et al., 2017; Shapiro, 2015; Simmons, 2017), many of the asthmatics I interviewed conveyed a sense of isolation as they attune to the qualities and surfaces that disorder their breathing. They may be in the company of others, but marked by their differential response to place (Ahmed, 2006). What does it mean to share atmosphere, then, if people are differentially affected by it (Choy, 2011)?

When I interviewed Greg, he was 27 years old, a white working class male from New England who had lived in the region his entire life. He was one of a handful of subjects who told me they had been born with asthma. Greg has allergic asthma, the most common variant of the disease—about 50–60% of asthmatics have allergic asthma. This is also the asthma phenotype that has been most extensively studied by biomedical researchers (Wenzel, 2012). People with allergic asthma are triggered by allergens, which the immune system identifies as harmful antigens; human and nonhuman molecules intra-acting at a cellular level. Immunologists tell us that human immune systems respond to allergens by releasing immunoglobulin E, a powerful inflammatory antibody that has, historically, been described as a defender of the body (Cohen, 2009; Haraway, 1999; Martin, 1994). The inflammatory mechanism of Immunoglobulin E is what causes allergic reactions, including asthma symptoms such as narrowed airways, chest tightness, wheezing, and coughing. Thus, tropes of bodily defense from environmental threats have long been built into medical and

scientific understanding of this form of disordered breathing, allergic asthma (Rackemann, 1928). These tropes extend to asthma sufferers own narratives of body-environment interactions, which I will describe in detail.

Cats and some dogs trigger Greg's asthma. And rabbits, apparently—Greg's list of asthma triggers was one line longer following the described house party. He's also triggered by mold, cold air, viruses, and exercise. Allergens, in other words, are not the only materials that trigger Greg's asthma. Greg is pathologically sensitized to an array of atmospheres and places. Typically, a person in Greg's position—someone who suffers from allergies, has a long list of triggers, and experiences symptoms several times a month, which suggests the disease is not well managed according to today's clinical standards (GINA, 2018)—would use a daily controller medication to prevent symptoms. But Greg did not use medication regularly. In fact, Greg tried to avoid using medication completely, except if he was in a really bad state—such as during the described house party or if he was getting over the flu. In lieu of taking a daily controller medication to manage airway inflammation, or using a rescue inhaler to quell symptoms as they emerged, Greg had developed a repertoire of care practices designed to keep a lid on symptoms across a range of situations. Greg used breath control techniques, conducted a "breath check" (as he called it) at timed intervals during attacks, and used avoidance techniques everyday. Sometimes he drank coffee when symptoms emerged, and if things were really "progressing" as he told me, he would ask around for an inhaler. Greg had even ended a relationship because of his allergic asthma—his girlfriend had a cat that he was highly allergic to, and this was a "dealbreaker" for their relationship.

This is another important piece of the story: not all people with asthma use medication. The list of reasons people give for not using drugs to care for asthma is long. In interviews, sometimes the breather conveyed to me that they did not believe daily medication was necessary. Their symptoms were intermittent or predictable, and could be controlled using other modes of care. In other cases, however, the breather framed daily medication use in economic terms. Asthma drugs, especially daily controller medications, are expensive (Rosenthal, 2013), an expense that could not always be met at the present time, nor potentially in the future. It was safer, in the minds of some interviewed, to be able to manage asthma without drugs; to not become pharmaceutically dependent. This speaks as much to the realities of healthcare access and costs as it does attitudes towards pharmaceuticals. So while Greg's life would have likely been much simpler and less restricted if he used a daily controller medication (as his doctor advised), he told me that he managed his disordered breathing just fine without a pharmaceutical regimen. He was far from alone in his effort to develop practices and cultivate space to breathe, in an (increasingly) unbreathable world.

In this paper, I show how some people with asthma rely on *emplaced care* tactics to stay in unbreathable worlds with as little distress as possible. Emplaced care both includes and supplements medication use, and is anchored by asthmatic attunement. Emplaced care is a response to the body's orientation to the world at the moment (Ahmed, 2006)—"I have enough time to get to my inhaler"; "I can control this attack if I just stay calm"; "I'll open the window, or step out onto the porch or leave the party"; "I'll use my rescue inhaler again"; "I'll have my coworker drive me to the hospital." There is a temporal element to emplaced care; the breather must sense how much time they have in the immediate situation, as well as what might be around the corner. Emplacement is a mode of care—a spatiotemporal negotiations between breath and place—that relies on asthmatic attunement, which draws on past experiences of disordered breathing in place, fleshy memories that form the bodily reasoning of care responses (see Latour, 2004 and Shapiro, 2015 on bodily reasoning). The visceral connection between breath and life is pulled to the forefront of

consciousness each time air gets suspended, truncated, or narrowed for the breather with asthma. Asthmatic attunement, then, informs an orientation to the world: emplacement; it anchors world-making practices that protect the breather from harmful environmental exposures (Chen, 2012).

In this article, I draw on more than 80 interviews with people who live with asthma, repeating their narratives of attunement and care to highlight a mode of living in unbreathable worlds characterized by *emplacement*, a defense of the breathing body in the face of death. These interviews were conducted between 2011 and 2016 with subjects aged 18–65. Most were living in the U.S. Northeast, but some further south, in places such as Pennsylvania, Tennessee, Virginia, and Washington, DC. The majority of interview subjects were white, working or middle class, and had been diagnosed with asthma after the U.S. epidemic began in 1985 (Jackson, 2009; Mitman, 2007). Some had mild or intermittent asthma, and did not consider their disease a prominent figure in their daily lives. Others had moderate asthma, where symptoms bothered them more at certain times of year or in specific circumstances. Still others had severe asthma, which needed to be cared for daily with several types of medications and behavioral tactics. The theme of defense came up over and over, even with the wide range of asthmatic experiences, the different circumstances under which the breath was threatened, and the various degrees and types of care.

In the next section, I use two narratives to show how asthmatic attunement works as a labor of care that some people rely on to navigate through and make their daily lives breathable. If we understand atmosphere as a *substrate* for living, caring for breathing space becomes a necessary labor for asthma sufferers. In the following section, I show how this labor of care becomes a form of *emplacement* when the asthma sufferer engages in tactics to make their atmosphere breathable. The next section explains that, some times, asthma sufferers find themselves trapped in atmospheric-substrates that are unbreathable; these situated experiences are what make emplaced care tactics necessary. I conclude by asking what we need from theories of “unbreathable spaces” and what kinds of collective care might respond to the threat of death in ordinary everyday environments, a threat not evenly recognized, let alone felt.

Attuning the breathing body

Most people, because from the minute they are born they are able to take a breath, they don't think about it. It's just automatic. I know that since having that first attack and knowing that I – and then having that period of a month where I was really struggling, has made me very aware of the smell of the air, where I am, how when I get up in the morning and take a breath, the air feels heavy. It's hard to describe except that it's not this – [takes a deep breath] feeling, like this feels good. Like days like this that are clear and crisp and nice. I can tell when I get up, when the air is heavy, it affects how I move because I just take it easy. I'm aware, when I get up in the morning, I take the deep breath and I always feel good, I always think, the air smells good or the air doesn't smell good today or whatever. And a lot of times I will go over – the first thing, I will go over to the back door and I will look out and this time of year, I will open the back door and I look – the first thing I always do is I look at the sky and the trees, so that I can see how sharp the contrast is, and that will tell me what the air is like. Now, part of that is getting to be older. You are enjoying the fact that you can still look out and see something, but it also tells me what the day is going to be like and how much energy I'm going to have and whether I'm going to actually get down and scrub the baseboards like I want to. Or if I'm going to be able to go out and take that walk. So since I have had that, even though I know I have it under control, I am aware of what the environment is like. I think it's affected everything I do.

Cynthia is a white middle-class woman in her mid-60s. She does not have allergies and did not grow-up with asthma, which is typically the case for people with asthma, my interview cohort included. Childhood is when most people are diagnosed with the disease, and usually alongside allergies. Yet increasingly, people are diagnosed with asthma later in life, without allergies. This was the case for Cynthia, who had her first asthma attack in her early 40s when she was out walking with her cousin one September afternoon. Her doctor told her that, given the timing, Cynthia's first asthma attack was likely triggered by an air inversion. Indeed, over the course of our interview it became clear that Cynthia is mostly triggered by air quality changes and atmospheric conditions such as temperature, humidity, and pollution. She described the thickness of air, such as on a humid day; the granularity of atmosphere, how it felt on her skin; and the look of air, how it could dull the scenery when she looked out her window first thing in the morning. In the above excerpt, Cynthia conveys well how asthmatic attunement directs a breather's engagement with the world from day to day. Each morning, Cynthia ritualizes asthmatic attunement by starting her day with pointed body-environment engagement using her senses. This is more than awareness. As Kathleen Stewart (2011) writes, attunement is a labor that allows a person to dwell in the world in relation to atmosphere,

The senses sharpen on the surfaces of things taking form. They pick up texture and density as they move through bodies and spaces, rhythms and tempi, possibilities likely or not. They establish trajectories that shroud and punctuate the significance of sounds, textures, and movements. . . . Every attunement is a tuning up to something, a labor that arrives already weighted with what it's living through. The intimacy with a world is every bit about that world's imperative; its atmospheres are always already abuzz with something pressing. . . . What affects us—the sentence of a situation—is also a dwelling, a worlding born from an atmospheric attunement. (448)

Cynthia's sensorial morning ritual not only gives her a sense of her lungs, and how her body feels in the day's air, but this practice is a labor of care that directs her activities. It is, as Maria Puig de la Bellacasa might put it, "a concrete work of maintenance" that allows Cynthia to live in the world (2017; see also, Tronto, 1993).

Feminist scholars have long described and theorized care work and its labor politics (Kittay, 1999; Murphy, 2011; Tronto, 1993). Care labor can be emotional, tactile, and based in knowledge accrued through experiences that get rendered invisible by the informal, unpaid contexts in which care is performed. In some cases, care labor compensates and covers for failings and limitations in social, cultural, and political institutions. Some have argued that care labor should be thought of as a practice (Held, 2006; Isserles, 2010; Sennett, 2008), particularly when it becomes habituated and effective for making daily lives possible. Joan Tronto (1993) has famously argued that care is a practice "aimed at maintaining, continuing, and repairing the world" (104). Thinking through Joan Tronto's work, Maria Puig de la Bellacasa has suggested that care work engages and creates a *substrate* for "living to be possible" (2017). The move from informal labor to knowledge-based practice to maintenance and then substrate is the genealogy that shapes my thinking about how attunement anchors care in these stories, allowing breathers with asthma to live in the world.

Attunement as a form of care labor extends to breathers' movement through and between places as well. Cynthia described to me, for example, how atmospheres on the coast of Massachusetts, in the Colorado Rockies, and the classroom where she taught English to eighth graders felt different to her, and triggered labored breathing, shortness of breath, and uncontrolled coughing. In each place, the air seemed to affect her airways differently,

I was told. And in these places, Cynthia relied on her rescue inhaler more since she was unable to modify her activity level, or protect herself from air pollution.

Travel between places was a theme that came up repeatedly in interviews, an activity that allowed for embodied comparison of environmental difference. Janet, a 54-year-old white woman from New England, described how the work she conducted several times a year on the U.S.–Mexico border helped her attune, as she put it, to the impacts of air quality.

For many years, we worked in a part of the border where the city is Matamoros which is near the Gulf of Mexico and in Brownsville, which is the Texas town. We always brought – I would beg, borrow and steal the little vials of Albuterol for nebulizers because the health clinic that we visited had the machines, but they didn't have access to the medication. And we would just go to the clinic and then ream after ream of little kids would get nebulized. So that is a really bad area. And often – I mean, always when I traveled there, I brought the Albuterol and I often had to use it myself. In those areas, I would – before we opened the door of the van, I was puffing. I would write in my instructions to people before our trip, if you have asthma, bring your stuff and when we went to these places, I was always very clear about, if you have any trouble, get back in the van, it's air conditioned, doors are closed. And I would feel it instantly in those areas. It was doing the border work that made me more aware of air quality as a health issue for the people who lived there. I didn't really become attuned to it until then. Much more of a – wow, I feel this, I smell this, I am definitely noticing this. But lucky me, I get to go back to an air conditioned space, back to the Northeast where air quality is better. So I don't know, but here I am not so conscious of thinking about air quality.

The contours of Janet's illness narrative were similar to Cynthia's: she developed asthma in her early 40s and did not have allergies. Her asthma, she told me, seemed to be triggered by air pollution, like Cynthia, but also cigarette smoke. Janet's original and primary trigger, however, was the common cold. Viruses did a number on her lungs, causing breathlessness and coughing that required a rescue inhaler. This was part of the reason Janet failed to sense the connection between atmosphere and asthma, until she began working in Matamoros. Asthma might be a disease of disordered breathing, but not all people with asthma experience symptoms under the same environmental conditions. Indeed, for some, it takes a change of place to see how atmospheres work the breathing body. Kevin, a 39-year-old white man who grew up with allergic asthma, highlighted how attunement enables understanding of the relationship between place and illness, "I don't think we realize how sensitive we are to that stuff until we remove ourselves from those environments and go back into them and realize exactly how intense they can be." Movement between places enables asthmatic attunement.

When describing a sense for atmosphere, and its effects on breathers, one can easily slip into characterizations that are fleeting, mutable, and hard to pin down, like air itself (Adey, 2015; Irigaray, 1999). Breathing, however, is actually quite consistent and concrete; a physiologic activity that is (typically) rhythmic and self-regulating. As Cynthia states above, respiration is largely an automatic procession that runs in the background, silent to everyday awareness. Only upon disruption, a suspension or narrowing, does breathing become something sensed by the breather (Choy and Zee, 2015). (Unless through pointed awareness such as meditation or breathing exercises.) I want to argue, then, that atmosphere and breathing are substrates for human beings. Following Choy (2011) and others (Shapiro, 2015; Simmons, 2017; Sloterdijk, 2009; Zee, 2017), I want to emphasize how air becomes substantiated through breathers; how atmospheric effects and affects accrue in places, bodies, and also care practices. These are anything but fleeting or hard to pin down.

This is a labor of attunement. Cynthia's description of her morning practice of attunement captures well this kind of substantiation, a mode of care that both engages with and creates a substrate for her everyday living. Substrates by their very nature, of course, can be difficult to sense without some kind of disruption or disorder.

Emplacing asthma care

I'm not going to be around, I know that these cats and these dogs are bad and I'm not going to put myself in harm's way, but I'm also gonna not not go to my friend's house because there is a cat there and that might give me an asthma attack. You can go there, but don't pet the cat. Look and make sure when you are sitting down that there isn't a bunch of dander and hair on the couch. If there is, go to the kitchen table, or get something that they can – you can wipe it off with.

Max was in his early 30s at the time of our interview, an allergic asthma sufferer who had lived in Upstate New York his entire life. Max was an IT consultant who worked short-term contracts; he had not had health insurance for several years. He was healthy, he told me, and didn't lead a risky life. There was less need for health insurance at this point in time, he reasoned. Max had lived with allergies since elementary school, but did not develop asthma until his middle school years. In his early 20s, he stopped taking medication for his allergic asthma after several years of living mostly symptom free, except for the occasional attack brought on by unanticipated exposures—smoke at a friend's house, a reaction to household cleaning products, and while out on a run at the height of summer when air quality was pretty poor, he explained. When I asked Max to tell me how he managed his disease without drugs, he began by describing environmental control practices, which are a medically recommended pillar of care in asthma management regimens (GINA, 2018).

In the above excerpt, Max narrates avoidance ("not being around"), limiting behaviors (not petting cats), and cleaning as strategies he uses to keep himself out of harm's way, i.e. distanced from triggers he may be exposed to at his friend's house. Before the development of quick relief and controller medications, environmental control practices such as avoidance and lifestyle changes were staples of asthma management. Even today, although controller medications can reduce inflammatory response in allergic asthma patients, avoidance of triggers is often recommended as well. Interview subjects recalled clinical appointments where they discussed their triggers with a doctor, who then provided suggestions for managing exposure—dust covers for beds in the case of dust mite allergies; staying off the grass and bathing after outdoor play in the case of pollen and grass allergies; avoiding contact with animals; and keeping pets out of bedrooms in the case of dander triggers. Some took these recommendations very seriously—Savannah moved out of a warehouse apartment, which had a lot of mold problems; Devon wore a respirator while mowing the lawn; and Cynthia kept her windows closed year round. These were not fail-safe practices, however.

Environmental control strategies work well when exposures can be known in advance. Max could anticipate exposure to cats at his friend's house, for example. Indeed, exposure to animals is familiar and ordinary for many people, and allergic asthma sufferers often have strategies that allow them to navigate spaces inhabited by companion species. Knowing that animals inhabit a home environment, Max can position himself socially and materially: He can opt out of the visit, or while in the space he can enact care tactics to reduce contact with dander, such as wiping off the table or not sitting on a couch, sitting on a wood or plastic chair instead. These are things Max needs to do for himself of course, as he indicates at the end of the quote—his friend will not wipe off the couch, he needs to do that.

To care for others, one must understand and have a sense for the needs of others. That asthma often gets rendered invisible, coupled with the fact that environmental exposures are not evenly felt, it becomes difficult know how to care for someone with asthma based on atmosphere alone. Without allergies or asthma, many people are unaware of how confined spaces, common activities, or environmental qualities can impinge on the breathing body. In Max's case, the organization and materiality of his friend's home did not support his breath. To visit his friend's house then, Max engaged in a balancing act based on strategic analysis of the sociomaterial contours of place. Max was not going to put himself "in harm's way" but he wasn't going to necessarily restrict his life either—he will continue going to his friend's house even though there is harm there. It's not his space, however, so he can't control the animals or their dander. He is left to his defenses—strategic emplacement and cleaning.

French in its origins, emplacement refers to how a material thing sits or is sited. It's a chosen location, a place occupied, to be in place. In geology, the term signals how organic matter, such as igneous rock, becomes embedded within older rock formations and otherwise layered within rich ecological matter. Emplacement can also refer to an action to set something up. In military contexts, for example, emplacement describes how weapons are positioned in landscapes, often as part of a defensive strategy. Anthropologists have used the term to describe how communities position themselves or are positioned by military conflict (Lofving, 2009), environmental hazards (Reno, 2011), and global economic relations (Englund, 2002). Others have shown how, in the context of home care, people living with chronic disease conditions emplace medications and other treatment products in strategic locations throughout their home (Hodgetts et al., 2010; Langstrup, 2013). Emplaced care, in this context, reflects relationships between illness, identity, sociomaterial living conditions, such as support from family members (or a lack thereof), the details of built environment, and even temporal patterns (Bell, 2018; Bowlby, 2012; Milligan and Wiles, 2010; Williams, 2002).

In conversation with literatures that theorize care in illness contexts (Chudakova, 2017; Guell, 2012; Mol, 2008; Saillant, 2008; Trnka, 2017), emplacement shifts the focus from the contained self performed in relation to neoliberal dynamics—which might be characterized as striving for a future life better than the current one, for example – to a more-than-self performing defensive or protective care in the immediate, sensorial environment. This is different from landscapes of care or carescapes, which also emphasize the relational aspects of care, but do not hone in on the defensive, preservation-oriented qualities of care that breathers with asthma (necessarily) enact. And while some scholars have sought to distinguish protection from care (Tronto, 1993), in the case of asthma, protection from harmful exposures is indeed a central part of care regimens.

Environmental control exemplifies emplacement as a mode of care. While at times environmental control practices are enacted in response to exposures – such as Greg's response to the rabbit at the house party and Janet's retreat to the van in Matamoros – these practices may also be routine and habituated. They may be prompted by attunement, such as when Cynthia begins her day by sensing air quality and then closing windows, or when Max wipes down surfaces before sitting down at a friend's house. In both cases, the breather's attunement conditions and directs care.

While Greg, Janet, and Max's stories highlight how breathers with asthma move through spaces they are visiting, often by creating distance between themselves and elements of place, others described—they fortify their homes against risky air. Cynthia, for example, may open the doors first thing in the morning, as she wakes up to the day, but once the world begins moving she needs to emplace herself in her sealed home.

When we are some place or if it's a humid day or something like that, you can almost see the air. And I will say to my husband, we need to close up the house—we open up the doors in the morning and if there is a little bit of fresh air on a warm day we will say, oh, you know—but usually by about 8:30, 8:45 we close the doors. As you can see, most of the time, the curtains stay closed. I do not open the windows downstairs because we live on this street, and this street and the Boulevard are very busy streets. We have buses that are up and down. We have trucks, we have fire trucks, we have everything, delivery, everything on that street. And because this is a wider street than a lot of the ones coming in on either side of it, people use this street a lot. And it's not like living in the suburbs. You can smell the air in the city that you can't when you go some place else. So I tend to keep the doors and windows closed.

Homes can harbor harm or they can act as a safe haven (Bowlby et al., 1997), and some scholars have argued that there is room to understand homes as a geopolitical space where broader national and cultural power dynamics become embedded in domestic spaces (Brickell, 2012a, 2012b). In this example, Cynthia sealed her home to create a boundary between the vehicle emissions from the busy roadway and her domestic breathing space, similar to the way Janet did in the van she used in Matamoros. A kind of climate control away from collectively breathed atmospheres. Here, emplacement operates as a form of boundary work that acknowledges and protects against risk (Reno, 2011). Because Cynthia was triggered by air quality and pollution, she was particularly attuned to the volumes of traffic on her street, with the road just twenty feet from her front door. But it was more than just the traffic; it was also the boulevard in relation to surrounding streets, which made it more likely that cars and trucks and buses used her boulevard. Cynthia also noted atmospheric differences between suburbs and the city, where a breather could smell the air. What gets articulated here is a politics of emplacement that highlights the unequal ties between place and pollution. Cynthia connected this to city planning: "It wasn't always like this," she told me, noting that she and her husband had lived in the house for more than thirty-five years. Over time, the road grew wider, the city bus routes were added, and development proliferated in the neighborhood. Also over time, Cynthia and her husband sought to increase the distance, using enclosure, between themselves and the boulevard.

From triggers to doglife

When I asked Janet when she first started noticing air quality, she described a context that was mentioned repeatedly in interviews with asthma sufferers: "The first thing I thought of is how, as a kid especially, I would have arguments with my parents because they would smoke in the car when we were traveling and I couldn't stand that." Others described struggling to breathe during childhood, stuck in a smoke filled car, asking parents to open windows. This memory, of being trapped in a car while adults smoked cigarettes, sticks with many, providing a foundation for their sense of atmosphere and their ability to move through it, or not. It also shapes responses to these atmospheres in the future.

My dad has smoked my entire life. In the house, in the car, everywhere. And my dad still smokes and that's a trigger for me. So when I go home, I am very sensitive to it. My clothes – even this week, I was doing work on a guy's house in upstate Pennsylvania and the guy smoked and the first thing I did when I got home was I took all my clothes off and got in the shower. Because I smelled of smoke and it was bothering me. And I was only in this guy's house for an hour and a half.

Jake, a 41-year-old white working class man living in rural Pennsylvania, could not help his exposure to cigarette smoke while working. As soon as he was able, however, he distanced himself from the atmospheric traces he had picked up on the job: he removed his clothes and showered. Even though Jake was no longer in the presence of smoke, the smell drove him crazy, prompting him to distance himself further from the previous atmosphere. Whereas in some cases emplaced care might mean cleaning surfaces to remove environmental triggers, in this case, it became necessary to clean clothes and hair to remove exposures, a kind of boundary work that divides body from environment.

Jake's experience points to the risk of moving through the world with asthma: It is not always possible to close the windows, leave the party, retreat to an air conditioned van, or even clean a surface before taking a seat. These actions, described in the previous narratives, reflect a privilege not always held by breathers. This is particularly true for children, who do not have the ability to distance themselves or create the boundaries needed to breathe in certain situations.

Vinny, a 29-year-old allergic asthma sufferer from Philadelphia, conveyed this dynamic through a poignant childhood memory.

If there is an actual dog in the room that I'm allergic to and it's on the couch and stuff, within 20 minutes, I'm whistling. These days, I just leave. But my aunt would always – I have these horrific memories of going to my aunt's house for family parties and there are outdoors people and hunters and their dogs and like, a finder dog that goes and gets the goose. And they would tragically kennel it up when I would come over and not understand that it's not the animal, it's your couch. And then they would sort of go out of their way to do this and accommodate me, so then I would go there and hide it and try to breathe for a few hours, because it's so and so's birthday party or whatever. Now I can just leave, but I vividly remember having to stay in rooms for hours on end. It's not even the dog itself. If it's on the street, it's nothing. It's like, carpeting. And dog life. I have a friend, he used to live with someone who was a dog lifer. Like, they would have dogs in a kennel that weren't theirs in their house for long periods of time. She's gone, she's been gone for months, for like, six months, but I can still feel even slightly just coming into their house. It's like – it usually comes out like in carpet or if I'm on the couch or involved like that.

When I asked Vinny what triggered his asthma, he began talking about his experiences with dogs. In this relatively quick move, he reframed my reference to the dog-as-trigger to “doglife,” the living space within which his breathing would become disordered.

While medical professionals and public health experts emphasize that asthmatics should avoid triggers, which appear as singular objects on the page—dust, pets, chemicals, pollen—asthma sufferers experience these exposures within a more complex and layered substrate. Avoidance is rarely simple. In interviews, when I asked subjects what their asthma triggers were, rather than respond in list format—as I have performed throughout this article, following the fashion of medical associations, public health agencies, and peer-reviewed articles—subjects would describe in detail the circumstances under which symptoms may emerge. Over the course of my research, the word trigger began to feel like a too simple shorthand for much more complicated entanglements, and the emplaced care tactics developed to create breathable space.

The idea of ‘triggers’ comes from the work of Francis Rackemann, one of the foremost 20th-century doctors specializing in allergy and asthma. In his 1931 book, *Clinical Allergy, Particularly Asthma and Hay Fever*, Rackemann described asthmatics as “loaded guns.” Used to label a wide range of factors and circumstances, “triggers,” had the potential to

“fire the charge” of the immune system in breathers with asthma. The imagery of pulling the trigger on a loaded gun is a metaphor violent in nature, and one that derives from older descriptions of asthmatic events as “attacks.” Consider Dr. Henry Hyde Salter’s description of an attack from his foundational 1868 book, *On Asthma*—which, in full, describes a terrifying moment—as well as the overarching life of an asthmatic.

...The sense of impending suffocation, the agonizing struggle for the breath of life are so terrible, that they cannot even be witnessed without sharing in the sufferer’s distress. . . *And even in the intervals of health the asthmatic’s sufferings do not cease; he seems well, he goes about like his fellows and among them, but he knows that he is altogether different from them; he bears about his disease within him wherever he goes; he knows he is struck . . . he is conscious that he is not sound—he cannot be warranted;* he is not certain of a day’s, perhaps not of an hour’s health; he only knows that a certain percentage of his future life must be dedicated to suffering; he cannot make an engagement except with a proviso, and from many of the occupations of life he is cut off; the recreations, the enjoyments, the indulgences of others are not for him; his usefulness is crippled, his life marred. . . (Salter, *On Asthma*, 1868)

Salter opens his monograph with a description of a full blown asthma attack, the kind that most people are able to avoid in the 21st century, thanks to medical advancements such as rescue and controller inhalers. Although Salter insists that such an attack cannot be seen without sharing the sufferer’s terror, it is unlikely many people witness asthma in this form today. This invisibility is compounded by the efforts many asthmatics make to hide symptoms, wishing to avoid social stigma or concern, similar to Greg’s response at the house party. Tactics of de-escalation, which work to halt the progress of an attack, contribute to asthma’s invisibility and normalization. How can the unbreathability of atmosphere be collectively shared, and understood, with all the cultural, technological, economic, and institutional forces conspiring to mask our attunement to atmosphere? How can the terror of the everyday asthma attack, which might appear at any moment, be collectively sensed and felt, giving sway to a collective politics that many scholars hope for? How can this be felt amid technologies that conspire to make our atmosphere breathable? The everyday violence felt by breathers with asthma is not the atmoterror described by Sloterdijk, which is a more pointed form of violence (2009; see also Nieuwenhuis, 2016). Here, there is a slow violence that affects the most vulnerable (Ahmann, 2018; Nixon, 2011), and often in ways that are silent, submerged, and removed, undirected but designed nonetheless.

In the second half of the paragraph above, Salter describes the substrate of the 19th-century asthmatic life—the asthmatic “bears about his disease within him wherever he goes” never knowing when he will be struck with symptoms. This is a kind of suffering in itself because of the way in which the disease shapes, cuts off even, the breather with asthma from the social world (Biehl et al., 2007; Charmaz, 1983; Kleinman et al., 1997). Any place may be unbreathable, making it difficult to be certain of health, how the body will respond to its environment. And this orientation to the world is not a mere remnant of the 19th century, but a reality for many today. Consider Savannah’s sense of place after losing her home and job,

I had a six month period where I lost my job. I lost my apartment, it was horrible and all my stuff was in storage and I had to move and I sent my cat to live with a friend. I needed to live really cheaply. But the place I stayed at during that period was just like, rotting. It was like, the windows – the glass would fall out of the windows. It was an old brick factory and they had resurfaced the brick so that it was like a sponge. So anytime it would rain outside, it would rain

inside. It was moldy and dusty and – it was bad. I was really having – I was so sensitive to everything. Then when I left that place, I noticed the difference and then I thought, okay, that is something I should pay attention to. It's even more important when moving to a new state and you get all the different pollens or whatever. Yeah, if you are just every day in a place that has bad carpeting or – it's like working in a foundry and being around that every day. It has a huge effect. So yeah, I think its in all those little things around you.

The little things have a way of accumulating.

Care does not happen in a “separate cozy realm where ‘nice’ relations can thrive” (Puig de la Bellacasa, 2015: 707); care may mean limiting, negotiating, or ending relationships of various kinds, if you can. If not, breathers must negotiate the substrate of everyday life by using the breath itself, like Greg and Vinny, who found they could use their breath to stay in place a little longer.

For Stewart and others, what is atmospheric often points to a collective sense of the world and its contours, and sometimes its effect. Asthmatic attunement, however, is specific to and starts with the breather who is marked and differentiated by symptoms, which have been triggered by an environment that is shared, but not evenly or collectively embodied. Indeed one of the most common forms of asthma, atopic or allergic asthma, traces its etymological origins, back to the Greek *atopia*: out of place. But what is out of place? The breather or environmental matter? And when does the displacement begin? If something is out of place, it must be out of time as well (Massey, 2005). Public health statistics and environmental justice research show how specific vulnerabilities to unbreathable spaces accumulate if you are a woman, black, poor, under the age of eighteen, or are living in dilapidated housing or a neighborhood with poor air quality—and all the more so if you take on several of these markers. This is the marked identity that Dr. Salter describes at the end of this passage: The breather with asthma cannot be warranted, does not know when they will be struck by atmosphere, and in some cases, cannot escape these conditions, the atmospheric-substrate. Rather than attuning to a collective experience, asthmatic attunement is felt as a vulnerability that sets one apart.

Conclusions

Today, more than 25 million people live with asthma in the United States. A little more than half of those diagnosed with asthma suffer from allergies, but increasingly asthma is diagnosed in people who have no allergies, like Cynthia and Janet. While medical and public health descriptions advise people with asthma to avoid common triggers—including pollen, mold, smoke, and animal dander, as well as domestic chemicals, industrial and transportation-related pollution, and atmospheric condition such as rapid change in temperature, humidity, and air pressure—the very concept of triggers seems to obscure the entangled sociomaterial environments that could be more accurately described as everyday substrates. Often conceived of as singular objects that can simply be avoided, the reality is that asthma triggers are often intricately embedded and involved in places. The trick to breathing in such spaces is to not get too involved with them, as Vinny put it. Avoidance of triggers then may necessitate distancing from unbreathable *spaces*, which is a kind of care labor that involves negotiating the relationship between atmosphere and body.

As Peter Sloterdijk has noted, we are still very much working on a “theory of unbreathable spaces,” even though for more than a hundred years now scientists and medical practitioners have been developing technologies that protect breathers from their surrounding environment. Important to this emergent theory of unbreathable space, a theory which

many are contributing to today (Ahmann, 2018; Calvillo, 2018; Choy and Zee, 2017; Shapiro, 2015), is an understanding of the defensive style of care that these descriptions of environmental engagement invoke, a protective care that derives from the terror of not being able to breathe and by a striving to survive and persevere. Noteable in these examples is the fact that the threat to survival, to breathing, comes from the substrate of the everyday, ordinary environments that breathers traverse and become “involved” with. Living in an increasingly unbreathable world—with dogs and cats, friends and loved ones, in neighborhoods and careers—requires a mode of worlding that is persistently negotiating contact between body and place. Unless, of course, you have drugs that allow you to breathe (almost) anywhere. And if you do not, you may find yourself in a situation like Greg at the house party, tumbling down the rabbit hole if you will, desperately sensing the substrate that takes his breath away.

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References

- Adey P (2015) Air’s affinities: Geopolitics, chemical affect and the force of the elemental. *Dialogues in Human Geography* 5(1): 54–75.
- Ahmann C (2018) “It’s exhausting to create an event out of nothing”: Slow violence and the manipulation of time. *Cultural Anthropology* 33(1): 142–171.
- Ahmed S (2006) *Queer Phenomenology: Orientations, Objects, Others*. Durham, DC: Duke University Press.
- Anderson B (2009) Affective atmospheres. *Emotion, Space and Society* 2: 77–81.
- Bell SE (2018) Placing care: Embodying architecture in hospital clinics for immigrant and refugee patients. *Sociology of Health & Illness* 40(2): 314–326.
- Berlant LG (2011) *Cruel Optimism*. Vol. 226. Durham, NC: Duke University Press.
- Biehl J, Good B and Kleinman A (eds) (2007) *Subjectivity: Ethnographic Investigations*. Vol. 7. Berkeley, CA: University of California Press.
- Bowlby S (2012) Recognising the time–space dimensions of care: Caringscapes and carescapes. *Environment and Planning A: Economy and Space* 44(9): 2101–2118.
- Bowlby S, Gregory S and McKie L (1997) “Doing home”: Patriarchy, caring, and space. *Women’s Studies International Forum* 20(3): 343–350.
- Brickell K (2012a) Geopolitics of home. *Geography Compass* 6(10): 575–588.
- Brickell K (2012b) ‘Mapping’ and ‘doing’ critical geographies of home. *Progress in Human Geography* 36(2): 225–244.
- Brown P, Mayer B, Zavestoski S, et al. (2003) The health politics of asthma: Environmental justice and collective illness experience in the United States. *Social Science & Medicine* 57(3): 453–464.

- Calvillo N (2018) Political airs: From monitoring to attuned sensing air pollution. *Social Studies of Science* 48(3): 372–388.
- Centers for Disease Control (2015) *National Hospital Ambulatory Medical Care Survey: 2015 Emergency Department Summary Tables*. Atlanta, GA: Centers for Disease Control.
- Charmaz K (1983) Loss of self: a fundamental form of suffering in the chronically ill. *Sociology of Health & Illness* 5(2): 168–195.
- Chen MY (2012) *Animacies: Biopolitics, Racial Mattering, and Queer Affect*. Durham, DC: Duke University Press.
- Choy TK (2011) *Ecologies of Comparison: An Ethnography of Endangerment in Hong Kong*. Durham, DC: Duke University Press.
- Choy T and Zee J (2015) Condition—Suspension. *Cultural Anthropology* 30(2): 210–223.
- Chudakova T (2017) Caring for Strangers: Aging, Traditional Medicine, and Collective Self-care in Post-socialist Russia. *Medical anthropology quarterly* 31(1): 78–96.
- Cohen E (2009) *A Body Worth Defending: Immunity, Biopolitics, and the Apotheosis of the Modern Body*. Durham, DC: Duke University Press.
- Degen M, Melhuish C and Rose G (2017) Producing place atmospheres digitally: Architecture, digital visualisation practices and the experience economy. *Journal of Consumer Culture* 17(1): 3–24.
- Englund H (2002) Ethnography after globalism: Migration and emplacement in Malawi. *American Ethnologist* 29(2): 261–286.
- Global Initiative for Asthma (GINA Reports) (2018) Global Strategy for Asthma Management and Prevention. Available at: <http://ginasthma.org>
- Guell C (2012) Self-care at the margins: meals and meters in migrants' diabetes tactics. *Medical Anthropology Quarterly* 26(4): 518–533.
- Haraway D (1999) The biopolitics of postmodern bodies: Determinations of self in immune system discourse. *Feminist Theory and the Body: A Reader* 1(1): 203.
- Held V (2006) *The ethics of care: Personal, political, and global*. London: Oxford University Press.
- Hodgetts DJ, Stolte O, Chamberlain K, Radley A, Groot S and Nikora LW (2010) The mobile hermit and the city: Considering links between places, objects, and identities in social psychological research on homelessness. *The British journal of social psychology* 49(2).
- Irigaray L (1999) *The Forgetting of Air in Martin Heidegger*. Translated by Mader MB. Austin, TX: University of Texas Press.
- Isserles RG (2010) Caring for and about the work we do: The dialectics of alienation, emotional labor, and an ethic of care. In: *28th International Labour Process Conference*, 15–17 March 2010, New Jersey, USA.
- Jackson M (2009) *Asthma: The Biography*. New York: Oxford University Press.
- Kenner A (2018) *Breathtaking: Asthma Care in a Time of Climate Change*. Minneapolis, MN: University of Minnesota Press.
- Kittay EF (1999) *Love's Labor: Essays on Women, Equality and Dependency*. New York: Routledge.
- Kleinman A, Das V and Lock MM (eds) (1997) *Social Suffering*. Berkeley, CA: University of California Press.
- Latour B (2004) How to talk about the body? The normative dimension of science studies. *Body & Society* 10(2-3): 205–229.
- Langstrup H (2013) Chronic care infrastructures and the home. *Sociology of Health & Illness* 35(7): 1008–1022.
- Lofving S (2009) Liberal emplacement: Violence, home and the transforming space of popular protest in Central America. *Struggles for Home: Violence, Hope and the Movement of People* 3: 1149.
- Martin E (1994) *Flexible Bodies: Tracking Immunity in American Culture from the Days of Polio to the Age of AIDS*. Boston, MA: Beacon Press.
- Massey D (2005) *For Space*. London: SAGE.
- Meng YY, Babey SH, Brown ER, et al. (2006) Emergency department visits for asthma: The role of frequent symptoms and delay in care. *Annals of Allergy, Asthma & Immunology: Official Publication of the American College of Allergy, Asthma, & Immunology* 96(2): 291–297.

- Milligan C and Wiles JL (2010) Landscapes of Care. *Progress in Human Geography* 34(1): 736–754.
- Mitman G (2007) *Breathing Space: How Allergies Shape Our Lives and Landscapes*. New Haven: Yale University Press.
- Mol A (2008) *The Logic of Care: Health and the Problem of Patient Choice*. London: Routledge.
- Murphy M (2015) Unsettling care: Troubling transnational itineraries of care in feminist health practices. *Social Studies of Science* 45(5): 717–737.
- Murphy SL, Xu JQ, Kochanek KD, et al. (2017) *Deaths: Final data for 2015. National Vital Statistics Reports*, Vol. 66, No. 6. Hyattsville, MD: National Center for Health Statistics.
- Nieuwenhuis M (2016) Breathing materiality: Aerial violence at a time of atmospheric politics. *Critical Studies on Terrorism* 9(3): 499–521.
- Nixon R (2011) *Slow Violence and the Environmentalism of the Poor*. Cambridge, MA: Harvard University Press.
- Puig de la Bellacasa M (2015) Making time for soil: Technoscientific futurity and the pace of care. *Social Studies of Science* 45(5): 691–716.
- Puig de la Bellacasa M (2017) *Matters of Care: Speculative Ethics in More than Human Worlds*. Minneapolis, MN: University of Minnesota Press.
- Rackemann FM (1928) Studies in asthma: II. An analysis of two hundred and thirteen cases in which the patients were relieved for more than two years. *Archives of Internal Medicine* 41(3): 346–369.
- Reno J (2011) Beyond risk: Emplacement and the production of environmental evidence. *American Ethnologist* 38(3): 516–530.
- Rosenthal E (2013) The Soaring Cost of a Simple Breath. *New York Times*, 13 October.
- Salter HH (1868) *On Asthma: its Pathology and Treatment*. London: Churchill.
- Shapiro N (2015) Attuning to the chemosphere: Domestic formaldehyde, bodily reasoning, and the chemical sublime. *Cultural Anthropology* 30(3): 368–393.
- Simmons K (2017) Settler Atmospherics. Member Voices, Fieldsights, November 20. Available at: <https://culanth.org/fieldsights/settler-atmospherics>.
- Sloterdijk P (2009) *Terror from the Air. Translated by Patton A and Corcoran S*. Los Angeles: Semiotext(e).
- Stewart K (2011) Atmospheric attunements. *Environment and Planning D: Society and Space* 29(3): 445–453.
- Trnka S (2017) *One Blue Child: Asthma, Responsibility, and the Politics of Global Health*. Stanford: Stanford University Press.
- Tronto JC (1993) *Moral Boundaries: A Political Argument for an Ethic of Care*. London: Psychology Press.
- Wenzel SE (2012) Asthma phenotypes: The evolution from clinical to molecular approaches. *Nature Medicine* 18(5): 716.
- Williams A (2002) Changing geographies of care: Employing the concept of therapeutic landscapes as a framework in examining home space. *Social Science & Medicine* 55(1): 141–154.
- Wright RJ (2006) Health effects of socially toxic neighborhoods: The violence and urban asthma paradigm. *Clinics in Chest Medicine* 27(3): 413–421.
- Zee JC (2017) Holding patterns: Sand and political time at China's desert shores. *Cultural Anthropology* 32(2): 215–241.

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