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Naturalist Smellscapes and
Environmental Justice

Abstract This essay considers naturalist and neonaturalist deployments of smell as a means of mapping uneven and potentially toxic atmospheres in the contexts of Progressive Era urbanization and twentieth-century environmental “slow violence.” After showing how the description of noxious “smellscapes” structures Norris’s *Vandover and the Brute* (1914), I move on to consider the use of smell in key scenes in the writings of Ann Petry and Helena Viramontes. While environmental justice novels extend Norris’s interest in connections between smell, health, and stratified air, they also explore how these issues intersect with racially uneven geographies in the twentieth century.

Keywords naturalism, smell, ecocriticism, geography, environment, race, risk

In an effort to counteract an affliction that gradually transforms him into a “brute,” the protagonist of Frank Norris’s *Vandover and the Brute* (1914) turns to the uplifting influence of art. But, despite his “natural” talents as an artist, Vandover has trouble concentrating in his life-drawing class: “Vandover was annoyed at his ill success—such close attention and continued effort wearied him a little—the room was overheated and close, and the gas stove, which was placed near the throne to warm the model, leaked and filled the room with a nasty brassy smell” (Norris 2015, 82). Although Norris only mentions this art studio’s gas leak in passing, its smell evokes a range of tensions that I argue are central to his novel, and to the larger tradition of literary naturalism: the tension between vision and the so-called “lower senses,” the tension between modern improvements (such as indoor heating) and unintended environmental externalities (such as a gas leak), and the tension between aesthetic objects and

the material conditions they describe and inhabit. Underlying all these tensions is the problem of uncertainty: does Vandover notice the “nasty brassy smell” of leaked gas because he loses his concentration, or does he lose his concentration and succumb to “weariness” *because* he has been breathing leaked gas in a poorly ventilated, overheated room? Instead of counteracting his physical and mental decline, the environment of Vandover’s drawing class seems to exacerbate his malaise. This passage dramatizes what Ulrich Beck (1992, 21) calls “reflexive modernization”—or modernization’s tendency to produce concerns about modernization’s risks—on the level of aesthetic practice: the very heating apparatus designed to ensure the comfort of the nude art model is emitting gas that possibly hinders Vandover from drawing the model.

The gas leak in Vandover’s art studio points to an underexamined motif that I argue is crucial to understanding naturalism’s complex engagements with processes of environmental determinism or constraint: the uneven composition and distribution of air. As Lawrence Buell (2001, 129–69) has suggested, environmental “discourses of determinism”—which often feature cities, factories, and other “impure” environments—offer an important counterbalance to an American tradition of environmental thinking that largely derives from Romantic ideals about “Nature” and purity. Whereas the animal and the machine have furnished literary naturalism’s most familiar metaphors for a world of inhuman forces,¹ air represents a vehicle for thinking about an environment that refuses easy oppositions between wild “Nature” and artificial “machines.” As Jennifer Fleissner (2004, 7) has noted in a different context, our tendency to emphasize naturalism’s hyperbolic narratives—in which nature is depicted in either nostalgic or revitalizing terms—tends to obscure how naturalist authors enacted “a far more nuanced and serious confrontation with the meanings of ‘nature’’s changing status in the modern world.” Air—which consists of shifting combinations of anthropogenic emissions, animal and plant exhalations, and dust particles of *everything*—offers a complex yet often overlooked index of nature’s “changing status in the modern world.” As the anthropologist Timothy Choy (2012, 128) puts it in his groundbreaking discussion of air pollution in Hong Kong,

Air functions . . . as a heuristic with which to encompass many atmospheric experiences. The abstraction of air does not derive from asserting a unit for comparison or a common field within which to

arrange specificities, but through an aggregation of materialities irreducible to one another (including breath, humidity, SARS, particulate, and so on). Thinking about the materiality of air and the densities of our many human entanglements in airy matters also means attending to the solidifying and melting edges between people, regions, and events.

In addition to calling attention to our material interactions with multiple atmospheric substances, air embodies the frequently overlooked flow of lively materials between differentiated spaces and across geographic scales. For Choy, air is thus an important element for theorizing social relations and affect in material terms: “Thinking more about air, that is, not taking it simply as solidity’s opposite, might offer some means of thinking about relations and movements—between places, people, things, scales—means that obviate the usual traps of particularity and universality” (125).

In naturalist fiction, air functions as a diffuse yet significant vehicle (both metaphor *and* metonymy) for environmental influence. At the same time, naturalist writers’ tendency to vacillate between metaphorical, affective, and material treatments of air—air as a social “atmosphere,” as an evocative smell, or as a toxic cloud—dramatizes both the stratification of air (which enables health and sociability in some places, while inducing asthma and exhaustion in others) and the uncertainty that characterizes many experiences of environmental risk, particularly among vulnerable populations. Despite the frequent absence of scientific proof of harm, naturalist authors are acutely aware of how the chemical composition of air varies across spaces and class boundaries,² as well as how airborne toxins can impair bodies, minds, and entire populations. At once animated and animating (or deadening) in its effects, air calls for a reassessment of Georg Lukács’s influential dismissal of naturalism as a genre whose overemphasis on describing physical details reifies humans as passive, mechanistic beings. Whereas Lukács (1970, 139) claims that “the descriptive method lacks humanity [and transforms] men into still lives,” describing the liveliness of nonhuman materials such as air illuminates the transcorporeal underpinnings of human mood, embodiment, and action. In “The Language of the Stones: Literary Naturalism and the New Materialism,” Kevin Trumpeter (2015, 237) argues that naturalism shares important conceptual ground with the new

materialism, noting that Bruno Latour's methodological privileging of description "is consonant with the emphasis on description in the 'experimental' novels of naturalism."

Like much urban and industrial writing, naturalism devotes considerable attention to air's appearance: the writings of Frank Norris, Stephen Crane, Theodore Dreiser, and Jack London are shot through with smoke, steam, fog, dust, and soot. Rather than focusing on visualizations of air pollution, however, this essay will explore a mode of representing air that violated both Victorian morals and Enlightenment aesthetics: naturalist descriptions of smells (particularly unpleasant ones). Associated with passive reception, physical permeability, corporeal excess, involuntary responses, and disease transmission, the sense of smell unsettles liberalism's fiction of the rational, individual subject of free choice. Air is simultaneously an aesthetic medium of scent and a biopolitical medium that determines life and death. As Immanuel Kant (2007, 158) puts it, "The man who pulls his perfumed handkerchief from his pocket treats all around to it whether they like it or not, and compels them, if they want to breathe at all, to be parties to the enjoyment."³ The chemicals emitted by a perfumed handkerchief might compel bystanders to be parties not only to "enjoyment," but also to what Rob Nixon (2011) calls the "slow violence" that insidiously disperses environmental harm across space and time. Yet smell is also something to which we become habituated: the more we're entangled with it—the more a smell enters our bodies and sticks to our clothing—the less we notice it. Smell thus offers naturalist writers an especially effective medium for dramatizing both the uneven distribution of bad air and people's involuntary—frequently debilitating—responses to airborne particulates. To the extent that it serves as a visceral yet indefinite index of airborne toxins, smell dramatizes routes of environmental "trans-corporeality"—what Stacy Alaimo (2010, 2) calls "the material interconnections of human corporeality with the more-than-human world."⁴ Environmental humanities scholars such as Alaimo, Nixon, and Mel Chen have demonstrated how attending to such material entanglements between differentiated bodies and uneven environments opens up illuminating points of intersection between cultural analysis and environmental justice concerns.⁵ Beginning with an analysis of olfactory environments in *Vandover and the Brute*, this essay will show how the naturalist narrative of

mental and physical “decline” intersects with the genre’s obsessive mapping of place-based smells. Next, I will show how the twentieth-century authors Ann Petry and Helena María Viramontes—whose works have significant affinities with earlier naturalist novels—extend Norris’s thematic treatment of air as an environmental vehicle of debilitation by dramatizing the connections between airborne toxicity and race- and class-based inequalities. While critics have traced the influence of naturalism on twentieth-century genres such as protest novels, film noir, hard-boiled crime fiction, and science fiction,⁶ my focus on environmental justice fiction illuminates a strain of neonaturalism that runs through all these other genres, infusing their plots with diffuse manifestations of environmental “slow violence.” The threads that run from turn-of-the-century naturalism to environmental justice fiction illustrate how the formal innovations of Norris and his contemporaries have been reappropriated from their imperialist, Anglo-Saxonist origins and rechanneled toward antiracist projects.

Vandover’s Smellscapes

While modernization is often associated with a drive to eradicate undesirable smells, it would be more accurate to say that the dramatic growth of US cities and industrial production beginning in the 1880s introduced disorienting and rapidly shifting “smellscapes”—to borrow the geographer J. Douglas Porteous’s (1985) term for the way in which places can be characterized by particular smell combinations.⁷ The rapid and chaotic growth of urban spaces and populations disseminated spatially differentiated mixtures of smells emitted by smokestacks, steam laundries, asphalt, paint, cleaning materials, gas lamps, unfamiliar foods, and diverse bodies human and nonhuman. The cultural, ethnic, and class diversity of cities—as well as the vast populations served by urban infrastructure—gave rise to new anxieties about identity, hygiene, and contagion: smells perceived to be “repulsive” could index class and ethnic disparities, failures of urban planning and infrastructure, or the potential for disease transmission. Differentiated smellscapes thus offer an important perspective on the “micro-climactic ‘fragmenting of the atmosphere’” into compartmentalized and stratified breathing spaces—a process which the philosopher Peter Sloterdijk (2009, 99) identifies as modernity’s most significant historical break from the past.⁸ These complex and shifting

smellscapes gave rise to aesthetic experiments with *toposmia* (Greek: *place+smell*), a field of inquiry that the olfactory art critic Jim Drobnick (2002, 42) glosses as “mapping by smell.” Drobnick provides a typology of artistic practices of *toposmia*, arguing that they may reinforce visual topographies with supporting smells, trace the affective means by which smells induce place-based identifications, or explore “dialectical odours” that strategically “use smell as an intervention into and means to critique . . . abstract or essentialist political conceptions of space” (42). Smell is thus an important medium for understanding the affective capacities of air—what Peter Adey, in “Air/Atmospheres of the Megacity,” calls the “material-affective ecology of a place[,] the qualities of the city that . . . imbue its material and biological fabric with affect” (2013, 293).⁹

The widespread association of unpleasant smells with poor hygiene and risk derived from nineteenth-century “miasma” theories of disease: as the British public health expert Edwin Chadwick put it in 1846, “All smell is, if it be intense, immediate acute disease; and eventually we may say that, by depressing the system and rendering it susceptible to the action of other causes, all smell is disease” (quoted in Schoenwald 1973, 681). As Alain Corbin (1988, 7) writes in his study of odor in nineteenth-century France, “The increased importance attributed to the phenomenon of air by chemistry and medical theories of infection put a brake on the declining attention to the sense of smell. The nose anticipates dangers; it recognizes from a distance both harmful mold and the presence of miasmas.” In the Progressive Era United States, smell was perceived to be both a nuisance and a public health threat: in 1891, for example, the Fifteenth Ward Smelling Committee embarked on a voyage up Newtown Creek to determine the sources of pungent and reportedly debilitating odors in Brooklyn, Queens, and parts of the Lower East Side (see Waldman 1999, 107). Although germ theory (already widely accepted in Europe) was gaining influence in the United States at the end of the nineteenth century, historian JoAnne Brown (1997, 78, 57) notes that “older etiological concepts of putrefaction, miasmas, and filth [as disease agents] persisted in the popular culture well into the twentieth century.” Miasma theory—or the notion that disease transmission is facilitated by poor air quality—underscores the connections between olfactory aesthetics and public health. In addition to mapping place-based smells, *toposmia* can produce olfactory maps of environmental

inequality, tracing not only how odor contributes to affect and memory but also how unevenly distributed smells can debilitate or kill by transcorporeal means.

Naturalism was the first American aesthetic movement to dramatize these links among air quality, health, and disease. Examples include Buck sniffing the “fresh morning air” in London’s *The Call of the Wild* (1903, 200), the “subtlest, most enduring odor” of Charlotte Perkins Gilman’s (1892, 654) yellow wall-paper (possibly arsenic dust from pigments¹⁰), the “strange and unspeakable odors” and “unholy atmospheres” that assail Crane’s protagonist “like malignant diseases with wings” in the 1892 “An Experiment in Misery” (2001, 156, 159), the “subtly strong odor of powder-smoke, oil, wet earth” that causes “alarmed lungs . . . to lengthen their respirations” in Crane’s “In the Depths of a Coal Mine” (*McClure’s Magazine*, August 1894, 200), the opposition between rancid forecastles and healthy salt air in Norris’s and London’s seafaring novels, the theme of “bad air” that Rose Ellen Lessy (2008) has traced in the works of Edith Wharton, and the tension between dazzling social “atmospheres” and suicide by gas inhalation in Theodore Dreiser’s *Sister Carrie* (1900).¹¹ In their diffuse references to air—an element that frequently hovers in the barely perceived background of texts—naturalist writers enact a version of “ambient poetics” attuned to the intoxicating qualities of airborne pollutants (see Morton 2007). This intense attunement to the supposedly “low” sense of smell¹² led the critic Max Nordau (1895, 13) to deride the fiction of “Zola . . . and his disciples” as an olfactory offense: “The books in which the public here depicted finds its delight or edification diffuse a curious perfume yielding distinguishable odours of incense, eau de Lubin and refuse, one or the other preponderating alternately. Mere sewage exhalations are played out. The vanguard of civilization holds its nose at the pit of undiluted naturalism, and can only be brought to bend over it with sympathy and curiosity when, by cunning engineering, a drain from the boudoir and the sacristy has been turned into it.”¹³ While contemporary critics such as Bill Brown (2003) and Kevin Trumpeter (2015) have illuminated the social liveliness of *things* in realist and naturalist novels, scholars of these genres tend to overlook the “animacy” of air—to adapt Chen’s (2012) term for the capacity of language to attribute degrees of liveliness to bodies, things, and environmental materials such as toxins. In these novels, air functions as both a metaphor for stratified social milieu (it tends

to be more hazardous in spaces occupied by the poor) and an uneven medium of physical and mental health. In *The People of the Abyss*—his 1903 account of what he calls “precarious” living conditions in East London—Jack London offers a toposmic account of how “the manifold smells of the day” mix and persist in the small, overcrowded room that serves as kitchen, laundry room, living room, and bedroom for a large family. Elsewhere, describing the slow deaths caused by occupational dust inhalation, London (1904, 305, 258) writes: “Steel dust, stone dust, clay dust, alkali dust, fluff dust, fibre dust—all these things kill, and they are more deadly than machine-guns and pom-poms.” London’s metaphor of the “abyss” names a vicious downward spiral whereby environmental factors slowly debilitate the minds and bodies of the poor, leaving them more vulnerable to new environmental risks connected with ever poorer living and working conditions.

Vandover and the Brute—a novel permeated with smells—charts just such a vicious cycle of decline. The novel traces the moral and physical degeneration of Vandover, a young aspiring painter who graduates from Harvard, rapes a young woman, causes her suicide, indulges increasingly in alcohol and long baths, inherits his father’s real estate holdings, fritters away his inheritance on fancy dinners and gambling debts, and ends up working as a janitor in a row of cheap working-class cottages. Along the way, he slowly succumbs to *lycanthropy-mathesis*, a nervous disease supposedly linked to syphilis (Norris 2015, 217n1), which impairs his vision and coordination and eventually causes him to act like a wolf, running around naked on all fours while barking the word “Wolf!” over and over again. *Vandover* was the first novel Norris completed (in 1895), but it was only published posthumously in 1914, twelve years after his death. Russ Castronovo (2015, 14) attributes the delay in publication to publishers’ concerns about its lewd and “immoral” content: “There was no saving a novel where portraits of harem girls bathing and other racy paintings hang from the walls[,] wine flows freely[,] women talk coarsely[,]” and the protagonist nearly vomits in a church from a hangover. Although *Vandover* received mixed reviews when it was first published,¹⁴ it has since figured as an important text for new historicist critics such as Walter Benn Michaels, June Howard, Katherine Fusco, and Gina Marchetti, who frame Vandover’s degeneration as an important index of the era’s anxieties about the capitalist economy, urban environments, mass entertainments, class mixing, and the atavistic “brute”

within. While my analysis builds on these contextual readings, I focus on the centrality of smell as a formal influence and environmental motif that links *Vandover* with twentieth-century fiction concerned with intersections between social inequality and toxic atmospheres. If *Vandover* is representative of an interest in the materiality of smell found across many naturalist texts, it is distinguished by Norris's persistent formal engagement with questions of uncertainty, habituation, and pervasiveness arising from everyday low-level exposures to environmental toxins.

Vandover stages a tension between visual and olfactory aesthetics, pitting the aspiring painter's control of lines and color against his susceptibility to San Francisco's varied—but generally unhealthy—smellscapes. In a degenerative process that allegorizes Kant's hierarchy of the senses, Vandover's ambitions and independent will are gradually eroded by the lower senses as he overindulges in chocolates in the bathtub, reads sensationalistic novels, and inhales the scents of alcohol, food, and the perfumed "odour of abandoned women." According to Kant (2006, 29), vision, hearing, and touch perceive the surface of objects, while taste and smell involve "the most intimate taking into ourselves"—an intimacy that, he adds, "can be dangerous to the animal." For Kant, smell is both "contrary to freedom" and "even more intimate" than taste. As Drobnick (2002, 32) explains, smell threatens Kant's "central aesthetic tenets" of disinterestedness—insofar as "smells are highly subjective and directly implicate the beholder's body"—and autonomy—insofar as smells are perceived passively, appeal to the limbic system, and call forth visceral physiological responses. Just as smell's excessive intimacy threatens to undermine the liberal subject's capacities of reason and will, Vandover finds himself increasingly unable to act on his moral judgments over the course of the novel. At the same time, his foul inhalations contribute to Vandover's physical decline and his increasing susceptibility to a nervous condition that Norris frames in both emasculating and atavistic terms (see Williams 1990; Seitler 2001). Smell thus plays a pivotal role in Vandover's vicious cycle of decline: bad air renders him increasingly susceptible to lycanthropy, and his psychological transformation into a wolf may in turn sharpen his sense of smell.

Norris stages Vandover's decline across a range of unpleasant—and possibly noxious—smellscapes. The novel begins by juxtaposing the death of Vandover's "invalid" mother with "the smell of steam and

of hot oil” at a train station. At the Imperial barroom, where Vandover frequently drinks with college chums and prostitutes, “a heavy odorous warmth in which were mingled the smells of sweetened whisky, tobacco, the fumes of cooking, and the scent of perfume, exhaled into the air” (Norris 2015, 71). The previously healthy Vandover becomes sick for the first time amid the foul air of a ship: “The cabin was two decks below the open air and every berth was occupied, the only ventilation being through the door. The air was foul with the stench of bilge, the reek of the untrimmed lamps, the exhalation of so many breaths, and the close, stale smell of warm bedding” (120). In this scene, Norris explicitly attributes Vandover’s illness to the air: “The continued pitching, the foul air, and the bitter smoke from the saloon-keepers’ cigars became more than Vandover could stand. His stomach turned, at every instant he gagged and choked” (121). At one of Vandover’s art studios, the casts of celebrated classical statues are surrounded by an atmosphere that is at once filled with artistic materials and uncondusive to the artistic process: “A strong odour of turpentine and fixative was in the air, mingled with the stronger odours of linseed oil and sour, stale French bread” (79). When Vandover attends the opera, aesthetic experience is again accompanied by bad air: “The atmosphere was heavy with the smell of gas, of plush upholstery, of wilting bouquets and of sachet. A fine vapour as of the visible exhalation of many breaths pervaded the house. . . . The air itself was stale and close as though fouled by being breathed over and over again” (174). Vandover’s living quarters become progressively stuffier as well: at one hotel, “The air of the room was thick and foul, heavy with the odour of cooking, onions, and stale bedding. It was very warm; there was no ventilation. . . . He was glad to be warm, to be stupefied by the heat of the bedding and the bad air of the room” (243). Rendered passive and sensuous by so many smells, Vandover is not only “stupefied” by his home’s bad air—he’s happy to be stupefied. In the novel’s final scene, Vandover in his janitorial job is immersed in both the stench of rotting filth and the smell of cleaning products: “Now he was cleaning out the sink and the laundry tubs. They smelt very badly and were all foul with a greasy mixture of old lard, soap, soot, and dust; a little mould was even beginning to form about the faucets of the tubs” (259). The novel maps Vandover’s regression by moving from sensual and cloying scents in spaces of

luxury to the cheap boarding houses and cottages in which he lives and works after gambling away his inheritance.

Norris's deployment of toposmia throughout *Vandover* formally underscores three facets of low-level exposure: habituation, uncertainty, and diffusion. Norris enacts our tendency to become habituated to smells by describing them only early in each of the novel's scenes: once noticed, even the foulest smells fade into the background. This phenomenon of olfactory habituation—or what Drobnick (2014, 191) terms *olfactory fatigue*—dramatizes how low-level exposures to “bad air” can function through the gradual, accretive temporality of “slow violence”: for even intolerable smells become tolerable with time. Moreover, as Nixon explains, the spatial and temporal dispersal of widespread low-level exposures has a camouflaging effect: they're present everywhere, but in barely noticeable quantities. Olfactory habituation in Norris's narration parallels the process of sensory habituation that propels Vandover's decline: always on the lookout for “fresh excitement that . . . could rouse his jaded nerves,” he indulges in increasingly extreme forms of gambling and consumption until the thrill of losing fantastic sums of money becomes the only novelty left to him.

Vandover's juxtaposition of physical and mental degeneration with foul smells also stages what environmental historian Michelle Murphy (2006) calls “the problem of uncertainty.” In her study of the emergence of “sick building syndrome” in the 1990s, Murphy explains that office workers voicing health concerns about harmful chemicals in office buildings negotiated “domains of imperceptibility” generated by scientific standards of proof. In the face of so much uncertainty, Murphy argues, it is necessary to “historiciz[e] the techniques through which ‘exposure,’ as an effect between buildings and bodies, became a phenomenon people could say, feel, and do something about” (7); whereas Murphy traces the techniques enacted by scientists, corporate experts, and labor activists, I argue that the naturalist novel was also an important cultural tool for reconfiguring domains of imperceptibility. Although it seldom specifies direct causal relations between airborne particles and physiological reactions, Norris's novel insinuates correlations between the foul air that pervades Vandover's environments and the protagonist's debilitation. Relegated to the edges of perceptibility, airborne particles are usually invisible and sometimes scentless; their biological effects are difficult to prove.

When the foul air on the ship is juxtaposed first with a Salvation Army worker's violent, choking cough and then with Vandover's nausea, the novel only implies direct causation. Similarly, Norris's descriptions of Vandover's mind as "clouded" and "enwrapped [in] fog" suggest the transcorporeal influx of bad air, but only through metaphorical associations.¹⁵ The near-imperceptibility of airborne toxins—along with the impossibility of establishing definite etiologies of harm—makes them a frequent subject of the "compulsion to describe" that Fleissner (2004, 43) identifies as a definitive formal feature of naturalist writing. Grounded in a "feeling of incompleteness" and a compulsive sense of doubt, this "compulsion to describe" takes the form of "an endless, excessive attempt to gain control over one's surroundings that reveals one's actual lack of control and concomitant frozenness in place." In spite of this pervasive uncertainty concerning smells, Norris consistently correlates health with air quality, as when Vandover's episode of incessant barking in a stuffy barroom is temporarily relieved "after a few minutes in the open air" (Norris 2015, 233), or when working-class tenants complain to their landlord of "a certain bad smell that was supposed to have some connection with a rash upon the children's faces" (259). The incapacity to shift from consecutive correlations to positive proof—frequently resulting from a lack of access to scientific expertise on the part of vulnerable populations—persists in many twentieth-century narratives of environmental injustice.

The tenants' complaint about a "bad smell" possibly correlated with "a rash upon the children's faces" points to the extensive diffusion of airborne pollutants. While Norris focuses on Vandover's predicament, he frequently hints at the ubiquity of environmental risks among the urban poor. Vandover's entanglement with filth and chemical soap smells in the novel's concluding scene is multiplied not only by the correlation of "bad smell" with children's rash, but also by the fact that he is cleaning the cottage of a burnisher's family. The burnisher—who polishes floors or machinery at the factory across the street—is also a subject of occupational chemical exposure: "An odour as of a harness shop hung about him" (Norris 2015, 263). Norris's description of one of Vandover's boarding house rooms indicates the larger scope of toxic exposure: "Close by, from over the roofs, the tall slender stack upon the steam laundry puffed incessantly, three puffs at a time, like some kind of halting clock. The room became more and more close, none of them would take the time to open the window,

from ceiling to floor the air was fouled by their breathing, by the tobacco smoke and by the four flaring gas-jets" (222). What good would opening the window do here, with the laundry steam-stack puffing like clockwork just outside? In a later scene, the steady puffs of this smokestack—"each sounding like a note of discreet laughter interrupted by a cough" (239)—ominously blend into the city's general atmosphere:

The clouds had begun to break, the rain was gradually ceasing, leaving in the air a damp, fresh smell, the smell of wet asphalt and the odour of dripping woodwork. It was warm; the atmosphere was dank, heavy, tepid. . . . Not far off the slender, graceful smokestack puffed steadily, throwing off continually the little flock of white jets that rose into the air very brave and gay, but in the end dwindled irresolutely, discouraged, disheartened, fading sadly away, vanishing under the night, like illusions disappearing at the first touch of the outside world. As Vandover leaned from his window, looking out into the night with eyes that saw nothing, the college slogan rose again from the great crowd of students who still continued to hold the streets.

'Rah!, rah, rah! Rah, rah, rah!' (237)

Here, the gradual, meticulously described "vanishing" of white jets of smoke is tinged with psychologically debilitating affects: irresolute, discouraged, disheartening, sad. If smoke becomes invisible, it remains materially dispersed throughout the city air, possibly contributing not only to "the queer numbness that came upon [Vandover's] mind [and] enwrapped his brain like a fog" (238) but also to the atavistic behavior of the crowd of drunken students puffing mechanical, inarticulate monosyllables after a football victory: "Rah!, rah, rah!" Hinting at indefinite connections between the vanishing smokestack puffs and variegated symptoms of mental intoxication, Norris captures both the uncertainty inherent to representations of environmental risk and the generalized sense of anxiety that Beck (1992, 49) argues is characteristic of risk society.

On the one hand, mapping urban smells served to enhance Norris's allegory of the emasculating influences of industrial modernity. The passive, atavistic, and effeminate implications of smell in *Vandover and the Brute* support critical accounts of the anxious opposition

between white male degeneration and imperial remasculinization that structured many naturalist narratives of adventure and decline: as Molly Ball (2016) argues, *Vandover* and other naturalist texts mobilize the figure of the male neurasthenic to claim vulnerability as a property of privileged white men.¹⁶ On the other hand, environmental determinism was fundamentally at odds with race thinking: as Julie Sze (2006, 32) notes, “[miasma theory] suggested that economic class and living conditions, rather than character or morality, were the sources of disease.” As I’ll show in the next section, Norris’s aesthetic engagements with smell as a medium for perceiving threats to environmental health have been taken up by twentieth-century writers explicitly concerned with racialized health disparities. If naturalist narratives frequently naturalized racial and class inequality, their formal experiments with air also developed a mode of environmental representation oriented not toward the crypto-racist wilderness ideal, but toward modernity’s proliferating “nature-cultures.”¹⁷

Atmo-Terrorism in Environmental Justice Literature

What if American environmental thinking took naturalism—in addition to romanticism—as a central point of reference? As Lawrence Buell (2001, 129–69) has noted, ecocriticism’s origins in Romantic “nature writing” led the field to neglect how naturalism’s “discourses of determinism” might illuminate the social consequences of “impure” environments such as the city. In this section, I will explore the possibilities for environmental literature stemming from naturalism by sampling from a tradition of environmental novels devoted to mapping the uneven distribution of risks—a tradition that preceded and may have helped orient the emergence of the environmental justice movement in the 1980s. Twentieth-century fiction extends naturalism’s stagings of “bad air” as a medium contributing to environmental health disparities, treating airborne toxins and the smell of risk as central political themes and formal concerns. At the same time, these writers delink environmental injustice from naturalism’s investments in anti-modern discourses of wilderness, imperialism, and “racial suicide,” attending instead to poor and racialized populations that bear the largest burdens of environmental risk. Focusing on instances of toposmia in the novels of Ann Petry and Helena Viramontes, I will show how twentieth-century authors bring Norris’s concern with modernity’s

differentiated smellscapes to bear on two scenes of residential, infrastructural, and occupational “slow violence”: poorly maintained Harlem apartments and Central California’s poisoned agricultural fields.

The manifestations of airborne toxicity explored by these novelists illustrate how—particularly in the United States—race inflects the twentieth century’s processes of “atmospheric fragmentation” traced by Sloterdijk in *Terror from the Air* (2009). Sloterdijk coins the term *atmo-terrorism* to describe the production of unbreathable atmospheres—a practice that originated in the use of gas warfare in World War I. Opposed to these unbreathable atmospheres are enclosed spaces that have been disconnected from the immediate atmosphere: according to Sloterdijk (2009, 20), this “principle of air conditioning” is based on the battlefield’s “gas mask concept.” Sloterdijk traces how poison gas technology moved from pesticide producers and military scientists to the architecture of gas chambers, a supposedly “humane” and “peaceful” apparatus of execution that depends on the efficient atmospheric separation of the chamber from the surrounding air (Christianson 2011, 1). The disproportionate exposure of black and brown Americans to pesticides, smog, poorly ventilated spaces, and (in Petry) leaking gas stoves illustrates how this atmospheric separation distributes toxicity along racial lines. These racial disparities in gas exposure are also evident in the history of the gas chamber in the United States: first used in Nevada’s 1924 execution of the convicted murderer Gee Jon,¹⁸ the gas chamber’s supposedly “humane” executions (which witnesses described in gruesome terms as a slow process of death by asphyxiation) continued to be disproportionately imposed on racialized subjects. As the historian Scott Christianson (2009, 113) reports, “By the end of 1941 the gas chamber had claimed eighty-two lives, at least sixty-eight of them African American—many of them for crimes other than murder.” Whereas *Vandover* frames air pollution primarily in terms of overcrowded, mixed crowds in urban spaces, Petry and Viramontes draw attention to how legal, economic, and social forces superimpose uneven atmospheres onto historically sedimented racial inequalities. Their novels document how “atmo-terrorism” in Harlem and Central California’s agricultural fields is both racialized in its imposition and racializing in its results (which frequently exacerbate existing conditions of immigration and premature death).

The two authors I’ll consider borrow a range of formal techniques from turn-of-the-century naturalists. In their narratives of

disempowered, working-class characters confronted with everyday environmental constraints, Petry and Viramontes deploy distanced third-person narration, extensive passages of environmental description, characters who are relatively unaware of the forces that act upon them, and plot trajectories that emphasize immobilization and decline. Both authors indirectly acknowledge naturalist precursors by echoing and repurposing formal and thematic elements of Stephen Crane's *Maggie* (1893), Richard Wright's *Native Son* (1940), and John Steinbeck's *The Grapes of Wrath* (1939).¹⁹ Instead of detailing all the formal and intertextual points that link these works to earlier naturalists, I will focus on how they develop Norris's staging of air as a medium of life and health. In key passages devoted to the animacy of air, these authors detail how air transfers material supports of health between places and populations: in their novels, building maintenance, real-estate investments, and corporate agriculture transfer resources and health to wealthier locations while abandoning inhabitants of Harlem and Central California to premature death. In addition to demonstrating the influence of naturalism on environmental justice literature, Petry and Viramontes experiment with a range of formal techniques for representing airborne risks situated at the edge of perceptibility. Their novels deploy smell to aid in characterization, to represent the insidious effects of everyday low-level exposures, and to convey the anxiety induced by the nearly imperceptible nature of some airborne toxins.

The Street (1946)—Ann Petry's novel about a young black woman struggling to raise her child amid Harlem's spatialized constraints on social reproduction²⁰—exemplifies the technique of olfactory characterization, in which smells situate and develop characters in relation to environmental factors. *The Street* begins with a prolonged account of the cold November wind, which “found all the dirt and dust and grime on the sidewalk and lifted it up so the dirt got into their noses, making it difficult to breathe; the dust got into their eyes and blinded them; and the grit stung their skins” (Petry 1998, 2). Animating the dust, grime, and litter on the street, the wind obstructs the life chances of Harlem's humans. If, as Petry writes, streets “were the North's lynch mobs,” then air serves as one of the street's most oppressive features, helping to “keep Negroes in their place” (323). Elsewhere described as an “invisible hand” distributing grime and rubbish along the sidewalks, the Harlem wind appears as the novel's central antagonist. In

addition to confronting a series of racist employers and predatory men, Lutie Johnson must struggle to survive the city's burdened atmosphere itself.

Throughout the novel, Petry invokes choking and suffocation as both physiological reactions and metaphors describing affective responses to life's constraints. With no window in the bedroom—"just an air shaft and a narrow one at that"—Lutie carefully considers how to ensure that her son Bub will have access to "air" in their new apartment (Petry 1998, 14). As she scrutinizes the apartment, the importance of fresh air becomes more apparent: "She was conscious that all the little rooms smelt exactly alike. It was a mixture that contained the faint persistent odor of gas, of old walls, dusty plaster, and over it all the heavy, sour smell of garbage—a smell that seeped through the dumb-waiter shaft" (16). Lutie's determination to improve her son's situation prevents her from passively suffocating in this atmosphere. By contrast, Petry's descriptions of the mingled smells that pervade the building's apartments, hallways, and basement provide an environmental explanation for the awkwardness and violence of the building's superintendent, who ogles women, sneaks into Lutie's bedroom, and eventually assaults her. When Petry writes that Jones's "voice had a choked, unnatural sound as though something had gone wrong with his breathing," it's unclear whether his choked voice results from his sexual arousal and mental imbalance, or from his prolonged exposure to the building's bad air (it could be asthma triggered by excitement, for example). Indeed, Jones's occupational exposure to chemicals is more intimate than Lutie's: when he spends an afternoon painting the building and firing the furnace, for example, he briefly steps out for "a breath of air . . . because the smell of the paint was in his nose, looked like it had even got in his skin" (373). Mrs. Hedges, who rescues Lutie from Jones's assault, provides an environmental—even transcorporeal—explanation for his behavior: she tells him, "You done lived in basements so long you ain't human no more. You got mould growin' on you" (237). Mrs. Hedges, who is herself the victim of occupational debilitation (her face was disfigured in a furnace fire when she worked as a janitor), also considers environmental explanations for the physical appearance and comportment of minor characters: when one young man stops by the brothel she runs, she "wonder[ed] if a creature like this was . . . the result of

breathing soot-filled air instead of air filled with the smell of warm earth and green growing plants” (249).

Petry’s most extensive treatment of smell appears in chapter 14, which uncharacteristically assumes the point of view of Bub’s school-teacher, a white woman who hates teaching black children in Harlem. Miss Rinner’s reflections about her job are described through eight paragraphs devoted to a suffocating mixture of odors: “the dusty smell of chalk, the heavy, suffocating smell of the pine oil used to lay the grime and disinfect the worn old floors, and the smell of the children themselves” (Petry 1998, 327). While Petry notes that this peculiar mixture of smells is characteristic of all poorly maintained, forty-year-old buildings—not just classrooms located in Harlem—Miss Rinner feels repulsed by the smell of “rancid grease” on the children’s clothing, which she eventually comes to think of as “‘the colored people’s smell,’ and then finally as the smell of Harlem itself” (328). By this point in the novel, Petry has already provided numerous economic and architectural explanations for the poor ventilation and musty smells of Harlem’s low-income apartment buildings; Miss Rinner’s reactions to these smells thus represent the process of stigmatization whereby the effects of the racially uneven distribution of air are perceived to be a racial fact: not the smell of poorly maintained, segregated housing units, but “the smell of Harlem itself.” Miss Rinner’s horrified fantasy about a racialized smell that follows her into her own home is an allegory for racial thinking that misperceives effects as causes: because poor black residents of Harlem inhabit unhealthy apartments and poorly maintained streets, white middle-class outsiders like Miss Rinner tend to perceive them as what Sarah Jaquette Ray (2013, 332) calls “ecological others”—irresponsible environmental stewards who, according to Miss Rinner, are “probably diseased” and have “no moral code.” Petry’s technique of olfactory characterization thus highlights the different ways in which characters interpret and respond to Harlem’s suffocating smells: Miss Rinner’s stigmatizing essentialization of smells, Jones’s resignation to their transcorporeal influence, and Lutie’s determined refusal to “get used to it” (194).

Helena María Viramontes’s novel about Chicana migrant farmworkers exposed to pesticides in Central California, *Under the Feet of Jesus* (1995), also features a protagonist who resorts to violent resistance in the wake of prolonged exposures to poisoned air. Whereas Petry

underscores how Harlem's air physically obstructs (as wind) or psychologically disturbs (as gas, mold, and smell) characters like Lutie, Jones, and Miss Rinner, Viramontes turns to an improbable scene in which a character is directly sprayed with chemicals as a strategy for dramatizing the population's everyday exposures to agricultural pesticides. Because low-level exposures are rendered invisible to the public by "temporal camouflage"—Rob Nixon's (2011, 210) term for the dispersal of exposures and their health effects over long time spans—Viramontes incorporates a spectacular scene of direct exposure into her otherwise naturalistic novel. When the teenage farmworker Alejo finds himself in the path of an unscheduled crop dusting, "the lingering smell was a scent of ocean salt and beached kelp until he inhaled again and could detect under the innocence the heavy chemical *choke* of poison. Air clogged in his lungs and he thought he was just holding his breath, until he tried exhaling but couldn't, which meant he couldn't breathe. He panicked when he realized he was *choking*" (Viramontes 1995, 77, my emphasis). Viramontes's olfactory description underscores the difficulty of perceiving environmental risks by noting the deceptive disjunction between smell and substance: the smell of pesticide is camouflaged by the artificial smells of the sea. When Alejo notices the presence of poison at all, what he detects is not an odor but a "heavy chemical *choke*"—not the smell of chemicals but his physiological *response* to the pesticide. At about the same time, another character, Perfecto, also inhales a trace of these chemicals: "The winds shifted and he breathed in a faint trace of saltwater and coughed" (78). Perfecto seems barely aware of the faint saltwater scent in the air, and the narrator does not directly attribute his cough to the scent. Juxtaposed with Alejo's dramatic poisoning, this correlation between smell and physiological response points to the insidious and everyday nature of low-level exposures. The characters in Viramontes's novel suffer a range of ailments including irritated eyes, muscle soreness, fatigue, chronic coughing, and other respiratory conditions. Although none of these conditions is directly attributed to pesticide exposure, the fact that they are endemic among the novel's migrant workers suggests a causal connection. Aside from industrial pesticides, Viramontes also details a range of everyday toxins that pervade the air her characters breathe. In an early scene, for example, Estrella opens a kitchen cabinet to discover there is no food—"Nothing . . . except the thick smell

of Raid and dead roaches and sprinkled salt on withered sunflower contact paper and the [empty] box of Quaker Oats oatmeal” (18). Given that both domestic pesticides like Raid and particulates from dead cockroaches have been linked to respiratory health conditions, this early scene both foreshadows and provides a broader everyday context for the concentrated dose of pesticide that Alejo receives in the fields. Likewise, the saltwater smell of pesticides induces in Perfecto involuntary memories of the smell of his stillborn child from decades earlier, and a lover who died of cancer. The juxtaposition of cancer and stillbirth with the chemical smell of pesticide indicates an oblique yet ominous connection between chemical exposure and premature deaths, between human and insect responses to poisoned air: “Perfecto coughed into his fist, and his nose began to run and he blew his nose and sneezed again. Flies tumbled like leaves from the bushy trees, dropping onto his shoulders and then onto the ground” (80). The climactic scene in which Alejo is sprayed by a crop duster thus condenses years of low-level exposures spread across an entire population into a single instant, presenting a scene of direct poisoning with clear causal relationships that can be difficult to prove in more mundane cases of environmental harm. Yet even in Alejo’s case, the aftermath is riddled with uncertainty: his debilitated condition—which other laborers refer to as *daño* of the fields—has no official medical diagnosis, and the novel tells us nothing more about him after Alejo’s friends leave him at a hospital. The ambiguity of Viramontes’s smells and the uncertainty of their effects call attention not only to the uneven distribution of risk factors, but also to the uneven distribution of expertise and research on risk factors affecting racialized populations. In a world so riddled with unknowable toxins,²¹ even the novel’s scattered moments of lyrical resilience—as when Estrella finds music in a “full of empty” oatmeal box (20) or when she enjoys the sensation of a breeze in her hair while standing on the roof of a barn—are clouded by airborne risk. For as Viramontes indicates throughout the novel’s passing references to air, neither the fluttering breeze nor the air inside the oatmeal box is truly “empty.”

Anticipating contemporary ecomedia such as neighborhood “smell-walks,” crowdsourced smell-maps, and olfactory art,²² naturalist smellscapes deploy smell to make environmental inequity a matter of affective immersion and visceral response. While Petry and Viramontes build on the naturalist aesthetics of smell that figures so

prominently in *Vandover and the Brute*, they are distinguished from Norris by their investment in documenting and resisting environmental racism. Whereas *Vandover* frames unhealthy smells as a pivotal element in the decline of white manhood, the twentieth-century writers I've discussed here depict prolonged and everyday encounters with modernity's racialized geographies of air. In doing so, they detail specific ways in which environmentally induced debility is embodied: whereas *Vandover*'s lycanthropy enacts naturalism's post-Darwinian obsession with the human brute,²³ Petry and Viramontes document how "slow violence" manifests in respiratory ailments, visual impairment, fatigue, and other physiological and psychological conditions precipitated by chemical exposure. They also attend to emergent forms of resistance and resilience within the domains of uncertainty imposed by environmental risks: *The Street* depicts Min's efforts to use "conjure" powders and candles—along with ritual dusting—to counteract her domestic partner's violent rage; *Under the Feet of Jesus* details how migrants employ alternative family formations and folk remedies (the most prominent being pungent garlic) to sustain social reproduction in the face of environmental violence.²⁴ These environmental justice novels thus leverage naturalism's aesthetic concern with smellscapes to depict lived experience in unevenly distributed conditions of environmental debilitation, illuminating critical intersections between the environment, race, and disabling geographies across the twentieth century.²⁵

In addition to tracing the influence of early naturalists on twentieth-century fiction concerned with environmental injustice, reading these diffuse, uncertain treatments of toxic atmospheres calls attention to the role of air—and airborne risks—across a range of twentieth-century "neo-naturalist" texts. The environmental threat posed by bad air hovers over the smelly sump hole at the end of Raymond Chandler's hard-boiled crime novel, *The Big Sleep* (1939); it takes the form of "the smell of hot dust" in the opening chapters of Steinbeck's 1939 protest novel, *The Grapes of Wrath* (2006, 37); it haunts the protagonist of Don DeLillo's *White Noise* (1985)—which Frank Lentricchia (1991, 99) and Paul Civello (1994) have characterized as a postmodern "naturalist" novel—with the smell of death in the wake of a toxic airborne event;²⁶ it pervades Cormac McCarthy's dystopian speculative novel, *The Road*, with the "smell of earth and wet ash in the rain" (McCarthy 2006, 156). Cutting across a range of novelistic genres that critics

have traced to turn-of-the-century naturalism, bad air suffuses narratives of environmental constraint with problems of risk and unknowability. It thus calls attention to elements of uncertainty and open-endedness already inherent in texts like *Vandover*, while also drawing attention to the daily transformations of body and mind experienced most intensely by vulnerable communities inhabiting modernity's uneven geographies of risk.

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Notes

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- 1 See Rossetti (2006, 26–65), Lundblad (2013), and Seltzer (1992).
- 2 In addition to physiology, Zola—who had a strong influence on Norris's writing—cites the field of chemistry as an important model for the naturalist “experimental novel” (see Zola 1893, 2, 6, 23).
- 3 For a more extensive account of prejudices against smell and olfactory art in the Western philosophical tradition, see Shiner and Kriskovets (2007, 275–79).
- 4 Alaimo's materialist approach to the environment's human consequences offers an important counterpoint to Jameson, who views smell primarily as a figurative rather than a transcorporeal “vehicle” for affect: “The usefulness of smells as a vehicle for different types of affect derives at least in part from its marginalized status, its underdevelopment, so to speak, as a symbolic element” (Jameson 2013, 35).
- 5 See Alaimo (2010), Chen (2012), and Iovino and Oppermann (2014).
- 6 For other studies of twentieth-century neonaturalist genres, see Pizer (1982), Civello (1994), Jaeckle (2011), Scharnhorst (2011), Fleissner (2004, 275–80), and special issues of *Studies of American Naturalism* on “Naturalism and African American Culture” (7, no. 1 [2012], edited by John Dudley) and “Naturalism and Science Fiction” (8, no. 1 [2013], edited by Eric Carl Link).

- 7 For a detailed account of the emergence of public health in rapidly growing nineteenth-century cities, see Sze (2006, 31–37).
- 8 Sloterdijk (2009, 98–99) suggests that the experiences of alienation narrated in twentieth-century novels are expressions of this “micro-climatic ‘fragmenting of the atmosphere.’”
- 9 For other important studies of atmosphere and affect by cultural geographers, see Anderson (2009) and Philippopoulos-Mihalopoulos (2015).
- 10 Although arsenic was most frequently found in green wallpaper pigment, “arsenic pigments were still being used (at least in the United States) to dye [wall]papers colors other than green, where the consumer might not suspect the use of arsenic, as [*sic*] least well into the 1880s (Parascandola 2012, 121).
- 11 Referencing “A Harp in the Wind” in the title of *Sister Carrie*’s final chapter, Dreiser (1958, 386, 397) suggests the need to rethink the Aeolian harp—the classical figure for a detached poetics that passively records what’s in the wind—in the face of modernity’s toxic air flows.
- 12 “The more we descend in the vertebrates the greater is the olfactory, and the smaller the frontal, lobe The olfactory perceptions only furnish a minimum contribution to the concepts which are formed out of ideational elements” (Nordau 1895, 503).
- 13 Jameson (2013, 59) offers a different, more positive analysis of Zola’s description of pungent cheeses, in which embodied affect is expressed through “virtually an autonomous unfolding of sense data.” Norris, who was strongly influenced by Zola, also foregrounds smell in his novels: as Marchand (1942, 93) notes, “An interminable catalogue of odors might be compiled from the work of Norris.”
- 14 Most reviewers in 1914 framed *Vandover* primarily as evidence of Norris’s considerable—but not yet fully developed—abilities as a young writer; see the reviews collected in McElrath and Knight (1981, 335–64).
- 15 On “brain fog” as a figure for environmental debilitation, see Chen (2014).
- 16 On race and remasculinization in naturalist texts, see Lye (2004), Dudley (2004), Eperjesi (2005), and Banerjee (2013). For an influential critique of literary historians’ excessive emphasis on naturalism’s antimodern narratives of male decline, however, see Fleissner (2004, 13–18).
- 17 On the ties between American eugenics, imperialism, and the wilderness ideal, see Ray (2013, 11–16). On “nature-cultures,” see Latour (1993).
- 18 For a detailed history of Gee Jon’s execution, see Christianson (2011, 69–89); Christianson notes that the Mexican American youth Thomas Russell and Gee Jon’s Chinese accomplice Hughie Sing were also sentenced to the gas chamber around this time: although these two men were spared, the sentences bear witness to the state’s apparent interest in testing this new technology on nonwhite subjects (79).

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- 19 Noting its intersections with Wright's style and subject matter, Jay Garcia (2012, 101) reports that "critics described *The Street* as an example of naturalism in the vein of Wright's *Native Son*." See also Dingledine (2006). For a comparison of Viramonte's and Steinbeck's approaches to social realism and migrant laborers, see Moya (2002, 190–91).
- 20 For an influential discussion of "social reproduction"—or the means by which people reproduce themselves across time and generations—see Katz (2001). Katz discusses the environment as a material basis for social reproduction, along with the particular vulnerability of children to environmental pollutants (713–14).
- 21 For an incisive analysis of the theme of unknowability in this novel, see Huehls (2007).
- 22 On smellwalking and olfactory mapping, see Henshaw (2014, 42–58) and McLean (forthcoming); on olfactory art, see Drobnick (2012) and Hsu (forthcoming).
- 23 On naturalism's interests in evolution and degeneration, see Seitler (2001, 525–62), Rossetti (2006), and Armstrong (2011).
- 24 "[Estrella] establishes . . . a practice of responsibility and care for her community on this shifting ground" (Fiskio 2012, 313). See also Hendersen (2000, 853–59).
- 25 In addition to olfactory description, naturalist fiction is shot through with processes of physical and mental debilitation amid unevenly distributed environmental risks—or what Clare Barker and Stuart Murray, in their groundbreaking discussion of postcolonial disability studies, call "the wider contexts and material environments in which disablement occurs" (2010, 230). On debilitation as a concept attuned to uneven geographies and differentiated populations, see Puar (2009).
- 26 For an influential analysis of DeLillo's treatment of everyday toxic risk-scapes, see Heise (2008, 160–77).

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