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CLIMATE-CHANGE INFRASTRUCTURE AND THE VOLATILIZING OF AMERICAN REGIONALISM

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Slowly and with much reluctance, the United States has begun to convert its monolithic carbon-based energy infrastructure into a cleaner and more diverse energy network powered by a combination of carbon combustion, nuclear fission, solar rays, wind, biomass, and geothermal steam. In the following essay, I argue that this transition has shaped not only political and environmental discourse but also American regional literature produced during the first two decades of the twenty-first century. Examining representations of new climate-change infrastructure in recent regional narratives including Jay Tyrrell's *Wind Army*, Paolo Bacigalupi's "The Tamarisk Hunter," and Richard Powers's *The Echo Maker*, I show how authors convey the enduring significance of place in the twenty-first century through the volatilization of a region's landscapes.

A central assumption of American literary regionalism is that the geological, biological, and meteorological properties that constitute a given place within the United States are stable, synchronic, and unchanging features. By virtue of their immobility these features cannot be incorporated into the diachronic macroenvironment of the country as a whole. For this reason, such environmental markers contribute to the formation and preservation of regional microcultures, which

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always depend on the idea of geographical difference for their very existence. Just as local customs, dialects, and economies are understood (mythically, of course) to be unchanging characteristics of a given region that establish it as a space removed from the turbulent velocity of modern America, ecological markers such as topography, flora, fauna, and predictable seasonal weather patterns form a bulwark against what the great American environmental writer Edward Abbey calls "[t]he engineer's dream . . . of perfect sphericity, the planet Earth with all its irregularities removed, highways merely painted on a surface smooth as glass" (80).¹

If literary regionalism is characterized by what Roberto Dainotto calls "a pastoral sensibility untouched by the evils of history and sheltered from the latter within the 'boundaries of some sort' of place" (9), anthropogenic climate change would seem to constitute one of the greatest challenges to the continued relevance of this literary mode in the twenty-first century. After all, changes in global climate brought on by the hyperconsumption of fossil fuels vividly illustrate the interconnectedness rather than autonomy of regions within and beyond nation-state borders. Carbon gases emitted from power plants, automobiles, and other combustion sources exhibit a mobility that cannot be localized to the areas in which they are produced. In accordance with well-known models, these cosmopolitan molecules directly and indirectly alter markers of geographical difference by warming the planet and changing its weather patterns. These climatic changes, in turn, affect the biodiversity of a given area, altering the composition of plant and animal life and rendering the landscapes celebrated by regional fiction as volatile and permeable as the modern landscapes of urban cultural centers. This volatility changes the ways that individuals and communities respond to and define their local environments. It draws attention to the fact that nature has its own changing history and calls into guestion the very ground on which regional discourses rest.

But changes in markers of bioregional difference need not signify the imagined end of local difference in an era of anthropogenic climate change. If anything, these changes tend to reaffirm rather than minimize the sense of a region's uniqueness within the larger geography of the United States. The rapid and often catastrophic results of weather linked to climate change play a prominent role in contemporary regional fiction, which frames the sites of such catastrophes as worthy of representation precisely because of the transformations they are undergoing. Jesmyn Ward's *Salvage the Bones*, for example, tells the story of an impoverished African American family in the fictional coastal town of Bois Sauvage, Mississippi, during the days leading up to Hurricane Katrina. As the title suggests, *Salvage*

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the Bones bases its sense of region on what persists in spite of the hurricane's destructive power: the bonds that still hold the family and the larger community of Bois Sauvage together. At the same time, it is the hurricane itself that provokes this salvage effort and thus, in a sense, instantiates regional thought. In its title and plot, *Salvage the Bones* therefore illustrates that it is the possibility of a region being other than itself that enables artists and their characters to salvage a sense of what it is.²

The fact that contemporary regional literature tends to represent climate change as a set of catastrophic weather events makes sense, for as Rob Nixon argues, "violence is customarily conceived as an event or action that is immediate in time, explosive and spectacular in space, and as erupting into instant sensational visibility" (2). However, this also means that regional literature's representations of climate change often operate through a dubious synecdoche: weather as a stand in for climate. As Nixon reminds us, this kind of violence offers a poor approximation of the typical effects of a changing climate: "We need . . . to engage a different kind of violence, a violence that is neither spectacular nor instantaneous, but rather incremental and accretive, its calamitous repercussions playing out across a range of temporal scales" (2).

If we were to examine this less noticeable (and for that reason much more difficult to represent) "slow violence" of climate change as it appears in regional literature (Nixon 8), we would have to look for it not in synecdochic relationships with local weather but rather in its metonymic relationships with new infrastructural projects designed to mitigate its effects. Over the last three decades, these projects have transformed the appearance and functionality of regional landscapes throughout the United States. Spurred by the adoption of a renewable energy standard in 1983 and generous state and national tax credits thereafter, public utility companies in rural northwestern Iowa have constructed more than 2,800 wind turbines over the last two decades (Wiser) with an additional 656 turbines to be completed by 2015 (Lucey).³ Similar state and national policies have led to the construction of the Topaz Solar Farm in San Luis Obispo County, California, which began operation in 2014. The project spans 4,700 acres of the Carrizo Plain area of the county and generates 550 megawatts of electricity—enough energy to power 180,000 homes in the state. Less than a year after Hurricane Sandy devastated the East Coast, New York City mayor Michael Bloomberg issued a report calling for a \$20 billion network of flood barriers to be assembled around the city, including 20-foot-tall concrete floodwalls in Staten Island, a creek wetlands and tidal barrier in Coney Island, and a surge barrier at Newton Creek to protect Brooklyn and Queens. A month earlier,

the US Department of the Interior's Bureau of Reclamation funded seven projects in Oregon and Washington that would convert irrigation canals from the states' many rivers into underground pipelines (Redding). Clean-energy companies in California have even proposed building photovoltaic canopies over the state's many canals, including over 400 miles of the California Aqueduct (Woody).

Clearly, these infrastructural projects—particularly those based in rural areas of the United States—confirm what critics such as Fredric Jameson call our postnatural condition, in which all geographical features of a given region have "systematically been eclipsed from the object world and the social relations of a society whose tendential domination over its Other (the nonhuman or the formerly natural) is more complete than at any other moment in human history" (170). The sheer scale of the projects—square miles of solar panels, wind turbines that stretch to over 100 meters in height, and so on—create new, ultramodern landscapes that change the ways their occupants relate to and understand the land, making it increasingly difficult to sustain a cultural regionalism that, as Wendy Griswold reminds us, is "first and foremost an assertion of otherness" (125).

In a related sense, climate-change infrastructure compels local communities to participate in national and global energy and water networks through the rational management of their particular environmental resources. This fusion of local, national, and transnational interests undermines any model of regionalism that depends on absolute divisions between rural, antimodern spaces and urban, modern spaces within the United States. Just as clearly, these projects fit comfortably within the terms of regional discourse, which as Michael Kowalewski notes, "generally seek to stress not the common qualities of American places but the distinctive ones, the aspects of local identity taken to be most indelible and unreproducible elsewhere" (17). Indeed, technologies such as wind farms, solar farms, water barriers, and water pipelines depend on the unique features of a given local landscape—the breeziness of northwestern Iowa, for example, or the sunniness of California's Carrizo Plain-and their presence both calls attention to the features of those landscapes and renders them stranger, more volatile, and therefore more visible than they were without them.

As critics such as Bruno Latour, Patricia Yaeger, Michael Rubenstein, and Bruce Robbins observe, infrastructural technologies always play an important role in the construction and maintenance of social networks, but this role is often obscured by habitually separating material artifacts from the social relationships they enter into with humans. Robbins writes, "Public utilities drop off the radar because they seem to constitute a minimum threshold, an earth-bound zone in which the large irresolutions of politics can for once be ignored and decisions safely left to the technocrats" (31). This argument is similar to Latour's general observation regarding objects within a social network: "objects, no matter how important, efficient, central, or necessary they may be, tend to recede into the background [of social discourse very fast . . . and the greater their importance, the faster they disappear" (79-80). To resist this process and thereby render social objects visible, Latour argues, one must study situations in which those objects call attention to themselves as active participants in social networks. For Latour, the most obvious moment to study an object is when it first comes into being and before habit strips it of all its strangeness as a "visible, distributed, accounted mediator" that actively produces and sustains interactions between humans and their environments (80). If this is not possible, he argues, "fiction can bring-through the use of counterfactual history, thought experiments, and 'scientification'-the solid objects of today into the fluid states where their connections with humans may make sense" (82). The appearance of climate-change infrastructure in contemporary regional narratives combines these two approaches. If we consider literary regionalism as a representation of a social network that aspires to stasis at the same time as it responds to the mutable broader networks within which it is embedded, then it stands to reason that the actual features of both regional and national networks are rendered clearer by the introduction of these new infrastructural technologies within fictional settings already preoccupied with the question of what makes a social network unique. Solar and wind farms, for example, are now far more visible within and beyond literary settings than their equally artificial predecessors—coal power plants, irrigation canals, and so on—simply because they are new; older infrastructural technologies, on the other hand, disappear from view because we have grown accustomed to seeing them and they no longer exert a hold on our imaginations.⁴ At the same time, new infrastructure projects operate as metonyms for the monumental changes that are taking place within US communities and around the globe, linking together human-centered social networks and nonhuman meteorological and geological networks and therefore offering a way to connect the slow violence of climate change with the fast pace of anthropocentric narratives.

Climate-change infrastructures have already begun to play a role in transforming how regional difference comes into being in the novels and short stories of American artists. The presence of climatechange technologies in literary narratives draws attention to the relationships between geography and culture in ways that echo some of the strategies of older literary regionalisms, but as I will conclude,

these narratives force us to reevaluate the ideologies that govern these older regionalisms, replacing a model of difference rooted in permanence with a more volatile regionalism that foregrounds the relationships among local, national, and global networks and that is distinguishable from the country's cultural centers by its even more rapid pace of change. This inversion renders the peripheries of American culture more modern, in a sense, than their metropolitan counterparts, which, as Bloomberg's future plans for New York City suggest, harness climate-change technologies in order to preserve the city's appearance. In other words, for many recent fictional examples, the new measure of regional identity is that which changes rather than that which stays the same.

Alien Infrastructure

Jay Tyrrell's electronic photonarrative Wind Army plays on the tensions between the destruction and re-creation of regional difference in its comic homage to H. G. Wells's classic science-fiction novel The War of the Worlds. The primary component of Tyrrell's work is a series of black-and-white photographs of two California wind farms—the San Gorgonio Pass Wind Farm near Palm Springs and the Altamont Pass Wind Farm near Livermore—from perspectives designed to represent in sequence the assembly, deployment, and eventual destruction of a squadron of alien pods portrayed by the wind turbines. As Tyrrell recalls, his first thought on encountering the new and strange looking technologies was not of clean energy or wind power but rather of Wells's tripods (Lubertozzi), and his art constitutes an attempt to recover this sense of strangeness. An early image entitled "The Pod," for example, presents a single set of turbine blades in the foreground against a background of barren mountains, while a later image, "Martian Supreme Commander" (fig. 1), presents what appear to be the same blades resting in front of (and therefore commanding) a large number of upright and functional turbines that have taken over the landscape. Interpolating these photos are interviews by the artist, audio clips from Orson Welles's radio play, fragments of Wells's text, video clips from the 1953 Paramount Pictures film, and comic strips of the same subject.

Wind Army is therefore what its author calls an "homage to [a] story that so shaped [his] childhood fantasies" rather than a photorealist presentation of place and for this reason seems to bear little resemblance to realist modes of literary regionalism, which cast an anthropological eye on local geographies and customs (Interview by Smithson). Nevertheless, Tyrrell's decision to cast the climate-



Figure 1. "Martian Supreme Commander" from *Wind Army* (Courtesy of Jay Tyrrell. Reprinted with permission).

change infrastructure as destructive alien tripods clearly speaks to local anxieties associated with the emergence of gigantic wind farms in the American West. As critics of Wells's novel frequently conclude, the towering and destructive alien machines in The War of the Worlds embodied growing fears within Victorian England of a new kind of global warfare delivered through advanced weapons and telecommunications technologies. Ingo Cornils, for example, argues that "Wells' inventiveness seems to go beyond imaginatively toying with the idea of new technology that might shock or astound his readers; rather, he extrapolates from contemporary technological or scientific processes a likely—and terrifying—future. Wells was convinced that the ability to build and control machines would be the decisive factor in future conflicts" (27). In Wind Army, Tyrrell's photographs seem to update these anxieties by casting wind farms as the violent encroachment of modern technologies on supposedly natural rural landscapes. The connection is rooted in local history, for as Tyrrell recalls, the wind farms outside of opulent Palm Springs were understood as a kind of invasion (Personal Interview). Or as Palm Springs resident Donald Trump recently tweeted, "Ugly wind turbines have destroyed the entrance to Palm Springs, CA. These monstrosities are ruining landscapes all over the globe—expensive & bad electric."

This conclusion is reinforced by the work's formal logic. By blending together two different regions of California, *Wind Army* transforms both places into a set of blank signifiers that are reinscribed with new narrative values in the same way that various adaptations of Wells's work are hypertextually divorced from their status as autonomous texts, audio recordings, or films and instead play a secondary role in Tyrrell's artwork. The landscapes of the San Gorgonio Pass and Altamont Pass Wind Farms thus represent the English landscapes of Wells's fiction or, in the case of Orson Welles's adapted radio play, areas near New York City. In order for the homage to work, a viewer

must see beyond the particularities of place and instead translate regional differences into a series of allusive codes.

Jameson would call this reinscription a pastiche, and in many respects, Wind Army can be understood as a kind of postmodern "blank parody" that repeats the feel if not the historical sensibility of Wells's 1899 novel (17). As Jameson argues, under the conditions of late capitalism, art adopts a form characterized by "the random cannibalization of all the styles of the past, the play of random stylistic allusions . . . which is not incompatible with a certain humor. . . . [I]t is at the least compatible with addiction—with a whole historically original consumers' appetite for a world transformed into sheer images of itself" (18). The difference between Tyrrell's work and Wells's novel might therefore be visible in the ways that each work transforms the world into an image of itself. A chief assumption within both Tyrrell's narrative and Wells's novel seems to be the idea that place-the unique features of a given region and culture-still functions as a thing to be rescued from the threat of technology. After all, the alien technologies are only threatening because of their ability to volatilize a given static environment. In Wells's novel this holds true. However, within the terms of Tyrrell's work, which depends on the seamless integration of the San Gorgonio Pass and Altamont Pass Wind Farms, the two distinct regions clearly play at being the same place and are thus already stripped of geographical particularity. The perceived threat of the wind farms in Tyrrell's work is therefore no threat at all, for the landscapes have already been integrated into the simulacrum of a world now based in images rather than in stable geographies.

At the same time, as Eve Dunbar reminds us, American literary regionalism "is constituted by narratives about alien places and the people who inhabit them" (111), and thus Tyrrell's story seems to resonate with the central themes of the movement. If this is the case, Tyrrell's photographs of alien wind turbines make the same appeals as literary regionalism by exoticizing the landscapes in which they appear. Moreover, Tyrrell's incorporation of green energy technologies into his story calls attention to the real source of violence-comedic or otherwise—in both narratives: the carbon-based energy sources of the Anthropocene. In Wells's novel, the Martian invasion is catalyzed by an entropic shift in Mars's climate that renders the planet uninhabitable. Wells's narrator writes, Mars's "air is much more attenuated than ours, its oceans have shrunk until they cover but a third of its surface, and as its slow seasons change huge snow-caps gather and melt about either pole and periodically inundate its temperate zones. That last stage of exhaustion, which to us is still incredibly remote, has become a present-day problem for the inhabitants of Mars" (2). Tyrrell's turbines reinforce this metonymic link between the wind farm's technological functionality and climate change, suggesting that the alien invasion marks a desperate attempt to mitigate other technologies' devastating effects on regional, national, and global climate. Far from destroying the landscape, with this Wellsian context the alien turbines of *Wind Army* are the refugees of climate change and the new champions of twenty-first-century regionalism. Put slightly differently, the wind army suggests that the landscape of a region must become more artificial—more suffused with human artifacts—in order for its climate, flora, and fauna to be maintained; it must change some features of its appearance in order for it to stay the same.⁵

Climate-Change Infrastructure as the Return of Regionalism

Because of their proximity to local communities, these climatechange technologies also enable members of those communities to reconsider their energy consumption habits and the extraregional networks that enable these habits. In so doing, regional communities have the opportunity to experience what Timothy Morton calls a real confrontation with a shifting, networked ecology rather than a mythic confrontation with a static nature. In *Ecology Without Nature*, Morton argues that discussions of the environments within which people live typically "involve discrimination between inside and outside," which enables us to distinguish between noise and sound, graphics and letters, smell and scent, space and place, and subject and object (48-49). Within such a model, the environment (what Morton calls "nature") is reducible to either a frame around which human meaning can come into being or a distant object of contemplation to be kept separate from the social lives of humans (2). These perspectives align comfortably with the antimodern, pastoral qualities of certain older regional discourses, but both perspectives overlook the fact that the subject position eager to define nature is never wholly outside the ecological system from which it attempts to separate itself. "We are now," Morton argues, "compelled to achieve ways of sorting things out without the safety net of distance, ways that are linked to ways of sorting things out ethically and politically" (27). If Morton is right, then Tyrrell's new relationship with climate-change infrastructure creates a regionalism based on changing ecology rather than unchanging nature, collapsing the distance between subject and object and enabling Wind Army to confront the radical otherness of its environment in its monstrous unwillingness to conform to outdated models of natural beauty.

Paolo Bacigalupi's short story "The Tamarisk Hunter" also calls attention to the ways in which regional discourses of the contemporary period replace stable notions of place grounded in nature with unstable notions of place rooted in ecology. Set in the near future, the story follows the life of the eponymous hunter, Lolo, as he struggles to survive in the borderlands between Utah, Arizona, and Nevada after an intensification of the drought conditions that have ravaged the American Southwest since 1999.⁶ The drought leads to the predicted disappearance of water reservoirs such as Lake Havasu and Lake Mead and violent interstate conflicts over water rights on the Colorado River.⁷ To mitigate the effects of "Big Daddy Drought," The US Bureau of Reclamation pays Lolo to eliminate tamarisk plants that arow along the banks of the Colorado River (178). An invasive shrub native to the desert regions of Africa and Asia, the tamarisk "can suck 73,000 gallons of river water a year," and Lolo is paid "\$2.88 a day, plus a water bounty" to travel by camel down the river, destroying any plant that he sees (171). To prevent evaporation, water theft, and further water loss due to plants such as the tamarisk, the state of California creates what Lolo and his fellow tamarisk hunters call the "Straw"—a pipeline to Los Angeles comprising half of the Colorado River that "flopped out on the desert like a damn silver snake. . . . And the river just disappears inside. Nothing but an empty canyon below it. Bone-dry" (179).

As Bacigalupi's bleak descriptions suggest, Big Daddy Drought and the Straw change the nature of southwestern regionalism to a far greater extent than the alien tamarisk plants do, leading to the abandonment of many towns and a reversal of the half-century demographic shift toward the Southwest, Lolo's fellow hunter, Travis, speculates that these changes enable the urban centers of Californianow lined with "immigration fences" to keep out displaced Nevadans and Arizonans—to continue "filling [their] swimming pool[s] with last year's water bounty," preserving their lifestyle at the expense of catastrophic changes in nearby regions (179). The story thereby critiques models of regionalism that call for absolute divisions between inside and outside, suggesting that such divisions are often enforced by metaphysical or real violence directed toward the disempowered periphery. This failure to think systemically is not limited to water consumption. Freighthopping his way to the interstate, Travis sees "nothing moving out there except highway trucks and coal trains and a couple truck stops" (179)—a transportation and energy infrastructure that plays a dominant role in anthropogenic climate change.

But as the story makes clear, the drought clears away a culture that bears more resemblance to the ultramodern cities of Los Angeles and Las Vegas than the local environment in which it was situated.

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When Lolo tops a mesa, for example, he views the "familiar landscape of an eviscerated town": "At the very edge of the empty town, oneacre ranchettes and snazzy five-thousand-square-foot houses with dead-stick trees and dust-hill landscaping fringe a brown tumbleweed golf course. The sandtraps don't even show any more" (174). Travis recalls, "when all that land down there was selling like hotcakes and they were building shit as fast as they could ship in the lumber. Shopping malls and parking lots and subdivisions, anywhere they could scrape a flat spot. . . . Forty-five thousand people. And none of us had a clue" (178). As typical products of the southwestern boom, the abandoned town's golf courses, mammoth houses, shopping malls, and grassy yards call attention to the ways that modern architecture and infrastructure often liquidate regional difference, rendering the "scrape[d]" landscapes of these areas indistinguishable from suburban locations elsewhere in the country until that infrastructure fails. At that point, the now-indistinguishable sand traps and "deadstick trees" (174), along with Lolo's memories of the green grass of football fields ("sprinklers sprayed their water straight into the air" [185]), illuminate the community's exploitation of overtaxed water systems to preserve this nonsustainable engineering dream. They are an invasive species on the order of the thirsty tamarisk that makes even greater demands on the Colorado River in an effort to combat rather than reinforce the ecological properties of their environment.

By denying the town water, the drought and the Straw effectively return the land to an exaggerated version of its original desert conditions, and its only remaining denizens revert to behaviors that recall older southwestern regional communities. Though he was once a real estate agent, Travis raises cattle in addition to hunting tamarisk, and his career change clearly reflects the story's privileging of cowboy culture over land speculation. Likewise, Lolo's "homestead" is a "couple acres of semi-alkaline soil, conveniently close to the river's edge," which he shares with his wife (180). They water their crops using buckets they fill in the river and store an illegal cistern beneath their adobe house, echoing behaviors of their nineteenthcentury counterparts and thus making the same nostalgic appeals to the past as previous regional fictions.

For all of its obvious problems, the Straw's brutal infrastructure cannot be read as an alien presence in this regional story. Like Latour's object mediators, the pipeline's novelty draws attention to the often hidden or overlooked infrastructure that sustains the American Southwest and illuminates the historical and contemporary relationships between local and national water networks. As the story makes clear, this infrastructure (and the failure of older infrastructures) are manifestations of the slow violence that inevitably accompanies

attempts to preserve the lives and lifestyles of a given region-a violence that, in Bacigaplupi's ironic conclusion, replaces the explosive violence of a typical western story with what Rob Nixon would call the "incremental and accretive" violence of an area slowly dving of thirst (2). When Lolo returns to his home at the end of a hunt, he meets two quardies whom he thinks are there to arrest him for siphoning water. To avoid an anticipated gunfight, he surrenders to the guards, muttering "Yeah, OK. You got me. . . . Annie didn't know anything about this. Don't get her involved. It was all on me" (189). Subverting generic expectation, the men chuckle and reveal that they are there only to deliver a buyout check to him. The US Bureau of Reclamation, they tell him, has decided to end the bounty program and will close Lolo's headgate, leaving him with no access to the river and forcing him to join a resettlement community or die of thirst. "Anyway," one guardie tells him, "in a couple years they were going to pipe this whole stretch. There won't be any tamarisk at all after that" (189). In foregrounding this slow violence inflicted on individuals by infrastructure managers, Bacigalupi illuminates the ways in which policy decisions based on static and autonomous notions of place obscure the ways that a space becomes a place, replacing an older, conservative regionalism with a regionalism in transition that highlights the ways in which humans remake the environment into a place and then naturalize that activity, hiding it from active thought. Put slightly differently, by representing the pipeline before it is buried, Bacigalupi symbolically explores the ways that ecological networks enable or inhibit the perpetuation of older regional mythologies by burying or foregrounding the connections between regions of the United States.

Richard Powers' 2006 novel *The Echo Maker* explores similar ideas. Within the novel, a consortium of commercial interests plan to create the Central Platte Scenic Natural Outpost near Kearney, Nebraska, which will enable tourists to experience the annual migration of sandhill cranes (the eponymous echo makers) to the area—during which time "cranes . . . outnumber humans several times over" (127). In an effort to monetize this biomarker, the group applies for water rights to the Platte to service "crane cabins" and the "Living Prairies Museum," which will serve as a nature-themed zoo and waterpark (410-11). As the novel's environmental advocate Daniel Siegel laments, however, the requisite water pipelines would drain more of the already taxed river, rendering it inhospitable to the cranes and ensuring that the living prairies would be every bit as artificial as the water slides in the park. Clearly, this commercialized regionalism fails because it must destroy the ecosystem in order to celebrate it.

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At the same time, Siegel's opposition to the Living Prairies Museum suggests once again that it is the prospect of a region being other than it is that provokes regional discourse and that enables people to mount defenses of the environment. Powers emphasizes this idea by contrasting Daniel's lament for a disappearing bioregionalism with the transhistorical memories of migrating birds:

> The yearling crane's past flows into the now of all living things. Something in its brain learns this river, a word sixty million years older than speech, older even than this flat water. This word will carry when the river is gone. When the surface of the earth is parched and spoiled, when life is pressed down to near-nothing, this word will start its slow return. Extinction is short; migration is long. Nature and its maps will use the worst that man can throw at it. . . . When all else goes, birds will find water. (443)

In this strange shift from human time to nonhuman time, regionalism—here described as a mystical word or map—is defined by what endures in the midst of change, by what the Kearney region would mean even "when the river is gone." This perspective brings together ecological modes of representing the natural environment with technological modes of understanding the hidden infrastructure of the contemporary world. Within the terms of this model, whatever ultimately constitutes the map of a given place incorporates temporal as well as spatial variables, making ecological change as much a part of the place as ecological consistency.

This perspective, like those of Tyrrell and Bacigalupi, locates the place of the individual within broader networks. Following Benedict Anderson, infrastructural critic Michael Rubenstein argues that encounters with public utilities enable citizens to imagine "a virtual relationship with the state" by "commun[ing] with [its] material culture . . . encountering its power, and, when things are in working order, its benevolent provision" (9-10). The task of the contemporary regionalist, I have argued, is similar; one must find ways to link this virtual encounter with artificial environments to virtual encounters with natural systems. If, as many critics have suggested, the great task of environmental artists and their critics is to establish methods by which the slow violence of anthropogenic climate change might be represented, then new infrastructural technologies must surely be examined as fruitful metonymic markers of this violence that have been (and, increasingly, are being) incorporated into regional literary narratives. In the process, climate-change infrastructure might become the central marker of regional difference in an era of anthropogenic climate change.

Notes

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- Unsurprisingly, these markers find their way into titles of major works of literary regionalism—Sarah Orne Jewett's *The Country of the Pointed Firs*, William Faulkner's *Light in August*, Mark Twain's *Life on the Mississippi*, and so on. These same biomarkers are celebrated by the American conservation movement of the mid-twentieth century, which views them as indictors of a region's health. As the leader of this movement, Aldo Leopold, writes in *The Sand County Almanac*: "[a] thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise" (224-25).
- 2. This conclusion dovetails the central theme of many cultural artifacts produced in the aftermath of Hurricane Katrina. In Josh Neufeld's nonfiction graphic narrative *A.D.: New Orleans After the Deluge*, Denise, a sixth-generation New Orleanian, returns to the city and muses, "now that I'm back, I feel better. More hopeful somehow. In spite of it all, even though the place will never be the same—I am home. But it's not over. We're not all home yet" (187). HBO's series *Treme* also explores the difficulties of community-building in New Orleans in the months and years after Hurricane Katrina. Such narratives suggest that a dominant subject of future regional narratives will be the process of creating (or re-creating) a sense of regional difference after catastrophic events.
- 3. Fittingly, Iowa wind farms have found their way into the *Atlantic Monthly*, a journal widely credited with spurring the development of literary regionalism during the late nineteenth century. *Atlantic* reporter Christina Davidson clearly draws on this legacy in her two-part article "Wind Power: New Shade of Green Dominates Iowa Landscape."
- 4. Because it is a major contributor to global warming, carbon-based energy infrastructure may undergo a second visible period. As Latour notes, hidden objects can regain visibility through "accidents, breakdowns, and strikes: all of a sudden . . . objects, which a minute before appeared fully automatic, autonomous, and devoid of human agents, are now made of crowds of frantically moving humans with heavy equipment" (81). While Latour privileges the sudden violence of objects breaking down, in the case of carbon-based energy production, it is the world rather than the object that is disrupted. This continuous disruption provokes new political and economic debates centered on once-forgotten infrastructure.
- 5. This idea is not localized to the United States. The British road film *Hinterland* (2015) follows two childhood friends as they travel from New York City and London to their former hometown on the Cornish coast. On their journey, they discuss what makes their hinter-homeland unique while passing enormous wind turbines. The film's director

and star, Harry Macqueen, believes that these wind turbines serve the same role as natural phenomena: both entities give shape to the dramatic regional landscape. As he states, "The turbines are a very present part of the landscape where we were filming and are—to me, at least—really beautiful structures" (qtd. in Pierce).

- 6. Connie Woodhouse et al. offer a clear summary of this drought and its potential long-term impact on the region. As they argue, twentyfirst-century droughts in the region will be more comparable to megadroughts of the prehistoric past in the region than to the major droughts of the twentieth century.
- 7. In the 15 years since the drought began, Lake Mead's water level has dropped by 140 feet, with an additional ten-foot drop predicted by the end of 2015. The old tunnels that transport water to Las Vegas will be unusable if the lake's level drops below 1,000 feet (it is at 1,080 feet as of April 2015), so the Southern Nevada Water Authority has spent \$1.5 billion on the construction of a new tunnel connecting to deeper levels of Lake Mead. See Siegler.

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