

# Conclusion

## *Stuck in the Mud*

William Burrows famously wrote in his 1959 countercultural novel, *Naked Lunch*, about the stark reality that slides underneath consumptive capitalism: it describes “a frozen moment when everyone sees what is at the end of every fork.” We can pause to bring to light the contradictions of American capitalism and still not succumb to despair. Grief can turn to righteous anger. We can identify how reputations are greenwashed. We may applaud the care by a “survival center” sponsored by Freeport McMoran for animals injured by oil spills, but also recognize that Freeport McMoran is an international oil and mining company that in 2021 agreed to settlement talks in a \$100 million environmental lawsuit for its role in pipeline-related destruction in the Louisiana marsh. We must keep these two opposing ideas in our heads.

It’s part of living here at the edge of doom. Yet doom cannot equal hopelessness. The game is not up. In fact, it has just begun. When we find the future too dystopian and the needed changes too draconian, it may help to follow the provocation by Haraway to “stay with the trouble.” In other words, we stay with one another and work *with* rather than *on*.<sup>1</sup> We can and should push back against the narrative of hopelessness. Science communicators themselves argue that the report by the United Nations Interagency Panel on Climate Change (IPCC) offers some immediate opportunities. Even as ominous warnings about methane gas releases from permafrosts point toward the dreaded positive feedback loop, buried in chapter 6, the 2021 report actually shows that immediate reductions in methane emissions and other short-lived climate pollutants could reduce warming 0.2 degree Celsius by 2040 and .08 degree Celsius by the end of the century. That’s pretty substantial in the context of 1.5 degrees Celsius outlined by the 2015 Paris Agreement. The IPCC report also stated that methane and other short-lived pollutants released in 2022 will have “at least as large” an impact on climate change

over the next ten to twenty years as current carbon dioxide emissions. Their extreme potency, combined with their limited time in the atmosphere, means that reducing those emissions will have a significant and “almost instantaneous” climate impact.<sup>2</sup> Other collaborative scientific reports support this assessment.<sup>3</sup> Framing the situation as hopeless saps the will to make necessary changes today for human survival. It also saps our capacity for imagining and caring for others’ worlds. It defeats our ability to make meaning and becoming with each other and other “companion species” who will continue living and dying. “To think-with is to stay with the natural-cultural multispecies trouble on Earth,” Haraway reminds us. Our present and unfolding future in the ruins is “relentlessly contingent” on what we do and on what kinds of “storying and worlding” we can do with familiar and unorthodox agents.<sup>4</sup>

We may look to Anna Tsing’s investigation of Matsutake mushroom picking, which reveals something powerful about flourishing among ecologically harmed areas. The Matsutake circulates globally through an exchange system that defies traditional economics.<sup>5</sup> By following the Matsutake, Tsing discovers assemblages of Japanese buyers and American businessmen, as well as pickers from multiple communities: Chinese, Korean, Hmong, Lao, and Mexican, as well as disaffected Americans. Getting mushrooms to mouths requires informal exchanges along a network of pickers, buyers, shippers, restaurateurs, and businessmen. Tsing also attends to the scientists, foresters, DNA sequencers, fungal spores, trees, and mycorrhiza. She refuses to reduce the Earth’s urgency to abstract destruction. “She looks for the eruptions of unexpected liveliness and the contaminated and non-deterministic, unfinished, ongoing practices of living in the ruins.” In other words, by following the Matsutake, Tsing is guided to possibilities of coexistence within environmental disturbance. “Matsutake tell us about surviving collaboratively in disturbance and contamination.”<sup>6</sup>

What about possibilities for monitoring air pollution using racing homing pigeons, who can traverse heights inaccessible to more expensive ground-based monitors? “These data could also be streamed in real time to the public via the Internet. What would it take to enlist the cooperation of such birds and their people, and what kind of caring and response-ability could such a collaboration evoke?”<sup>7</sup> Pigeons in this case are not inert transistors or SIM cards but coproducers that interact with and impress on their co-trainers. There’s a kind of cohabitancy in the ruins—characterized in how different beings come together in ways that can only happen through the “unnatural” disturbances of one another’s native habitat. Haraway calls these multispecies interactions “flawed translations across difference” that allow for a modest flourishing.

In these cases, emerging natures are coproduced through disturbance. “Out of the ruins of the Anthropocene might then emerge ‘wildness’ as an inclusive principle that meshes the organic being that inhabits us with the environment that surrounds us.”<sup>8</sup> We cannot afford to denounce a kind of world in the

name of modern nostalgia. The sanctification of a natural world separated from humans simply reinforces the fallacy of a pristine untouched wilderness and, ironically, reinforces poor stewardship and ignorance that we are part of its ecology. Life continues to assert itself among the ruins as wildness, instead of wilderness. Wilderness is romantic and limited. Wildness is rather quite ubiquitous. While pristine wilderness barely exists, wildness persists in all kinds of uncharted spaces.<sup>9</sup>

At the river, wildness is displayed by purple irises and pink dandelions that sprout through the concrete revetment levee plates; turkey vultures perched atop trees that have been thinned by repeated hurricanes. Wildness is the breaking through; trilling insects in the city; frogs just out of sight in the evening; crickets rubbing; beetles in the bedroom; a puppy munching on a cockroach on his walk. My repulsion notwithstanding, wildness resists or rather overwhelms our controlling impulses. It flourishes despite them: when fields are left to “fallow” or offices are left to the woods. There is an ironic bit of comfort in that. It arcs beyond the Anthropocene to an unfolding that collects and layers its trash and chips into a planetary compost like a “mad gardener.”<sup>10</sup>

#### GREENWASHING NET ZERO

But we have work to do. We must be vigilant and skeptical when the fossil fuel industry manages to embed itself in the solutions for achieving a sustainable future. Not only in the Louisiana Master Plan, but in any narrative of “having a seat at the table.” Lately, the industry line has targeted achieving net zero through industrial carbon capture and storage (CCS), which is embraced by elected leadership—despite the failure of carbon capture pilot projects. Over 80 percent of the thirty-nine projects that have sought to commercialize carbon capture and storage have failed.<sup>11</sup> “Industry wants to build a whole new network of pipelines through our wetlands, through Cancer Alley and other environmental justice communities, and they want billions and billions of dollars not only in federal money but state subsidies too. Because there is no money to be made in the marketplace,” says Rob Verchick, a member of Governor Edwards’s Climate Action Task Force and president of the Center for Progressive Policy Reform. “The only money to be made is if you can get the federal government to pay you.”<sup>12</sup>

Biden’s bipartisan infrastructure bill and Inflation Reduction Act, for example, increased the “45Q” tax credits for carbon dioxide that is either stored underground or used to bolster oil extraction.<sup>13</sup> According to Verchick, the federal government is subsidizing \$12 billion in carbon capture spending with only a quarter going to ambient air capture. “The problem is that despite billions spent on it, the CCS industry has failed to even meet its own expectations.” The Government Accountability Office reported in 2021 that the federal Department of Energy invested a billion dollars in nine different CCS projects between 2010–2017 and

only two were still operating. “It’s an amazingly expensive way for oil and gas companies to keep burning fossil fuels,” says Verchick.<sup>14</sup> Over five hundred environmental organizations signed an open letter, published in the *Washington Post* in July 2021, calling carbon capture and storage a false solution. “We already have a huge problem with methane and leakage.”<sup>15</sup>

Louisiana has historically positioned itself as a fossil fuel–friendly state while it has increasingly become a case study for environmental racism. These two elements are part of the same legacy. Carbon capture advocates seem to be grasping the first part of the equation without its negative externalities. More industrial development would increase the potential for plant accidents, water contamination, noise, and squalor that disproportionately affect environmental justice communities. It is likely to rationalize demand for new projects running on dirty energy sources, delaying the energy transition to renewables, extending the life cycle of aging plants, and misdirecting critical public resources that could be spent more productively elsewhere.

Despite the vast public relations and marketing budgets promoting carbon capture, the road to net zero based on modeling by the governor’s own Climate Action Plan requires electrification of the industrial grid, expansion of forests, and no-carbon hydrogen.<sup>16</sup> Carbon capture was modeled at best case to nominally reduce greenhouse gas emissions if it was tied to production activity with no carbon sources and other combinations of natural carbon sequestration, energy transition strategies, and conservation. “It’s less than 10 million metric tons. It’s a rounding error almost. If you compare that to the potential harms and all the money, it doesn’t seem like a very good investment,” explains Verchick in a zoom presentation, “The False Promise of Carbon Capture.”<sup>17</sup> This rounding error also assumes competent oversight by a regulatory apparatus with a poor track record of enforcement. In a technical memorandum accompanying the state’s Climate Action Plan, the Water Institute of the Gulf, which facilitated task force collaborations, argued that industrial carbon capture alone would have minimal effect on reducing greenhouse gas emissions. Louisiana is a carbon-intensive producer. Most of its energy consumption—over 70 percent—comes from industrial refining, chemical manufacturing, and natural gas processing.<sup>18</sup> The state ranks number two in per capita energy consumption, number one in per capita petroleum consumption, and forty-ninth in renewable energy consumption, according to the Energy Information Administration. Unless Louisiana’s intensive industrial sector transitions to fully electric, clean energy through fuel switches and heightened efficiency, it will do little to lower emissions.<sup>19</sup>

Though it sounds green, industrial carbon capture does not remove legacy carbons from the atmosphere as forests and oceans do. It works by capping new emissions at the smokestack and transporting them by high-pressure pipelines to other sites where they can be contained in deep geologic formations, supposedly forever. It requires new infrastructure and pipelines, which would slice up more

of Louisiana's degraded environment. It also, presumably, continues to expose environmental justice communities that currently bear the burden of industrial production, since many of the same facilities would continue operations. It would encourage new construction and buildout along sites considered shovel ready in the crowded Cancer Alley industrial corridor. It would require billions of dollars of public subsidies.

But the promise of local capital investments, construction jobs, and economic development has officials applauding a slew of billion-dollar (tax-exempt) projects that sound too green to be true. "We're a natural fit for it. This is where capital investment is going to continue to flow," said Governor Edwards.<sup>20</sup> Indeed, industrial carbon capture and storage seems to crop up whenever it comes to discussing capital investments and job creation. Louisiana's Climate Action Plan cites a study by the Rhodium Group that touted the potential job boom for carbon capture projects. It said carbon capture projects could produce between 2,700 and 4,000 total jobs per year on average over the next fifteen years and an additional 1,700 to 2,500 jobs per year to operate and completely retrofit older plants. This suggests carbon capture is more about job creation—even if subsidized—than reducing carbon footprints.

Officials and lobbyists touting carbon capture projects are not sharing much information with fence line communities, who are weary of aging, accident-prone plants. CO<sub>2</sub> is a highly corrosive material, says Monique Harden with the Deep South Center for Environmental Justice. In 2020, a pipeline carrying compressed carbon dioxide ruptured in the town of Satartia, Mississippi, which caused over forty people to get hospital treatment and more than three hundred to evacuate. The incident illustrates the potential dangers of transporting carbon over long distances. "Right now, we don't have a legal way of mitigating environmental racism. You don't see community folks talking about carbon capture sequestration or carbon capture storage," said Harden.<sup>21</sup>

A company called Gulf Coast Sequestration, which had a representative on the governor's Climate Task Force, has applied to the US Environmental Protection Agency to inject carbon into a deep reservoir in southwestern Louisiana that is already under stabilization protocols for environmental damages. The Louisiana Department of Natural Resources filed a permit to regulate that site—called Project Minerva—and received twenty-eight negative comments and zero in support of it. "They are not developing them with understanding for vulnerability of suitability for sites."<sup>22</sup> A thirty-five-page report evaluating Project Minerva's potential impact on drinking water sources has twenty-one redacted pages—about 60 percent of the document—which somehow concludes it poses no threat to drinking water while redacting the methodology used to reach its conclusion.<sup>23</sup>

Any time the fossil fuel industry becomes part of a climate or environmental solution, people should be wary, says Karen Sokol. Up until the 2018 IPCC report,

the industry was engaging in systematic and overt climate denial to undermine global climate goals. When the IPCC issued its report in 2018, the rhetoric shifted. Demands around the world for climate action were starting to grow, and they only got louder after that. Industry shifted its rhetoric to align itself with Paris climate goals and net zero. “They shifted from attacking any kind of climate solution to being the solution—being an essential part of the solution. Which at first blush make little sense. The climate crisis and rising emissions are by and large a result of fossil fuel production,” says Sokol.<sup>24</sup>

#### PART OF THE SOLUTION?

Today the fossil fuel industry and its allies are “appropriating and weaponizing” language from climate advocates. ExxonMobil uses the phrase “advancing climate solutions” and “lower emission energy future.” Shell is “working . . . to accelerate the transition to net-zero emissions.” Chevron is “advancing a lower carbon future.” All while planning billions of dollars in new oil and gas reserves. Some researchers have called this “fossil fuel solutionism.” No longer are oil and gas executives straight-up “denying” that the climate is changing; instead, the message becomes one that ultimately slow-walks real climate action—saying, it’s too expensive to address; it’s too late to do anything.<sup>25</sup> “We call these ‘climate delay’ discourses, since they often lead to deadlock or a sense that there are intractable obstacles to taking action.” Such discourses lead to deadlock by making obstacles to action against fossil fuels seem intractable.<sup>26</sup>

Oil companies will argue that the public wants energy, and the market dictates supply. But we can think of different solutions? Can we use less oil? “Do we need so many plastic forks and knives?” asked Verchick.<sup>27</sup> In places where natural gas is more expensive, like Europe, people are incentivized to use less of it. Can we rethink our own incentive structure? “We need to think about how the Louisiana delegation’s support for carbon capture, Liquefied Natural Gas (LNG) export terminals, and other heavy industrial output—not to mention, storing other people’s carbon emissions—will make Black and Indigenous towns unlivable in Louisiana and around the world,” said Verchick.<sup>28</sup>

Making the most aggressive adjustments through natural sinks, mass electrification, and conservation by less demand will be essential to avoiding the worst impacts of climate change. Achieving 1.5 degree Celsius over preindustrial levels compared to 2 degrees Celsius is the difference between saving 10 percent of all coral reefs or none at all. What we must understand is that we are headed for ruin, and we are now nibbling over the last 10 percent, said Sokol. The real question is, how will we adapt? We know decreasing production works. It not only reduces carbon dioxide, but other deadly air pollutants. We know restoring natural carbon sinks work. We know those should be prioritized. Anything else should be carefully and fully considered—not just this blanket all-of-the-above approach,

but one that is thoughtful, says Sokol. Policy makers must think about how to get there, in addition to what the world will look like when we get there. “We are going to transition to another world one way or the other.”<sup>29</sup>

#### THE SILVER LINING

The governor’s Climate Action Plan—though imperfect—provides a documented account of the necessity of wetlands and mud for carbon sequestration. And despite the rosy, techno-utopianism of technologies like carbon capture, it projects quite urgently the need to maintain coastal wetlands and forests as important and effective carbon sinks. However, the logic of the working coast is explicitly entangled with the governor’s plan. It’s in the very first paragraph of the governor’s executive order creating the Climate Action Task Force: “Whereas, Louisiana’s working coast is a national treasure, exporting over \$120 billion in annual goods, servicing 90 percent of the oil and gas activity in the Gulf of Mexico, producing 21 percent of all commercial fisheries landings by weight in the Lower 48 states, and providing winter habitat for five million migratory waterfowl . . .”<sup>30</sup>

The operationalization of wetlands for industrial output is a nefarious red herring. While acknowledging the importance of carbon sinks, it frames them through a calculus to merely achieve short-term economic gains. However, the existence of the record is important. The Climate Action Plan acknowledges the “business as usual approach” will not only raise overall greenhouse gas emissions but also lead to more coastal erosion, which also reduces natural carbon sinks. “Louisiana’s abundant natural lands and wetlands are important not only for carbon sequestration but also for maintaining cultural heritage, coastal and agricultural economies, and reducing flood risk.”<sup>31</sup>

And despite efforts to confuse and conflate the economic goals of capturing subsidized capital investments with the absolute environmental necessity of carbon reduction, the existence of this record will allow knowledge to escape the “plantation” of the working coast, as Anna Tsing might say. In the seepages of muddy spaces, we might nurture a knack for wildness that grows on its own volition despite efforts to control the narrative.

#### MUDDY THINKING AS A NECESSARY CONSTRAINT

Wildness, after all, challenges notions of linear progress. It is tactical and unplanned. It happens usually through neglect. It disrupts the colonizing impulse of space-time compression. In New Orleans and South Louisiana, I read wildness as the mud. As a concept, this idea of wild mud and Muddy Thinking writ large is meant to be broad and open to new and repurposed ideas, applications, and complexities. It is also speculative. We cannot abandon the mud no matter what sins of society it manages to contain.

We can embrace the constraints of the muddy thinking of subsistence epistemologies. And we must be willing to entertain unorthodox ideas—not just ideas, but new modes of living as well as *living with*. Just as mud itself is part of the working coast, so are the Indigenous residents, descendants of enslaved peoples, fishermen, subsistence farmers, and other agents of coproduction that Extractive Thinking fails to comprehend. We must embrace alliances to disrupt the Extractive Thinking that pervades the petro-economy. But I caution against the technoutopian tendencies of what Lewis Mumford called the “technological sublime” for the next innovation to produce its way out of its own dilemma. Innovations in battery technology, for example, must also account for the creation of sacrifice zones of cadmium mining and labor conditions. We otherwise replace one extractive economy with another.

Here in New Orleans, sifting through the debris and uncollected city garbage left for weeks after Hurricane Ida, we faced that perennial question of recovery that arises in Louisiana somewhere every autumn: How to rebuild? What exactly are we building toward? We must be equipped to pose this question to every discipline, vocation, and person. Each year, we face not only technical preoccupations about better building codes and home elevations but also rising insurance premiums and social concerns like effects of trauma, closed schools, and community disruption, costs of recovery, and place-based identity. These questions span disciplines and require a strategy.

Such questions need to be communicated in ways that speak to the cultural foundations and subjectivities of a wide assortment of people and places. They must go to the heart of knowledge production. I’m thinking here of Toby Miller’s proposal for a “green audit” of energy use for various cultural institutions and products; or Dipesh Chakrabarty’s suggested syllabus for histories of energy that enabled the emergence of the Western enlightened subject. “Every evocation of Rousseau or Jefferson today needs to be accompanied by information on per capita energy use,” he writes. A genealogy of energy use may denaturalize the historical epochs that were supported by extractive practices. A consideration of what energy humanities scholars call petrocultures might critique “the mansions of freedom” built on fossil fuels.<sup>32</sup> We may trace the contours not only of a political ecology of energy use and its environmental destruction but also the bourgeois culture and subjectivity it has produced.<sup>33</sup> The enlightened liberal subject moved from an ethos of stewardship of nature to domination and conquest through European colonialist ideology. “The idea of Nature being opposed to ‘Man’ privileges men in active relations with the natural world” while also feminizing nature.<sup>34</sup> Romanticism distanced people from the natural world, which was reinforced by urbanization and materialism. All of which led to a sentimentalization of wilderness. Rachel Carson so eloquently stated the still-unheeded call six decades ago: “Although modern man seldom remembers the fact, he could not exist without

the plants that harness the sun's energy and manufacture the basic foodstuffs he depends upon for life."<sup>35</sup>

### ENERGY HUMANITIES

What this means is that established academic scholarship regarding climate change in earth and climate sciences are enriched with the humanities and social sciences to study impacts of changing forces on local human and other-than-human ecologies. Such scholarship interrogates geopolitical decisions and engages with communities experiencing the local effects of those decisions. Rather than turn away, I suggest we look toward the Anthropocene as a concept providing for a potential opportunity for interdisciplinary exchange. To foster such exchange, we may follow models of care and "infrastructuring" to form alliances that cross disciplines to maintain critical spaces.<sup>36</sup>

We will need to accommodate multiple theoretical traditions: cultural analysis, political economy, poststructural analysis, environmental humanities, and science and technology studies. We will need these intellectual *and* affective tools to bring the "hyperobject" of climate change into full relief for citizens and policy makers to understand and intervene in equitable ways.<sup>37</sup> "Recognition of dying coral reef ecosystems in warming and acidifying seas was at the heart of advancing the very term *Anthropocene* in 2000." Coral taught biologists to understand the parochialism of their own ideas of individuals and collectives. "These critters taught people like me that we are all lichens, all coral," Haraway writes.<sup>38</sup>

### (UN)NATURAL SCIENCE AND AN EQUITABLE LENS

Diverse practices will be needed to find possibilities in the rubble. While humankind has created "a species-level effect of a geologic force" (my apologies to the critics of the phrase), we have yet to establish a commensurate mode of collective thought and action to soften those effects.<sup>39</sup> Species-level responses will require an equity framework. Those who have profited most should contribute most. Ghosh argues that instead of one modernity, we should account for the effects of "plural modernities" of rising national powers in Western and Asian nations—as well as the price of foreclosing modernities to others. "What we have learned from this experiment is that the patterns of life that modernity engenders can only be practiced by a small minority of the world's population. . . . Every family in the world cannot have two cars, a washing machine, and a refrigerator—not because of technical or economic limitations but because humanity would asphyxiate in the process."<sup>40</sup> If we are serious about equity, we must be prepared to cushion the economic blow to those sidelined from the benefits of consumptive affluence and yet may still suffer from mandated reductions in consumption—as well as to those whose future modernities we are curtailing in the process.

How much money is it worth to the Global North, for instance, to place Brazil's Amazonian rain forest into an international trust? Recent moves by academic institutions to establish climate schools and interdisciplinary majors, as well as student-led protests against university endowments that invest in fossil fuel companies, signal popular interest. But we need a critical cultural approach to measure the effects of climate changes on its different and uneven sites of impact. We must interrogate the temptation of neoliberal techno-utopianism. Climate change is not isolated to only raising temperatures, but also production practices that are destroying habitats, polluting environmental justice communities, plasticizing oceans, and creating mass extinction. An equitable framework gives scholars, activists, artists, and community members the space to analyze climate and environmental discourses, including the abstraction of nature through mitigation, such as offsets and wetland mitigation banks that perversely encourage development in sensitive, irreplaceable areas.

Critics of the term "Anthropocene" argue that it lends itself to defeatism and cynicism, which allow for technocratic and geoengineering approaches. To encourage life, we need other forms of action and stories for inspiration. We need stories that affirm the need to resist the "stifling impotence created by the 'no possibility to do otherwise, whether we want it or not,' which now reigns everywhere."<sup>41</sup> The openly contested category of the Anthropocene offers a well-situated framework of intellectual exchange. It provides possibilities for cultural, intellectual, and critical conversations that elevate not only postcolonial concerns but also those of gender, race, affect, aesthetics, and other sociopolitical effects. Its utility comes from its widespread legibility among diverse practitioners. As a technoscientific category *and* a social critique, it in fact demands dialogues on social equity, government policy, postcolonial sensibility, and critical politics in the academy. I am also mindful of risks of critical erasure, which must be addressed openly.

The initial framing of the Anthropocene by geologists seemed to imply that "humanity" is responsible for catastrophic environmental change. But that has been indispensably critiqued. Not all humans are equally culpable. There is a great deal of important scholarship that questions the logics of attracting Anthropos embedded in the notion of the Anthropocene, says Haraway. Such critiques emphasize the uneven causes and consequences of global environmental change, as well as "the unmarked whiteness and Eurocentricity of Anthropocene discourses." Some social groups are more culpable than others for consumption, and others are overly burdened by its climatic effects. Marco Armiero uses the analogy of the *Titanic*, where poorer, steerage passengers experienced greater hardships than first-class passengers when the vessel broke in half and sank.<sup>42</sup>

The environmental justice veteran Robert Bullard is more explicit. People of color bear the brunt of environmental pollution because they are breathing other's people pollution. Black and Hispanic people are breathing much more

pollution than they cause, and climate change will exacerbate these effects, he says. “Racism is a health issue. And racism is often times the underlying condition that creates, maintains, and underlines these disparities. I’ve been saying this for the last four decades or so.”<sup>43</sup> Bullard’s movement now is challenging and, more importantly, widening technical and economic conversations through social and community-level actions and making connections among different disciplines and communities. The challenge is to do the necessary “care work” to keep those connections viable. That also means critiquing the hopeful yet vague executions of various international accords like the Paris Climate Agreement and the industry-led solutions at UN climate change conferences. The fairy tale of unending growth and consumption must be met head-on with a reckoning about the uneven wage effects that an economic drawdown might have on marginalized communities.<sup>44</sup>

An equitable lens, likewise, brings into conversations experiences of Indigenous communities, like tribes along the subsiding coast of Louisiana, who are also among those who have contributed the least to greenhouse gas emissions that drive climate change. “In fact, many Indigenous communities at risk of climate change impacts are the same ones that have already been—and continue to be—sacrificed by the fossil fuel extractive energy industry.”<sup>45</sup> We must account for what the Native environmentalist and activist Winona LaDuke describes as “predator economics” that hold communities, and governments, hostage. The greatest negative impacts of our current extractive economic system fall on those places with few resources to resist. Health and justice must stay on the agenda of infrastructure investment. Ensuring a just future and a just transition will require difficult conversations among environmentalists as well. We must apply an equity lens on all green infrastructure project decisions, lest battery storage facilities create their own environmental justice communities. “There are huge facilities being planned next to black and brown neighborhoods without their consideration. We can be green, but we also have to be just,” says Bullard. “Let’s talk about siting issues.”<sup>46</sup>

A critical Anthropocene, focusing on equity, can work with Muddy Thinking. We can slow down for difficult and important conversations. “Part of what going forward means to me is telling some really terrible stories about what’s going on in the world,” says Haraway.<sup>47</sup> Muddy Thinking invites the imperfection in these messy conjectures. It accepts the struggle in our unfolding moment. It provides a vocabulary with which to face the ruined places of the world to reaffirm our own humanity and allow some kind of healing to happen.

In late fall 2019, I attended a weeklong conference at Tulane University that was the culmination of a two-year project, titled “Mississippi: An Anthropocene River.”<sup>48</sup> Activists, artists, scientists, scholars, and students had been meeting over two years along the river at various sites and presented their experiences at workshops in New Orleans. I was particularly riveted by a presentation from the Louisiana

activist and artist Wendi Moore-O’Neal, who underscored the stakes of this kind of work. “Where you see along the river these petrochemical plants next to old plantations, many of the people there are descendants of people who worked those plantations,” she said. The people of this place belong to the river, with all its complexities and contradictions. She continued, “You know there are so many things I don’t know about the river, the industries, the environments . . . about birds, the trees, the land. . . . But some things I do know. I do know pieces of the histories of resistance to white supremacist, capitalist, imperialist, colonization. And I do know anywhere that that has existed, resistance to it has existed.”

People of the river have managed to thrive and grow and build and create and love, she said. “That’s what I want to share, is that there are people here. We’re not simply beings to be researched—vehicles to master’s degrees and PhDs. We are whole.”

The ways of living and being here may look primitive, but they are important historically and for future survival, she continued. “We are the leaders of how we can survive being in resistance. . . . I’m talking about common, everyday living. The people on the street you are passing, whose names you do not know, know more about how to survive these constructs than any paper or any thesis or any doctorate, because they are here. Because we are here,” she said. “We are still here. We are alive, and we are becoming.”<sup>49</sup>

It was a powerful message about care—and carelessness. It was an intentional invitation for the artists, activists, and academics gathered over the week to trouble our own paradoxes.

There is after all a cost to producing knowledge. I’m thinking here of an essay that ran in *Southern Cultures* in 2021. Justin Hosbey and J. T. Roane wrote that while Katrina further stressed the swampy environments that had historically provided protection for maroon communities, it also solicited another kind of harm through academic efforts to understand the crisis. There’s a neocolonialism embedded in certain attempts to understand environmental crises. Such framings tend to depict Black people either as equal partners in ecological destruction or as victims of extraction, they wrote. To counter the colonial binary, Hosbey and Roane set out to chart a maroon imaginary through cultural, spiritual, and intellectual lenses.<sup>50</sup> Their imaginary would find an ally in Muddy Thinking. A maroon imaginary might spend some time charting the cultural practices that pay homage to muddy entanglements, people, and places through New Orleans’s Mardi Gras Indians. Enslaved people saw possibility in the mud because it gave masters the sense that there was “no place” for slaves to go. Their shared lineages are often not recorded or known. It is a culture that resists Extractive Thinking because it seems to resist origin itself. It expresses itself through call-and-response performance as well as exquisite craftsmanship in sewing unique outfits each Mardi Gras season. It is an ongoingness.

Taking up Moore-O’Neal’s provocation—as well as the energy humanities approach—we might interrogate what kinds of knowledge we take without acknowledgment of the conditions that make it possible:

- A bus of professors touring neighborhoods struck by Katrina.
- The arborist taking a core sample through the trunk of a 500-year-old tree to date it.
- The WPA archaeologist slicing through a midden or burial mound to date the cultural landscape.
- The dystopian sea cruises taking thousands of passengers to witness the melting ice caps of Greenland.
- A grant to restore the Kid Ory Museum provided by the backers of the Wallace Grain Elevator.

It is a paradox: Our knowledge production is enabled by the very materials we critique and the people we overlook. I come away from this project—not trying to find a grand narrative, but instead gaining an appreciation for moments of disruption. And almost perversely, I find that the idea of permanence and posterity is part of the problem we now face. This ego-driven need to leave a lasting mark on the world has scarred it.

We’ve spent some time and attention on the extractive impulses that carved New Orleans out of the marshy swamp. But New Orleans subsists in the 2020s through a different kind of ethos. It is a damaged landscape, whose residents shape it through an imperfect practice of living. New Orleans is a harbinger of what happens after catastrophe. It demonstrates life in the ruins. Ironically, the Big Easy is anything but. It is a difficult place to live: boiling summer humidity; mosquitoes; crime; aging infrastructure; chopped streets; failing oversight; poor job prospects; subpar schools; routinely missed garbage pickup; uninspiring leadership; rising insurance costs; seasonal storms and evacuations; a perennial shortage of skilled labor. And perhaps most profoundly, there is an underlying racial enmity that culturally divides along a color line. In fact, as I write this, I’m wondering (perhaps with the reader), why live here? This is a good question.

Here’s my response. New Orleans illustrates what James Scott calls a “thick city.” New Orleans is beautiful and powerful in its decay. In its vulnerability, perhaps because of it, New Orleanians have developed an informal resiliency that comes with familiarity with death and catastrophe. As asserted recently in the *Gambit’s* observance of Black History Month, New Orleans was a place of both cruelty and hope. It was the birthplace of the first Black governor in the United States, PBS Pinchback, and the headquarters of Martin Luther King Jr.’s Southern Christian Leadership Conference. The city was home to Homer Plessy, the biracial shoemaker who was pulled from a first-class seat on a whites-only railcar en route to Covington in 1892. The act of civil disobedience, orchestrated by a New Orleans civil rights organization, violated Louisiana’s 1890 Separate Car Act, which led to

the eventual Supreme Court decision, *Plessy v. Ferguson*. The decision, as we know, legalized institutional racism throughout the South for nearly five decades until the *Brown v. Board of Education* decision in 1954.<sup>51</sup> It would be another six years for New Orleans itself to be integrated when four black students were permitted to attend the city's two whites-only public schools.<sup>52</sup> Here was also the largest domestic slave market—which increased the cruelty of that enterprise after the importation of slaves was banned by the United States in 1808. Egregious racism and the birth of the Civil Rights Movement, New Orleans is a place of contradictions that exist simultaneously. The city's history never quite retreats. It's archived in the mud.

This deep archaeology of culture is still influencing contemporary life. If we think of cities as a palimpsest of dreams and detritus, as Michael Sheringham suggests, we may gesture toward a place of possibility—which itself is a product of decomposition and archival traces.<sup>53</sup> New Orleans has been described as a simulacrum of itself, apparently frozen in time for the throngs of tourists looking for traces of its brothelized past in the gutted historic facades of French Quarter voodoo and daiquiri shops. But its aura emanates from a multilayered archive of street culture that complicates the racial binary of largely Protestant America. It was a place of slavery and free people of color; Indigenous tribes and European settlers; sensuality and American capitalism. “Neither mixed ancestry nor skin hue determined the status of freedom. . . . Some people of pure African ancestry acquired their freedom as some mulattoes remained enslaved.”<sup>54</sup> Some enslaved people were hired out by their owners and were allowed to keep a percentage of their income, which was used for commerce or purchasing their own freedom.<sup>55</sup> New Orleans businessmen at times lobbied the city to allow for gatherings of the enslaved at Congo Square to whom they could sell merchandise. Slaveholders in English territories typically forbade people of African descent to assemble for traditional rituals or intermix with those from other places. “Yet in the French, Spanish, and American-ruled, Catholic-based city of New Orleans, African descendants—enslaved and free—perpetuated African Cultural practices and performances styles,” which also included those Creole influences that developed in Cuba and Haiti and were embodied by enslaved people and free people of color who found their way to New Orleans.<sup>56</sup>

New Orleans was a place of fluidity—a site of disease, exoticism, and deception. The genealogies of the city and its people are traced around the footprints of its centuries of wayfarers. Today it's common for a single person to claim lineage to the oppressed and the oppressor.<sup>57</sup> These genealogies, unrecorded or deliberately forgotten, are nonetheless etched and written in the mud itself, cast in architectural cornices, and performed on public streets. They travel. They intermingle in art, music, and material culture. “The truth is you go down under Claiborne Avenue on a Sunday afternoon when there's a second line and look at the faces of people there—and they may identify as black but they are Atakapa, and they

are Houma, and they are Chitimacha, and they are Choctaw,” says Monique Verdin. “Go out anywhere in Louisiana, and you can see it. It’s still there, and some may not be identifying as Indian-only, but we are still here and so much of what this place is and what would be.”<sup>58</sup> New Orleans is a city where, according to the famed trumpeter Wynton Marsalis, “elegance met an indefinable wildness.”<sup>59</sup> A romantic depiction notwithstanding, any description of New Orleans seems to slip along a palette of percussive rhythm, color, and sound. There is a wild and elegant substance that resides within the mud that constitutes the city—an improvised timelessness deposited by the meandering Mississippi. Its history remains on the surface to intermingle with the living. It offers an opening to rethink archaeology. Mud processes history, performing not an erasure but an embodiment of the past. It becomes the refuse and the bodies that are buried within it.

It demonstrates that there is life in futility, decay, and death. In a place of contradictions, it “exists under constant reminders of its contingent mortality.”<sup>60</sup> Within this improbable place, there is something here to note—because it refuses the inevitable. The final two examples, which come from Rebecca Solnit and Rebecca Snedeker’s inventive study of New Orleans called “Unfathomable City,” illustrate the unique culture of this place that revels in the improbability of continuous rebirth. The first is the second line parade that follows the jazz funeral to ritualize and perform the celebratory affirmation of life. Joel Dinnerstein describes walking with the Prince of Wales Social Aid and Pleasure Club as they departed the small Spring Hill Missionary Baptist Church. Following the brass band, the second line of walkers adjust their stride with the changing rhythmic percussion as the energy and tempo shifts between human geography of present and past.

After only two blocks, we slow the parade roll to honor the dead. The band downshifts into a dirge in front of the late Jimmy Parker’s house on Annunciation and the Walers fall into a halting step with a syncopated slip: we strut in two lines with a slight diagonal step, shaping the air into chords of an ancient worship. Maybe we pick up his spirit. Maybe he’s satisfied we are all still dancing for him. Once past Jimmy’s house, the Tuba and snare drum pick up the groove, and down the block we pick up the Queen and her court.<sup>61</sup>

A joyous dance in the embrace of death. Decomposition enables life. The jazz funeral and the second line, the New Orleans street beat and the bamboula.<sup>62</sup> All represent a resistance to repression for people of color in New Orleans—which in 1856 ludicrously passed a brief city ordinance making it unlawful “to beat a drum, blow a horn or sound a trumpet in the city”<sup>63</sup>—and to the institutionalized racism of the Jim Crow South. Black New Orleanians responded with “social aid and pleasure clubs,” holding not only social aid, but, more importantly, pleasure. This spirit is both memorialized in records and ritual and always being reinterpreted. In the face of interminable odds, it perseveres through a kind of baseline beat that it loves to play for itself. It is a human ecology of cultural bearers whose refusal requires

and responds to its own improbability. A place of distinct and old neighborhoods, whose wards are mapped onto a byzantine coalition of political families, known by their acronyms: BOLD (in Central City), LIFE (in Mid City), COUP (in the Seventh Ward), and LAVA (in Lakeview).

Neighborhoods are mapped by their musical proclivities, whose province is as unique as the iconography and stitching of each costume of the two dozen Mardi Gras Indian tribes. My second example from Solnit and Snedeker's study comes from the Meters's bassist George Porter Jr., known as one of the progenitors of 1960s funk. Porter maps the geography of the city and his place in it through its musical styles. "In the studio, you know (Allen) Toussaint, he lays out a guideline about where we want to be. So Toussaint would say, 'We want to be in the Sixth Ward.' Or 'We going to the Ninth Ward.' Because if you went to different wards, you'd hear different styles of Music."<sup>64</sup>

The Lower Ninth Ward was gospel. The Upper Ninth Ward was blues. The Seventh and Sixth Wards were predominantly brass bands. "The Fifth . . . that was the police! Then, there was the Third Ward, where I grew up; that was the R&B guys, Earl King, Snooks [Eaglin]—that area was turning out those R&B musicians," Porter says. "And then there was Neville-ville. That was the Thirteenth." This foundation moves and shifts. Its low rhythm and bass give rise to the American sound of pop, rap, and rock and roll. Here at the end of the nation's river where everything collects. "And if they want to call us dirty—we say, yeah well it's your shit!" says Porter. "But we've taken their crap and made something wonderful out of it."<sup>65</sup>

Perhaps there is something to be learned here to cultivate care for one another and one's place. Perhaps there is something to be learned from hearing the joyous noise and then becoming it, in spite of yourself. New Orleans is always telling stories about itself—a practice that may have indeed saved it after Katrina and helped organize a national conversation around rebuilding in order to save its unique culture, a practice that might behoove all of us to start replicating. Stories about where we are now. There is possibility in decay. It is the birth of the imaginative soul, which may end up saving us.