

Waiting in Petro-Time

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Abstract To describe the multiple, colliding temporalities of climate change I put forward the concept of petro-time. Petro-time asserts that time itself has been compressed through millennia to become fossil fuels, and then burned, resulting in climate chaos. In this essay, I take up one aspect of petro-time, the feeling of waiting. I articulate this feeling of waiting through the opera Sun & Sea (Marina) by Rugilė Barzdžiukaitė, Vaiva Grainytė, and Lina Lapelytė, which explores the affective dimensions of climate change for those of us with the wealth and privilege that, so far, mostly shelters us from its worst effects. But climate change is always there, on the horizon, looming. This reality sits at the back of the brain, emerging in moments of relaxation as a "nagging malaise," depicted in the opera through "insidiously pleasant melodies." The tension that many of us experience in relation to climate change, where it cannot be sustained as the crisis that it is, instead blends into a background anxiety. I argue that waiting (for adequate policies, for climate relief) is felt differentially across the globe but that it also might provide a pause to recommit to climate solutions that don't repeat the injustices of the past.

Keywords climate change, Sun & Sea (Marina), performance art, time, petromodernity

Precious and assuring. Yet. Yet. Unpredictable moments. You can never tell about time either. Like that, it is. It is.
—Simon Ortiz, "Time as Memory as Story"

I suspect that time no longer exists.

—Etal Adnan, "No Sky"

t started with waiting. As the opera Sun & Sea (Marina) by Rugilė Barzdžiukaitė, Vaiva Grainytė, and Lina Lapelytė had already been awarded the top prize at the 2019 Venice Biennale, capacity was at a premium. There were warnings that it would take hours to get inside. I went in the morning with my partner, winding through the narrow streets until we arrived at the historic quayside building within the Marina Militare complex in the Castello district of Venice. The location of the island-city's mighty shipyards and armories, still in use, were turned over to art for the duration of the Biennale. After a little over an hour, we were able to enter the industrial building. We arrived at a mezzanine gallery that encircled the stage. Looking down, we saw the performers laid out on

a fabricated beach not unlike the many beaches worldwide that rely on the shipment of sand for their construction.¹ Sunbathers were doing crosswords, texting, and reading. Some, of course, were singing.²

The opera, as it is experienced by the viewer, has no clear start or finish. It circles around, with various performers moving in and out to relieve the others at the end of their shift, running continuously for eight hours at a time. Most of the performers were professional, but because the show expanded in response to audience demand, and because it ran out of money (it was able to keep going thanks to a crowdsourcing campaign), residents of Venice and tourists were invited to participate—to spend a day at the beach, onstage. The bodies below were a range of ages, sizes, skin tones, sexual couplings. There were dogs and children. The nonprofessional performers added a feeling of authenticity to the scene, as people really were spending a day at the beach, albeit indoors and with an audience intensely scrutinizing their actions. I watched as volunteer performers took selfies of the performance while performing, where "an eerie sense of unreality set in—the kind that surges when fiction is powerful but not total," as Erika Balsom wrote.³

The pastel, washed-out colors of the bathing suits and other beach paraphernalia evoked the intensity of the sun, the slowness of summer, the dehydration of the beach. The view was serene, peaceful, lulling. The music, too, had the effect of a pop lullaby, sung in arias and choruses with the "simplest of recorded keyboard lines, set to faint field recordings: the suggestion of ocean waves, the murmur of a propeller." Performers sang of the banal annoyances of life (why do people take their dogs to the beach?) coupled with flashes of the world in decline: the bleached corals of the Great Barrier Reef, the seasons that have gone awry, eutrophication, the plastics throughout the oceans. All the while, the performers continued to lie in the sun, basking, while reading books, looking at their phones, or napping. Their idleness betrayed a deep and growing sense of unease, as the opera continually circles back to the signs of climate chaos that are enveloping our world. The performance stages the characters looking at climate change slightly askew, sideways, glancing at it only for brief moments—like the sun, it seems to threaten to burn their eyes—before returning to the planned boredom of the present.

The opera gets at the affective dimensions of climate change for those of us with the wealth and privilege that, so far, mostly shelters us from its worst effects. Climate change seems to sit at the back of the brain, emerging in moments of relaxation as a "nagging malaise," depicted in the opera through "insidiously pleasant melodies." This tension, where climate change cannot be sustained as the crisis that it is, instead blends

- 1. Da and Le Billon, "Sand Mining."
- 2. The version that I saw at the Venice Biennale had been translated into English from the original Lithuanian.
- 3. Balsom, "Above the Fray."
- 4. Khong, "How a Beach Opera at the 58th Venice Biennale Quietly Contends with Climate Change Catastrophe."
 - 5. Barone, "Review."

into a background anxiety, mingling with the daily pressures of paying bills, taking care of children or elders or friends, and worrying about health. A rich man sings of exhaustion, of being completely overwhelmed by work. Vacationers recount being waylaid by an erupting volcano. Lovers speak of the torment of being apart. Throughout, and out of frame, the ocean is figured as an invisible and omnipresent threat, its waters unswimmable because of algae and the undertows that threaten to pull anyone under. It represents the rising tides and peril of flood that threatens to wash all this serenity away.

Watching the opera there is a feeling of anticipation, a performative expectation that "something might happen." It doesn't, not in any sense of an event or narrative. The beach simply continues to be the beach. And the libretto goes round and round, filled with stories of the bizarre and the mundane. The temporal landscape of the opera connects to a feeling of waiting. Waiting is often experienced as a space of inbetween, a pause, interval, or delay. Waiting is also an act of staying in place with an expectation of something happening or arriving. Waiting is a kind of no-time. Waiting can feel like being stuck in a temporal loop: dragging on, circling back. There is a sense of anticipation, often an anxious one, but the waiting itself is more like suspension. The durational aspect of the performance, the rhythms of the music, connect to this sense of waiting, of anticipation, of suspension. Unlike with the narrative portrayals of climate change in Hollywood or the very real and increasingly disastrous extreme weather events taking place all over the globe, no catastrophe happens in the opera. The characters are all enveloped in their own worlds of leisure, with a constant background sensation that something is profoundly wrong. The rhythms of anxiety expressed in the libretto, as it circles back to images of a too-hot world, follow that of the waves, mounting, crashing, receding, building again.

The waiting, suspended time represented in Sun & Sea gets at some of the ways that time has been reconfigured through fossil fuels and climate change, what I am calling "petro-time." If we think of the bodies of plankton and other organisms that became oil as the compression of those lifetimes, then burning fossil fuels releases millions of years at once. This vast unleashed time of the past is now wreaking havoc as it explodes into our present. Petro-time is the time fueled by the extraction and burning of fossil fuels, of ancient time released into the present and conditioning the possibilities of the future. Petro-time has resulted in the vastly accelerated times of extinction, ocean acidification, warming, and the migration of plants and animals. But as this time erupts into our present, it doesn't do so evenly. Some regions of the earth, such as the

^{6.} The actual waters of Venice are an enduring threat. Just the following year, in 2020, the city was flooded with high tides of up to 1.5 meters (5 feet) that drowned the iconic architecture—the worst flood in fifty years.

^{7.} Davis, Plastic Matter, 75-76.

^{8.} For example, birch trees in the Arctic in Norway are now moving at a rate of forty to fifty meters per year. Rawlence, *Treeline*.

Arctic, are warming at much faster rates than others. Sometimes it feels as if nothing is happening, and at other moments it feels as if the whole globe is on fire or drowning. Petro-time describes the "metatemporal instability" of our present, the sense of thresholds already crossed, but where the effects of these losses have yet to be fully felt or erupt in increasingly frequent catastrophic events, only to be normalized as a new baseline. For this reason, Adriana Petryna describes climate change not as a singular phenomenon or event but as an "ongoing process of destabilization." The end of this world, the world built through colonial and capitalist extraction, as the libretto in Sun & Sea suggests, feels like Easter at Christmas, chanterelles in December. The seasons no longer follow one from the other; rather, they appear in daily life as if they had been put in a blender and spat out again.

In addition to the phenomenological sense of colliding and uneven times within petro-time, we also have competing political timescales. While it is widely recognized that climate catastrophe is an urgent political problem, the timescale of response by world leaders and elected politicians has been painfully slow. Mark Simpson and Imre Szeman pointedly call the energy transition an "energy impasse." They write, "We understand impasse as stuckness: the texture or atmosphere setting the conditions of possibility for a given situation that, irrespective of any overcoming of actually existing blockages, manages nevertheless to perpetuate the situation as it is." In other words, even though there may be a gradual shift toward different kinds of energy, this has not meant a real transition away from fossil fuels. This sense of impasse or stuckness, the repetition of the same kinds of policies, the continued reliance and investment in fossil fuels by corporations and governments, is also part of the sense of anxious waiting, a temporal distension where even if things are happening, much stays the same.

Incommensurable Times

In the global North, it feels as if we've been waiting for climate change to fully arrive, or for it to be averted, for my whole life.¹² It has always been there, on the periphery, encroaching, making itself more present, more felt, for some people much more so than for others. But it is not a discrete event, so the building and receding of various markers of climate change makes it difficult to grasp. In geologic time, this time is a time of unimaginable speed. Although the atmosphere has warmed and cooled in the past, this rate of warming has not occurred within the past sixty-five million years.¹³ We are

- 9. This term comes from Danowski and Viveiros de Castro, Ends of the World.
- 10. Petryna, Horizon Work, 39.
- 11. Simpson and Szeman, "Impasse Time," 80.
- 12. By "global North" here I am referring to a set of sociopolitical positions that shelter privileged subjects from the worst effects of climate change, rather than a distinct geographic region. Clearly, there are many people located in wealthy, industrialized nations that do not reap the benefits of their geographic positioning, most often affected along lines of race and class.
 - 13. Diffenbaugh and Field, "Changes in Ecologically Critical Terrestrial Climate Conditions."

witnessing the planet changing at a catastrophic rate. Yet in our embodiment, in the temporal framing of a human life, the rate of change is often more difficult to register. This problem of the temporality and scale of climate change is part of why it is so notoriously hard to represent.14 Not only are there vast temporal differences between the span of a human life and the pitch toward infinity of geologic time; media and political cycles have also been progressively truncated. In Rob Nixon's influential text on slow violence and environmental change, he openly worries about the "temporal projections of disaster [that] are routinely foreshortened."15 Climate change cannot be represented through a singular event or spectacle; it requires sustained attention over time, despite the increased frequency and intensity of storms, floods, droughts, and wildfires that we are witnessing around the globe. To mark this temporal dimension, the public is often given sequences of numbers about levels of carbon dioxide and methane, the hottest years on record, ocean warming and ice melt. But this type of abstraction is often difficult to understand, much less feel. This is why durational performance is a particularly interesting medium to think through the complexities of climate change, as it offers an extended, live, collective meditation on the times we are living through.

Unlike most art that is created in relation to climate change, the opera is not about the future. As Jennifer Gabrys and Kathryn Yusoff outline, the "environ-mental" imagination tends to operate in the service of "anticipat[ing], and if possible, forestall[ing] actual apocalypse."¹⁶ It has best been exemplified in fiction and film, envisioning what it would be like not only to encounter climate apocalypse but also to live on in its aftermath.¹⁷ The other tendency is adaptation, where artistic "practices may be presented as viable and pragmatic alternatives for configuring attainable climate futures,"¹⁸ as in the climate adaptation plans of Helen and Newton Harrison or the floating food barge, Swale, created by Mary Mattingly. Using the imagination to coconstitute what the future might be in order to avoid the worst outcomes is not the only orientation of artistic practices, of course. Other artists, such as Bernie Krause, have been documenting the effects of climate change and habitat loss, as we listen, through his work, to the world becoming quiet. Sun & Sea presents a different kind of documentation. Sun & Sea conveys a

- 14. See Heise, Imagining Extinction; Ghosh, Great Derangement; and Nixon, Slow Violence.
- 15. Nixon, Slow Violence, 276.
- 16. Yusoff and Gabrys, "Climate Change and the Imagination," 520.
- 17. They include the examples of J. G. Ballard's *The Drowned World*, Margaret Atwood's *Year of the Flood*, and films such as *Soylent Green*. T. J. Demos has written extensively about the question of artistic practices that are interested in engaging with what happens after the end of the world; see Demos, *Beyond the World's End*. For another excellent analysis of various artistic and mediatic practices that explicitly engage climate change, see Diamanti, *Climate and Capital in the Age of Petroleum*.
 - 18. Yusoff and Gabrys, "Climate Change and the Imagination," 522.
- 19. Krause says that he did not originally intend to document extinction. He was just interested in recording ambient sound for his own musical projects, but as he diligently returned to the same places year after year, he found there was a stark contrast between the first recordings, which were almost cacophonous with the sounds of birds and other animals, and the recordings from thirty years later, which were nearly silent.

prolonged sense of anticipatory waiting for a reality that is already here. It portrays the impasse of climate change not on the level of policy but through affect. It grapples with our present, re-presents that time to its audiences. In this sense it importantly intervenes in the climate-change-as-apocalypse narratives that tend to shape our imaginations into thinking that climate change will be a definitive event, with a satisfying arc, where all humans will have gone extinct by a set date in the future. The appeal to apocalypse is also an appeal to redemption, in the religious vein. Apocalypse or extinction both provide a neat end and narrative closure so that we can escape from the complexities and ethics of a world in slow decline. The sense of uncomfortable waiting, of impasse, is a much harder reality to sit with.

Many reviews of the opera point to the excruciating parallels between the stasis of the performers and contemporary politics. For example, one critic from the *New York Times* wrote of the piece: "It's nauseating enough to take in its depiction of a world ending with quiet complacency. But then you have to walk back outside to Venice, where cruise ships drop off and pick up thousands of tourists, and countless shops sell cheaply made souvenirs that can be as insidiously forgettable as a day of leisure."²⁰ In this way, the opera speaks to the sense of impasse in relation to climate change and the desperate need to halt continued fossil fuel extraction. Staging this display of stuckness at the Venice Biennale is not a neutral act. The Biennale is notorious for bringing together not just artists but also very wealthy patrons and those seeking and maintaining the status of art, precisely the kind of people that are able to barricade themselves, psychologically and physically, from the worst effects of climate change while also using the most resources. The opera depicts the sense of suspension that climate change is still somehow imagined as a far-off phenomenon, and through this false understanding it contributes to the paralysis of adequate response.

It's not that climate change has yet to arrive—it is obvious that we are very much inside it, with average global temperatures about 1.2 degrees Celsius above preindustrial levels—it's that it irrupts and recedes, slowly building, but not appearing as one distinct event. Even the increasingly frequent and spectacular storms are only sometimes attributed directly to climate change. At the same time, these sped-up times are crashing into pasts not yet felt. There is a lag between the fossil fuels released many years ago and the warming of the planet. We have yet to feel the full impact of what has already happened. The past has yet to arrive.²¹ And the cascading effects of climate

^{20.} Barone, "Review."

^{21.} Michelle Murphy's concept of latency, or temporal lag, is useful here to think through untimely times. Latency describes the wait between chemical exposure and symptom, the ways in which that temporal lag, sometimes appearing generations later, distributes harm and renders the haunting of petrochemicals pervasive. As Murphy writes, "To be latent is to be 'not-yet': a potential not yet manifest, a past not yet felt." Murphy, "Distributed Reproduction." In a similar vein, Hermann Muller, recipient of the 1946 Nobel Prize in Physiology or Medicine, coined the term *time bomb* to describe chemical and nuclear fallout that kills "more in the future" than when it explodes. Altman, "Time-Bombing the Future."

change will trigger feedback loops, causing more acceleration. Still, it often feels like waiting: Waiting for "it" to arrive. Waiting for adequate political responses. Waiting to be released from the loops of promises and inaction. This waiting is what it's like to live inside a rapidly warming world. Like that, it is. It is.

Melancholia

While watching, as reality and performance blurred together, I began to have the increasingly uncanny sensation that what I was experiencing wasn't real—not in the sense that I was watching a performance, but that the performance, the venue, the flight, the hotel, none of it was real. I can't shake the feeling we are living on borrowed time, that this reality of a culture saturated in fossil fuels has already passed. Sun & Sea heightened this feeling as I watched a performance of leisure take place while on a leisurely vacation in a luxurious setting. The feeling continued, intensified even, after we left the performance and came back outside to the crowds of tourists and Biennale attendees in the fascinating and beautiful city of Venice, a locale made for the global elite. I felt as if I was already living in a past time.

Stephanie LeMenager characterizes these feelings as anticipatory grief for the loss of petromodernity. She points out that in a world that is thoroughly saturated in oil, our affective experiences are constituted through petroleum: our memories, our sensations, the way we communicate with friends and loved ones. "Here the problem is proximity," she writes. "The petroleum infrastructure has become embodied memory and habitus for modern humans, insofar as everyday events such as driving or feeling the summer heat of asphalt on the soles of one's feet are incorporating practices, in Paul Connerton's term for the repeated performances that become encoded in the body."²² The world that we have known is bound to disappear in one way or another due to climate change, and we grieve its loss, because it is also the loss of these embodied memories, of, in some ways, our entire lives. This grief results in a melancholic reaction to the loss of the "bad object" of oil, what LeMenager describes as petromelancholia. Petromelancholia is also filled with ambiguity, for even as we subjects of petromodernity grieve the loss of our way of life, the immense destruction linked to fossil fuels is becoming increasingly visible and felt.

It is not just petromodernity for which we experience anticipatory grief or a melancholic reaction. The actual disappearance of so many species, forms of human life and culture, and ecosystems is a cumulative grief that seems unbearable, unfathomable. The experience of environmental melancholia is one mechanism for the negotiation of environmental loss and environmental responsibility, as Catriona Sandilands argues. Melancholia itself is a "suspended mourning" where the object of loss is "ungrievable' within the confines of a society that cannot acknowledge nonhuman beings, natural environments, and ecological processes as appropriate objects for genuine grief."²³

^{22.} LeMenager, Living Oil, 104.

^{23.} Mortimer-Sandilands, "Melancholy Natures," 333.

The difficulty of grievability in relation to ecologies stems not only from the denial of our deep ties to the world around us and all its beings but also from the immense scale of loss, the profound sense of losing what we don't even know we are losing.24 This environmental melancholia can elicit very different reactions. Sandilands pointedly shows how melancholy nature serves as an excuse for ecotourist pilgrimages precisely of the kind that the "wealthy mommy" sings in the libretto, where the dying corals of the Great Barrier Reef become yet another tourist destination that "needs to be seen." In a brilliant and pointed insight, Sandilands writes, "Nonhuman beings and particular, life-filled places are, here, ungrievable in the same moment that their loss (or impending loss) propels their value on the market."25 Environmental ruin tourism, witnessing the world in decline, enacts and exacerbates the underlying conditions that have led to the destruction of the reefs in the first place. But this is not the only kind of environmental melancholia that Sandilands identifies. In its more radical political dimensions, melancholia represents an affective state that refuses to move on, that is constituted by the past. The suspension of real mourning also means a suspension from returning to normalcy. Sandilands evokes the use of melancholia and mourning as one of the central strategies of activism within the AIDS epidemic, where many of the infamous actions of ACT UP happened precisely through the staging of grief. Public mourning and refusing to "move on" keeps alive what has been lost. These strategies have also importantly been used to mobilize police abolition in the Black Lives Matter movement through campaigns such as #sayhername. It is a refusal to give in to the perceived normalcy of the eradication of lives that don't count.26

This stuckness, a melancholy that lives in the past, represents a break from "traditional U.S. progressive futurist imaginaries."²⁷ The future is not what it once was, especially for white and wealthy residents who were promised the dream of ever-increasing

- 24. Kathryn Yusoff addresses this problem in "Insensible Worlds," asking how to account for species loss when there are species that will go extinct without ever being known. She argues that this excess could be understood to be productive—"The surplus to meaning that is biodiversity loss suggests that in a sense we need to become more attuned to *nothing*, rather than *something*" (215)—and that confronting the limitations of our own knowledge might be useful in cultivating an ecological sensibility.
 - 25. Mortimer-Sandilands, "Melancholy Natures," 338-39.
- 26. Translating this grief into the public realm in environmental activism is not an easy task, however, as organizations such as Extinction Rebellion have been widely critiqued for their tactics of funeral marches, while ignoring questions of environmental justice and their own complicity with police. See Demos, "Climate Control"; and Wretched of the Earth, "Open Letter."
- 27. Kaplan, *Climate Trauma*, 2. The effects of climate breakdown on mental health have now been widely acknowledged. For example, *The Energy Mix*, a digest of news about renewable energies, fossil fuels, and climate change, recently began putting disclaimers at the top of their articles. Underneath an article titled "Oceans Absorb Record Heat in 2021" there is a warning that reads, "This story includes details on the impacts of climate change that may be difficult for some readers. If you are feeling overwhelmed by this crisis situation here is a list of resources on how to cope with fears and feelings about the scope and pace of the climate crisis." There is a link to another page titled "A Crisis Is a Scary Time. You Are Not Alone." Climate change news now comes with trigger warnings and lists of mental health resources.

happiness, wealth, and well-being. Despite the continuation of progressivist future imaginaries advanced by entrepreneurs such as Bill Gates, who seem to truly believe in the possibility of a technofix to climate change, there is a sense that the liberal capitalist future is rapidly coming to an end. This has been translated into the legal realm through the landmark case of twenty-one youths who are suing the federal government. The lawsuit claims that the government of the United States has "violated the youngest generation's constitutional rights to life, liberty, and property, as well as failed to protect essential public trust resources." In other words, the government has taken away the future from these children and youth, undermining the sense of inherent progress that is built into the United States as a political and national entity.

Yet mainstream environmentalism largely works within a linear framework. There is even a deadline for climate change, and a clock that is counting down to this deadline. Metronome, located in Union Square in New York City, once projected a baffling series of numbers for twenty years that was apparently an alternate clock. It has now been reprogrammed by two artists, Gan Golan and Andrew Boyd, to present the critical window for action on fossil fuel reduction. On Saturday, September 19, 2020, the clock announced, "The Earth has a deadline." "Then the numbers 7:103:15:40:07 showed up, representing the years, days, hours, minutes and seconds until that deadline," reported the New York Times.²⁹ The number is based on the calculations made by the Intergovernmental Panel on Climate Change in 2018, who quantified and temporalized the remaining carbon budget for the world to limit warming to 1.5 degrees Celsius. The Climate Clock deadline shows how long we have left until this carbon budget runs out, given the average amount of carbon dioxide and methane emitted globally. It also calculates climate mitigation measures, such as the amount of land under Indigenous sovereignty, and the rate of transition to greener technology. The clock conveys the sense of an emergency through a deadline: less than eight years. It is meant as a call to action, to urgent action. The climate crisis is obviously an emergency, yet many people have expressed deep skepticism about the efficacy of this temporal framing. As Kyle Powys Whyte has written, "When people relate to climate change through linear time, that is, as a ticking clock, they feel peril, and seek ways to stop the worst impacts of climate change immediately. Yet swift action obscures their responsibilities to others who risk being harmed by the solutions."30 In other words, we risk repeating all of the extractivist logics and brutal inequities that have gotten us into this mess. This is already being enacted with the switch to electric vehicles and the correlated plunder of the Atacama Desert, the Democratic Republic of Congo, and the deep sea to mine essential rare earth and other "green transition" minerals.31 Further, the framing of emergency serves to obfuscate the ways in

^{28.} Juliana v. United States, 986 F.3d 1295 (2021).

^{29.} Moynihan, "New York Clock."

^{30.} Whyte, "Time as Kinship."

^{31.} Nayar, "Not So 'Green' Technology."

which climate change is not new but, rather, has been embedded in the practices of settler colonialism for centuries.³² The vision of progressivism, especially the kind codified in America, was really only for certain people to begin with, especially those marked as white. For others, in particular Indigenous and Black people, we are already living after the end of the world. If your people have been attuned to the dire effects of climate change for nearly five hundred years, it's hard to feel the same sense of urgency, even when things are clearly very bad. To try to balance both the clear and obvious sense of emergency around climate change with a desire to not simply replicate the horrors of the past, Isabelle Stengers has called for a "slow science," one that involves not idly waiting but prolonging, hesitating, and paying attention as methods of responding.33 There is an invitation here for a certain kind of ecological thinking to inhabit different temporal relations, away from progress and everything that it has meant in relation to endless expansion and consumption. Waiting or suspension could be understood as an alternate temporal framework that increases our capacity to tolerate things we would normally simply react to, which could create a gap to respond more creatively and more justly to the incredibly difficult and immeasurable problems we face because of climate change, one that takes more seriously that the changes that need to be made are not technological but social and political, with deep roots in the histories of colonialism.

The existential threat of climate change remains; the pervasive impacts of petrochemicals or heavy metals will not go away. As LeMenager writes, "Feeling at home in a petrol 'world' creates an affective drag on thinking through human survival."³⁴ This drag is both the resistance to meaningful action and the drag of existential threat. Waiting is not an emancipatory future-oriented political temporality, despite the possibilities within hesitating or slowing down. There are also considerable critiques of the turn to "slowness" in relation to climate change, especially as inaction is what so many people on the front lines of climate change experience and have been unjustly enduring for many years, resulting in a crisis and necessity to do something immediately. The calls to slow down have been critiqued as a privilege of the "time rich," those of us who are not yet experiencing the full devastation of climate change.

Conclusion

Sun & Sea affectively documents the normalization of the extremely abnormal environmental conditions in which we are living. It is a performative archive of now, an act of witnessing that records not the state of things lost, but anticipatory grief and the uncanny feeling of a world already gone. There is no collectivity in its staging. Instead,

^{32.} For more on this argument see Davis and Todd, "On the Importance of a Date"; Weizman, *Conflict Shoreline*; and Whyte, "Is It Déjà Vu?"

^{33.} Stengers, Another Science Is Possible.

^{34.} LeMenager, Living Oil, 112.

there is a group of anonymous individuals, couples, friends, family, all in their own worlds. Each performer waits, with their own preoccupations, expectations, desires. In the absence of a political collective, there is a mobile affect, one that seems to take up the rhythms of the libretto, moving from singer to singer and then out through the volunteers and into the audience. The immobility in Sun & Sea translates into an immobilizing present that simply endures.

Sun & Sea is not political art in the sense of agitprop or an aestheticized call to action. It is not an opera for the people, a visualizing of the political work that needs to be done to motivate activists and politicians to finally make something happen on the climate justice front. It does not imagine a future possible world that is different from our own, a way of seeing beyond the frames of petromodernity. Waiting in petro-time, then, is not some reprieve from the present. It does not offer a way forward or suggest alternate ways of living. Like the drag of time, it lingers in the present as a witness to inaction, to leisure, to anxiety, all in pastel colors. It does not offer consolation. It felt like a form of witnessing the present, and not a witnessing of someone else's reality, not a depiction of some imagined victim of climate change, but a presentation of the functional denialism that the most privileged of us—its audience and performers—take part in. Sun & Sea is an intensification of the discomfort of complicity, of the complicity of ways of living that are luxuriously subtended by the violence of extraction. Waiting may also offer an opening to begin to grapple with the complexities of the temporal frames of fossil fuels. Precious and assuring. Yet. Yet.

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References

- Altman, Rebecca. "Time-Bombing the Future." Aeon, January 2, 2019. https://aeon.co/essays/how-20th-century-synthetics-altered-the-very-fabric-of-us-all.
- Balsom, Erika. "Above the Fray: Erika Balsom on Rugilė Barzdžiukaitė, Vaiva Grainytė and Lina Lapelytė's Sun & Sea (Marina) at the Lithuanian Pavilion, Venice." Artforum, September 2019. https://www.artforum.com/print/201907/venice-2019-80531.
- Barone, Joshua. "Review: In Venice, an Opera Masks Climate Crisis in a Gentle Tune." New York Times, July 14, 2019. https://www.nytimes.com/2019/07/14/arts/music/sun-and-sea-lithuania-venice-biennale-review.html.
- Da, Sherry, and Philippe Le Billon. "Sand Mining: Stopping the Grind of Unregulated Supply Chains." Extractive Industries and Society 10 (June 2022). https://doi.org/10.1016/j.exis.2022.101070.

- Danowski, Déborah, and Eduardo Viveiros de Castro. *The Ends of the World*. Translated by Rodrigo Guimaraes Nunes. New York: Wiley, 2016.
- Davis, Heather. Plastic Matter. Durham, NC: Duke University Press, 2022.
- Davis, Heather, and Zoe Todd. "On the Importance of a Date, or Decolonizing the Anthropocene." ACME: An International Journal for Critical Geographies 16, no. 4 (2017): 761–80.
- Demos, T. J. Beyond the World's End: Arts of Living at the Crossing. Durham, NC: Duke University Press, 2020.
- Demos, T. J. "Climate Control: From Emergency to Emergence." e-flux 104 (November 2019). https://www.e-flux.com/journal/104/299286/climate-control-from-emergency-to-emergence/.
- Diamanti, Jeff. Climate and Capital in the Age of Petroleum: Locating Terminal Landscapes. London: Bloomsbury, 2021.
- Diffenbaugh, Noah S., and Christopher B. Field. "Changes in Ecologically Critical Terrestrial Climate Conditions." Science 341, no. 6145 (2013): 486–92. https://doi.org/10.1126/science.1237123.
- Ghosh, Amitav. The Great Derangement: Climate Change and the Unthinkable. Chicago: University of Chicago Press, 2016.
- Heise, Ursula K. Imagining Extinction: The Cultural Meanings of Endangered Species. Chicago: University of Chicago Press, 2016.
- Kaplan, Ann. Climate Trauma: Foreseeing the Future in Dystopian Film and Fiction. New Brunswick, NJ: Rutgers University Press, 2015.
- Khong, En Liang. "How a Beach Opera at the 58th Venice Biennale Quietly Contends with Climate Change Catastrophe." Frieze 204, May 17, 2019. https://www.frieze.com/article/how-beach-opera -58th-venice-biennale-quietly-contends-climate-change-catastrophe.
- LeMenager, Stephanie. Living Oil: Petroleum Culture in the American Century. Oxford: Oxford University Press, 2014.
- Mortimer-Sandilands, Catriona. "Melancholy Natures, Queer Ecologies." In Queer Ecologies: Sex, Nature, Politics, Desire, edited by Catriona Mortimer-Sandilands and Bruce Erickson, 331–58. Bloomington: Indiana University Press, 2010.
- Moynihan, Colin. "A New York Clock That Told Time Now Tells the Time Remaining." New York Times, September 20, 2020. https://www.nytimes.com/2020/09/20/arts/design/climate-clock-metronome-nvc.html.
- Murphy, Michelle. "Distributed Reproduction, Chemical Violence, and Latency." Scholar and Feminist Online 11, no. 3 (Summer 2013). https://sfonline.barnard.edu/life-un-ltd-feminism-bioscience-race/distributed-reproduction-chemical-violence-and-latency/.
- Nayar, Jaya. "Not So 'Green' Technology: The Complicated Legacy of Rare Earth Mining." *Harvard International Review*, August 12, 2021. https://hir.harvard.edu/not-so-green-technology-the-complicated -legacy-of-rare-earth-mining/.
- Nixon, Rob. Slow Violence and the Environmentalism of the Poor. Cambridge, MA: Harvard University Press, 2013.
- Petryna, Adriana. Horizon Work: At the Edges of Knowledge in an Age of Runaway Climate Change. Princeton, NJ: Princeton University Press, 2022.
- Rawlence, Ben. The Treeline: The Last Forest and the Future of Life on Earth. New York: St. Martin's Press, 2022.
- Simpson, Mark, and Imre Szeman. "Impasse Time." South Atlantic Quarterly 120, no. 1 (2021): 77–89. https://doi.org/10.1215/00382876-8795730.
- Stengers, Isabelle. Another Science Is Possible: A Manifesto for Slow Science. Translated by Stephen Mueke. Cambridge, UK: Polity, 2018.
- Weizman, Eyal. The Conflict Shoreline. Göttingen: Steidl, 2015.
- Whyte, Kyle Powys. "Is It Déjà Vu? Indigenous Peoples and Climate Injustice." In Humanities for the Environment: Integrating Knowledges, Forging New Constellations of Practice, edited by Joni Adamson, Michael Davis, and Hsinya Huang, 88–104. London: Routledge, 2018.
- Whyte, Kyle Powys. "Time as Kinship." In The Cambridge Companion to Environmental Humanities, edited by Jeffrey Cohen and Stephanie Foote, 39–55. Cambridge: Cambridge University Press.

- Wretched of the Earth. "An Open Letter to Extinction Rebellion." Common Dreams, May 4, 2019. https://www.commondreams.org/views/2019/05/04/open-letter-extinction-rebellion."
- Yusoff, Kathryn. "Insensible Worlds: Postrelational Ethics, Indeterminacy and the (K)Nots of Relating." Environment and Planning D: Society and Space, January 1, 2013. https://doi.org/10.1068/d17411.
- Yusoff, Kathryn, and Jennifer Gabrys. "Climate Change and the Imagination." WIREs Climate Change 2, no. 4 (2011): 516–34.