

# Climate Change Deniers versus Climate Change Decriers: the Pragmatics of Climate Defense in the Age of Disinformation

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## Abstract

Thirty-five years ago, Bill McKibben published his best-selling popular depiction of climate change, *The End of Nature*. Nearly a decade ago, Naomi Klein's global best-seller *This Changes Everything: Capitalism vs. The Climate* presented her detailed case for why: "thought leaders" must resist and reverse the degradation of Earth's climate in the face of denials that this policy change was impossible. This gambit presumes when presented with disturbing facts on how and why rising fossil fuel use is degrading the climate, like-minded readers will wisely rise, readily organize, and rationally stop such destruction. Both authors have thriving careers as "thought leaders," but the gamble that informative writing would inspire game-changing decisive actions has backfired. In fact, the intensity of their climate change decrying for millions of "action laggards" is often twisted into disinformation to justify climate change denying. Nature has not ended, and climate change has not changed everything. Costly climate disasters are increasing, but habits of embedded symbolic action tied to moralistic decrying suggest McKibben and Klein now play new roles as traders in the networks of disinformation. In today's ESG-guided climate politics, major energy companies nod appreciatively to climate change decriers, pledging future perfection at carbon reduction in contrite climate change denialist exchange for sustaining their carbon emissions. This is a puzzle. Are answers to the puzzle to be found in Klein's latest book, *Doppelganger: A Trip into the Mirror World*, which explores to what degree everyday life now is not engaged with the natural world? Instead, denial and disinformation seem to ensnare many in "trips into the Mirror World" where sustainable degradation produces "digital doubles" of fulfilled future pledges of true sustainability in the 24x7 attention economy underpinned by the falsehoods of current concentrated carbon intensity.

## Introduction

This paper tentatively explores why decades of debate between putatively dueling producers of climate change "disinformation" (e.g., Lomborg, 2001; and 2007; Nordhaus and Shellenberger, 2007; and 2009) and the providers of climate change "information" (e.g., McKibben, 1989; and 2014; Klein; 2017; and, 2023) have proven ironically to be quite "sustainable developments" in the struggle to develop dueling measures of developmental sustainability in climate change politics. Despite endless academic debates, scientific studies, media reports and nature writings spun up from America's "marketplace of ideas" (Menand, 2010), efforts to attain internationally agreed temperature targets in climate change conferences tragically have resulted in years of paralyzing delays, which should not

have been squandered (Stoddard, Anderson, Capstick, Carton, Depledge, Facer, Gough, Hache, Hoolohan, Hultman, Hällström, Kartha, Klinsky, Kuchler, Lövbrand, Nasiritousi, Newell, Peters, Sokona, Stirling, Stilwell, Spash, and Williams, et al. (2021)). In heated environmental debates across the US, the personal and philosophical divides between the “Keep Hope Alive” in capitalist crowds trusting big technofixes, where climate change deniers scream; and, the “TEOTWAWKI” (the end of the world as we know it) protest camps fearing so little time is left, where the climate change decriers weep, one finds huge ideological gaps growing wider every year.

Why? For decades, climate change models have predicted more climate-related catastrophes are coming to both the US and countries overseas from intense greenhouse gassing (GHG). Climate models strive to “mirror” reality mathematically to generate actionable “information,” which is being amplified continuously by multiple Earth sensing systems with real-time monitoring of the planet’s atmospheric, terrestrial, marine, and polar expanses to collect more accurate “data” (Luke, 2009). On the one hand, “skeptical environmentalists,” like Lomborg (2001) or Nordhaus and Shellenberger (2007), claim there is still time for decision-makers to get more data-driven “sound science.” The “convinced Cassandras,” like McKibben (1989 and 2010) or Klein (2014 and 2019), on the other hand, keep repeating their respective views of why the “end of nature” is even nearer as they map the advent of today’s new anthropogenic “Eaarth” or push hard for “Green New Deals.” Along the way, as Paul Edwards suggests (2010), it is evident something is amiss, “this supposed contest is at best an illusion, at worst a deliberate deception --- because *without models, there are no data* (Edwards, 2010: xiii). This suggests the world’s online green attention economy increasing trades in disinformation as the climate change decriers push their apocalyptic models and the climate change deniers sweep up more data in a spiral of mutually developed disinformation.

Before this epoch in Earth’s history was branded as “the Anthropocene,” as Edwards (2010) illustrates, a vast machine for mirroring its trends from space was capturing more data to model global ecosystems with interlacing series of statistical simulacra amid these ecological simulations. The left-wing progressive Naomi Klein (2023) trips over comparable links in her own life, announcing: “Welcome to the Mirror World --- where left is right, fiction is fact, and you may not recognize even yourself.” In her latest book, *Doppelgänger: A Trip into the Mirror World* (2023), Klein recounts how she personally has been confused, conflated and compounded the *Echtewelt* (“real world”) with her own *Doppelgängerin* in this *Spiegelwelt* (“mirror world”), namely, the right-wing conservative, Naomi Wolf, who is the author of *The Beauty Myth*, *End of America* and *Fire with Fire*, and hangs with Steve Bannon. Thus, the pragmatics of climate defense, as well as climate offense, in this age of disinformation is warped, as both “Earth Day” and “January 6” become ever-shifting shapes of significance. This figure of the *Doppelgänger*, which blurs up a digital double or active “alterhood” for any agent, is intriguing.

The hard material facticity of world climate change exists, although its full concreteness exists for many people in the ever-changing disequilibria of incomplete simulations. Informative clues and disinformative messages mingle in the “mirror world,” because it tracks in orbit the “real world” in united dualities, trailing bits and bytes of unruly telluric phenomena, undiscovered climate challenges, and untold mitigating capacities. Together, this conjoined disruption of the biosphere and technosphere, in part, is what McKibben (2010) has tagged as “Eaarth,” where everyone is left “Making a life on a Tough New Planet.” Yet, the widest awareness of man-made climate change arguably comes to most people not directly but rather indirectly through what Klein depicts as today’s information-driven economy with “a culture in which many of us have come to think of ourselves as personal brands, performing a partitioned identity that is both of us and not us, a doppelgänger we perform ceaselessly in the digital ether as the price of admission in a rapacious attention economy” (Klein, 2023: 11).

Caught on these hooks of mass-mediated attention, how much of this “digital ether” one breathes matters. The *Spiegelwelt* multiplies and mixes the materiality of agency. One’s digital double might “degrow” into a tiny house with PV solar panels off the grid or occupy a new McMansion with a five-bay garage -- one for the long-haul motorhome, one for the speed boat, one for the muscle car, one for the SUV and one for the multi-function rideable lawn mower -- all tied to fossil fuels. Klein asks, as McKibben (1992; 2000; 2004; and 2005) has discussed for years, what is “all of this duplication doing to

us? How is it steering what we pay attention to and more critically --- what we neglect” (Klein, 2023: 11). Ultimately, as McKibben (1992: 9) observes, all are now immersed in “An Unenlightenment. An Age of Missing Information.”

Despite the attention given by Klein and McKibben to the still robust ecologies of Nature (McKibben 2000; 2004; and 2005), these “real world” ecosystems continue to sustainably degrade at alarming but still allowable rates behind the symbolic politics of “sustainable development” (Luke, 2006). It has been endorsed by the UN and most of its members for decades, who have trusted the digital doubles of Fortune 500 firms to deliver the secure sustainability at some future date they evade now every day. Indeed, the average percentage yield of such “alterhoods” in the “mirror world” cash out over decades as the profitable turnover drawn from debating climatological catastrophism in the attention economy of the *Spiegelwelt* with/for/by a bevy of individual and corporate informatic doppelgangers, who tag along in the dust of their actual business practices. Whether it is at <https://naomiklein.org/> and <https://billmckibben.com/> or <https://corporate.exxonmobil.com/sustainability-and-reports> and <https://www.chevron.com/sustainability>, in these battles of the brands, environmental politics is deadlocked over negotiating symbolic corporate pledges of future perfection on greenhouse gas emissions by 2030, 2040 or 2050 in exchange for materially sustaining highly flawed current emissions and their serious environmental degradation in 2010, 2020 or 2025.

Whatever effective efforts to advance sustainability in the *Echtwelt* (“real world”) are being gained, or will be made soon, often are essentially neglected by many citizens, if not entirely lost --- in the dot.com domains of *Spiegelweltnachhaltigkeit* (“mirror world sustainability”). There fossil fuel companies, like ExxonMobil or Chevron, continuously crow about “tomorrow,” not “now.” 2024 is not the issue. Their digital doubles dream about 2050, while their corporate purposes of today are centered on “creating sustainable solutions that improve quality of life and meet society’s evolving needs” (<https://corporate.exxonmobil.com/sustainability-and-reports>) will have made everything all right.

With its ardent interest in lithium, hydrogen fuels, methane, carbon capture, and resiliency, ExxonMobil affirms that society recognizes that the ecological risks are real, but “The need for energy is universal. That’s why ExxonMobil scientists and engineers are pioneering new research and pursuing new technologies to reduce emissions while creating more efficient fuels. We’re committed to responsibly meeting the world’s energy needs” (<https://corporate.exxonmobil.com/>).

Hence, pollution, global warming, contamination, climate change, and toxicity tied to fossil fuel production are now being traded for pledges of sustainable futures by 2050. Yet, ExxonMobil has leveraged these policies for such a *Spiegelweltnachhaltigkeit* since the 1980s. It claims to be striving to mitigate the climate change downsides of 1990, 2000, or 2010 to fulfill future pledges to get to the upside by 2030, 2040, or 2050. Meanwhile, in the “real world,” ExxonMobil continues fending off pollution lawsuits around the world from the past and the present. Like Chevron, these corporate disinformation strategies allow fossil fuel firms to “strive to protect the environment, empower people and get results the right way. This approach is integrated throughout our business” (<https://www.chevron.com/sustainability>) because their digital doubles concur with the average consumers. In these shared alterhoods of modern life, all attain the upsides of “satisfying universal needs for energy.”

## **Rough Weather or Climate Change: Informational Blips**

Until 1988-1989, intensely destructive meteorological phenomena were regarded largely as erratic episodes of “bad weather.” After James Hansen on June 24, 1988, asserted, “The first five months of 1988 are so warm globally that we conclude that 1988 will be the warmest year on record” in a Congressional hearing, however, “global warming” soon acquired political and scientific facticity in print and broadcast media. In turn, any incidents of extraordinary weather and wind would soon be labeled, rightly or wrongly, by newspaper reporters and local TV weather anchors as atmospheric artifacts of anthropogenic changes in the planet’s climatic conditions [<https://www.nytimes.com/1988/06/24/us/global-warming-has-begun-expert-tells-senate.html>].

A few months later, in 1989, Random House published Bill McKibben’s *The End of Nature*. This

book pivoted off Hansen's research on anthropogenic climate changes caused by rapid increases in fossil fuel use and declared when "the waves crash up against the beach, eroding dunes and destroying homes, it is not the awesome power of Mother Nature. It is the awesome power of Mother Nature as altered by the awesome power of man, who has overpowered in a century the processes that have been slowly evolving and changing of their own accord since the Earth was born" (McKibben, 1989: 51). Science and journalism seemed to merge into new streams of environmental information about "the real world" of evolving Nature; but, they could, in turn, be contested also as junk science, political rhetoric or technological error rooted in the spinning "mirror world" of data-driven disinformation. Nonetheless, the dark days of current disasters illustrate vividly how past delays in dealing with climate degradation are causing waves of environmental devastation today.

During a few weeks in July and August 2023, the capital of Vermont, Montpelier, experienced its downtown being inundated by intense unprecedented rains. In addition, the capital of Arizona, Phoenix, endured 31 consecutive record-breaking days of daytime temperatures above 110 degrees Fahrenheit with at least 25 heat-related deaths during 2023 despite extensive community efforts to assist its most at-risk residents. In Hawai'i, drought-plagued Maui could not evacuate the one-time capital of Hawai'ian kings, Lahaina, before its historic core burnt to the ground, killing scores of residents. These 2023 flash brushfires were stoked by hurricane-speed winds blowing over once lush terrain made arid by corporate pineapple cultivation techniques. California's "atmospheric rivers" of 2024 eclipsed the massive storms of 2022 with widespread flooding, high tides, hurricane-force winds, and deep snowfall across much of the state. The Smokehouse Creek wildfire in the Texas Panhandle in February 2024 burned over a million acres of private and public lands in three weeks, making it the greatest wildfire disaster in the history of the state. Likewise, the Great Lakes during the Winter of 2023-2024 hit a historic winter low-point of having only 2.7 percent of their surface covered by ice across the entire expanse of all five lakes.

These are only a few incidents pounced upon by Bloomberg News, CNN, and the Weather Channel over recent months, whose news readers and content programmers all choked for weeks during 2023 in the surreal red and orange plumes of forest fire smoke wafting down the Eastern seaboard from Canada as they churned out more and more information about the links between accelerating fossil fuel consumption and worsening climatic conditions. Despite these "real world" developments, the first GOP presidential primary debated "the mirror world" between eight candidates on August 23, 2023, featuring the one-time pharmaceutical executive Vivek Ramaswamy. He stood out in this crowd by vigorously proclaiming, "The climate change agenda is a hoax, and more pointedly, "We need to abandon the cult of climate change" (Crisp, 2023: A7). While he quickly dropped from the field, Donald Trump is now the GOP's 2024 presidential candidate, who has full control of the same narrative. With the Republican National Committee, such disinformation helps him push climate denialism's standard line that climate change is a hoax cooked up by the Chinese to bamboozle the West to use less fossil fuel as Beijing eclipses the West economically all across the world.

The prospects for experiencing endless environmental disasters, when put into perspective with the rhetorical response of Donald Trump, should he once again become the American president, underscores the acute insights in Nietzsche's observation that "insanity in individuals is something rare -- but in groups, parties, nations, and epochs, it is the rule" (1968: 33). Ramaswamy's and Trump's campaign quips, like President Reagan's 1981 insight that "trees cause more pollution than automobiles do" (Radford, 2004), given the writings of hundreds of environmental writers, social organizers, and political thinkers about the politics of climate denial, also accentuate Einstein's acute insight that "insanity is doing the same thing over and over and expecting different results."

The trance of consumerism supported by abundant fossil fuels, as well as the GOP's allegedly "conservative" culture industry, have brought the US into an "age of unreason" (Jacoby, 2008). Despite the bad signs of 2023 and 2024, this era excuses such material and moral excess as the benefits of comfort, convenience, and conventionality while denying its costs will hit anyone that hard, soon or widely. Hence, one must ask why such environmental "business as usual" continues for both climate change deniers and decriers who respectively serve as key "thought leaders" seeking to mobilize "change makers" to downplay or resist the forces of climate change.

## Does This Change Everything

The disasters of Summer 2023 and Winter 2024, in which environmental heat-rooted catastrophes, ecological expert commentaries, and electronic new clips constantly clumped together 24x7 through the collective awareness, returns one to think about two “public intellectuals” (Posner, 2001) who have put climate change front and center, namely, Naomi Klein and Bill McKibben. Klein’s books and essays written after Hurricane Katrina on “disaster capitalism” garnered considerable recognition in many circles for important and insightful “thought leadership” (Drezner, 2017). Likewise, McKibben’s writings on climate change and the end of Nature have captivated millions of readers for over three decades. Few environmental political theorists would regard either her or him as major figures in their subfield, but both McKibben and Klein have earned plaudits enough to be read closely due to their honesty, dedication, and optimism about the prospects for change.

Bill McKibben’s (1989) anxious reflections about “the End of Nature” since the 1980s in *The New Yorker*, plus many other books and articles, plainly have made slowing and/or stopping climate change into his life’s work. McKibben’s “reduce, reuse and recycle” consciousness, which favors individual sacrifice and collective austerity to decarbonize the American economy and society, is brimming with facts from scientific studies as well as intense personal vignettes of his own regrets about what Klein labels “high consumer lifestyles” (2014: 2). Believing that hearing the truth, reviewing the data or feeling the danger will move anyone “to do something” to lessen greenhouse gassing, McKibben holds to the *illusio* that the more information he churns out in print, online or across the airwaves, he will spur rapid and widespread intervention by “the People” that “something will be done” directly to slow climate change.

Still, in McKibben’s case, many things have been taken to the point of being overdone. His aesthetic and austere meditations on global warming for 35 years have become so predictable that in many other citizens’ minds, he typifies “the death of environmentalism” (Nordhaus and Shellenberger, 2007), criticized by contemporary ecomodernism. Taking 350 ppm of CO<sub>2</sub> in the Earth’s atmosphere on purpose as his “dream the impossible dream” target for policing climate change, which was last true in May 1986, McKibben -- the “thought leader” -- and a group of close friends who perhaps are “change-makers,” organized 350.org, an environmental issue and pressure group. It had been an active lobbying/pressure group for adopting this scientific parameter as the ideal for advanced industrial civilization to return to and then enforce indefinitely forever.

Hence, McKibben and 350.org have been held up as a significant activist organization for concentrating “on grassroots campaigns across the globe, leveraging people power — individuals working together in pursuit of a common goal — to dismantle the influence and infrastructure of the fossil fuel industry and to power up clean systems rooted in justice” (<https://350.org/about/>). This conceit of energetic concern, however, has not controlled or slowed rapid climate change despite leveraging all sorts of people power around the world who have been represented with their digital doubles in animated graphic clips (<https://www.youtube.com/watch?v=s5kg1oOq9tY>). It is true that “350 quickly became a planet-wide collaboration of organizers, community groups, and regular people fighting for a fossil-free future” (<http://350.org/about/>). Yet, the simulacra of solutions in the “mirror world” do distract attention from the dearth of these “real world” environmental “change makers” making any progress despite scrambling to contain energy companies, populist oppositions, or ordinary commuters simply seeking access to more cheap gas and oil supplies. Doppelganger activists ardently march to stop climate change by halting the Mountain Valley Pipeline (MPV) in Appalachia, for example, are mistaken for successfully slowing or stopping climate change in the “real world.” Demonstrating does build the 350.org brand for environmentalists’ digital doubles in the “mirror world,” but a lot of natural gas already is flowing through the MPV into the “real world” to cook with gas.

For 15 years, McKibben’s admirable climate, energy, and environmental justice movement has leveraged the 350 ppm of CO<sub>2</sub> metric to rally; for example, in 2022 alone, 680+ campaigns in 70+ countries with 10,000+ activists to claim that “we have achieved extraordinary things, from getting millions of people onto the streets worldwide to moving trillions of dollars away from the fossil fuel

industry, to stopping dirty coal, oil and fossil gas plants and pipelines. We take on ambitious fights -- and we often win!" (<https://350.org/about/#our-people>). Still, "often "winning" on "real world" sites of struggle also means often losing there. Perhaps success is not actually mitigating climate change; it is instead actively depicting their promotional struggles in the global attention economy exchanges. Such brand-building mobilizations of millions marching and then attaining their second-best alternatives of "adapting to climate change," even as global climate change accelerates largely unmitigated, is measured by stacks in blogs, tweets, and clips as "success."

Someday "change makers" in green movements may halt climate change, but now climate change relentlessly contains them in simulacra of valiant struggles in the "mirror world." After these 15 years in which millions of supporters marched, trillions of dollars might have disinvested and dirty energy infrastructure projects perhaps stopped in the US, the ppm levels of CO<sub>2</sub> have continued to rise from 359.99 in May 1992 "when the Earth Summit saw the formation of the United Nations Framework Convention on Climate Change (UNFCCC)" resolved to stop this cycle of atmospheric destruction (<https://www.downtoearth.org.in/news>) to 421.08 during 2023, as measured at the Mauna Loa Observatory (NOAA) in Hawai'i (<https://www.climate.gov/news-features/understanding-climate/climate-change-atmospheric-carbon-dioxide>).

With such criteria for success set for 350.org's "ambitious fights" against climate change, by which this organization of decriers claims "we often win!", are the standards for victory problematic in their *Doppelgängerheit*? Despite the qualifying "often," they verge on "disinformation" inasmuch as McKibben and his followers appear to be deliberately pushing multiple mixes of information in disconnected narratives. Given how the numbers on massive individual efforts at direct action in the "real world" match up against concrete outcomes in actual greenhouse gas reductions, either immediately or slowly over the years, the digital doubles of these vaunted activities largely cash out in "mirror world" metrics. In reality, global CO<sub>2</sub> levels are still rising, not falling. Millions of activists in the streets of 70+ countries are not slowing climate change; they arguably are adding to it simply by massing themselves in such numbers from around the world at mediagenic points to brand in their direct action. Fossil fuel use is expensive, dirty, and atmosphere-degrading, but it is nowhere near dropping off that significantly in the US. Even McKibben admits to these inconsistencies since "righteousness only goes so far. Because – unlike Jet Skis – we all benefit from the systematic abuse of the planet. Cheap food and cheap energy would let us eat big meals, build big houses, drive big cars. . . .I'm as implicated as most people" (2005: 134).

## Shockingly Doctrinal

Given varied career of Naomi Klein, who is regarded today as "one of the world's most powerful voices against capitalism's negative impact on human life and the earth's ecosystems" (<https://americanswhotellthetruth.org/portraits/naomi-klein/>), one must think twice about McKibben's belief that fruitful possibilities for human survival remain viable on today's anthropogenic planet, or "Eaarth" (McKibben, 2010). Klein's pitch on climate change begins with a *mea culpa*, "I denied climate change for longer than I cared to admit. . . .And I continued to behave as if there was nothing wrong with the shiny card in my wallet attesting to my "elite" frequent flyer status" (2014: 3).

She hooks the reader with this confession, "Like you, I too have sinned." She then declares this is the hour for all elite sinners to end "doubling down on the stuff that is causing the crisis in the first place" (2014: 3). The reading public's response to this confession of green sins clearly is warm, most likely because so many others in the "equivocally environmental publics" among the world's "semi-sovereign peoples" commit the same environmental wrongs in their *Doppelgängerheit*. Ironically, Klein essentially admits she remains ineffective as an ecological "change-maker" in the "real world" despite her "thought leader" status in the "mirror world." When she is not green-wrapping neoliberal ecotourism escapes, she is green-rapping the think-positive digital double backbeat of corporate sustainability. Nonetheless, ecomodernizers still call out her "disaster capitalism" ecologies, which is one of the finest examples of "why we can't leave saving the planet to environmentalists" (Nordhaus and Shellenberger, 2009).

Klein's frequent personal appearances and widely published analyses, which have been reformatted in extended media interviews, popular lectures, or documentary films, simply add more credibility to this born-again environmentalist alterhood. In fact, as the 20 celebratory blurbs sprawling across three pages of the 2015 paperback edition of her *This Changes Everything* attests, Klein -- who also is the author of *No Logo* (2020) about corporate domination -- is regarded now as the most exemplary climate crusader now needed to cut a workable path through our "New Branded World." All logos up with her designer-like name surrounded by a minimalist square; she has motivated millions to follow "Naomi Klein" (<https://naomiklein.org/>) online as their guide for surviving the fights of "Capitalism vs. The Climate."

In Klein's web presence, one finds the accretion of prodigious flows of images and texts, which are an endless whirl of products circulating in her self-sustaining pools of opinion pieces, interviews, documentaries, and articles. Her intense coverage of rapid climate change issues and never-ending denunciations of the cynical innovations of "disaster capitalism," have made her famous as one of the fiercest advocates of the "Green New Deal" (Klein, 2019) in Europe and North America. In the meantime, she leads the thoughts of her devotees, dispensing her opinions on everything from pipeline politics, degrowth localism, environmental gentrification as well as field to fork distances, bunker-building for millionaire survivalists, raising blue-collar houses 20 feet higher on concrete piers in often flooded poor neighborhoods, setting up community banks for localistic green investing, purchasing organic foods, installing home back-up power generator installations for those with spare cash as adaptations to rapid climate change.

Klein's disbelief in the value of capital-intensive technofixes has moved her to see such high-tech development as a historical turn to "magical thinking" for coping with a worldwide environmental calamity that allegedly "changes everything." Yet, it is not as clear how "everything changes this" stance in her thoughts. They remain anchored by mass-mediated visions of a once-balanced and bountiful nature. After positing the emergence of a destabilized, less predictable, and chaotic "post-environmental world," which the traditional forecasting tools of environmental science still try to map, and the ontic stabilizers of public policy still seek to legitimize, are green visions increasingly ineffective? These nostrums might have held the line at 350 ppm of CO<sub>2</sub> a generation ago when she and her audiences did not anticipate the climate calamities of 2023 could become more likely now instead of much later, like 2030, 2040, or 2050.

In turn, should such certainty be accorded as much respect in political discourse, policy solutions, and public life today due to how dubious scientific model-manufactured dictates for surviving catastrophic chaos are becoming? Once again, as hard as it might be to concede, are Klein's celebrations of many apparent small successes in the struggle to adapt to rapid climate change that meaningful? Like her admiration of Angelica Navarro Llanos, Bolivia's 2009 ambassador to the World Trade Organization, who told Klein in Geneva that the world still needs "a Marshall Plan for the Earth. . . .to mobilize financing and technology transfer on scales never before seen" (Klein, 2014: 5). Why? Navarro Llanos declared, "we only have a decade" (Klein, 2014: 5). Not surprisingly, Llanos and Klein forgot to mention Al Gore, Jr. (1992) made the same pitch and prediction a generation ago.

In actuality, it is 15 years later, and that precious decade of Llanos decries has passed. Many places in the world already have been almost hitting 2 degrees C over their preindustrial temperatures frequently during 2023 and 2024, even though the climate conferees at the Rio, Kyoto, Paris, and Copenhagen climate conferences agreed no one should ever experience such conditions:

The European climate service Copernicus announced on July 7, 2024, "The global temperature in June was record warm for the 13th straight month, and it marked the 12th straight month that the world was 1.5 degrees Celsius (2.7 degrees Fahrenheit) warmer than preindustrial times, "It's a stark warning that we are getting closer to this very important limit set by the Paris Agreement," Copernicus senior climate scientist Nicolas Julien said in an interview. "The global temperature continues to increase. It has at a rapid pace."

That 1.5-degree temperature mark is important because that's the warming limit nearly all the countries in the world agreed upon in the 2015 Paris Climate Agreement, though Julien and other

meteorologists have said the threshold won't be crossed until there's a long-term duration of the extended heat — as much as 20 or 30 years. “This is more than a statistical oddity, and it highlights a continuing shift in our climate,” Copernicus Director Carlo Buontempo said in a statement (<https://spectrumlocalnews.com/tx/south-texas-el-paso/news/2024/07/08/june-sizzles-to-13th-straight-monthly-heat-record--string-may-end-soon--but-dangerous-heat-won-t>)

Perhaps Klein's hopes and dreams, once again, like McKibben's, are misleading or biased information trapped in artfully manipulated narratives, given the planet's current environmental flux.

## Denialism Hides Harsh Truths Decried Out in the Open

The concrete challenges posed by rising CO<sub>2</sub> levels in the atmosphere as a long-lasting major greenhouse gas that could soon trigger rapid climate change have been officially recognized in Washington since the mid-1960s by the Johnson Administration. Data gathered by NASA with atmospheric remote sensing satellites as well as from other ground-based monitoring stations managed by other researchers documented how the global warming of the atmosphere and oceans gradually had been altering Earth's climate for decades in the *President's Science Advisory Committee Report on Atmospheric Carbon Dioxide* (1965) as CO<sub>2</sub> rose by seven percent from 1860 to 1960 [<https://www.climatefiles.com/climate-change-evidence/presidents-report-atmospher-carbon-dioxide/>].

These trends, however, greatly accelerated during worldwide waves of fossil-fueled economic growth after World War II (McNeill and Engelke, 2016), posing the threat of a 25 percent increase by 2000.

The *ultimate* goal of contemporary climate change activism has been to develop and deploy a strategy in the 1990s for the “decarbonization” of advanced industrial economies and societies to cap global warming at no more than 3.6 F/2 C degrees above preindustrial global temperatures. This important change, in turn, has been treated as a radical imperative for decades. Yet, it was not adopted until 2015 with “The Paris Agreement, which entered into force on November 4, 2016,” aiming to check “global temperatures from rising above Earth's preindustrial Revolution temperatures by 2°C (3.6°F).” ([https://education.cfr.org/learn/reading/paris-agreement#:~:text=The%20Paris%20Agreement%2C%20which%20entered,C%20\(2.7%CB%9AF\)](https://education.cfr.org/learn/reading/paris-agreement#:~:text=The%20Paris%20Agreement%2C%20which%20entered,C%20(2.7%CB%9AF))).

Because the Paris Imperatives are quite stark in “the real world,” namely, requiring immediate the rapid reduction and sustainable suppression of carbon dioxide and other greenhouse gas emissions generated by fossil fuel consumption around the world, it is increasingly forgotten a decade later. It does not work outside of the “mirror world,” as many ideas about how to attain this goal have advanced since the late 1980s. Despite Klein's advocacy for a Green New Deal, no comprehensive, enforceable, and workable program for launching such a full-spectrum technology, policy, and change program, in fact, has gained any real traction for over two generations. Yet, the ecomodernizers still fear Klein's and McKibben's “thought leadership” (Asaifu-Adjaye, 2015).

In part, this static deadlock is due to the fact that there are no practical alternative energy sources to replace fossil fuels (Smil, 2017). And, in part, delays are due to the fact that “alternative energy sources” cast long “fossil fuel shadows.” Developing alternatives essentially requires fossil fuels to produce, transport, install, and maintain windmills, solar farms, biofuels, or hydropower plants that are regarded as decarbonized energy sources. Electric cars, for example, leave huge occluded carbon footprints. Volvo has reported the carbon emissions needed to build their non-carbon emitting electric cars are 70 percent higher than producing comparable ICE-powered cars. Moreover, fully electric cars, on average, must be driven 68,000 miles before they break even with an ICE-driven automobile in terms of carbon emissions (Crisp, 2023: A 7).

Former NASA scientist James Hansen issued in June 1988 what many regard as “the first warning to a mass audience about global warming,” as reported to “a US congressional hearing he could declare “with 99% confidence” that a recent sharp rise in temperatures was a result of human activity” (Milman, 2018). As carbon emissions in 1988 rose from 20 billion tons in 1988 to over 32 billion tons three decades later, Hansen in 2018 mused that ““All we've done is agree there's a problem,” to the



extent activists and scientists “ agreed that in 1992 [at the Earth summit in Rio] and re-agreed it again in Paris [at the 2015 climate accord]. We haven’t acknowledged what is required to solve it. Promises like Paris don’t mean much; it’s wishful thinking. It’s a hoax that governments have played on us since the 1990s” (Milman, 2018). Still, Klein believes her 466-page documentation of these challenges, like McKibben’s unyielding faith in 350.org, will awake all from their fossil-fueled trance with such outraged alarm that decisive action would soon be taken in all arenas of governance.

On the one hand, layers of unconscious habituation, deep capital investment, and heavy dependence on legacy technology made change difficult; but, on the other hand, “fossil fuel companies such as Exxon and Shell” were conscious enough of the perils of rapid climate change years before Hansen’s and other scientists’ 1988 congressional testimonies “to support a network of groups that ridiculed the science and funded sympathetic politicians” to favor fossil fuels over alternative energy sources” (Milman, 2018). Recent studies of the oil majors during the 1970s document the extent to which they researched the inevitability of climate change, developed adaptation and mitigation strategies to respond, and then purposely suppressed the science (except to plan their own endangered capital investments) to maintain profitability, avoid regulation, and stall litigation (Rich, 2019).

One strategy for critics of the clean, green, and lean transition since the 1990s has been to advance “pragmatic approaches,” even though there is no consensus about what is realistic, sensible, or practical when facing such titanic ecological changes. Otherwise, the policy challenges they entail might have been surmounted nearly 50 years ago. Yet, when more practically-inclined souls reason that deeply degrading patterns in the forces of capitalist exchange are best met by more pragmatic responses, they pivot to energetically spin the merits of mobilizing capitalist counterforces, like “natural capitalism,” “green business,” or “corporate sustainability” (Hawken, Lovins and Lovins, 1999; and, Elkington, 1999).

Even after 50 years of both battling environmentalists and striving to innovate technologically, ExxonMobil, for example, declared its experts believe the world is still not on track in 2023 to reduce carbon emissions enough to meet the 2 degrees C increase in global warming by 2050 (Eaton, 2023: B 1). Furthermore, the gap is immense. Current world emissions in the 2020s are 34 billion metric tons of CO<sub>2</sub> on average annually, and a reduction of 25 percent by 2050 to 25 billion tons is quite likely. To reach the UN’s Intergovernmental Panel on Climate Change targets for 2050, no more than 11 billion tons of CO<sub>2</sub> on average globally would be allowable (Eaton, 2023: B 1). Pragmatically, this is a paradox. Tremendous current efforts might hit their 2050 targets by 2050. It would be a major miss on the allowable greenhouse gas emission targets -- still more than double the amount of carbon the world economy should emit to be safe (Eaton, 2023: B 1).

Klein (2014: 466) has positioned herself in the vanguard pushing “new structures built in the rubble of neoliberalism -- everything from social media to worker co-ops to farmer’s markets to neighborhood sharing banks. . . .to actually build the world that will keep us safe.” Not many of these structures are new. They are rather a familiar cognitive/ communitarian capitalist mix of soft energy paths, localist markets, and degrowth jobs to counter the momentum of ordinary technofixes, whose “magical thinking” of sustainable materialism will still leave the world in the clutches of giant grids of legacy megatechnics a definite dependence on fossil fuel growth machines.

With their heavy dependence upon coal, gas, and oil supplied by the world’s major oil companies to generate energy, an entire industry of climate change denialists, downplayers, and anti-doomsters developed a data-driven pragmatics for both honesty and prevarication about climate change to pursue an effective program for seeing themselves as green “change makers” in the shiny glitter of *Spiegelweltnachhaltigkeit*. Disinformation about these issues has distorted their core message in “the new Age of Information” that took hold after the tumultuous struggles of the 1960s and 1970s. When decisive change could have been made in the US during the 1980s (Rich, 2019), defensive pushback from oil industry scientists bobbing and weaving in global conferences, national legislatures, regional regulations, and local actions enabled fossil capital interests to leverage this complex crisis by pledging to adopt comprehensive “climate solutions” by 2050, even though they truly needed to be implemented much sooner by 2020 or 2030 (Smil, 2016; and, 2010).

Selling more Teslas to the upper-middle classes in Shanghai, Los Angeles, or Berlin today might

lessen smog levels considerably in those cities. Still, over their lifetimes, electric cars contribute to worsening climate conditions, not better ones. Into this gap, new ecomodernizationist programs from Michael Schellenberg, Bjørn Lomborg, Paul Hawken, Gregg Easterbrook, and Bill Gates, among others, have promised a grand array of improved technofixes, from more nuclear energy generation of electricity to deploying artificial intelligence for better grid monitoring, will save the day. Whether it is climate change defense that pushes an eclectic mix of radical adaptation, constant migration, hard regulation, or mild mitigation practices, they all believe “Nothing is Changed by This.” Hence, humanity must ride out conditions of spreading environmental collapse for a few decades to come until Bill Gates’ small new modular nuclear reactors from Breakthrough Energy begin powering the economy.

### Conclusions: Still an Age of Little Missing Information

This overview of Klein and McKibben as green “thought leaders” is troubling. Inasmuch as there seems to be a disinformation race between fossil capital and climate change activism, Klein and McKibben, with their various doppelgangers, have pursued perfecting green performativity for policies well-suited to *Spiegelweltnachhaltigkeit* over new offensives against fossil capital. ExxonMobil continues to deny the UN’s IPCC greenhouse gas targets can ever be hit in time since its own scientists informed “the management” in the 1970s that it had to be around 1980 or all would be lost. Highly influential green thinkers and organizers continue to move the goalposts in these rhetorical games. The cliff-hanging last moment to attain change is nearer and nearer -- even as the decades of decisions fly by. In the 1990s, the world fortunately had until the 2020s, and it could still make positive changes during the 2000s to avoid disasters in the 2030s. Now, in the 2020s, the world has only until the 2050s. Meanwhile, “the End of Nature” events so fearfully foretold in 1989 have been happening more and more frequently for over twenty years.

Has Klein’s green politics and theory best-seller *This Changes Everything: Capitalism vs. The Climate* proven to be only a pot-boiling political thriller best read at the beach? Will the historic case of “Capitalism vs. The Climate” always remain unfinished, unsettled, and unresolved? Quite likely, they will, because the pleas made on both sides of “Capitalism vs. The Climate” feuds still trigger mutually assured denying, and incessantly more decrying, about what actually is “disinformation.” Perhaps the best answers are yet to come from the death-defying heat exhaustion felt by the readers out on the sand, the disorientation of beach-goers unable to find the beach they rested on five years ago and the delusion that bigger 350.org direct action marches in more cities against greenhouse gas levels will return the world to those pleasant sea-side vacations of days past free from atmospheric rivers, unchecked brushfires, invasive predators, bleaching corals, constant droughts, higher tides and more Category 5 hurricanes?

To conclude, this critique has reconsidered how and why so many policy initiatives in climate change politics have promoted and/or suffered from recursive patterns of political frenzy or paralysis for decades in the face of persistently repeated factual revelations about the endangerments of greenhouse gassing caused largely by expanding fossil fuel consumption. When effective change might have been made, did a *Doppelgangerkultur* of high media-mention counts in flashy performative earth defense actions staged by prominent environmental activists, and then streamed mostly in the digital domains, like <https://naomiklein.org/> as well as <https://billmckibben.com/>, induce an empty inertial solutionism --- that accepted more and more symbolic accords instead of decisive confirmed material progress --- by well-branded as well as no-brand eco-warriors from 350.org to fridaysforfuture.org? In too many ways, each sees the other mostly in “the mirror world.”

With gaining celebrity in “the mirror world,” the climate change decriers often have been outmaneuvered in “the real world” by climate deniers. Their green-leaning judicial, legislative, and administrative interventions largely play out as histrionic activist logrolling in global conferences, national legislatures, and regional pacts, even though many local actions did make real changes in their spheres of influence. Historic climate agreements “are supposed to be the climate-savers’ gold standard — the key data on which the world relies in its efforts to lower greenhouse gas emissions and hold global

warming in check. But the national inventories of emissions supplied to the United Nations Climate Convention (UNFCCC) by most countries are anything but reliable, according to a growing body of research” (YaleEnvironment360, 2021). Getting symbolic accords for “measuring and monitoring” greenhouse gases rather “mitigating and migrating” to much more non-fossil fuel use essentially have proven to be a long string of Pyrrhic victories.

Disoriented in this *Doppelgangerkultur*, the climate change resistance movements mistook, in a sense, light “Naomi Wolfe” shadows from Rio all the way to Paris for bright “Naomi Klein” lights. These constant missteps perhaps thrilled millions in the world’s media-driven green attention economy, hoping for any solution, but very little climate change was mitigated. In the dust of disinformation kicked up by digital doubles, they enabled fossil capital to artfully contest the alleged ambiguities in the world’s climate change trends as “business opportunities” rather than “ecological outrages.” Since 1992, “thought leaders” produced far more too-little/too-late “climate agreements” aiming at success by 2050, while what was most urgent were mobilizing more “change makers” to implement tough permanent reductions by 2000, 2020, or 2030.

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