The Semiotics of Carbon

A Community Engaged Case Study of Environmental Governance in New York State

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Eco- word-forming element referring to the environment and man's relation to it... from Latin oeco, from Ancient Greek οἶκος (οῖkos, "house, household, or **hearth**)

Hearth- the lowest point of a furnace or the floor of a fireplace or the root of a heat-source central to a home or a fire.¹

In his study of Tolstoy, Isaiah Berlin compares the hedgehog who "knew one big thing", to the fox, who knew many things². Imagining the administrative state as the hedgehog and the landowner as the fox, a good picture of the forest that is New York State is made. When it comes to climate change and governing carbon emissions, the interplay between these groups is one founded on a network of symbols and signs often far away from any definable reality. Emission and climate change appear to us in many forms as semiotic structures representing a politic of catastrophe grounded in the environment.

It can be difficult to avoid ruminating on the apocalypse during fire season because we can see the smoke, or emission, as it appears around us. This particular fire season³ had also, against some odds, found its way to the Eastern seaboard of North America in addition to "fire season's" traditional natalwest, an inferno still. The Canadian wildfires set the stage of the summer in the mid-west and on the east coast; their plumes of of smoke staining the sky with a palid, orange hue while consuming many millions of acres in the northeastern boreal forests in the province of Quebec.

We know that the relationship between fire, trees, and carbon emission is a negative loop. While wildfires emit a lot of carbon dioxide into the atmosphere, they also destroy trees which we count on as devices of sequestration to offset industrial and home output— carbon becomes a conceptual center as well as an ephemeral currency in the discussion around climate issues.

In New York State, a state involved in relatively radical environmental policy while also having a large forest cover comprised of nearly complete private ownership, the idea of rural realities and rule making around climate and carbon are crucial to interpret.

Of several sustainability strategies, New York State has implemented legal and incentive frameworks which would reduce emissions through the regulation of stoves, electric vehicles, infrastructure, and other forms of combustion; something that, during fire season, can seem like a red herring—a misnomer for an existential and industrial problem. In layman's terms, rule making in the state tends on halting climate change by rigorously accounting for carbon emissions and incentivizing denizens of the state to lower personal emission through behavioral change, technology, or otherwise by offsetting carbon through market mechanisms. Those, not necessarily tied to the carbon that they normatively represent. Rooted in the prosaic language of accounting and measurement, these frameworks don't necessarily ground themselves in ecological, or carbon realities. Rule making around carbon seems to often harbor this deep disconnect from itself, especially in a rural, carbon dense, and self governed context such as New York State.

A story of familiar hubris, the irony of valorizing the preservation of the atmosphere's quality to fix a problem result of its initial degradation is lost on nobody. Roger Caiazza, meteorologist and author of the blog *Pragmatic Environmentalist of New York* stated, in conversation, that "people don't believe that if we simply control our carbon dioxide emission that we can fix the climate... they just don't believe that and they are right not to"4.

Of a variety of strategies for combating climate change, New York State has developed

¹ Online Etymology Dictionary. Accessed 10, July, 2023.

² Berlin, 2013

³ Referring to the fires in Quebec, Canada, in the summer of 2023

⁴ Caiazza. Phone interview. Aug 2023.

comprehensive carbon accounting and emission reduction models which target not only the household, but the entire infrastructural gird, the "hearth", of the expansive state—excerpting such lofty goals as reaching net-zero by 2050 through technological innovation and market systems. In analysis, New York's climate strategy is amongst those most advanced in the world. Nonetheless, to inhabitants and land owners, the state's Climate Leadership and Community Protection Act⁵ (CLCPA), and those bills similar to it, exhibit tremendous disconnect from rural, environmental, emotional, and empirical carbon realities. Roger continued to say that "we should never think that this is anything but political. We've got an environmental crusade as an excuse to do anything" and that "the disconnect between people and politics is a huge problem when it comes to climate issues."⁶.

The use of the environment, or carbon, as a semiotic mechanism creating allegorical meaning around emission and quantification is not necessarily rooted in a carbon reality, much less that of a rural condition involving people and their behavior. Far be it from anybody to know whether or not policy should consider such nuance with austerity. Nonetheless, rural realities and political symbolism have the potential to cause unrest through civil discourse during the dispersal of environmental rule making in the paradigm of climate preparedness and the rules which increasingly surround natural resources. The use of the environment and its conservation remains under strain in its application as a political metaphor in riposte to catastrophe, that which its own degradation incurred, producing mixed response from people and their perceptions of home. Because the rural condition is largely private, these implications will strongly influences governance of the environment and resource commons.

It is difficult to cite an accurate estimate, but the exhaust of the aforementioned fires, by mid-July, had amounted to at least two hundred and ninety million metric tons of atmospheric carbon⁷. New York State, while varying, is purported to typically emit around just over one hundred and seventy million metric tons of carbon, of which around fifteen percent is from the household⁸ i.e the "hearth". The difference between seen and unseen emission and politics around them hinges on the semiotic discourses which they induce.

In a conversation regarding the theoretical universe in which it were possible to reduce emissions to net-zero by 2050, and by forty percent before 2030, as laid out by the Climate Leadership and Community Protection Act, Chris O'Conner, a fire marshal, amateur forester, and proprietor of firewood mentioned that he "wasn't sure what the right thing to focus on was" and even that "we might be focusing on the wrong targets" altogether⁹.

With the background of the wildfires, it would have been difficult to disagree with him. For rule makers it is a theoretical exercise to think about carbon. For specialists like Chris who deal with fire and trees on the ground, the reality of carbon and emissions is something totally different, even nuanced. Chris was referencing gas-stove bans, super-emitters, and the regulation of household carbon in New York State and, within this inquiry, the seed of the biggest failure of carbon accounting, or responses to climate change in general, resided—outsourcing. "Outsourcing" meaning the displacement of both time and culpability result of climate problems; a symptom endemic to the production of economies grounded in the currency of environmental symbols, like energy and emissions, as prosaic solutions to a climate dilemma through numeric modeling. The production of a binary language around catastrophe grounded in measurement, faith in technological innovation, and capital is a response to that which is impossible to simplify— carbon and social patterns. This binary system produces a stark disconnect between information, people, rule makers, and the environment, perpetuating the idea that environment and people, in posterity, are separate.

⁵ United States Congress, 2019

⁶ Caiazza. Phone interview. Aug 2023.

⁷ Copernicus Atmosphere Monitoring Service, accessed July, 2023

⁸ Department of Environmental Conversation, 2022

⁹ O'Connor. Interview. July 2023.

This dichotomy between use and preservation is not a new one. In Gilgamesh¹⁰, perhaps the oldest recorded story, the king of the city Uruk himself nearly weeps at his desecration of the mountain and its guardian, Humbaba, a god like creature who is one with the trees and the mountain. Enkidu, his rural counterpart born of the wilderness, seems to look on with cold indifference, urging the desecration of the forest to continue, eventually leading to his own death— as if to say *this is what you wanted, so be it.*

Carbon can be thought of as an indicator of meaning constructed around the premise of climate change and utilitarian solutions for it wherein use and preservation can exist at once— often dubbed in political science circles as "synergistic". It is a currency; and while climate issues are something that will shape the coming years, even what some such as political scientists Daniel Mazmanian and Michael Kraft would call a coming paradigm¹¹; the unfurling of the climate age is something however discrete and shaped by symbolic language. The environment is reduced to a conceptual center, or politic. Sociologist Ingolfur Blühdorn even goes as far as to say that certain sustainable mechanisms in politics are mere simulations of sustainability by both the state and non-state actors, merely symbolizing action or care.¹² According to Blühdorn:

This new variety of symbolic politics can suitably be referred to as *simulative politics*. Reaching well beyond the narrow realm of eco-politics and the unsustainability of contemporary consumer democracies, Baudrillard conceptualizes the loss of authenticity and the exclusive preoccupation with signs, symbols and performances as the central problem of late-modern societies (Blühdorn 267)

Expanding on the idea that governance extends not only to state actors, but to the institutional and emotional condition of citizens, he states that:

This is a seemingly schizophrenic condition where citizens want politics to be no more than symbolic, but still complain about democratic deficits and 'merely symbolic' politics. This form of political communication can be aptly described with Nullmeier's expression 'performance of seriousness'. It is a political game that is, arguably, characteristic of late-modern society, and that is motivated by the characteristic dilemma caused by the post-ecologist turn and the exhaustion of authentic politics (Blühdorn 265).

The semiotics of carbon markets likewise are derivative of many layers not exclusive to the state. Political scientist Arun Agarwal coins the concept of an "environmentality"¹³. His idea prompts a critical examination of just this interplay: how environmental governance can both empower and constrain individuals and communities as subjects with an environmental concept as their nexus, resulting in decentralized governance and non-clarity. Agrawal highlights the intricate exchange between state power, environmental discourse, and the everyday actions of people and the complexities of environmental management during the construction of environmental subjectivities. Carbon economies, decentralized and state run, are among these institutional technologies.

Still, just as carbon is used semiotically, it is a physical material which, effectively, makes up all things on earth. Language around carbon and climate change can separate us from that idea which I am calling "reality"— the synthesis of many parts. The improvement of the stove, or hearth, on an infrastructural level represents this discontent as a myopic narrative seeking a solvent for an existential and systemic dilemma.

¹¹ Mazmanian and Kraft, 1999

¹⁰ Helle, 2023

¹² Blühdorn, 2007

¹³Agarwal, 2012

During a class discussion which turned, as many do, in address to climate and the discourse around it, professor and researcher Anindita Banerjee summarized that the "... sublime becomes banal"¹⁴ conjuring, for me, modernist poet T.S Eliot's *Hollow Men*, and lines "the world ends...not with a bang, but with a whimper" (Eliot 82) a line used frequently in pop culture because it touches on the very human tendency to subdue issues by creating additional meaning around them, by dramatization and metaphor i.e rumination on an apocalypse as a cataclysmic explosion instead of something systemic and slow.

The effects of climate change will more than likely *not* be an Armageddon or a cataclysmic singularity but, instead, a gradual and unpredictable turn of a social, ecological, literary and emotional wheel— the effects of the climate dilemma will be a reckoning with the very premise of home and humanity; the change incited will be equal to the internal ideological landscape as to the physical landscape itself. Climate change and the dispersal of climate politics make it apparent that the separation between people and natural resources, or that which is dubbed nature, is something actually very thin. While First Nation peoples have known this for a longer stretch of time, the term in the western framework "ecology" came as a reckoning with the myth of this binary separation, spousing that our environment was actually something grounded in connectivity and attachment. In many ways, this idea was the greatest invention of the age and, in his book *Topophilia*, *A Study of Environmental Perceptions*, *Attitudes*, *and Values*, Yi-Fu Tuan grapples with this idea as it applies to attachment and environment, writing that:

The earth's surface is highly varied. Even a causal acquaintance with its physical geography and teeming life forms tells us as much. But the ways in which people perceive and evaluate that surface are far more varied. No two persons see the same reality. No two social groups make precisely the same evaluation of the environment (Tuan 5)

Not only will people react and perceive the environment differently, but they will engage with it in a variety of ways, too, often based on the specific discourse of their internal ethic. This is to say that communities will be a part of the environment in a myriad of normative manners non-soluble with the bureaucratic ideas of management. Roger continued to say that "In New York State, there are a lot of dirt roads, and at the end of them, we don't know what's happening"¹⁵ Insofar as policy and science should be concerned, reality is unwieldy and hard to touch with prosaic, administrative techniques— people simply *are* carbon; an existential premise which hinders a global desire to see a problem and solve it.

The events of today's changing climate, in that they represent the totality of human actions over time, represent also the terminus of history. For if the entirety of our past is contained within the present, the temporality itself is drained of significance. Or, in the words of the Japanese Philosopher Watsuji Tetsuro: "Rather than trace the historical development... all one needs to do is to distinguish the various formal transformations of the present."

The climate crisis of this era, then, are distillations of all human history: they express the entirety of our being over time (Ghosh 115)

Above is an excerpt from the writing of Amitav Ghosh in his book *The Great Derangment*, where he describes the role of colonialism and its antithesis, imagination, in the climate crisis. He continues to write that "... to imagine other forms of human existence is exactly the challenge that is posed by the climate crisis: for if there is one thing that global warming has made perfectly clear it is that to think about the world only as it *is* amounts to a formula for collective suicide." (Ghosh 128).

¹⁴ Banerjee. Spoken. Apr 2023.

¹⁵ Caiazza. Interview. Aug 2023.

Author and activist Naomi Klein, in her book *This Changes Everything*¹⁶, attributes the emergence of climate change to industrialism whereas Ghosh takes it another step by coloring it as being result of colonialism and conquest. A prerequisite to all of these systems, however, is that they necessitated the separation of people and the environment so that the environment could be something to plunder. In *Seeing Like A State*, anthropologist James Scott writes about the control and commodification of people and nature through forms of binary separation, measurement, and cadastral labeling systems. Those, not so dissimilar to techniques used to disseminate carbon.

He uses the example of early scientific forestry, saying that: "... the actual tree with its vast number of possible uses was replaced by an abstract tree representing a volume... If the princely conception of the forest was still utilitarian, it was surely a utilitarianism confined to the direct needs of the state." ... "The fact is that forest science and geometry, backed by state power, had the power to transform the real, diverse, and chaotic old growth forest into a new, more uniform forest that closely resembled the administrative grid of its techniques." and that "The forest as a habitat disappears and is replaced by the forest as an economic resource to be managed efficiently and profitably... fiscal and commercial logics coincide; they are both resolutely fixed on a bottom line". Continuing to say that: "The vocabulary used to organize nature typically betrays the overriding interests of its human users." And that the "... utopian dream of scientific forestry was, of course, only the *immanent* logic of its techniques. It was not and could not ever be realized in practice. Both nature and the human factor intervened." (Scott 12, 15, 13, 19)

Both nature and the human factor intervening with the immanent logic of technique and measurement as it has been, in this case, applied to forestry and management, could be applied to any commodification of natural resources insofar as their being ephemeral, animate, and impossible to define in a value system, much like the tree. "Eco-system services" for example, those services which nature provides, and on which we rely, such as tides, pollination, precipitation, et cetera, have been labeled by economists such as Robert Costanza as being worth a number varying drastically in range but being at least over the global GDP¹⁷. Scott continues to say that "certain forms of knowledge and control require a narrowing of vision. The great advantage of such tunnel vision is that it brings into sharp focus certain limited aspects of an otherwise far more complex and un-wieldy reality." (Scott 11). Here, we could imagine climate change and emissions. Scott continues in saying that "One sign of this concern were the numerous state-sponsored competitions for designs of more efficient wood-stoves" (Scott 14).

This competition, or faith in technological improvement shown by stoves, remains the primary goal of laws in regard to emissions. Measuring trees for sequestered carbon and increasing the efficiency of engines and stoves is still the name of the game. If we could imagine the tree and stove in Scotts critique of scientific systems as symbols which would label and commodify people and places, we can easily imagine the metaphorical measurement of carbon; not only because the tree and stove remain as a symbol is this discourse, but because it is confined to the technique of measurement itself while remaining inadequate in the face of "knowing" reality— simply replace the idea of timber and land parceling with carbon and its many decentralized value systems. Those, furthering the narrative of symbols and the dichotomy of use and preservation, or nature and society. These systems continue a legacy of utilizing the planet as a commodity while changing the symbolic, linguistic, and political terminology to match ecomorals and the universalization of ethical demands.

This idea of utilitarianism and technocratic land use was what political scientist John Dryzek would deem "Prometheanism" summoning the myth of Prometheus, the god who gave mankind fire

¹⁶ Klein, 2014

¹⁷ Costanza, 2020

¹⁸ Dryzek, 2013

and technology, thereby incurring punished for eternity by the others on Olympus. The idea is firmly rooted in technological faith— improvement of the hearth remains true to the promethean standard which can be highlighted by any major climate law.

In 2022, Dr. Karl Hausker of The World Resource Institute gave a talk at on the climactic features of the Inflation Reduction Act of the same year— a bill nicknamed the *green vault* as it boasted the largest monetary investment into climate in history. In address of carbon emission, Hausker highlighted technological innovation, carbon sequestration, and incentive frameworks¹⁹. Nature based systems such as reducing emissions from deforestation and forest degradation, or REDD+, seem to be a backup option for funding, while capital is streamlined into incentive regimes, innovation, and implementation of a clean infrastructure, or a "win-win". Dr. Hausker concluded his presentation with a picture of poker chips strewn atop a velvet table.

Laws and other initiatives such as The Paris Agreement, the Kyoto Protocol, and New York's Climate Leadership and Community Protection Act are deeply involved in market pragmatism and the "just transition" rooted in this idea. CLCPA races towards replacing an arcane, coal based infrastructure with clean electricity. The idea of a hearth comes to mind, and the ancient push to replace it with a better one. The idea that electricity isn't attached to carbon, however, is another symptom of this technological, even utopian, longing.

In 1882, at his home in wall street, J.P Morgan commissioned Thomas Edison to light his home and city block with the earliest electric lightbulbs. They did this to demonstrate the use of the light bulb as a replacement to the gas lanterns which lined the streets, displaying hundreds of the bulbs around the mansion block, and within the house, in lower Manhattan. It was seen as something brilliant— a beautiful spectacle of dazzling light, clean, and devoid of soot and oil. What wasn't visible, however, were the many laborers who dug miles of tunnels underneath Manhattan to funnel electric currents to said lightbulbs, that energy which was created by six generators the size of elephants requiring thousands of tons of coal or wood input into combustion furnaces, roaring at an unimaginable volume out of sight and mind.

Energy, as a commodity, also became something which purified and streamlined natural resources and people into commodity forms, obscuring view from their foundation, the environment. Suddenly, we return to the idea that Scott posits of people and nature being the cost of something. Ghosh further writes, on our ideas around energy, that "these too are moments of recognition, in which it dawns on us that the energy that surrounds us, flowing under our feet and through the wires in our walls, animating our vehicles and illuminating our rooms, is an all encompassing presence that may have its own purpose about which we know nothing." (Ghosh 5)

The just transition i.e the global push to sustainable infrastructure, has its many ironies. The sheer fact it has to be labeled "just" may be to avoid this suspicion, or to recognize it. Cobalt, for example, is a primary ingredient in batteries which span the gamut for electric vehicles, stoves, solar panels et cetera, and must be mined for production of said infrastructure. The demand for this mineral has skyrocketed at an unprecedented rate the world over.

The main source of raw cobalt is in the Democratic Republic of the Congo where artisanal mines ravage the densest forest on earth or, as Wanjira Mathai of the World Resource Institute stated, in a talk at Cornell University in 2022, "destroying the final set of lungs on the planet" While incurring thousands of hectares worth of deforestation, the mines are also the peril of many thousands of underpaid workers. In the context of New York State, a place where a transition to electric infrastructure is technically possible, and where comparative privilege resounds, the reality of effectiveness simply becomes invisible, like the elephant generators. Laws are difficult to interpret and, on the inverse, decentralized self

²⁰ Mathai, 2022

¹⁹ Hausker, 2022

governance ensues. In relation to carbon and trees, it is critical to note that, in New York State, over ninety percent of forested landscape is privately owned, and therefore privately managed. Roger's "dirt road" idea could effectively apply to the zoning of the entire state. Trees and emission, while being themselves hard to measure, also disappear under the umbrella of private tenure and desegregate management.

In the rural context, the idea of subversion of political concepts and decentralized governance is even more apparent. Scott goes on to write that "The relative clarity of customary tenure is lost on those who live outside the village." (Scott 36) meaning that outside of a hyper monitored and publicly organized grid, rules and consequences become too variable to understand. If we are to reimagine the binary of people and nature as not being separate, we could logically say that nature and social constructs around it are united. A rural context makes this idea even more acute, and gives Scott's ideas new meaning— imagining what he suggests, only now in the context of carbon economies as a metaphor for the natural world, and for people:

If the natural world, however shaped by human use, is too unwieldy in its "raw" form for administrative manipulation, so too are the actual social patterns of human interaction with nature bureaucratically indigestible in their raw form. No administrative system is capable of representing *any* existing social community except through a heroic and greatly schematized process of abstraction and simplification. It is not simply of capacity, although, like a forest, a human community is surely too complicated and variable to easily yield its secrets to bureaucratic formulae. (Scott 22)

Undoubtably, Scott took inspiration from, and used in epigraph, the work of political scientist Herbert Simon who, in his book *Administrative Behavior: A Study of Decision-Making Processes in Administrative Organization*, wrote that:

Administrative man recognizes that the world he perceives is a drastically simplified model of the buzzing, blooming confusion that constitutes the real world. He is content with the simplification because he believes that the real world is mostly empty— that most of the facts of the real world have no great relevance to any particular situation he is facing and that most significant chains of causes and consequences are short and simple. (Simon 119)

Herein the unwieldy-ness of space and time gain further resolve. It is no stranger to us in our everyday lives, but escapes measurable significance in policy and action. In interview, several landowners, who have made clear a desire to remain anonymous, expressed deep concern around rules such as the Climate Leadership and Community Protection Act and others which address carbon emissions, believing that they would cut off underserved or otherwise reliant individuals from the fuel they needed to heat their homes in the frigid winter months.

From the onset of the bill, the fear was that firewood would become harder to come by, more expensive, and even downright forbidden. Forbidden, at least, in new construction projects. In conversation, rumors permeated and dialogue regarding the wood ban made its way into community forum, online, and elsewhere in New York State. For a time, emotions around the issue were high.

Indeed, the bill has an appendage which would decrease emissions by a substantial percentage in regard to wood burning apparatuses. Still, that people will be restricted from purchasing or collecting wood to heat their home remains as yet to be seen in the features of any law in existence— the implications of that would be too obviously draconian. Even still, analysis of CLCPA, as Roger puts it, is "inconclusive" and that "something like a wood ban or a wood ban itself is perhaps inevitable" 21.

²¹ Caiazza. Interview. Aug 2023.

In line with panic and widespread interpretation of the bill, the Department of Environmental Conservation, the agency which administers the law, made several statements in attempt to quell these worries, but themselves seem unclear on the empirical nature of these features.

Journalist Nikki Rudd cites DEC spokesperson Haley Viccaro on the issue: "...the analysis remains consistent across scenarios as to the contribution of remaining high-efficiency, low-emissions wood burning (for example, wood use for primary and secondary heating or industrial use) as well as some recreational wood combustion," Rudd continues to write that "In layman's terms, the plan right now does not include any recommendations specifically about wood burning. Viccaro wants to make it clear, the state is not considering legislation that would ban heating your home with firewood. So if you read or heard that claim, it's false."²² Roger, in his piece on CLCPA, writes, on these statements: "Frankly, the response from DEC to this and the other reports might be true as presented but in the bigger picture they lack context."²³ This all, not without mentioning the impossibly massive cost of this transition which is something he, and many, believe to be insurmountable.

To reach such lofty goals as a reducing in emissions to net zero, much more than reducing wood burning would be necessary. This is a problem attached to people's varied ideas of sovereignty. Whether political perceptions are well founded or not, emotional reaction implies their disconnect, fallacy, and symbolism. In conversation with environmental lawyer and landowner, Charles Wage, he noted that "It appears that a lot of people that lack knowledge but are well intended are making decisions and laws that will not really advance their cause or may not do any good... I think there will be a lot of push back when it comes to wood burning devises for heating. A large number of people use wood stoves to cut their heating bills and make themselves independent through their ownership of their own heating supply, they own woods."²⁴. No matter the case, there remains a discrepancy in what the bill states and how proceedings will normatively occur, not mentioning civil discourse around topics. That the world which emission reduction goals necessitate remains as one drastically different from the one we inhabit is what incites these emotional responses.

That people were agitated only by a *perceived* taking of their rights to a resource common, wood, may imply two things. Firstly, that there exists a logical fallacy in reducing emissions through any way other than taking away certain rights and, second, that literacy around rules is something which is difficult to decode, at best, and may be a language separate from empirical reality at worst. Carbon and rules around it become symbolic and interested on all sides in only signs and symbols. Civil reaction to change in the face of climate change will be a great challenge. As the cutting edge, CLCPA, and New York State, can provide the best case example for these issues in climate policy on a global scale.

²² Rudd, 2022. Accessed. Aug 2023.

²³ Caiazza, 2022

²⁴ Wage. Interview. July 2023.



Fig A



Fig B

Figures A and B^{25} , above, are flags which had circulated internet communities, such as reddit and tik-tok, after the expose of New York's earliest climate legislation as well as CLCPA. These flags are embodiments of attitudes that can be found in rural communities which are closest to natural resource commons rather than urban ones. One participant in conversation, wishing to remain anonymous, even noted that "if you want to get to my wood lot, you're going to have to get past my gun".²⁶

The emotional response to environmental issues is systemic and long founded. In a recent paper titled *Green Walls: Everyday Ecofascism and the Politics of Proximity*²⁷ by Dr. April Anson and Dr. Anindita Banerjee, a long timeline of violence and terrorism founded in environmentalism is brought to light. The flags symbolize resistance to rights being taken, perceived or otherwise, and are rooted in emotion which can lead to crusade. Natural resources and the feeling of sovereignty become something inextricably linked. This idea is pathological to the idea that environmentalism is simply human-hood and that the separation of people from environmental rights and quality will cause discord.

In New York City this summer, activist and performance artist Scott LoBaido marched to city hall with a slew of onlookers to throw pizza at the building, reportedly shouting "give us pizza or give us death" in emulation of Patrick Henry delivering his address on the rights of the colonies at the Virginia Assembly in Richmond, 1775, which is often dubbed the war cry of the revolution. A week or so before, in response to the same legal appendage, pizza reviewer and owner of Barstool Sports, David Portnoy, released a tweet; a video of him expressing his grievances towards a law, real or imagined, which would cease coal and wood fired pizza production for the sake of decreased emissions. In his video, amongst other things, Portnoy stated that he "... can make threats..." and that "if you come for coal and wood fired pizza, I am coming for your throat!" with intense enthusiasm. In his conclusion, he noted that many of the ovens used to produce these coal and wood fired pizzas were "a hundred years old" and "needed to be left alone" Portnoy's sentiment is one which implies a perceived loss of cultural heritage.

No matter, for now, the reality of climate bills and carbon regulation, people's attachment to their perceptions of home, and the sovereignty to access resource commons, is one ruled by emotion. Ghosh goes on to write that "Climate change ... poses a powerful challenge to what is perhaps the single most important political conception of the modern era: the idea of freedom ..." (Ghosh 119)

In the case of the matter of wood restriction to underserved denizens of rural New York, CLCPA seems to take an acute care in not implying these deficits nor effecting any underserved community members. In fact, the name has the words "community" and "protection" in it, like the *just* transition, to avoid these very conceptions— those that environmental preservation has a long history of in contradiction, often, to human rights. Nonetheless, because the matters of wood stoves and worries around pizza have been declared, for now, as unfounded, it becomes even more difficult to imagine how the state will reach its emission reduction goals to begin with. Regarding carbon accounting, Roger made the point that "they come up with the numbers... there is a lot of guessing going on. You could throw darts and do better" and that, in regard to reaching CLCPA's emission reduction, the goals are

²⁵ Reddit, anon, accessed June 2023

²⁶ Anon. Interview. August 2023.

²⁷ Anson and Banerjee, 2023

²⁸ Rohit, accessed Aug 2023

²⁹ Portnoy, 2023

³⁰ Portnoy, 2023

"inconclusive". Imagining the current infrastructural grid of New York is the same thing as imagining the whole state, a behemoth, one that Roger remarks as being "more deeply ingrained than you might think"³¹, implying also a humanitarian connection to a cultural hearth as well an industrial necessity.

In *Topophilia*, Tuan stresses the importance of the attachment to place as synonymous with the human experience, and that a bond between people and their setting is the root of said "philia"³². He writes that, of many, one tenant to environmental attachment and a sense of home rooted in emotion is the very change in attitude towards environment. He continues to write that "... human beings boast a highly developed capacity for symbolic behavior. An abstract language of signs and symbols is unique to the species. With it human beings have constructed mental worlds to mediate between them and external reality." (Tuan 13) And further questions our attachment to place with the question "Can culture influence perception to the degree that a person can see things that are non-existent?" (Tuan 60). This is not to imply that climate change isn't real, strongly the opposite, but instead to question belief and response to it. This question has everything to do with climate and governance of the environment because it inserts an emotional attachment to ideas and places as something just as real and important as anything else. In New York, a place regulated in large part by its inhabitants who own land, this invisible world of symbolism and emotions is critical.

After similarly musing on the king of Uruk, Gilgamesh, and his rural counterpart Enkidu³³, Tuan braids together ideas of power and sovereignty to the environment, writing that:

People pay attention to those aspects of the environment that command awe, or promise support and fulfillment in the context of their lives' purpose. The images change as people acquire new interests and power, but they are still taken from the environment: facets of environment, previously neglected, are now seen in full clarity. (Tuan 120)

When we apply these ideas to an increasingly climate sensitive ecology, and an intricate political framework around natural resources, the reaction of people to the decrease in access to wood and coal burning becomes clear, if even in an abstract universe. Of all things that the just transition would necessitate, not burning wood and coal would be minuscule—herein lies a discrepancy in legislation which, although has no foundation now, can seem inevitable to state prescription and lifestyle change.

For eon, people have lived with the hearth. For eon greater still, we have grappled with the dichotomy of using the environment and preserving it. Tuan writes that "Human nature is polarized. Man plays two roles, the social-profane and the mythical-sacred, the one bound to time, the other transcending it." (Tuan 129). This somewhat convoluted remark is simply about the simultaneous valorization and use which we incur on natural resources, and therefore ourselves. It is still the binary language stuck between preservation and use "seeking for a point of equilibrium that is not of this world" (Tuan 248)

The matter of attachment and emotion as being simultaneous to an environmental condition is something that the paradigm of climate change will exhibit. The irony of foresters and wood sellers as being those which would foster environmental care is one that tells us a story of humanity and nature together. Research shows that fostering relationships between people and land-use is beneficial to environmental preservation, this including carbon capture, as well as people's livelihoods.

In her book *Governing the Commons*³⁴ Elinor Ostrom, a political scientist and Nobel Memorial prize winner, wrote about the governance of resource commons in response to Hardin's tragedy of the

³¹ Caiazza. Interview. Aug 2023.

³² Philia meaning "the love of", and the conception of love as connective tissue to ideas in late antiquity

³³ Tuan 103

³⁴ Ostrom, 1990

commons, a paradigm informing notion stating that we would inherently deplete the natural resources of the world. Ostrom, among other things, highlighted the idea of closeness and connection to natural resources as being the surest way in maintaining them— she illustrated a kind of rural, moral economy which is difficult to define while remaining both prevalent and increasingly crucial to the governance of natural resources.

While making a visit to Chris O'Connor's family home in Dryden, New York, the wildfires still loomed above. I was there to ask Chris about his small business as a proprietor of treated firewood. To this, he simply told me that it wasn't a way to make money, not at all, but instead a way to manage his land— as he only harvested wood from trees which had died— and to connect with his son who cut logs as an exercise to better himself for his favorite sport, rowing. Chris walked me through his property and demonstrated an incredible knowledge-base around each tree. Walking atop grass and patches of flowers, we arrived at a pond that he and his father had dug out in the 1930s as part of the Farm Pond Act. To do so, Chris had to fell a poplar tree. At the time, it was 1932, and Chris was eight years old. His father gave him a few cents for the work, and he learned the skill of forestry. Today, Chris's property is a museum. It is a grove of many boisterous, diverse, and old trees of which Chris keeps a close eye, preparing to harvest those with emerald bore or other forms of blight and disturbance might cripple— stressing that forestry is a type of management, and that it is rooted in a connection to the landscape.

After our visit to the poplar tree-stump, we ventured further into the property where it became clear that Chris's land contained an arboretum. In it, Chris pointed to a metasequoia, commonly called a dawn redwood, which is among the only deciduous conifer trees in the world, and is rare to come by in New York. The nearest species member resides at the Cornell University Arboretum, and stands in a circumference of stone that Chris himself had built for the university.

Chris proceeded to tell me the story of his grandfather, Ernest Harkness, a botanist educated at Harvard University, who had been in China during world war II, and had consequentially been involved in rediscovering this very species, thought extinct at the time, likely near a war zone. Chris told me that caring for his land and his trees was a way of life, and also a way to connect with his son and grandfather — that a love for the land came from this familiar tie. Returning to Tuan, the line "More permanent and less easy to express are feelings that one has toward a place because it is home, the locus of memories, and the means to gaining a livelihood" (Tuan 93) takes on profound meaning.

We valorize trees. They are a means of building, heating and thereby cooking and eating, capturing carbon, and connecting to our sense of place. This is not a new idea. To the Gayogohó: no, members of the members of the Haudenosaunee Confederacy, and one of many disposed sovereign nations from the Finger Lakes region, the white pine is referred to as the a symbol of peace and life. Associate professor of the history of art and visual studies at Cornell University, Jolene K. Rickard says, in conversation, that the white pine is called "the peacemaker" and is "the consciousness of peace as a way of life through connection to place"³⁵. The white pine, as a symbol, is one of tremendous importance to community and life as much now as it ever was. Professor Rickard continued to say that "a way of life becomes a relationship to place"³⁶.

Disseminating matters of the heart with the wholesale wood and coal seller community in Tompkins county, New York, was another story but with the same bones— one of resoluteness. One interview, wishing to remain anonymous, typically indicated the stance that "people are going to get wood and burn it one way or another, it's just a matter if it's done right" and that "some people need to burn to heat their homes, that's life." Irregardless of the reality of legal features, individuals expressed a resolute defiance to even the potential of resource commons being restricted. They also stressed that people take

³⁵ Rickard. Spoken. July 2023.

³⁶ Rickard. Spoken. July 2023.

³⁷ Anon. Interview. 19 July 2023.

care of the land because it's theirs— in some cases even noting that climate change didn't seem to matter. One anonymous participant, in conversation, noted that "I don't think global warming is actually happening. We take care of our land and that's it. It's warmer? So what?"³⁸. Just as unbelievable then, to some of those who govern the biggest carbon bank in the state, forests, is the idea that they should be responsible for installing expensive heat pumps and solar panels. What matters the most to land owners in New York's rural context, and across any political spectrum, seems to be the moral economy and a closeness to resources as being something to maintain, congruent and not mutually exclusive to use, i.e to burning and timber harvest.

Still, the nature of timber and firewood markets is changing. Tree poaching occurs often despite stringent rules and timber product of a variety change in value constantly. In continued conversation with environmental lawyer and land owner, Charles Wage, he notes that he "... can tell you one thing about the present timber market in New York and Pennsylvania— it is terrible. The prices started dropping a year ago, in January, and have not stopped ... Some sawmills are shut down temporarily. Some are only sawing a part of the week. All have either placed loggers on quota or told them to stop sending logs³⁹". Among market rates and supply chain issues, many loggers and those reliant on forestry jobs cite environmental regulation as the nexus of their loss of livelihood.

In New York State the situation of industry and climate is much the same as it is in the rest of the world insofar as management and reality remain as not being institutions which are inherently synonymous. New York's majorly privatized system of forested landscape and ephemeral carbon system, as an example, highlight the very decentralized nature of environmental governance while also making clear that globalism, or nestedness, although propounding as morally correct and politically efficient, is a departure from Ostrom's resource closeness.

CLCPA, holistically, is a bill that treats the issue of people, or shareholding, delicately because of an increasing awareness, if even peripherally, that community and climate are intrinsically linked. The semiotics of carbon politics, an erroneous extension of measurement and economy, still hold an unclear trajectory. Returning to Blühdorn's ideas, the examination of gaps between the rhetoric of sustainability and the actual practices that perpetuate unsustainable behaviors within modern societies becomes important. Blühdorn introduces the concept of sustaining the unsustainable to describe situations where societies engage in actions that appear environmentally friendly, yet ultimately fail to address the underlying causes of ecological degradation. While not being the focus of governance groups in many cases, Tuan and Ostrom's related ideas of attachment and closeness to resources are, on one hand, perpetual, and on the other, critical to sustainability. As a result of desegregating people, concepts, and resources, an out of focus globalism and myopic speculation gain the potential to occur around environmental issues.

In *Environmentlaity*, Agarwal illustrates the creation of this meaning and governance in communities as holding a center in a produced environment not only as a conceptual model, but as a way to mechanize the production of subjects. Agrawal's work emphasizes that environmental governance is not solely a top-down process enforced by authorities but is also influenced by diverse local practices, cultural norms, and knowledge systems. He highlights the need to recognize and incorporate these local perspectives and practices when designing effective environmental policies and initiatives. This idea, in the context of New York and climate change, will require no small amount of trust in people's attachment to their homes, resources, and the moral economy. Blühdorn writes that:

It is certainly true that the analysis of the post-ecologist constellation and late-modern society's politics of simulation does not easily translate into environmental policy recommendations. Yet

³⁸ Anon. Interview. August 2023.

³⁹ Wage. Interview. Aug 2023.

the attempt to understand the architecture of this constellation and the logic of these practices is one essential precondition of developing the capacity to transcend it.⁴⁰

If carbon and the environment are used so much as a metaphor, what are they a metaphor of? Perhaps just people. Returning to prometheus and imagining the technocratic control of fire, carbon becomes merely an existential bi-product.

In her book *Prometheus in the Nineteenth Century, From Myth to Symbol*, Caroline Corbeau-Parsons writes about the myth of Prometheus as a symbol of romanticism, human nature, technology, and defiance throughout the reaches of the ages. Within the myth is the seed of both hubris and a kind of glory, comparing humanity to the titan's own image. She cites Goethe's lines:

Here I sit, forming man In my own image, A race to be like me, To suffer, to weep, To delight and to rejoice, And to defy you, As I do.⁴¹

Continuing to Thomas Woolner's reference of Pygmelion, in which Prometheus is cited as being a figure of Athena's rational love, and one who wouldn't stop at the theft of fire, but also strive for "...the torch of eros and the thunderbolt of Zeus" (Corbeau-Parsons 162). Prometheus's intellectual prowess would extend to the domain of electricity and light—both a depiction of humanity's impressive abilities in innovation and a caution of our tremendous tendency for hubris.

⁴⁰ Blühdorn 272

⁴¹ Corbeau-Parsons 103

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