

Biophilic Institutions: Building New Solidarities between the Economy & Nature

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Climate change and economic insecurity are the two most pressing challenges for modern humanity, and they are intimately linked: climate warming intensifies existing structural inequities, just as economic disparities worsen climate-induced suffering. Yet precisely because this economy-nature interrelationship is institutionalized, there exists an opening for alternative institutional configurations to take root. In this essay, we make the case for that institutional remaking to be biophilic, meaning it supports rather than undermines life and livelihood. This is not speculative thinking: biophilic institutions already exist in the here and now. Their existence provides an opportunity to learn how to remake institutions founded on solidarities of shared aliveness and a shared alliance with life that advance the premise that nature and the economy are not just intertwined but indistinguishable.

Climate change and economic insecurity are the two most pressing challenges for modern humanity, and they are intimately linked: climate warming intensifies existing structural inequities, just as economic disparities worsen climate-induced suffering. But for this destructive pattern to persist, it requires constant institutional attention and reinforcement. In other words, institutional actions and actors must promote and defend practices that damage both the economy and nature, making those outcomes seem inevitable and necessary. Yet precisely because this economy-nature interrelationship is institutionalized, there exists an opening for alternative institutional configurations to take root.

In this essay, we make the case for that institutional remaking to be biophilic, meaning it supports rather than undermines life and livelihood. We are facing a future that is already being indelibly shaped by anthropogenic climate change. To confront the consequences of global warming on our societies and ecologies, the moral economy we envision will have to be built on institutional arrangements that are regenerative in form and thus act to counter those that intensify human and environmental suffering. This is not speculative thinking: biophilic institutions already exist in the here and now, offering insights for how to foster life-

affirming solidarities based on shared vulnerability, while also ensuring nature and the economy are not just intertwined but indistinguishable.

By “institutions,” we mean patterns of social engagement that sometimes solidify into norms, rules, policies, and roles. These patterns of interaction are contingent and always evolving as people respond to social, economic, and ecological conditions. But, for all their adaptiveness, they can also create enduring distributions of political power and enact obstacles to societal change that can appear immovable. The dominant institutions that structure and control local, national, and even global economies – and thus define patterns of political and economic practice – treat nature as a raw material for production and radically simplify the complex living systems that define ecologies down to natural resources for consumption. In doing so, these powerful institutions, especially those that provide the framework for contemporary markets, create and perpetuate an antagonism between nature and the economy, in which the protection of one causes damage to the other.¹ Whether it is claims by probusiness groups that environmental protection will lead to job loss, or the seemingly more progressive argument that poverty reduction is too important a goal to sacrifice economic growth through climate policies, these most influential institutions operate as if nature and the economy existed in a zero-sum game. But by assuming the costs and benefits of environmental protection are prescribed, they reinforce the problematic assumption that the interests of political actors are deeply rooted, even fixed.²

In the rare instances in which prominent institutions attempt to combine environmental and ecological logics – for example, “cap and trade” arrangements that give polluting organizations and corporations the option to pay for, rather than end, environmentally damaging practices – they subordinate one logic to the other: ecology under economy.³ We see this visibility with pricing schemes and commodification of environmental resources, as well as with the centering of profit-making objectives (including accepting the expectation of high returns by financial investors) in the selection of environmental responses, solutions, and technologies.⁴

The observation that mainstream institutions create and perpetuate a hierarchy that places the requirements of maintaining the economy above the protection of nature informs the numerous and amplifying critiques of the economic and social systems that have caused climate change.⁵ Many use this insight as a starting point to argue for system-wide institutional dismantling. But we see a pathway for change that runs through established institutions, acknowledging they are a vehicle for political transformation.

Our call for institutional change starts with the observation that institutions, as social processes, are always subject to political reworking. We draw inspira-

tion from political scientists Gerald Berk and Dennis Galvan's characterization of institutions as "always-decomposable resources, rearranged and redeployed as a result of action itself."⁶ With that reframing, institutions are neither static nor are they easily reduced to a set of practices and expectations that are repeated and rehearsed over and over again. Rather, institutions result from creative and lived processes, always open to reinterpretation and reconfiguration.⁷ Even their appearance of solidity and immovability is a product of contingent interpretation, backed in many cases by vested interests that benefit from a certain set of institutional patterns. Claims that measures to protect the environment are costly and produce market distortions that undermine economic growth are invoked to defend the business interests of polluting industry, most brazenly fossil fuel extraction. But this same interpretative quality means institutions offer both the resources and the setting for coalitions and movements to push back on attempts to privilege the needs of the economy over nature. They are the field and the medium for political actions to reverse economic and social inequality, to reconcile nature and the economy, and to foster life-affirming biophilic objectives.

We use biophilic literally: *bio* meaning *life* joins *philia*, which denotes a particular kind of love. *Philia* refers to a profound altruistic care and affection, based on mutuality, in which the well-being of self is indistinguishable from the well-being of the other.⁸ Thus, our use of biophilia expresses the aspiration for political and institutional solidarities built around a shared aliveness and a shared alliance with life.

Biophilic is not a new term. Coined by psychologist Erich Fromm in the 1960s, it was initially used to describe the human drive toward self-preservation and the resulting affinity for life and life-like processes.⁹ Since then, the term has been taken up by theorists in disciplines ranging from evolutionary biology, psychology, architecture and design, and urban planning, applied in diverse contexts to indicate an emotional and psychic affinity by humankind to frequent interaction with nature.¹⁰

Existing proposals for supporting a biophilic life offer a promising start for institutional reimagination insofar as they recognize and rejoice the value of sustained earthly protection for human existence and flourishing. But where they often fall short is with their narrow conception of the economy, which gets reduced in their critiques to a singular form that reinforces a top-heavy economic ordering. Not only are the plans that have been forwarded to reverse course so totalizing that they become paralyzing, including calls for revolutionary overthrow, they have also given rise to calls for antidemocratic and socially hierarchical interventions to implement them.¹¹ Worse still, some early proponents of biophilia have applied the concept in support of pseudobiological assertions that racial differences are reflected in and reinforced through an affinity for or aversion to nature.¹² Modern applications of the concept sometimes carry forth the idea embedded in that racist legacy that

the project of defining the future should be reserved for racial, economic, or political elites. These variants of eco-authoritarianism, as sociologist Damian White and others call them, use the imperative of environmental protection to harden economic inequalities, to exclude broad constituencies and even nations and regions from deliberations over economic futures, and to impose a political system in which the imaginaries of a powerful few override the aspirations of the rest.¹³

In our use, we explicitly break from this legacy and reclaim the term to pivot toward a democratic, just, and open process of institutional remaking where the needs of the economy and nature are not just co-equal but are impossible to separate. This reinterpretation requires a pragmatic and more granular approach that looks for ways to reorient existing institutional practices and relationships to favor solidarity in life. Borrowing the words of anthropologist Anna Tsing, institutional transformation requires that we first “look around rather than ahead.”¹⁴

In looking around, we start by considering what is preventing or stopping many contemporary institutions from being biophilic. This practice leads us to institutions that shape work and the lived experience of workers in the capitalist economy.¹⁵ After all, we create the economy through our work, and our economy relies on our aliveness as workers – as thinking, responding, and thriving beings that make the world through our actions. Our focus on work and workers draws our attention to three institutional tendencies that threaten life: the abstraction and simplification of labor processes, the disregard for economic equity and justice, and the representation of workers as solely economic and alienable from their natural environment.

Resolving these barriers to biophilic politics requires us to break the stalemate between environmentalists and economists, by recognizing that nature and the economy move together. But to do this work, we also need to reach beyond environmental and economic protection in the abstract, and take stock of the ways that specific institutional practices and relationships can be remolded to favor life *and* livelihood in the present moment.

With this focus, it becomes possible to envision how to reverse life-threatening institutional patterns and orient them toward biophilic goals. As a counter-movement to the three institutional tendencies to divide the economy from nature and undermine their potential to thrive together, we suggest three tangible features of biophilic institutions from which to inspire further action: shared materiality of economic and ecological processes; attention to economic equity and justice; and the cultivation of solidarity based on shared aliveness, with attention to both the resilience and precarity inherent in being alive.

Action to build and strengthen biophilic institutions requires us to see climate damage, at its most basic, as the rawest manifestation of inequality. The warming of our planet and the concentration of wealth are both prod-

ucts of an economic logic that reduces humans and nature to resources for production and investment. The distributional effects of this logic are well-known.¹⁶ Countries of the Global North have reaped the economic rewards of fossil fuel-driven industrialization, while the countries of the Global South, which have contributed little historically to global carbon emissions, disproportionately suffer the burden of climate damage.¹⁷ The economically and racially marginalized across countries are most exposed to pollution and climate damage.¹⁸ Across the globe, the world's wealthy drive climate change, with the wealthiest 10 percent responsible for half of global emissions.¹⁹ The role of institutions in magnifying the unequal allocation of the costs of climate change, across space and class, has been front and center in global and local policy debates.

The fact that exposure to climate damage and the costs of climate change bear down most heavily on the poorest and most marginalized is not an unfortunate byproduct of unequal economic systems, nor is it a fateful and tragic outcome of geographical concentration of global warming in regions with the fewest financial and ecological resources to adapt, such as South Asia and swathes of North and sub-Saharan Africa. Rather, it is a direct consequence of institutional patterns, deliberately practiced and enforced, to promote and protect economic activity that is extractive. The overlay between income inequality, poverty, and climate damage demonstrates that the institutions designed to structure our economies make no real distinction between the exploitation of persons and the exploitation of ecological systems – no political difference between the extraction of wealth from people and from the earth.

But as a result, the institutional processes that most amplify this inequality, where the conflation between ecological and economic extraction are pronounced, paradoxically display the most potential for biophilic revisioning. In contexts around the world, climate damage itself is being eyed as a business resource that can be used to increase profits and accelerate production.²⁰ Because they increasingly tie economic pain and environmental damage together, institutions that enable economic actors to capitalize on the inequitable distribution of climate costs may offer the richest terrain for biophilic reimaging of institutions to support life and livelihoods across the divide that splits the economy from nature.

This connection is most consequential and fundamental when it targets workers. Climate damage, in the form of slow-moving ecological change and fast-moving extreme weather, has pushed people out of their homes and off their land, and has eviscerated livelihoods and savings. Increasingly, economic actors have looked to this dislocation and the resulting economic precarity as a source of workers who can be hired at lower wages and under more exploitative conditions.²¹ At the same time, many of their business practices, from natural resource extraction to energy use and pollution, have caused environmental damage that has made

people and places even more vulnerable to the effects of climate change.²² These practices come together in a closed loop: climate damage leads to dislocation and livelihood destruction, which profiteering actors turn to as a source of exploitable labor that they use for production practices that are destructive to workers and ecologies.²³

These outcomes are not accidents of fate or the unfortunate products of the extractive logic built into economic institutions. They are the product of institutional processes that business owners enact to exploit workers and ecologies for their own profit and advancement. But in drawing the relationship between the economy and nature so close, these institutionalized processes become a transformative resource for strengthening collective action that uses the same interdependency of people and the environment to foster the well-being of both.

To make the case for institutional remaking more tangible, we turn to the work of rebuilding communities after they have been decimated by the major climate disasters that now sweep through cities and towns in the United States each year. The destruction left behind after hurricanes, massive floods, or drought-fueled wildfires has intensified in recent years, as global warming increases the force and frequency of extreme weather events. According to the National Centers for Environmental Information, the cost in 2021 alone from twenty major events in the United States totaled \$145 billion, the third most costly year in recorded U.S. history after 2017 and 2005. Another record-setting year, 2020, saw twenty-two major events, including severe storms that cut paths through the built environment in both summer and winter, as well as untamable wildfires that ravaged communities throughout the West, one of which burned an area the size of Rhode Island.²⁴

In addition to human suffering and the loss of life, each of these catastrophic events visits damage and destruction on our built environment. Before buildings can be repaired, replaced, or even assessed, the wreckage must be cleared. Sodden and charred materials must first be removed and hauled away. Buckled walls and caved-in structures must be dismantled and disposed. This work is difficult and dangerous, often exposing those doing it to harmful and noxious substances: toxic sludge, asbestos, fiberglass, mold, flesh-eating bacteria, a laundry list of carcinogenic chemicals, and since early 2020, an elevated risk of catching COVID-19.²⁵

In disaster recovery, damage to the climate and damage to workers come together through institutional structures that enable exploitation and amplify inequality. The work of disaster-clearing is done mostly by immigrant workers, many of whom are undocumented. *New Yorker* journalist Sarah Stillman has been following these migrant work crews for several years, and describes disaster-response workers as transitory, moving from one hard-hit community to the next,

recruited in spot labor markets that converge in the wake of extreme weather disasters.²⁶ The companies that recruit them are part of a vertical contracting structure that concentrates wealth in the hands of extremely powerful corporations, all the while intensifying worker vulnerability at the bottom of the labor market. At the pinnacle are a handful of highly profitable companies, made more profitable each year with the increase of climate disasters. Their market power is the outcome of years of consolidations, which have been backed by private equity investments and bolstered by guaranteed access to lucrative federal contracts managed by the Federal Emergency Management Agency (FEMA) and other emergency response agencies. Below this top rank are layers and layers of subcontractors, with labor brokers buried deep in the pile whose primary role is to recruit and transport new immigrants, often under the false pretense they will secure good pay and steady work. More often than not, the jobs they are offered are poor quality and low paying, some not paying at all.²⁷

This top-down structure is not unique to disaster clean-up and is reflective of the institutional trends that have undermined the position of labor in the building industry, where disaster restoration most aligns. Building trades unions in the U.S. construction industry have been eviscerated over the past thirty years, and with their decline, job quality, employment stability, and wages in the industry have eroded markedly.²⁸

But climate change accentuates these patterns because the increasingly big business of disaster recovery is unpredictable. The jobs follow hurricanes, fires, and tornadoes, and are always moving in ways that are impossible to fully anticipate. Workers are rarely in any place long enough to forge connections with place-based institutions, like unions. Far from home, they are lodged, often by their employers, who frequently limit their access to basic and protective services, like health care and legal assistance. The subcontractors who hire them are as erratic as the extreme weather events that the industry responds to. They are often fly-by-night operations that exist only as long as the reconstruction does, and disappear to dodge worker demands.

Just like the U.S. construction industry as a whole, the disaster clean-up relies heavily on migrant workers, but the industry's business model directly exploits the regulatory structures and enforcement policies of the national immigration system. In an industry practice that appears disturbingly widespread, unscrupulous labor subcontractors hold their immigrant workforce hostage, threatening deportation if workers submit legal claims against wage-theft or abuse. The upfront risk borne by immigrant workers – including payments to cross-border human traffickers that can be as high as \$30,000 – further silences the workforce. Too much is on the line for them and their families financially to risk speaking up. Many in this migrant workforce face few alternatives back home, some choosing to migrate because their communities of origin are also suffering from climate

damage effects. Droughts, floods, and storms strain livelihoods and sometimes conjoin with other political and economic pressures to make migration the only viable option.²⁹ Thus, the disaster-response business creates an institutional loop that yokes nature to the economy, in which migrants displaced by climate change work under exploitative and physically injurious conditions to repair the damage of climate disasters so that other communities, wealthier and with greater access to institutional resources, can rebuild.

And yet, even in this tangle of institutions that foster the joint exploitation of people and planet, we can find threads of biophilic institutional practice that run in the other direction, linking the economy and nature in ways that protect life. Stillman's reporting on disaster construction features a nonprofit called Resilience Force that organizes "resilience workers." Resilience Force advocates for policy change in the industry and prosecutes cases to hold employers accountable for wage theft, unsafe conditions, and human trafficking, but also acts as a worker-driven labor broker, directing resilience workers toward communities that have been underserved or abandoned by FEMA. Recently, Resilience Force partnered with a large reconstruction company to create a set of industry-wide standards for disaster work. The core of their model links worker protections with worker training: the company ensures that their subcontractors adhere to basic wage, housing, and safety standards in exchange for Resilience Force's help with skill development and safety training to transform jobs in disaster recovery from employment that is short-term, unpredictable, and dangerous to jobs that are skilled, steady, and safe.³⁰

Resilience Force and other advocacy organizations have partnered to take these protective institutional experiments further. For example, they have pushed to expand the labor-employer partnership to wider segments of the industry, while opening on-ramps to citizenship for immigrant reconstruction workers. Their efforts show the potential for strengthening and expanding the biophilic processes they started, and point to institutional channels for reversing the exploitative loop that runs through the economy and nature in disaster recovery.

Broadening the biophilic reach of Resilience Force's initial actions might involve additional reforms that target the national immigration system itself, including reversing its role in producing precarity and exposing immigrant workers to exploitative employer practices. It could also include a push to tighten regulation of business practices in disaster recovery that scrutinize the contribution of private equity and government policy in structuring unaccountable chains of subcontractors and labor brokers. Moving to the materiality of the buildings that workers are tasked with clearing, further biophilic intervention could enhance Resilience Force's training push to include developing skills in green demolition. Those trainings could even be used to connect with building trade unions and other established training organizations in the larger construction industry,

such that resilience workers could help strengthen skill development initiatives for green building and the use of new low-carbon materials. For immigrants in disaster recovery, a pivot to green building would mean that, in rebuilding communities decimated by extreme weather events, they would be working to protect their communities of origin from similar climate damage at the same time.

This biophilic vision for disaster recovery builds on the three areas we highlight as important in institutional remaking. It abandons the current industry norm of treating workers as brute and disposable labor power abstracted from their communities and hauled to the site of the latest disaster where they are exposed to hazards that injure them, and instead promotes worker dignity and fair compensation and guarantees that human bodies and lives will be protected just as their essential work helps localities heal. Instead of the disregard for economic equity and justice that is central to the standard low-road business model of disaster recovery, it focuses on forging institutional pathways that promote equity and justice, including reforms to immigration policy and strengthening mechanisms to enforce labor protections. Finally, it challenges the representation of workers as alienated from the natural environment and advances institutional logics that cultivate solidarity based on shared aliveness.

The biophilic institutions that workers have created in disaster recovery, as well as the broader and necessary institutional transformation whose possibility they suggest, illustrate the potential for biophilic reenvisioning. This example is just one of the many ongoing efforts around the world to remake the institutions that structure labor and environmental conditions, and specifically, to respond to the ways those conditions are produced by institutional patterns that swipe at people and ecologies with the same extractive gesture. But the journey of the resilience workers we offer here shows how the seed of biophilic institutional transformation is a perceptual change: the actions of workers in the Resilience Force movement stemmed from their reinterpretation of the protection of their bodies, their livelihoods, and their political rights as immigrants and as workers, and is part of the larger project of responding to environmental change. In their foregrounding of the connection between climate damage and economic exploitation, they also opened up the political possibility for dimensions of institutional remaking that they themselves did not – or could not, for lack of political power – complete fully in this moment. In this respect, they show that biophilic reimagining is ongoing, adapting and expanding in response to changing circumstances that threaten ecological and economic life, as well as to the emerging conditions that generate further resources to protect it.

Thus, as resilience workers demonstrate, the heart of biophilic institutional remaking is in our ability to learn with our environment, not dominate it or push against it. It requires we interpret across the divide between nature and the economy, but also recognize nature's role in cocreating new institutional processes and

inspiring a more hopeful vision of institutional change. We can all play a role in making biophilic institutionalization more than an aspiration. But this requires ongoing practice, drawing on and refining those qualities we as humans share with our planet Earth – our adaptability, our desire to nurture and care, our ability to cooperate and coordinate, our drive to work and learn together. The case of the resilience workers shows that even in the most exploitative seams of economic practice, in which people and ecologies are targeted for extraction, there are seeds for biophilic institutional remaking. Their efforts also suggest the importance of viewing their actions as more than just an isolated and even quaint example of institutional tinkering. Their initiative and many other similar instances of biophilic organizing are early test beds for building new forms of assembly and political power for engaging mainstream institutions, transforming them from sources of perpetuated damage to resources for restoration and collective hope. Expanding them outward to remake the broader institutional framework that shapes our economy and society requires us to deepen the skills for creating biophilic institutions that cut across political divides, reverse inequalities, and foreground the shared stake that we all have in a sustainable future. We do so by learning how to cultivate the solidarities that stretch across the economy and nature, in learning how to connect the well-being of workers with the well-being of the ecologies they act upon, and in learning how to attend, together, to the flourishing of humans and the environment.

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