

Perspective

Informal Work and Sustainable Cities: From Formalization to Reparation

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SUMMARY

Informal workers produce economic, social, and environmental value for cities. Too often, policy elites, including those promoting sustainable cities, overlook this value, proposing formalization and relying on deficit-based framings of informal work. In this perspective piece, we bring critical research and community-produced knowledge about informal work to sustainability scholarship. We challenge the dominant, deficit-based frame of informal work, which can dispossess workers, reduce their collective power, and undercut the social and environmental value their work generates. Instead, thinking historically, relationally, and spatially clarifies the essential role of informal work for urban economies and highlights their potential for promoting sustainable cities. It also reveals how growth-oriented economies reproduce environmental destruction, income inequality, and poverty, the very conditions impelling many to informal work. Rather than formalization, we propose reparation, an ethic and practice promoting ecological regeneration, while redressing historic wrongs and redistributing resources and social power to workers and grassroots social movements.

INTRODUCTION

Worldwide, about two billion people work informally, more than one-half of non-agricultural employment in most regions of the Global South.¹ Informal work includes a range of income-generating activities outside of state labor protections and the wage-relation. These workers generate value and contribute to the realization of the Sustainable Development Goals (SDGs). For instance, grassroots recyclers provide essential urban-environmental services, diverting waste from landfills and enabling recycling,² while street vendors support food security as they bring life, vibrancy, and protection to urban spaces.^{3,4} Formal economies rely on and appropriate this value. For instance, waste pickers reduce the cost of public waste management services by diverting recyclables away from landfills. Informal firms produce goods cheaply, reducing costs for formal, capitalist firms who depend on these inputs.⁵ Yet, in many places, urban policy frames informal work as problematic or even criminal. Desiring reform, policy makers and city officials invest formalization with supercharged powers to reduce poverty, increase productivity, clean and order urban space, and produce self-reliant economic subjects. The International Labor Organizations' (ILO) centenary declaration for the Future of Work prioritizes formalization,^{6,7} whereas the SDGs, particularly SDG 8, assert that formalizing the informal will produce economic growth and decent work (safe and adequately paid work that respects labor and human rights). But while policy elites push formalization, the economic reality is moving in the opposite direction. The characteristics associated with informal work—low pay, job insecurity, and temporary, contract-based employment without benefits—are becoming generalized,⁸ as seen through the ascendance of the gig economy.⁹ Despite persistent desires for formalization

among policy elites, informal work is a permanent feature of contemporary economic life.¹⁰

Informal workers produce economic, social, and environmental value for cities, value that is often underestimated or overlooked because informality challenges mainstream assumptions about what work looks like. Indeed, informal work is excluded from dominant *economic imaginaries*, widely shared assumptions of economically productive activity. The dominant economic imaginary associates work with a regular wage paid by an employer in a private establishment, rather than in public space, even as the work of so many looks very different. Using the term imaginaries reminds us that core economic assumptions are ideas made up by people. Economies are made real in and through social relations in human societies. They are always cultural and contextual.¹¹ Feminist geographer Gibson-Graham coined this term critiquing the restricted ideas of valuable work and corresponding notions of valuable people that currently dominate.¹² Commonly, informal work is defined by what it lacks. This deficit lens of informal work persists because policy elites ignore critical and community-based research on informality and overlook the knowledge and capacities of informal workers. The deficit-based frame of informal work can dispossess workers, reduce their collective power, and undercut the social and environmental value their work generates. New modes of thinking and acting can, in turn, animate new economic imaginaries and relations. Building on our research in India and Paraguay, amplifying critical informality scholarship and centering the knowledge produced by workers' organizations, we assert that by thinking historically, relationally, and spatially, and redistributing power and resources to workers, we can move beyond formalization to a frame that centers decent work, ecological health, and reparation for uneven legacies of harm.

Only when it redistributes resources and power to informal workers will formalization help address social and environmental inequities. Although we write to sustainability theorists and practitioners, we emphasize that the main protagonists of transformation must be social movements led by frontline communities, that is, the communities who are both most harmed by the crises of climate, COVID-19, and economic injustice, and therefore have most at stake in realizing alternative worlds.

In this article, we analyze why dominant economic imaginaries devalue informal work, assessing the implications for sustainability initiatives. We then outline our proposals about thinking historically, relationally, and spatially. We emphasize that moving toward sustainable cities requires understanding the dynamics of racial capitalism, which produces both poverty and environmental degradation. We offer reparation as a framework to guide the action of development practitioners and scholars, illustrating our argument with existing practices and transformational proposals. We conclude by reflecting on the hard road ahead, underscoring the need to resource, support, and learn from frontline workers' organizations and social movements.

INFORMAL WORK AND (Un)Sustainable CITIES

Indisputably, the 21st century is characterized by worsening ecological crises alongside a deficit of decent work. Although our focus is informal work, we note that waged employment does not necessarily protect against poverty, as 12 million US workers classified as the “working poor” can attest.¹³ Moreover, reducing poverty by expanding decent work has historically intensified environmental exploitation. Nearly all countries with national ecological footprints within the sustainability threshold have very high levels of working poverty, indicating that the traditional means of alleviating poverty through economic growth produces environmental degradation.¹⁴

Admirably, the 2015 SDGs seek to decouple decent work from ecological extraction, promoting both livelihoods and sustainability. However, the transformative potential of the SDGs is compromised by an economic imaginary that misreads the key drivers of both poverty and environmental degradation and ignores empirical and theoretical research demonstrating that economic growth cannot be decoupled from environmental degradation in today's economies of extraction.^{15–18} Studies finding modest success in a few exceptional countries to decouple economic growth from greenhouse gas emissions do not consider other forms of environmental degradation, such as land use change and unsustainable freshwater extraction.¹⁹ Indeed, the SDGs remain captive to “fairytales of eternal economic growth,” a mindset decried by youth climate activist Greta Thunberg at the 2019 UN Climate Summit. The SDGs privilege technocratic planning²⁰ and propose win-win scenarios, downplaying the trade-offs between economic growth, social development, and environmental protection.²¹ Furthermore, the SDGs ignore compelling evidence that redistribution, not growth, is the key.^{22,23} In their current form, the SDGs are a Trojan horse, smuggling in unpopular and problematic neoliberal economic policies, including the erasure and enclosure of informal livelihoods.²⁴

Scholarship over the last 50 years has offered changing perspectives on the nature and value of informal work.^{25,26} Early

dualist frameworks proposed that modernization would expand formal employment and starve the informal sector.²⁷ Since then, researchers have documented intense linkages across supply chains that crisscross sectors designated as formal and informal.²⁸ There is great variation between domains of informal work, from unregistered “petty commodity producers,” supplying cheap inputs into capitalist production processes and reducing costs for formal firms⁵; to own account operators, such as waste pickers and street vendors; to informal employees, such as day laborers or domestic workers.²⁹ Following insights from critical anthropologists, geographers, and planning scholars, we argue that the informal and formal are relational categories whose boundaries are determined by culture and power, pointing to deeply intertwined domains of economic practice.^{30–32} Although we find informal and formal to be analytically imprecise categories, we retain them here because of their political significance in policy making to draw lines between valued and devalued economic activities with consequences for both workers and sustainability initiatives.

In spite of this research, the dominant economic imaginary devalues informal workers as unproductive and problematic. Informal work is compared against the yard-stick of the “standard employment relationship,” signifying a unionized, waged worker, despite calls to decenter the wage.^{33,34} Yet secure, well-paid employment with benefits is the exception, not the norm, a form of work limited to so-called developed countries for a few postwar decades.^{35,36} The deficit-based definition of informal work holds across deep ideological divisions. Neoliberal economists see low productivity and “low levels of human capital,”³⁷ labor scholars emphasize the lack of state protections, such as social security or workplace protections, whereas orthodox Marxists see the lack of class consciousness and historical agency because of their structural location in economies of “informal survivalism.”³⁸ The tenacity of the deficit definition echoes dynamics that render invisible other value-producing domains, such as women's unpaid household labor, social reproduction more broadly,³⁹ the essential inputs of nature and non-commodified economies of reciprocity.⁴⁰

Informal work produces economic, social, and environmental value that sustains lives and urban environments. At the same time, formal economies rely on and appropriate this value. This article explores this central contradiction: the informal is framed as problematic and targeted for reform even as formal economies benefit from and appropriate the value produced by informal workers. To sketch a counter-story, we underscore the considerable creativity of workers facing calamitous state disinvestment in collective wellbeing. At the same time, we do not romanticize these economic words. Informal livelihoods are complex and contradictory, combining individualism and community, care and exclusions, competition and collaboration, autonomy and drudgery.^{41,42}

Formalization is shorthand for a range of policies seeking to align economic activities with the law, either changing legal codes or reforming behaviors. This can include decriminalizing informal work, licensing businesses, requiring tax compliance, enforcing labor and environmental regulations, promoting certain kinds of spatial order, or eliminating competition from firms or workers with lower costs of business because of non-compliance. However, legalistic formalization projects, rooted

in Eurocentric urban knowledge, fail to understand the diverse realities of most cities.⁴³ Whereas legalist policy frameworks value rule-following for its own sake, critical researchers demonstrate the anti-poor biases of law, the criminalization of poverty, and tendencies to leave the legal transgressions of elites unpunished. Urban life in many cities is marked by dealmaking and provisionality. Residents use, sidestep, and transgress legal codes depending on situational exigencies and a “transversal” relationship to law.⁴⁴ Contrary to expectations, formalization does not necessarily solve problems for informal workers, nor make those economic activities more valuable. Formalization deriving from a legalistic, deficit-based framing can dispossess workers of livelihoods, reduce workers’ collective power, reiterate stigmas associated with informality, and undercut the social and environmental value that informal work generates. If projects devolve risk and responsibility for providing basic services without resourcing worker organizations, formalization can increase the exploitation of informal workers.^{45,46}

The emphasis on formalization in the SDGs reflects the role of powerful, well-funded civil society organizations, largely from rich and middle-income countries^{47,48} and too often lacking representation of workers.²⁰ Official “invited spaces of participation”⁴⁹ often limit dissent, discourage critical examination of underlying economic imaginaries, and carry unspoken, exclusionary codes of acceptable behavior that reflect elite norms, values, behaviors, and codes of dress. Not uncommonly, policy elites interpret expressions of worker power as illegitimate, such as waste pickers blockading dumps to protect their livelihoods.^{50,51} Yet often, contentious politics are needed to interrupt the status quo and offer alternative political imaginations.

To illustrate the importance of informal work, we draw examples from street vending and waste work. In diverse cities, grassroots recyclers toil in difficult conditions while facing intense stigma, quotidian harassment, and even deadly violence.^{52,53} Yet their labors build functioning value chains for recyclables, generating income for themselves and materials for other markets as they also enable environmental behaviors among elites⁵⁴ and provide the only opportunity for recycling in many cities.^{55–60} Although there is great variability, the informal sector can rival formal sector material recovery rates.⁵¹ Informal sector recyclers have irreplaceable knowledge crucial to maximizing value in waste.^{55,62–65} Indeed, policy elites now herald informal recycling as already-existing circular economies critical for sustainability transitions. Similarly, street vendors enable access to cheap food⁶⁶ despite battling a host of “everyday challenges.”⁶⁷ Their work contributes to SDG 11: making cities and human settlements inclusive, safe, resilient, and sustainable.

Furthermore, informal livelihoods provide crucial incomes, critical to SDG 1: zero poverty. Worldwide, waste picking sustains some 15 million people,⁶⁸ while similar numbers work as street vendors.⁶⁹ But informal work means more than an income. Informal economies are complex systems of redistribution; community networks that can be tapped in times of need. In contexts of state disinvestment and chronic job scarcity, informal worlds provide a buffer against outright destitution. Indeed, against stereotypes, most monetary transfers that keep poor communities afloat occur *within* poor communities, not between the rich and the poor.⁷⁰ For instance, a Montevideo recyclers coopera-

tive transferred a share of their collective daily earnings to members unable to work due to sickness or care-taking obligations.⁷¹ In times of crisis, informal responses offer “collective security mechanisms,”^{72,73} illustrated by street vendors providing food to communities under a strict COVID-19 curfew in India.⁷⁴ While informal care networks help cities recover from disasters—both slow-moving and spectacular—intensifying inequalities are challenging these systems of social provisioning.⁷⁵ Finally, we emphasize that the conditions of waged work are not universally preferable to informality. The once-a-month payday, inflexible work schedules, and long hours of waged work can clash with the pressing daily needs of those living precariously. In Rio’s largest dump, waste pickers valued the flexibility, autonomy, and sociability of the dump, cooking together, socializing, and adapting schedules to their needs, working more when necessary and less when possible.³¹

Building just and sustainable cities requires reexamining how the informal is conceptualized and acted upon by mainstream development actors. We propose decentering formalization as a primary goal of initiatives such as the SDGs and organizations such as the ILO. For formalization to address social and environmental inequities it must redistribute resources and power to informal workers. This can be realized through an ethic and practice of reparation, which seeks to reimagine and recreate socio-ecological relations from a full acknowledgment of the injustices of the past as they live into the present.^{40,76} We advocate reparation over justice because dominant, liberal notions of justice center the individual, foreclosing consideration of histories of harm and denying the need for collective redress.

We articulate three modes of thinking to reconceptualize informal work and animate an alternative, ethical economic imaginary: thinking historically, thinking relationally, and thinking spatially. Yet, it is not enough to think differently. Urban economies come into being in and through webs of social relations that tie people to particular modes of laboring, living, creating, and consuming. Thus, we also argue for concrete actions oriented toward social and environmental justice: redistributing wealth and power, strengthening worker’s organizations, and recovering politics from technocratic capture. This approach underscores the interlinked nature of liberatory thought and action, or praxis.^{77,78} These ways of thinking and acting are diametrically opposed to dominant academic and policy-making trends in which informal workers are treated as “passive objects of study”⁷⁹ or which operate through benevolence, a stance which reproduces racial and imperial hierarchies of power.⁸⁰ This agenda cannot be designed and executed from the top down and must emerge through an authentic collaboration with workers. Such collaborations are only possible by expanding our notions of the agents of urban and sustainable development, which, in turn, requires radical humility on the part of “experts,” while valuing workers’ knowledge, power, and political forms. Without such a reframing, historically marginalized groups might well be excluded, exploited, or expelled from clean and green cities.^{81–84}

Thinking Historically

Thinking historically clarifies racial capitalism’s core logics of accumulation, appropriation, and exploitation as incompatible with decent work or sustainable societies. Decent work and

clean environments for some have always required oppressions, exclusions, and exposure to harm for others.^{85,86} Racial capitalism as a frame explains how capitalism incorporates and depends on the “devaluation of nonwhite bodies.”⁸⁵ From its beginning, capitalism tended to “differentiate—to exaggerate regional, subcultural, and dialectical differences into ‘racial’ ones.”^{87,88} Thinking historically with racial capitalism demonstrates the common patterns through which exclusion, exploitation, and disposability are racialized processes, even if racialization works differently for Mexican immigrants in the US, members of Scheduled Castes such as *Dalits* in India, indigenous Guatemalans, or Afro-Brazilians. Indeed, racialized groups are more likely to engage in undervalued and invisibilized forms of work (as are women), including care and informal work.³⁹

Today, COVID-19 has launched the term “essential workers” into our public vocabularies, making visible how essential work is often underpaid and under-protected. Thinking historically shows how capitalist economies treat essential workers as disposable by constructing myths that devalue or render invisible their work. From enslaved Africans picking cotton in the US south to reclaimers recycling the waste of consumer capitalism, a core logic twins the essential and the disposable. This lethal logic organizes formal and informal economies. In Indian cities, most frontline, essential workers keeping the city clean during COVID-19 lockdowns are *Dalit*, Scheduled Castes and Tribes, or Muslims.^{89–91} Yet, the state fails to equip them with adequate protective gear.⁹² Striking Amazon workers also report inadequate health protections at facilities with outbreaks, and have responded by organizing over 350 job actions in the US in March to June 2020.⁹³ Meanwhile, Amazon CEO Jeff Bezos amassed an additional \$34.6 billion during 6 weeks in March and April as the pandemic took hold.⁹⁴ These examples illustrate that treating people as disposable is not an aberrant behavior of a few bad apples but a common, accepted means to reduce costs and concentrate profits.

Indeed, in the US, the standard employment relation was made through racial and gendered exclusions. The 1935 Wagner Act—the cornerstone New Deal expansion of labor protections—excluded both domestic employees and agriculture workers, legally barring both groups from organizing. These exclusions were a “proxy to exclude most black employees”⁹⁵ in the South as they also reflected biases devaluing “women’s work.” Congress excluded these workers in an explicit compromise to appease the racism of conservative Southern legislators. Looking further back, the rise of the waged worker as the presumed norm and aspirational horizon of all has a long, bloody history. Early industrial capitalism needed people willing to work for a wage in brutal factories. In England, this required the Enclosures movement, two centuries of dispossessing peasants of commonly held lands and criminalizing “poaching” and other means of self-provisioning.⁹⁶ This long history normalizing the wage also rendered informal work “invisible to science.”⁹⁷

Similarly, self-sufficient indigenous communities steadfastly refused waged work. Forcing participation in waged work required centuries of sustained settler violence: land theft, the criminalization of indigenous culture, and attacks on community means of subsistence, for instance, the intentional decimation of buffalo in the US plains states.^{98,99} Indeed, racial capitalism refuses to recognize non-capitalist lifeways as legitimate or pro-

ductive. Marking these communities as “uncivilized” or “indolent” helped justify violence and dispossessions. Current land grabs and other processes of rural dispossession create mass migration to cities and urban populations seeking a foothold in informal economies.¹⁰⁰ Indeed, many waste pickers in Bangalore are migrants from Bengal, dispossessed of their land-based livelihoods by urban expansion and neoliberal development.¹⁰¹

Capitalist firms also appropriate unpaid or devalued inputs, a processes of “cheapening” land, labor, care work, and the fruits of nature, such as food and energy.²⁴ Some appropriations are overtly violent: theft of indigenous land, plantation-based slave economies,¹⁰² or ongoing murders of indigenous land defenders in Latin America and beyond.¹⁰³ Others are harder to see as cheapening rests on abstract ideas of value and its lack. For instance, capitalism appropriates the “free gifts” of nature: energy, natural resources, and raw materials.¹⁰⁴ These ecosystem services—uncounted, invisibilized but absolutely necessary—are valued at 70%–250% of global GDP.¹⁰⁵ The free services of nature also partially absorb the wastes of consumer capitalism. The Global Atlas of Environmental Justice tracks more than 3,000 cases of communities fighting to protect land, water, forests, and livelihood from economies of extraction and privatization.¹⁰⁶ The SDGs, for their part, propose delinking environmental destruction from economic growth, ignoring capitalism’s core logics of appropriation and cheapening. Furthermore, capitalism insulates markets from public accountability because of the abstract idea that private-sector economic decision making is separate from matters of public concern. Cut off from democratic control, the private sector peruses short-term profitably for elites over collective wellbeing and the sustainability of life on earth.

Thinking Relationally

Relational thinking shifts our practices of study and intervention “from ‘the poor and poor others’ to... relationships of power and privilege,” a framing we borrow from the Relational Poverty Network. It also helps us see the economic, social, and environmental value of informal work and the ways it subsidizes formal economies.

The forces that reproduce environmental destruction, inequality, and exclusion are multiscale and multidimensional: deregulated economies, tax rebellions by the privileged, corporate tax-evasion and off-shoring, and uneven landscapes of investment (and disinvestment).^{107–109} Fifty years of neoliberalism—a variant of racial capitalism characterized by austerity, deregulation, and financialization—has undermined the redistributive function of the Northern welfare states and hamstringed burgeoning social state capacities across the Global South. Economist Robert Reich calls this the “succession of the successful,” as rich communities renege on contributing to public goods, turning instead to privatized housing, education, and health that most families cannot afford.¹¹⁰ The tentative and uneven gains in reducing inequality in the postwar decades have been swept away by the rise of the superrich, in which the top 1% controls more wealth than the bottom 99%.¹¹¹ Yet, from sociological “cultures of poverty” research to social entrepreneurship bootstrap schemes aimed at reforming the poor, much scholarship and action persists in blaming the poor for their poverty or focusing interventions in poor communities, leaving

untouched key domains responsible for inequality and environmental harm. Thinking relationally helps show how capitalism predictably produces poverty and inequality, the very forces that make informal economies necessary. Given this, generating decent work and building sustainable cities requires transforming structural economic forces that much exceed the bounds of a particular informal economy.

Relational thinking highlights how informal workers provide “invisible subsidies” crucial for the social reproduction of capitalism,¹¹² from waste pickers metabolizing post-consumer waste to the businesses in Dharavi, an informal settlement outside Mumbai, recycling plastic, tanning leather, weaving fabrics, and producing pottery worth as much as \$1 billion each year.¹¹³ Relational thinking also demonstrates the connections between spaces of poverty and landscapes of wealth. Middle class and rich consumers depend on the cheap, often informal labor of the monetarily poor, who clean homes, build high rises, metabolize waste, and lower consumption costs by lowering the costs of production. Thinking relationally draws attention to the resource-hoarding, overconsumption, and disproportionate political power of the rich as major drivers of environmental harm. It also underscores how the modest welfare gains in the post-war era in North Atlantic countries relied on massive wealth transfers from the Global South (previously colonized) to the Global North (in most cases, imperial powers). Egyptian economist Samir Amin tracked one of these transfers, called unequal exchange.¹¹⁴ In addition to declining terms of trade, workers earning low wages in the Global South buy expensive goods produced by higher paid workers in the Global North, and vice versa, such that Northern countries capture uncompensated value from the Global South.¹¹⁵ In 2012, the estimated value of this south-to-north transfer was \$1.46 trillion, more than 11 times the value of foreign aid moving in the other direction.¹¹⁶

On a more local level, poor communities are targeted as sources of revenue through official and extra-legal channels. A US Department of Justice report found that police officers in Ferguson—under pressure to meet citation and arrest quotas—targeted Black residents for minor, even fabricated infractions in what one anthropologist called a “shake-down operation.”¹¹⁷ In other cities, street vending necessitates non-compliant activities. In response, officials harass and evict vendors, demanding bribes, imposing fines, and confiscating merchandise. In Cochabamba, Bolivia, these practices are so common that vendors call police officers “the hungry ones” (*los hambres*).¹¹⁸ Relational thinking exposes how the rule-breaking behavior of state officials (and elites) is often tolerated, whereas the necessary infractions of the poor are criminalized.

Finally, thinking relationally clarifies the sources of environmental harm, thereby identifying which countries and which social groups bear responsibility for redress and reparation.^{119,120} Environmental justice research demonstrates that political-economic processes concentrate environmental harm in poor, racialized communities, protecting spaces of privilege.¹²¹ Emphasizing the scale of environmental harms, ecologists and environmentalists propose we are in a new geologic age, the Anthropocene, in which anthropogenic climate change and environmental destruction are earth-transforming features and system-wide threats. But culpability is not evenly distributed. Environmental destruction and climate catastrophe result from our

political-economic system, not an undifferentiated “humanity” or a timeless, unchangeable human nature. It is the consumption of the middle classes and elites that produces dirty cities¹²² and a majority of urban greenhouse gas emissions.¹²⁰ The consequences of climate catastrophe concentrate in the Global South, even as the Global North is historically responsible for producing most carbon emissions. Instead of the Anthropocene, it is more honest and politically enabling to call our era the Capitalocene, a frame that names the culprits undermining the conditions for human society.^{123,124}

Thinking Spatially

Thinking spatially sheds light on the social processes that allocate authorization and formalized status. Elite groups, usually richer and whiter, have more social power to write their interests into law and more power in contests over the best uses of urban space. Spatial thinking helps identify the underlying struggles to control space and economy that often drive formalization projects.

State officials manage vendors with a range of laws, codes, tacit agreements, and other unofficial strategies.^{125,126} Too often, vendors are viewed as encroachers or criminals¹²⁷ while punitive state policies disregard their needs.¹²⁸ Media accounts and city officials describe vendors as outsiders or as an “invasion” from which the city must “retake” space, pursuing policies which expel the urban poor from desirable urban spaces.¹²⁹ Exclusionary policies are pervasive and evictions constant and violent.¹³⁰

Unfortunately, formal recognition does not always protect street vendors. In Monrovia, officials harassed vendors even after a memorandum of understanding extended formal recognition.¹³¹ Relocating vendors to formalized markets can also have negative effects.^{132,133} In Bogotá, relocated vendors gained better working conditions, but the move weakened their organizations and their incomes fell.¹³⁴ In Ciudad del Este, Paraguay, a municipal formalization project divided vendors, demobilized vending associations, and exposed vendors to “dispossession by formalization.”¹³⁵

Behind any campaign to “clean the streets” are competing ideas about the best uses of urban space. These visions are not neutral or objective. Captive to the growth imaginary, market forces and state policies define “highest and best use” as activities that increase property values or create profit opportunities for formal firms. The dominant economic imaginary associates work with private spaces, coding public spaces for recreation, cars, pedestrians, and shoppers. Consequently, urban zoning and regulatory practices often fail to support public space as sites of work. However, informal workers often must work in public. When vendors break the rules to work, they then are accused of being predisposed to unlawfulness, an accusation that codes structural inequalities as a question of culture or individual disposition.¹³⁶

Spatial imaginaries go beyond constructing public work as problematic. In the US, until the early 1900s, sidewalks and streets were multi-use spaces.¹³⁷ Sidewalks supported working vendors, circulating pedestrians, celebrating residents and politically active citizens. In Los Angeles, the notion that sidewalks should prioritize pedestrians solidified through anti-immigrant campaigns targeting the livelihoods of Chinese vendors.¹³⁸

Across Latin America, colonial spatial imaginaries construct particular racial groups as belonging to particular spaces: cities are for whites and mestizos whereas indigenous communities are imagined as belonging to rural areas.¹¹⁸ In Bolivia, officials racialized space, interpreting popular markets as unruly, rural incursions into cities, a precursor to attempts to remove or criminalize them. In Ecuador, similar policies sought to expel indigenous Ecuadorians from Quito's historic center, ignoring that rural communities needed the income earned by their family members in the city.¹³²

Policing the line between work, nuisance, and crime is also about asserting control over valuable resources. As resource-strapped cities move to “modernize” and formalize recycling, they often privatize waste management, privilege capital-intensive waste management systems, and enclose the materials that are claimed by waste pickers as livelihood inputs.^{139–141} This “rational-modernist model of urbanization”² can create a “vicious circle of competition” for resources.⁶⁰ Formalization also requires framing trash as valuable, that is, adopting the knowledge work of waste pickers who saw value where officials saw trash.⁵⁰ Indeed, the discursive construction of the informal as a problematic space in need of reform is a precursor to imagining sites that can be enclosed and privatized.

In contrast to official logics, street vendors and waste pickers value urban space by how it sustains life. When vendors and waste pickers carve out spaces for livelihood they are producing important urban commons, claiming urban space for ordinary workers. Indeed, the challenge of informal workers in many places is precisely that they question growth and market-driven notions of what public space should be for and who should decide.¹²⁶

From Formalization to Reparation

Thinking historically, relationally, and spatially clarifies the processes that co-produce both precarious work and ecological harm. Decentering formalization, we advocate for reparation as an ethic to orient the actions of development practitioners and policy makers. Our debt here is to the Black radical tradition,⁷⁷ scholars and activists proposing collective redress for the unspeakable violence and thefts of slavery, legacies that live into the present.^{120–122} Following W.E.B. Du Bois, the ethic of reparation activates memory against the forces of willful forgetting that deny history and deep relationality.¹⁴² We are inspired by the Black radical tradition's expansive, future-oriented political imagination and its call to remake economic and social relations from the roots up.¹⁴³ “Reparation ecologies” add an imperative to heal the false Nature/Society divide, locating socio-economic relationships within living ecologies.²⁴ Both lines of thinking emphasize redistribution: of resources, land, work, and the labors of care. Although formalization targets workers or the economies that sustain them for reform, the field of action promoted by reparation is much broader, including the forces producing inequality and environmental harm. Reparation acts horizontally, centering communities most harmed by fomenting worker power, repairing historic injustices, and redistributing social power and resources to the grassroots. Reparation can also help us acknowledge the long history of assent to exploitation that structures scholarship and practice.¹⁴⁴

The moment is ripe for clear thinking and bold action. The convulsions to work and life precipitated by COVID-19 offer a rare opportunity to enact transformational change. Of course, entrenched structures of race/class power are invested in extraction economies, wielding considerable resources to push for exclusionary, unsustainable modes of urban development. Only empowered social movements led by frontline communities have the force to contest these elite power structures. For this reason, we call on development scholars and practitioners to invest in worker power, embrace contentious politics, relinquish power over knowledge production, and develop accountable relationships with grassroots social movements.

Against assumptions that informal workers are unorganizable, and despite many challenges, informal worker organizing is powerful.^{145,146} Collective action takes many forms, from Member-Based Organizations (MBOs) to workers organizing from other identity roles, such as mothers or migrants.¹⁴⁷ Informal workers organize for different demands: protecting access to markets, defending public resources, expanding citizenship rights, demanding social protection,¹¹³ or advocating for infrastructure improvements.^{36,113,148}

Indeed, collective action by informal workers changes urban policy.⁶⁷ In Ahmedabad, India, the organization Self Employed Women's Association (SEWA) helped pass the Protection of Livelihood and Regulation of Street Vending Act while in Lima, vendor organizations won pro-vendor policy at the city and national level.⁴⁴ Organizing by waste pickers forced a sea change in how policymakers understand these workers. Once universally viewed as a nuisance or a criminal element, today, the UN frames informal waste workers as “any city's key ally.”¹⁴⁹ A study of 18 Latin American countries found that worker organizing was fundamental to establishing inclusive recycling policies.¹⁵⁰ Reversing trends of privatization, several Latin American cities have partnered with waste picker organizations for door-to-door waste collection. In Brazil, “solidarity recycling” includes over 900 worker organizations as partners in the 2010 national solid waste policy.¹⁵¹ The city government in Bangalore, India recognizes informal recyclers with occupational identity cards¹⁵² while organizing in Durban cut out middlemen and increased income for reclaimers by 250%.⁷⁹

Development organizations should resource informal worker organizations, promote supportive regulatory environments, and support the urban commons built by informal workers.⁴² This requires resisting the razing instinct of rational-modernist urbanization that tears down informal spaces, instead upgrading in situ, safeguarding community ties, and respecting the rights of the poor to live centrally and participate in urban life.⁴³ Specific action plans must emerge in collaboration with grassroots organizations, such that here we seed ideas for reparative policies, rather than propose blueprints. Worker-run cooperatives improve livelihoods¹⁵³ whereas MBOs build collective power.¹⁵⁴ Across levels of government, policy makers should resource these organizations, invest in MBO bargaining capacity, and seize opportunities to open up spaces for negotiations in diverse forums: everyday, ad hoc, and policy and statutory negotiations.^{148,154} When cities reorganize waste systems, they can meaningfully include grassroots recyclers, pay waste pickers for services,^{155,156} and provide work spaces.¹⁵⁷

Redistribution—across scales—is foundational to reparation, as it recognizes that markets unjustly concentrate wealth, neoliberal policies under-resource public goods while actually existing electoral politics concentrate social power. Public budgets are statements of social values. Currently, states overinvest in the military, jails, and policing, or in building infrastructures that cater to the consumption desires of elites. We must continue to insist that the resources for just and sustainable cities exist. Cities must prioritize public provisioning of systems of care and “Universal Basic Services” such as housing, healthcare, child-care, education, and sanitation.^{158,159}

Redistribution can help re-value informal and other forms of invisibilized work, reducing inequality. Inequality drives unsustainability, both by promoting conspicuous consumption and forcing poor people to over-exploit resources.^{160,161} Thus, addressing inequality through redistribution is critical to achieving environmental sustainability. Here, we highlight some bold proposals scaled to the enormity of today’s existential challenges: Universal Basic Income, the Global Green New Deal, the Red Deal, and Care Incomes. By delinking labor, income, and development, these reparative policies foster more just ways of organizing work, time, and life. In 1967, Reverend Dr. Martin Luther King promoted a guaranteed income to further racial justice and activate the creative powers of human labor freed from the compulsions of (low) waged work, a call echoed five decades later by Pope Francis in his 2020 Easter address. These ethical injunctions are now backed by evidence from Finland, where modest income supports improved wellbeing and life satisfaction.¹⁶² Envisioned to emancipate the economy from fossil fuels, the Global Green New Deal offers concrete plans to decarbonize the economy while redressing the historic injustices that concentrate vulnerability to climate harms in poor countries and communities by insisting that climate culprits finance the transition.¹⁶³ Visionary indigenous organizers go further with a Red Deal that defunds prisons, policing, and militarism, freeing up the resources for indigenous-led visions of “liberation, life, and land,”¹⁶⁴ invoking decolonial calls for “a world where many worlds fit.”¹⁶⁵ Feminist degrowth scholars propose Care Incomes, payments to recognize and compensate the socially reproductive work that sustains life and community. Currently ignored in GDP accounting, care work is largely carried out by women and marginalized social groups and thus Care Incomes have the potential to redress historical exclusions and benefit informal workers.^{166–168}

Conclusions

Today, life-sustaining earth systems are under existential threat.¹⁶⁹ As COVID-19 devastates informal livelihoods worldwide, mass layoffs plunge unprecedented numbers of workers into economic hardship. Ethical economic imaginaries undergirding new realities are thus an urgent necessity. Sustainable development initiatives such as the SGDs admirably seek to promote both environmental sustainability and decent work. Yet, promoting poverty alleviation and ecological wholeness through economic growth is like trying to squeeze water from stone. These approaches are seductive. They promise to decouple growth from environmental damage through innovation as they promote policies that leave inequalities in wealth and social power largely untouched. They ignore that inequality is a key driver of environmental harm. Thus, we insist, our pathways forward

must recognize the co-constitution of poverty, inequality, and unsustainability.

The necessary transformations are daunting. Challenging entrenched structures of elite power is so difficult that some caution incremental change and propose only Band-Aid solutions to ameliorate some of the most acute forms of suffering caused by racial capitalism. Against this limiting pragmatism, we argue for transformational change and encourage sustainability scholarship and practice to take an active role in promoting reparation. Policymakers and sustainability researchers should learn from the critical and community-produced research on informality. We must move beyond formalization and diagnose the shared drivers of decent work deficits and environmental degradation. Thinking historically, relationally, and spatially reveals how the value produced by informal workers subsidize urban economies and ecologies, even as racial capitalism predictably reproduces job scarcity, income inequality, and poverty, the very conditions that impel many to informal work. Ethical economic imaginaries combined with ethic of reparative action can offer pathways toward sustainable, equitable cities by investing resources in the only social force capable of contesting elite power structures: workers and social movements on the frontlines.

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REFERENCES

1. ILO (2018). *Women and Men in the Informal Economy: A Statistical Picture, Third edition* (International Labour Organization).
2. Dias, S.M. (2016). Waste pickers and cities. *Environ. Urban.* 28, 375–390.
3. Duneier, M., Hasan, H., and Carter, O. (2000). *Sidewalk*, 1st edition (Farrar, Straus and Giroux).
4. Bromley, R. (2000). Street vending and public policy: a global review. *Int. J. Sociol. Soc. Pol.* 20, 1–28.
5. Moser, C. (1978). Informal sector or petty commodity production: dualism or dependence in urban development? *World Dev.* 6, 1041–1064.
6. ILO (2002). *Decent Work and the Informal Economy* (International Labour Organization).
7. ILO (2019). *Work for a Brighter Future* (International Labour Organization).
8. Breman, J., and van der Linden, M. (2014). Informalizing the economy: the return of the social question at a global level. *Dev. Change* 45, 920–940.
9. Friedman, G. (2014). Workers without employers: shadow corporations and the rise of the gig economy. *Rev. Keynesian Econ.* 2, 171–188.
10. Chen, M. (2007). *Rethinking the Informal Economy: Linkages with the Formal Economy and the Formal Regulatory Environment* (United Nations, Department of Economics and Social Affairs).
11. Bear, L., Ho, K., Tsing, A., and Yanagisako, S. (2015). *Gens: A Feminist Manifesto for the Study of Capitalism – Cultural Anthropology* (Field-sights).
12. Gibson-Graham, J.K. (2006). *The End of Capitalism (As We Knew it): A Feminist Critique of Political Economy* (University Of Minnesota Press).
13. PolicyLink an Overview of America’s Working Poor. <https://www.policylink.org/data-in-action/overview-america-working-poor>.

14. ILO (2017). Few Countries Combine an Environmentally Sustainable Footprint with Decent Work. http://www.ilo.org/global/topics/future-of-work/trends/WCMS_549356/lang-en/index.htm.
15. Hickel, J., and Kallis, G. (2020). Is green growth possible? *New Polit. Economy* 25, 469–486.
16. Victor, P.A. (2018). *Managing without Growth: Slower by Design, Not Disaster* (Edward Elgar Publishing).
17. Ward, J.D., Sutton, P.C., Werner, A.D., Costanza, R., Mohr, S.H., and Simmons, C.T. (2016). Is decoupling GDP growth from environmental impact possible? *PLoS One* 11, <https://doi.org/10.1371/journal.pone.0164733>.
18. Haberl, H., Wiedenhofer, D., Virág, D., Kalt, G., Plank, B., Brockway, P., Fishman, T., Hausknost, D., Krausmann, F., Leon-Gruhalski, B., et al. (2020). A systematic review of the evidence on decoupling of GDP, resource use and GHG emissions, part II: synthesizing the insights. *Environ. Res. Lett.* 15, 065003.
19. ILO (2018). *World Employment and Social Outlook 2018: Greening with Jobs* (International Labour Office).
20. Struckmann, C. (2018). A postcolonial feminist critique of the 2030 Agenda for Sustainable Development: a South African application. *Agenda* 32, 12–24.
21. Gupta, J., and Vegelin, C. (2016). Sustainable development goals and inclusive development. *Int. Environ. Agreements* 16, 433–448.
22. Firebaugh, G. (2003). *Global Income Inequality* (Wiley Online Library).
23. Piketty, T., and Ganser, L.J. (2014). *Capital in the Twenty-First Century* (Cambridge University Press).
24. Weber, H. (2017). Politics of 'leaving No one behind': contesting the 2030 sustainable development goals agenda. *Globalizations* 14, 399–414.
25. Potts, D. (2008). The urban informal sector in sub-Saharan Africa: from bad to good (and back again?). *Dev. South. Africa* 25, 151–167.
26. Banks, N., Lombard, M., and Mitlin, D. (2020). Urban informality as a site of critical analysis. *J. Dev. Stud.* 56, 223–238.
27. Tokman, V.E. (1978). An exploration into the nature of informal—formal sector relationships. *World Dev.* 6, 1065–1075.
28. Meagher, K. (2013). *Unlocking the Informal Economy: A Literature Review on Linkages between Formal and Informal Economies in Development Countries (Women in Informal Employment: Globalizing and Organizing)*.
29. WIEGO WIEGO Network: Holistic Framework | WIEGO. <https://www.wiego.org/wiego-network-holistic-framework>.
30. Chen, M., Carré, F., and Carré, F. (2020). *The Informal Economy Revisited: Examining the Past, Envisioning the Future* (Routledge).
31. Millar, K.M. (2018). *Reclaiming the Discarded: Life and Labor on Rio's Garbage Dump* (Duke University Press).
32. AlSayyad, N., and Roy, A. (2003). *Urban Informality: Transnational Perspectives from the Middle East, Latin America, and South Asia* (Lexington Books).
33. Munck, R. (2013). The precariat: a view from the South. *Third World Q.* 34, 747–762.
34. Ferguson, J., and Li, T.M. (2018). Beyond the "Proper Job:" Political-Economic Analysis after the Century of Labouring Man. Working Paper 51 (Cape Town: PLAAS, UWC).
35. Neilson, B., and Rossiter, N. (2008). Precarity as a political concept, or, Fordism as exception. *Theor. Cult. Soc.* 25, 51–72.
36. Mosoetsa, S., Stillerman, J., and Tilly, C. (2016). Precarious labor, south and north: an introduction. *Int. Labor Work. Class Hist.* 89, 5–19.
37. Maloney, W.F. (2004). Informality revisited. *World Dev.* 32, 1159–1178.
38. Davis, M. (2006). *Planet of Slums* (Verso).
39. Rai, S.M., Brown, B.D., and Ruwanpura, K.N. (2019). Sdg 8: decent work and economic growth – a gendered analysis. *World Dev.* 113, 368–380.
40. Patel, R., and Moore, J.W. (2017). *A History of the World in Seven Cheap Things: A Guide to Capitalism, Nature, and the Future of the Planet* (University of California Press).
41. Gago, V. (2017). *Neoliberalism from below: Popular Pragmatics and Baroque Economies* (Duke University Press).
42. Sheppard, E., Sparks, T., and Leitner, H. (2020). World class aspirations, urban informality, and poverty politics: a north–south comparison. *Antipode* 52, 393–407.
43. Bhan, G. (2019). Notes on a Southern urban practice. *Environ. Urban.* 31, 639–654.
44. Caldeira, T. (2016). Peripheral urbanization: autoconstruction, transversal logics, and politics in cities of the global south. *Environ. Plann. D Soc. Space* 35, 3–20.
45. Rosaldo, M. (2019). The Antinomies of Successful Mobilization: Colombian Recyclers Manoeuvre between Dispossession and Exploitation (Development and Change).
46. Fredericks, R. (2018). *Garbage Citizenship: Vital Infrastructures of Labor in Dakar, Senegal* (Duke University Press).
47. Esquivel, V. (2016). Power and the sustainable development goals: a feminist analysis. *Gen. Dev.* 24, 9–23.
48. Esquivel, V., and Sweetman, C. (2016). Gender and the sustainable development goals. *Gen. Dev.* 24, 1–8.
49. Mirafab, F., and Wills, S. (2005). Insurgency and spaces of active citizenship: the story of Western Cape anti-eviction campaign in South Africa. *J. Plann. Educat. Res.* 25, 200–217.
50. Samson, M. (2015). Accumulation by dispossession and the informal economy—struggles over knowledge, being and waste at a Soweto garbage dump. *Environ. Plann. D Soc. Space* 33, 813–830.
51. Moore, S.A. (2009). The excess of modernity: garbage politics in Oaxaca, Mexico. *Prof. Geographer.* 61, 426–437.
52. Gidwani, V. (2013). Six theses on waste, value, and commons. *Soc. Cult. Geogr.* 14, 773–783.
53. O' Hare, P. (2019). 'The landfill has always borne fruit': precarity, formalisation and dispossession among Uruguay's waste pickers. *Dialect Anthropol.* 43, 31–44.
54. Anantharaman, M. (2014). Networked ecological citizenship, the new middle classes and the provisioning of sustainable waste management in Bangalore, India. *J. Clean. Prod.* 63, 173–183.
55. Gutberlet, J. (2012). *Recovering Resources - Recycling Citizenship: Urban Poverty Reduction in Latin America* (Ashgate Publishing, Ltd.).
56. Ezeah, C., Fazakerley, J.A., and Roberts, C.L. (2013). Emerging trends in informal sector recycling in developing and transition countries. *Waste Manag.* 33, 2509–2519.
57. Medina, M. (2005). Serving the unserved: informal refuse collection in Mexico. *Waste Manag. Res.* 23, 390–397.
58. Medina, M. (2007). *The World's Scavengers: Salvaging for Sustainable Consumption and Production* (Rowman Altamira).
59. Dias, S.M. (2012). Not to Be Taken for Granted: What Informal Waste Pickers Offer the Urban Economy (The Global Urbanist).
60. Scheinberg, A. (2012). Informal Sector Integration and High Performance Recycling: Evidence from 20 Cities, 23 (Women in Informal Employment Globalizing and Organizing (WIEGO)).
61. Wilson, D.C., Rodic, L., Scheinberg, A., Velis, C.A., and Alabaster, G. (2012). Comparative analysis of solid waste management in 20 cities. *Waste Manag. Res.* 30, 237–254.
62. Gutberlet, J., Carenzo, S., Kain, J.-H., and Mantovani Martiniano de Azevedo, A. (2017). Waste picker organizations and their contribution to the circular economy: two case studies from a global south perspective. *Resources* 6, 52.
63. Gall, M., Wiener, M., Chagas de Oliveira, C., Lang, R.W., and Hansen, E.G. (2020). Building a circular plastics economy with informal waste pickers: recycle quality, business model, and societal impacts. *Resour. Conserv. Recycl.* 156, 104685.
64. Gower, R., and Schröder, P. (2016). *Virtuous Circle: How the Circular Economy Can Create Jobs and Save Lives in Low and Middle-Income Countries* (IDS/Tearfund).
65. Schröder, P., Anantharaman, M., Anggraeni, K., and Foxon, T.J. (2019). *The Circular Economy and the Global South: Sustainable Lifestyles and Green Industrial Development* (Routledge).
66. Patel, K., Guenther, D., Wiebe, K., and Seburn, R.-A. (2014). Promoting food security and livelihoods for urban poor through the informal sector: a case study of street food vendors in Madurai, Tamil Nadu, India. *Food Sec.* 6, 861–878.
67. Roeber, S., and Skinner, C. (2016). Street vendors and cities. *Environ. Urban.* 28, 359–374.
68. England, R. (2017). *Living in Landfill* (The Independent).
69. Baker, J. (2020). From waste pickers to street vendors, how can cities expand opportunities for the urban poor? From waste pickers to street vendors, how can cities expand opportunities for the urban poor?. <https://blogs.worldbank.org/sustainablecities/waste-pickers-street-vendors-how-can-cities-expand-opportunities-urban-poor>.
70. Ferguson, J. (2015). *Give a Man a Fish: Reflections on the New Politics of Distribution* (Duke University Press).
71. O'hare, P. (2020). 'We looked after people better when we were informal': the 'quasi-formalisation' of Montevideo's waste-pickers. *Bull. Latin Am. Res.* 39, 53–68.

72. Pelling, M. (2003). *Natural Disaster and Development in a Globalizing World* (Routledge).
73. Carrero, R., Acuto, M., Tzachor, A., Subedi, N., Campbell, B., and To, L.S. (2019). Tacit networks, crucial care: informal networks and disaster response in Nepal's 2015 Gorkha earthquake. *Urban Stud.* 56, 561–577.
74. Chen, M.A. (2020). *Vegetables on Wheels in Ahmedabad, India: SEWA Partners with Municipality to Ensure Food Access during Lockdown* (WIEGO). <https://www.wiego.org/blog/vegetables-wheels-ahmedabad-india-sewa-partners-municipality-ensure-food-access-during>.
75. Solnit, R. (2010). *A Paradise Built in Hell: The Extraordinary Communities that Arise in Disaster* (Penguin).
76. Cadieux, K.V., Carpenter, S., Liebman, A., Blumberg, R., and Upadhyay, B. (2019). Reparation ecologies: regimes of repair in populist agroecology. *Ann. Am. Assoc. Geogr.* 109, 644–660.
77. Hooks, B. (1996). *Teaching to Transgress: Education as the Practice of Freedom* (Routledge).
78. Freire, P. (2000). *Pedagogy of the Oppressed* (Bloomsbury Publishing).
79. Samson, M. (2010). Reclaiming Reusable and Recyclable Materials in Africa (Women in Informal Employment: Globalizing and Organizing).
80. Roy, A. (2006). Praxis in the time of empire. *Plann. Theor.* 5, 7–29.
81. Angelovski, I., Connolly, J., and Brand, A.L. (2018). From landscapes of utopia to the margins of the green urban life: for whom is the new green city? *City* 22, 417–436.
82. Checker, M. (2011). Wiped out by the “Greenwave”: environmental gentrification and the paradoxical politics of urban sustainability. *City Soc.* 23, 210–229.
83. Dooling, S. (2009). Ecological gentrification: a research agenda exploring justice in the city. *Int. J. Urban Reg. Res.* 33, 621–639.
84. Rice, J.L., Cohen, D.A., Long, J., and Jurjevich, J.R. (2020). Contradictions of the climate-friendly city: new perspectives on eco-gentrification and housing justice. *Int. J. Urban. Reg. Res.* 44, 145–165.
85. Pulido, L. (2017). Geographies of race and ethnicity II: environmental racism, racial capitalism and state-sanctioned violence. *Prog. Hum. Geogr.* 41, 524–533.
86. Melamed, J. (2015). Racial capitalism. *Crit. Ethnic Stud.* 1, 76–85.
87. Robinson, C.J. (2000). *Black Marxism: The Making of the Black Radical Tradition* (University of North Carolina Press).
88. Kelley, R.D. (2017). What did Cedric Robinson mean by racial capitalism. *Boston Rev.* 72. <https://countercurrents.org/2020/07/what-did-cedric-robinson-mean-by-racial-capitalism/>.
89. Doron, A. (2018). *Waste of a Nation: Garbage and Growth in India* (Harvard University Press).
90. Gidwani, V., and Maringanti, A. (2016). The waste-value dialectic: lumpen urbanization in contemporary India. *Comp. Stud. South Asia Africa Middle East* 36, 112–133.
91. Kornberg, D. (2019). From Balmikis to Bengalis: the ‘casteification’ of Muslims in Delhi’s informal garbage economy. *Econ. Polit. Weekly* 54, 48–54.
92. Arakal, R.A. (2020). Bengaluru: ASHA Workers, BBMP Pourakarmikas Stage Protests for Better Working Conditions, Health Cover (The Indian Express).
93. COVID-19 Class Struggle Timeline | Sutori <https://www.sutori.com/story/covid-19-class-struggle-timeline-L59HEhnbep7FLq97Y9gCRpX>.
94. Frank, R. (2020). American Billionaires Got \$434 Billion Richer during the Pandemic (CNBC). <https://www.cnbc.com/2020/05/21/american-billionaires-got-434-billion-richer-during-the-pandemic.html>.
95. Perea, J.F. (2011). The Echoes of Slavery: Recognizing the Racist Origins of the Agricultural and Domestic Worker Exclusion from the National Labor Relations Act, 72 (Loyola University Chicago), pp. 95–138.
96. Federici, S. (2004). *Caliban and the Witch* (Autonomedia).
97. Denning, M. (2010). Wageless life. *New Left Rev.* 66, 79–97.
98. Dunbar-Ortiz, R. (2014). *An Indigenous Peoples’ History of the United States* (Beacon Press).
99. Estes, N. (2019). Our History Is the Future: Standing Rock versus the Dakota Access Pipeline, and the Long Tradition of Indigenous Resistance (Verso).
100. Li, T.M. (2010). To make live or let die? Rural dispossession and the protection of surplus populations. *Antipode* 41, 66–93.
101. Michael, K., Deshpande, T., and Ziervogel, G. (2019). Examining vulnerability in a dynamic urban setting: the case of Bangalore’s interstate migrant waste pickers. *Clim. Dev.* 11, 667–678.
102. Beckert, S., and Rockman, S. (2016). *Slavery’s Capitalism: A New History of American Economic Development* (University of Pennsylvania Press).
103. Scheidel, A., Del Bene, D., Liu, J., Navas, G., Mingorria, S., Demaria, F., Avila, S., Roy, B., Ertör, I., Temper, L., et al. (2020). Environmental conflicts and defenders: a global overview. *Glob. Environ. Change* 63, 102104.
104. Burkett, P. (2016). *Nature’s ‘Free Gifts’ and the Ecological Significance of Value—Paul Burkett, 1999* (Capital & Class).
105. Moore, J.W. (2018). The Capitalocene Part II: accumulation by appropriation and the centrality of unpaid work/energy. *J. Peasant Stud.* 45, 237–279.
106. Temper, L., Del Bene, D., and Martinez-Alier, J. (2015). Mapping the frontiers and front lines of global environmental justice: the EJAtlas. *J. Polit. Ecol.* 22, 255–278.
107. Peck, J., Theodore, N., and Brenner, N. (2012). Neoliberalism resurgent? Market rule after the great recession. *South Atlantic Q.* 111, 265–288.
108. Katz, C. (2001). Vagabond capitalism and the necessity of social reproduction. *Antipode* 33, 709–728.
109. Roy, A., Negrón-Gonzales, G., Opoku-Agyemang, K., and Talwalker, C. (2016). *Encountering Poverty: Thinking and Acting in an Unequal World* (University of California Press).
110. Swoboda, F. (1995). Reich Voices Concern over Growing Economic Elitism (Washington Post).
111. Hardoon, D., Fuentes-Nieva, R., and Ayele, S. (2016). *An Economy for the 1%: How Privilege and Power in the Economy Drive Extreme Inequality and How This Can Be Stopped* (Oxfam International).
112. Chari, S., and Gidwani, V. (2005). Introduction grounds for a spatial ethnography of labor. *Ethnography* 6, 267–281.
113. Agarwala, R. (2013). *Informal Labor, Formal Politics, and Dignified Discontent in India* (Cambridge University Press).
114. Amin, S. (1978). *Unequal Development: An Essay on the Social Formations of Peripheral Capitalism* (Monthly Review Press).
115. Hickel, J. (2017). *The Divide: A Brief Guide to Global Inequality and its Solutions* (Random House).
116. Hickel, J. (2017). *How to Stop the Global Inequality Machine* (The Guardian).
117. Graeber, D. (2015). *Ferguson and the Criminalization of American Life* (Gawker). <http://gawker.com/ferguson-and-the-criminalization-of-american-life-1692392051>.
118. Goldstein, D.M. (2016). *Owners of the Sidewalk: Security and Survival in the Informal City* (Duke University Press).
119. Srinivasan, U.T., Carey, S.P., Hallstein, E., Higgins, P.A., Kerr, A.C., Koeten, L.E., Smith, A.B., Watson, R., Harte, J., and Norgaard, R.B. (2008). The debt of nations and the distribution of ecological impacts from human activities. *Proc. Natl. Acad. Sci. U S A* 105, 1768–1773.
120. Wiedmann, T., Lenzen, M., Keyßer, L.T., and Steinberger, J.K. (2020). Scientists’ warning on affluence. *Nat. Commun.* 11, 1–10.
121. Martinez-Alier, J. (2016). Global environmental justice and the environmentalism of the poor. In *The Oxford Handbook of Environmental Political Theory*, Teena Gabrielson, Cheryl Hall, John M. Meyer, and David Schlosberg, eds. (Oxford University Press), pp. 547–562.
122. Vergara, S.E., and Tchobanoglous, G. (2012). Municipal solid waste and the environment: a global perspective. *Annu. Rev. Environ. Resour.* 37, 277–309.
123. Haraway, D. (2015). Anthropocene, capitalocene, plantationocene, chthulucene: making kin. *Environ. Human.* 6, 159–165.
124. Moore, J.W. (2017). The Capitalocene, Part I: on the nature and origins of our ecological crisis. *J. Peasant Stud.* 44, 594–630.
125. Anjaria, J.S. (2011). Ordinary states: everyday corruption and the politics of space in Mumbai. *Am. Ethnol.* 38, 58–72.
126. Tucker, J., and Devlin, R.T. (2019). Uncertainty and the governance of street vending: a critical comparison across the North/South divide. *Int. J. Urban Reg. Res.* 43, 460–475.
127. Bhowmik, S.K. (2005). Street vendors in Asia: a review. *Econ. Polit. Weekly*, 2256–2264.
128. Cross, J., and Morales, A. (2007). *Street Entrepreneurs: People, Place, and Politics in Local and Global Perspective* (Routledge).
129. Swanson, K. (2007). Revanchist urbanism heads south: the regulation of indigenous beggars and street vendors in Ecuador. *Antipode* 39, 708–728.
130. Skinner, C., and Balbuena, P. (2019). Where Are the Inclusive Cities? Street Vendors Globally Face Increasing Hostility (Women in Informal Employment: Globalizing and Organizing).

131. Budlender, D. (2017). Informal Economy Budget Analysis in Greater Monrovia, 12 (WIEGO). <https://www.wiego.org/publications/informal-economy-budget-analysis-greater-monrovia>.
132. de Pádua Carrieri, A., and Murta, I.B.D. (2011). Cleaning up the city: a study on the removal of street vendors from downtown Belo Horizonte, Brazil. *Can. J. Admin. Sci.* 28, 217–225.
133. Kayuni, H.M., and Tambulasi, R.I. (2009). Political transitions and vulnerability of street vending in Malawi. *Theor. Empirical Researches Urban Manage.* 4, 79–96.
134. Donovan, M.G. (2008). Informal cities and the contestation of public space: the case of Bogotá's street vendors, 1988–2003. *Urban Stud.* 45, 29–51.
135. Tucker, J. (2017). City-stories: narrative as diagnostic and strategic resource in Ciudad del Este, Paraguay. *Plann. Theor.* 16, 74–98.
136. Hunt, S. (2009). Citizenship's place: the state's creation of public space and street vendors' culture of informality in Bogotá, Colombia. *Environ. Plan D* 27, 331–351.
137. Norton, P.D. (2011). *Fighting Traffic: The Dawn of the Motor Age in the American City* (MIT Press).
138. Ehrenfeucht, R., and Loukaitou-Sideris, A. (2007). Constructing the sidewalks: municipal government and the production of public space in Los Angeles, California, 1880–1920. *J. Hist. Geogr.* 33, 104–124.
139. Gidwani, V., and Chaturvedi, B. (2013). Poverty as geography: motility, stoppage and circuits of waste in Delhi. In *Urban Navigations: Politics, Space and the City in South Asia*, J.S. Anjaria and C. McFarlane, eds. (Routledge India), pp. 50–78.
140. Luthra, A. (2019). *Municipalization for Privatization's Sake* (Society and Business Review).
141. Demaria, F., and Schindler, S. (2015). Contesting Urban Metabolism: Struggles over Waste-To-Energy in Delhi, India (Antipode).
142. Du Bois, W.E.B. (1935). *Black Reconstruction in America: An Essay toward a History of the Part Which Black Folk Played in the Attempt to Reconstruct Democracy in America* (Oxford University Press), pp. 1860–1880.
143. West, C., and Hooks, B. (2016). *Breaking Bread: Insurgent Black Intellectual Life* (Taylor & Francis).
144. Roy, A. (2017). The Infrastructure of Assent: Professions in the Age of Trumpism. (The Avery Review). <https://averyreview.com/issues/21/the-infrastructure-of-assent>.
145. Rosaldo, M., Tilly, C., and Evans, P. (2012). *A Conceptual Framework on Informal Work and Informal Worker Organizing* (UCLA Institute for Research on Labor and Employment).
146. Bonner, C., and Spooner, D. (2011). *Organizing in the Informal Economy: A Challenge for Trade Unions* (Internationale Politik und Gesellschaft).
147. Kabeer, N., Milward, K., and Sudarshan, R. (2013). Organising women workers in the informal economy. *Gend. Dev.* 21, 249–263.
148. Carré, F., Horn, P., and Bonner, C. (2018). *Collective Bargaining by Informal Workers in the Global South: Where and How it Takes Place* (Women in Informal Employment: Globalizing and Organizing).
149. Habitat, U.N. (2010). *Solid Waste Management in the World's Cities. Water and Sanitation in the World's Cities* (UN-Habitat). <https://unhabitat.org/solid-waste-management-in-the-worlds-cities-water-and-sanitation-in-the-worlds-cities-2010-2>.
150. Alaniz, Á., and Schaeffer, C. (2017). Análisis de políticas públicas para el reciclaje inclusivo en América Latina (Red Latinoamericana de Recicladores).
151. Candido, S.E.A., Soulé, F.V., and Sacomano Neto, M. (2018). The Emergence of “Solidarity Recycling” in Brazil: Structural Convergences and Strategic Actions in Interconnected Fields (Organization & Environment).
152. Anantharaman, M. (2020). Ecological routes to urban inclusion: theorizing ecological citizenship through informal waste work. In *Standing Out, Fitting in, and the Consumption of the World: Sustainable Consumption in a Status-Conscious World*, C. Isenhour and P. Roscoe, eds. (Cambridge University Press).
153. Gutberlet, J. (2016). *Urban Recycling Cooperatives: Building Resilient Communities* (Routledge).
154. ILO (2019). *Waste Pickers' Cooperatives and Social and Solidarity Economy Organizations* (UN International Labour Organization).
155. Dias, S.M. (2018). *Postura de WIEGO sobre el Cierre de Vertederos* (WIEGO).
156. Cohen, P., Ijgosse, J., and Sturzenegger, G. (2013). *Preparing Informal Recycler Inclusion Plans: An Operational Guide* (Inter-American Development Bank). <https://publications.iadb.org/en/preparing-informal-recycler-inclusion-plans-operational-guide>.
157. Riofrio, G., and Cabrera, T. (2012). *Trabajadores por la Ciudad: Aporte de las mujeres a la gestión ambiental de los residuos sólidos en América Latina* (Centro de Estudios y Promoción del Desarrollo), p. 131.
158. Coote, A., and Percy, A. (2020). *The Case for Universal Basic Services*, 1 edition (Polity).
159. Ramaswami, A. (2020). Unpacking the urban infrastructure nexus with environment, health, Livability, well-being, and equity. *One Earth* 2, 120–124.
160. Leach, M. (2016). Inequality and sustainability. In *World Social Science Report, 2016: Challenging Inequalities, Pathways to a Just World* (UNESCO Publishing), pp. 132–134.
161. Baland, J.-M., Bardhan, P., and Bowles, S. (2018). *Inequality, Cooperation, and Environmental Sustainability* (Princeton University Press).
162. (The Guardian).
163. (GNDE).
164. (The Red Nation).
165. *Comité Clandestino Revolucionario Indígena-Comandancia General del Ejército Zapatista de Liberación Nacional* (1996). *Cuarta Declaración de la Selva Lacandona* (The Revolutionary Clandestine Committee). <https://enlacezapatista.ezln.org.mx/1996/01/01/cuarta-declaracion-de-la-selva-lacandona/>.
166. Barca, S. (2020). Within and beyond the Pandemic. Demanding a Care Income and a Feminist Green New Deal for Europe. *Undisciplined Environments* (Undisciplined Environments). <https://undisciplinedenvironments.org/2020/04/07/within-and-beyond-the-pandemic-demanding-a-care-income-and-a-feminist-green-new-deal-for-europe/>.
167. *Feminisms and Degrowth Alliance*. (2020). *Collaborative Feminist Degrowth: Pandemic as an Opening for a Care-Full Radical Transformation* (Degrowth). <https://www.degrowth.info/en/feminisms-and-degrowth-alliance-fada/collective-research-notebook/>.
168. Paulson, S. (2020). *From Pandemic toward Care-Full Degrowth*, 8.
169. Steffen, W., Rockström, J., Richardson, K., Lenton, T.M., Folke, C., Liverman, D., Summerhayes, C.P., Barnosky, A.D., Cornell, S.E., and Crucifix, M. (2018). Trajectories of the earth system in the Anthropocene. *Proc. Natl. Acad. Sci. U S A* 115, 8252–8259.