

TRANSITION

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The digital revolution is bringing about a dramatic shift in power, from labor to capital. We assess what the impact of this transformation might be on land as a factor of production.

The digital revolution is not happening in a historical vacuum. It unfolds within a framework of confrontation or collusion between market forces and government forces. Depending on the market power that companies can exercise, the digital transition will have different impacts on income distributions between capital, labor, and land, as well as on income distribution within capital itself.

This digital transition is advancing during a period of history marked by the worsening of four major crises, the effects of which are interconnected: international, environmental, democratic, and distributive.

Urban land management, based on collective purpose, must be recognized as a strategic asset in building a future in which progress is guided by equity, resilience, and social responsibility, with human dignity and the environment at the center of decisions.

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In the digital age, territorial issues have once again become a key factor in both the economy and democracy.

The digital revolution is bringing about a dramatic shift in power, from labor to capital (Yang, 2019a). What impact will this transformation have on land as a factor of production?

Since the beginnings of economics, capital, labor, and land have been identified as the three essential factors of production necessary for creating wealth. Historically, however, the major debate in social sciences has centered on the opposition between capital and labor. Land, though a fundamental production factor, has often been sidelined in economic discussions. During the industrial era, the importance of land as a physical resource diminished in many sectors, which became less dependent on natural resources, and more reliant on innovation and technology. In modern economies, the services sector—which now accounts for the majority of total output—has further reduced the importance of land, as services are less dependent on availability of land compared to agriculture and manufacturing. In the digital era, the importance of land in relation to capital and labor shifts once again, but it is expected to reverse the previous trend of relative decline.¹

Of course, land has never ceased to be a central factor in any economy. The defense of territory was, and continues to be, the raison d'être of any state apparatus (Yang, 2019b). The protection of land and real estate remains a core focus of any legal system and a priority in the use of police powers. In the context of the ongoing digital revolution, it is crucial to observe the contexts in which land gains or loses importance, and to reflect on possible measures to curb or mitigate the negative side effects that such changes may cause.

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LAND, BYTES, AND GEOPOLITICS: BEFORE AND AFTER 'HYPER-GLOBALIZATION'

On the international level, the digital revolution is taking place in a context of deglobalization marked by the worsening of economic rivalries and military conflicts. Current events reverse the trends in terms of the importance of land seen in previous decades, during the period of so-called hyper-globalization, which lasted roughly from 1990 to 2010 (Canuto, 2021a). During the period of hyper-globalization, the land lost geopolitical importance. However, land gained importance from a purely economic point of view, as result of the increase in the demand of primary products.

^{1.} We approach 'land' here in the traditional economic sense, as one of the classical factors of production alongside labor and capital. It broadly refers to natural resources, space, and the availability of land for economic activity. When discussing control over territory or specific locational choices, we emphasize the importance and centrality of land as a means of production.

Hyper-globalization can be defined as the unprecedented intensification of the flows of goods, services, ideas, and capital (Rodrik, 2011). This period was driven by the fall of the Berlin Wall—an event that, at the time, was believed to have ended the East-West confrontation—along with China's commercial integration and the overall liberalization of world trade. This phase of hyper-globalization led to a certain deterritorialization of international relations, and a decline in the relative importance of land compared to capital and labor. The production of goods and services was dispersed across value chains located in different parts of the world, with various components manufactured in multiple countries before they became a final product. This production method weakened the connection between production and national territory as multinational companies sought the most efficient and profitable locations for each stage of production, regardless of national borders (Canuto, 2021a).

In this context, land's importance as a base for economic and political power declined. The ability of states to control and regulate economic activities within their borders weakened. The liberalization of markets and the push for neoliberal policies resulted in the transfer of power from national authorities to global financial markets, transnational corporations, and international organizations. The overaccumulation of capital led to declines in capital prices: lower real interest rates (Canuto, 2021b). Meanwhile, global macroeconomic dynamism led to a sharp rise in demand for resource-intensive products, including land, particularly in countries at the lower end of the global income pyramid (Canuto, 2023a).

Although the commodity price supercycle faded after 2010, the fact remains that the relative price of natural resources moved in the opposite direction from labor and capital, putting pressure on land prices. Despite increased productivity and the global availability of underutilized land, the expansion of agricultural frontiers and the globalization of markets led to a significant rise in rural land prices. In Brazil, one of the countries that benefited the most from the commodity boom, the average price per hectare of arable land increased more than tenfold between 1990 and 2010 in several regions (Oliveira, 2012).

This market appreciation of land was not accompanied by concern for the geopolitical value of territory. This phase of hyper-globalization and deterritorialization began to reverse after the 2008 subprime crisis, the aftermath of which saw the beginning of the deglobalization period of today.

In 2010, Brazil adopted a more restrictive interpretation, through a ruling by the Attorney General's Office, regarding the ability of foreigners to buy and cultivate land in the country. In the United States, discussions at both federal and state levels have also addressed potential national security risks posed by foreign ownership of land near critical infrastructure and military bases. These concerns have led to waves of legislative activity in several U.S. states, including Florida and North Dakota, where laws have been passed to limit foreign ownership in areas considered sensitive. There was a growing concern that foreign ownership of land could be harmful and detrimental to the full exercise of sovereignty.

At the same time, the intensifying rivalry between advanced countries and China, and the rise of protectionist measures in various nations, has reinforced this trend toward 'reterritorialization', the renewed significance and strategic value of physical territories, particularly as nations increasingly compete for control over resources, economic influence, and geopolitical power. In contrast to previous trends of globalization, which often diminished the importance of borders and territorial control, reterritorialization emphasizes the reassertion of territorial boundaries and sovereignty in the face of rising international rivalry, and this trend has been exacerbated by the 'perfect storm' of globally reaching shocks: the pandemic, the outbreak of regional wars in Ukraine and the Middle East that have reignited East-West tensions, and more intense and frequent manifestations of climate change.

Nations are starting to withdraw from global production and trade chains, and economic agents are increasingly emphasizing self-sufficiency or dependence exclusively on friendly and loyal nations, the so-called 'friendshoring' (Canuto, 2023b). This movement brings back the political value of land, as control over natural resources and physical space becomes central to new development and security strategies.

As the digital transition progresses, mineral security becomes an imperative. The extraction of minerals like lithium, cobalt, and rare earth elements has become crucial for producing essential components, making areas rich in these minerals into spaces of intense geostrategic focus (Canuto, 2023c). The geographic concentration of these minerals (China accounts for 95% of global rare earth production; Chile, Bolivia, and Argentina have 68% of lithium reserves; and the Democratic Republic of Congo controls 70% of global cobalt production) is mobilizing countries and corporations eager to secure access to these resources, bringing land back to its role as a key factor in determining whether there will be conflict or cooperation between states (Smith, 2024).

The geopolitical value of territory is further emphasized by the fact that the high-performance microchip industry—semiconductors with process dimensions of 5 nanometers or smaller, characterized by high transistor density, energy efficiency, and advanced processing capabilities—is also concentrated in a few locations around the world, some of which are strategically sensitive, such as Taiwan. While not land-intensive, semiconductor manufacturing, being an essential activity in the digital revolution, contributes to the reterritorialization of international relations. Taiwan gained territorial importance as it hosts one of the most important industries for the digital transition. In other words, Taiwan has been "reterritorialized"...

This reterritorialization, of course, is not an absolute trend and should, for now, be viewed only as a tendency, given the enormous degree of interdependence among major powers. This reality prevents the immediate formation of an economic order divided into antagonistic blocs. Full freedom to choose allies is not available to anyone—not even to the superpowers.

LAND AND CLIMATE CHANGE

In the context of the environmental crisis, the digital revolution is also taking place amid a shift in power toward land. While the digital transition intensifies the friction between land use for energy, food, and environmental purposes, it drives the centrality of land in terms of both what new technologies demand and what digital tools offer for renewing and optimizing land use processes.

The digital transition is marked by the rise of activities that require increasing amounts of electricity, given the proliferation of electronic devices, data centers, Al computing clusters, cryptocurrency mining, and electric vehicles. Because of the environmental pressure exerted by conventional energy generation, the demand for clean energy intensifies land-use conflicts.

In Brazil, for instance, if the area currently occupied by sugarcane plantations used for ethanol production were covered by solar panels, it could provide ten times the country's total electricity demand. Similarly, if the total area in the United States currently used for corn cultivation for ethanol were converted into a massive solar farm, the installed capacity could supply three times the nation's total electricity demand (Ritchie, 2024). Land can gain importance and this can unfold into conflicting uses of land. In the example: land for food versus land for energy.

The imperatives of clean energy generation, food security, and sustainability introduce variables that intersect, involving dilemmas, political choices, and behavioral decisions that are not always simple to make. Today, agriculture covers half of the planet's habitable surface, defined as the total land area minus frozen and desert surfaces. Of this total, only one-quarter is used for growing

crops, while the remaining three-quarters consists of pastureland, predominantly for livestock—a practice known to contribute significantly to climate change.

From an optimistic perspective, digital technologies, on the supply side, can drive numerous solutions capable of optimizing and protecting land, including: (a) real-time monitoring, which enables constant oversight of land, allowing for quicker and more effective interventions in case of events such as wildfires—a central concern in a burning Brazil—and in relation to illegal plantations and deforestation (Canuto, 2023d); (b) supply chain traceability via blockchain, from origin to final consumer.; ² (c) precision agriculture, which optimizes the use of water and inputs, increasing productivity while reducing environmental impact, among many other applications.

Brazil faces the additional challenge of determining which land uses should be prioritized to preserve tropical forests. The tools mentioned above are just a few examples of how the digital realm can exponentially enhance ecosystem conservation efforts and carbon capture.

Meanwhile, digital platforms can foster access to remote locations, encouraging rural tourism and creating jobs and income for local communities. Considering the transformations brought about by the digital world, Amazonian cities can be reimagined as pillars of forest conservation, as part of the urban transformations being driven by the ongoing digital revolution, as we will see next.

LAND, DEMOCRACY, AND INEQUALITY: CITIES IN FOCUS

Democratic representation and income distribution crises have the most significant potential for changing the relative weight of land compared to capital and labor.

The digital revolution has profoundly altered land use in the most densely populated areas of the planet: the cities. A true spatial and functional reordering of urban centers is unfolding, as we approach below. This radical change in how we occupy and utilize urban land in the digital era opens new opportunities to address what is undoubtedly the main emotional marker of today's societies: resentment, a central driver of the crises in democracy and inequality.

Resentment in cities is worsened by several factors. Economic and social inequality, exacerbated by the concentration of wealth and opportunities in specific urban areas, leaves many citizens marginalized, feeling increasingly excluded, devalued, and threatened. The rapid pace of technological change creates a growing sense of insecurity and disorientation. Many urban workers face skill obsolescence and job precariousness, creating a cycle of frustration and helplessness. Modern urban life can also lead to social isolation, even in large populations, because of the fragmentation of community life, and increasing reliance on superficial digital interactions at the expense of deeper, more meaningful human connections.

The rising cost of living in major metropolitan areas forces low-income populations to move to the periphery, where public services and opportunities are scarcer. Aggregated data from large Western metropolises show a significant increase in urban property values post-pandemic. The sharp rise in income concentration, combined with the traditional use of real estate as a store of value, is driving up prices and worsening the housing crisis in numerous cities worldwide.

^{2.} While supply chain traceability might seem primarily concerned with logistics, it is closely tied to land in terms of resource management and sustainability. Blockchain technology helps track the origin and journey of raw materials (which often come from land) and ensures that land-based resources, such as agricultural produce or minerals, are managed responsibly. This transparency can directly affect how land is used and protected, as it encourages responsible sourcing and can influence land-related decision-making, thereby impacting land as a productive asset.

The problem has no easy solution. Desirable cities such as Norwich, San Francisco, and Barcelona attract not only high-paid skilled workers but also tourists who fill Airbnb properties, displacing residents. These issues affect not only low-income populations but also a large segment of an entire generation of young people who will be unable to purchase their own homes if they wish to do so (Morrison, 2023).

Among many examples, the contrasting situations in London and Vienna offer points of reflection.

The United Kingdom's capital has been facing a severe housing crisis for decades, exacerbated by exorbitant rents and insufficient affordable housing. Many families spend up to half their income on rent, often in inadequate conditions. A 31% increase in rents from 2021 to 2023 (Block, 2023) has left many without options, leading to a rise in homelessness and an increase in shoplifting from stores and supermarkets.

A multitude of factors explains this dramatic situation. One prominent factor is the Right to Buy policy—introduced by Prime Minister Margaret Thatcher in the 1980s—that, in line with the neoliberal tradition reinforced by the measures that marked her government, led to the sale of over a million public housing units. This decision significantly reduced the public sector's ability to alleviate the crisis that worsened in the following years (Bennie, 2015).

In contrast, Vienna has been implementing rental subsidy policies that now cover 60% of the population through a public and cooperative housing stock that contributes to price stability. In the Austrian capital, the average rental price (€9.9/m²) is significantly lower than in other major European cities like Madrid (€18.6/m²), Barcelona (€19.3/m²), or London (€20.1/m²) (Linhart, 2023). The system is not limited to low-income individuals but also serves a broad middle class, providing the additional benefit of avoiding socio-territorial segregation.

The tradition of this policy dates to the 1920s when the *Gemeindebau* (public housing complexes) began to be constructed. These projects were designed to encourage interaction among residents in shared spaces, including laundry rooms, playgrounds, and community centers, promoting the development of a sense of community.

The cases of London and Vienna reflect extreme situations where liberal and interventionist policies have had significant impacts on the outcomes seen today. Far from being condemned or revered, these examples provide important lessons for those interested in observing and learning from the successes and failures in both cases.

There is, of course, a spatial dimension to the pool of negative emotions that pervades urban centers. The major geoeconomic transformations since the 1980s have had a profound impact on the territorial organization of Western cities. Hyper-globalization led to the transfer of a large portion of industrial activity from these cities to China, following Deng Xiaoping's reforms in 1978 that turned the country into the world's factory (Canuto, 2021a).

From an economic standpoint, China's rise as an industrial power has accelerated the process of deindustrialization, and reduced employment and income in the secondary sector across nearly all Western cities—although it cannot be singled out as the one factor responsible for the doldrums faced by lower-income segments of Western economies (IMF, 2007). Many people believe strongly in a cause-and-effect relationship between the reduction of poverty in China and the stagnation of wages in the West, even if—as highlighted by IMF (2007) and Canuto (2021c)—other factors can account for the latter. Since 1980, 800 million Chinese have risen out of poverty, while the average wage growth of workers in the United States and several European countries has been limited, far below the increase in labor productivity. This phenomenon lies at the root of social discontent and

the rise of anti-immigration and far-right movements in various countries.

Spatially, the decline of industrial activity in Western cities led to the abandonment of entire industrial zones. Many neighborhoods, often central and rich in infrastructure, became vacant and have since been the focus of urban redevelopment projects. These spatial transformations have occurred in two distinct phases, each driven by different technological and socioeconomic factors: the deindustrialization phase, which began fifty years ago, and the more recent digital phase.

In the first phase, cities such as Sheffield, St. Louis, São Paulo, Montreal, Manchester, and Milan experienced similar declines directly linked to deindustrialization. In these and other cities, large industrial areas were left unused, creating vast abandoned central spaces that are still being redeveloped today. The digital phase has become more pronounced in the last two decades, driven by the digitalization of the economy and, more recently, accelerated by the pandemic. The rise of e-commerce has led to the closure of many bricks-and-mortar stores, especially those unable to adapt their business models to incorporate an online presence. As physical stores closed, many central areas faced increased vacancies, creating empty and unsafe spaces. A walk-through downtown Rio de Janeiro, for instance, shows that the 40% vacancy rate in its commercial spaces recorded in 2020 (JLL Research, 2021) has been slow to decline (Maia, 2024).

Various initiatives are being developed to occupy these spaces. Examples of projects combining innovative mixed uses with social inclusion measures include the M4H District (Rotterdam), Scalo Farini (Milan), Hub Criativo do Beato (Lisbon), and La Samaritaine (Paris). The first three cases involved the redevelopment of former warehouses and industrial areas, while the Parisian example originates from a historic building that once housed a department store. A common feature of all four examples is their focus on social inclusion and mixed-use development. La Samaritaine stands out for combining a luxury hotel with social housing, along with retail and cultural spaces.

This reconfiguration of urban areas, initially triggered by the closure of bricks-and-mortar stores, was further disrupted by the subsequent adoption of remote and hybrid work, which has contributed to the desertification of several central and commercial districts. City centers such as those of Rio de Janeiro, Tokyo, London, Mexico City, San Francisco, Paris, and Buenos Aires, continue to suffer from the decline or near disappearance of street retail, and high vacancy rates for office space.

Taking New York as a reference, the office vacancy rate stands at 23.6% (Williams, 2024), more than double the pre-pandemic rate of 11%, while the delinquency rate, which was 0.57% in January 2023, jumped to 6.28% by January 2024 (Feldman, 2024). City centers are more and more vacant, first because of the impact of e-commerce on stores, and later because of the impact of remote work. The pandemic exacerbated those trends. The New York example is just a snapshot of the situation now.

Despite considerable losses and the degradation of certain urban areas, this radical shift in land use trends in urban centers has created an opportunity to use land as a tool to mitigate inequalities and socio-spatial segregation—an essential and imperative goal for democracies. Vacancies will not last forever, and street retail is not entirely dead. Vacant spaces will eventually be sought out by market players capable of keeping conventional retail alive or reinventing new real-estate functions. However, when vacancy persists for too long, public policies should aim to promote greater spatial justice, a more equitable distribution of resources, opportunities, and rights in urban spaces.

As disruptive as these transformations have proven to be, they present not only challenges but also numerous opportunities for creating more inclusive, sustainable, and resilient urban environments.

URBAN LAND AS A VECTOR OF RESISTANCE

Capital, labor, and land have long been the essential factors of production and key vectors of power underpinning various modes of production throughout history, forming the tripod on which social life has rested. The digital revolution, by reducing the utility of labor and enhancing the power of capital, has destabilized this balance.

In this context, distinguishing the dynamics of urban and rural land use is crucial. In rural areas, capital's advance tends to encounter less resistance, as 'neoextractivism'³ and agricultural expansion continue to dominate, often supported by public policies that favor capital accumulation, land concentration, and the intensive exploitation of natural resources. In this scenario, mechanization of the countryside and control of vast areas by large economic conglomerates limit the space for local resistance, exacerbating inequalities and environmental impacts. In contrast, urban land is subject to more complex dynamics, where organized resistance to market-driven interests and negative impacts is fueled by social movements and demands for social and environmental justice.

In rural areas, land will become the focus of new waves of projects that may bring with them economic and socio-environmental concerns, especially in new frontiers of exploitation in non-advanced economies: deforestation and ecosystem degradation, and impacts on traditional communities and indigenous peoples, who hold valuable knowledge for developing sustainable land management methods that the digital revolution could amplify.

First, it is important to assess whether digital tools (and our ability to apply them) will advance quickly enough to halt, or at least mitigate, the negative social and environmental impacts of extractivism. The second issue is geopolitical: will neoextractivism reinforce the excessive economic dependence of non-advanced economies on primary export commodities? Or, conversely, will it strengthen their bargaining power in response to growing global demands for food and environmental security?

The case of the Mercosur and European Union (EU) trade agreement illustrates the dilemmas and complexities involved in defining interests on both sides. French farmers, supported by a strong agricultural lobby, resisted the agreement, fearing competition from South American primary products, which, in Brazil's case, are considered more efficient and competitive. This resistance is compounded by concerns over food security and quality standards, which European consumers believe could be compromised by the entry of products that do not meet strict environmental and production criteria. However, many Brazilian consumers share these concerns and oppose practices that may harm the environment.

Thus, the negotiation of the agreement became a battleground for conflicting interests: while French farmers oppose Brazilian producers, European and Brazilian consumers share common interests and push for higher standards and environmental protection. This tension revealed a complex panorama in which the needs for economic development and the urgency of environmental protection must be balanced, reflecting the contradictions that permeate contemporary international negotiations. In this context, should Brazil defend free trade and the reduction of trade barriers to expand its export markets? Or should it agree and collaborate with the French government's push for standards aimed at decarbonization and biodiversity protection, which are also in the interest of the Brazilian population, but face resistance from certain segments of agribusiness?

^{3.} Extractivism typically refers to the large-scale extraction of natural resources (such as minerals, oil, or agricultural products) for export, and its associated impacts on both the environment and local populations. This model, historically linked to colonial and post-colonial economies, is characterized by the prioritization of resource extraction for global markets over sustainable development, frequently resulting in environmental degradation and socio-economic inequality. While extractivism refers to the traditional, often foreign-controlled exploitation of resources, neoextractivism involves state-driven extraction aimed at social welfare, but that still reproduces many of the same environmental and structural vulnerabilities as classic extractivist practices.

It seems natural that the dispute between social actors over land use will require some form of political arbitration, since a balance determined solely by market dynamics tends to produce severe externalities that could threaten the survival of the human species. In this specific case of Brazil's interaction with Europe, it is plausible that a hypothetical convergence of interests between Brazilian and European consumers (both, for example, interested in regulating pesticide use) could coincide with opposition from Brazilian society to the government's negotiating stance, which favors less stringent toxicity control standards. Unfortunately, as in any pluralist democracy, policies result from the pressure exerted by the strongest interest group on the government.

Thus, rural land proves to be an easy target for capital's concentrating mechanics, while urban land seems to represent the last bastion of resistance to the negative effects of a capital's socially and environmentally unbalanced reproduction.

Although the logic of markets is equally dominant in urban land, cities offer the possibility to find more equitable forms of capital reproduction. For now, in the urban sphere, the digital revolution by itself has not shown the capacity to counteract the negative impacts of capitalist exploitation. However, it is in cities that the groundswell of resistance holds the potential to grow stronger.

So-called smart cities, despite their enormous potential for improving urban facilities and services, have replicated the logic of spatial segregation and concentrated opportunities in privileged areas. The processes of commodification and intensive resource exploitation, characteristic of neoextractivism, are echoed in urban dynamics. Municipal structures replicate the phenomenon of public power being captured by particular interests.

The difference—offering a glimmer of hope—is that market intervention in cities directly affects the daily lives of an increasing majority of the world's population, making the occupants of urban land capable of eventually rising as a force of resistance in favor of new forms of capital distribution and reproduction.

Peaceful social movements, such as the civil rights movement in the United States (in the 1950s and 1960s), the June Journeys (2013) in Brazil, the Jasmine Revolution in Tunisia (2011), Solidarity in Poland (in the 1980s), the Velvet and Rose Revolutions in Czechoslovakia (1989) and Georgia (2003) respectively, Black Lives Matter (2013), Occupy Wall Street (2011), the Yellow Vests in France (2018), and many others, demonstrate how peaceful mobilization can promote transitions, redirect policies, achieve concessions, or raise broader awareness among public and private decision-makers.

The mobilizations led by activist Jane Jacobs (1916–2006) in the U.S. and Canada are also emblematic examples of how civic movements can be effective as forces of resistance against undesirable change. In New York, Jacobs's victorious efforts prevented the construction of the Lower Manhattan Expressway, a project proposed by Robert Moses (1888–1981), a key figure in the transformation of the city's infrastructure throughout the twentieth century. The project would have destroyed neighborhoods such as Greenwich Village and Soho. In Toronto, her leadership was crucial to the success of the Stop Spadina movement, which managed to halt the construction of the Spadina Expressway, which, in a similar fashion, would have decimated The Annex neighborhood.

However, a mass movement that embraces the cause of urban land rights remains a gap in history. Perhaps the closest example was the June Journeys in 2013, in Brazil, which erupted over the specific issue of public transportation fare increases, but quickly expanded into broader concerns about improving public services, misusing budgetary resources, and combating corruption. The Right to the City movement—launched in the 1960s in France under the influence of French sociologist Henri Lefebvre (1901–91) and later strengthened by the contributions of British geographer David Harvey, who expanded on Lefebvre's ideas from the 1970s onward, addressing social justice and the

fight against urban inequalities in the context of global capitalism—has influenced and continues to inspire many urban struggles worldwide. However, the ideas of both have been more widely disseminated through local activist movements advocating for specific public policies, rather than through mass protests aimed at creating systemic urban land governance mechanisms.

The issue of global governance for cities has gained traction at the United Nations through actions that led to the development of the 2030 Agenda and the New Urban Agenda (United Nations, 2016). These two documents establish guidelines and goals for public policies and urban practices on a global scale, and have the merit of bringing urban issues to the forefront of the global agenda. They complement bottom-up movements inspired by the Right to the City, but as international, top-down actions, they face challenges in translating ideas into concrete reality, especially in adapting these guidelines to diverse local contexts and harmonizing them with existing economic and social dynamics.

The relationship between capital, labor, and land is, in economic terms, the material reflection of the political struggle between market forces, civil society, and government—forces that have shaped human societies since ancient times. The eventual predominance of capital over land in the economic sphere will ultimately correspond to the supremacy of market forces in shaping the direction of social life. In practical terms, this would signify the decline of liberal democracy.

Democracy and capitalism are on a collision course. Capitalism continues to generate extreme income and wealth inequalities, while democracy seeks to distribute political power equally. The former is advancing faster than the latter; the framework of economic liberalism has promoted the accumulation of capital more rapidly than democracy has been able to expand citizenship. And if liberal democracies are ineffective in curbing income concentration, the only alternative is to reflect and act in favor of using urban land as a distributive tool, as the activism of the urban population may be the only power capable of peacefully provoking desirable changes.

The formula is well known. The public and private provision of collective infrastructural goods in cities, including housing services, should be used as a systemic method for generating wellbeing. These collective goods—the urban landscape, historical heritage, well-maintained sidewalks, illuminated streets, parks and squares, public Wi-Fi, mobility networks—provide quality of life and dignity to the population. They tangibly reduce the perception and reality of socioeconomic differences.

The granting of Universal Basic Income (UBI), as advocated by Silicon Valley activists, may be welcome for facilitating the purchase of individual consumer goods, but contributes little to the provision of collective goods, which are also essential for living a dignified life. In an exclusionary context, UBI may help someone buy groceries, but it won't ensure a well-maintained sidewalk or a new footbridge providing access to the train station for people living on the wrong side of the tracks—a situation that is not uncommon.

In these and many other urban contexts, territorial 'listening' – understood as a a process of actively gathering, interpreting, and synthesizing data and insights directly from local sources within a specific geographic area or community – becomes crucial. Policies that promote infrastructure improvements and social housing are far more likely to succeed if grounded in broad participatory processes. Housing movements in Brazil and many other countries are often better at managing condominium issues than government agencies. Similarly, neighborhood associations know their communities' realities much better than municipal bureaucracies. Civic and community engagement in urban planning and management is therefore essential to ensuring that public policies truly reflect the needs and aspirations of the entire population.

The digital transition carries the potential—and responsibility—to radicalize participatory processes that will allow citizens to have a voice in land-use decisions, potentially resulting in more functional, just, and inclusive solutions. This includes everything from public consultations, the establishment of active community councils, to 3D visualization and virtual reality tools that can help the public decide on the future of their cities.

Territorial 'listening' can be amplified through the implementation of sensors and IoT (Internet of Things) devices that enable more efficient management of urban services such as public lighting, waste management, and traffic monitoring. The collection and analysis of vast volumes of urban data will increasingly help public authorities make more informed decisions and plan more effectively (Peixoto et al, 2024).

Recent events seem to indicate that democracy risks crossing a point of rupture in: (a) prolonged contexts of economic stagnation or decline; (b) continued processes of deepening inequality; and (c) scenarios in which state and government institutions are captured by predatory market forces.

Democracy is a theoretical ideal that presupposes the equal participation of all citizens in political decisions, the absence of coercion, and maximum individual freedom. It becomes increasingly unattainable where the concentration of wealth and power in the hands of elites undermines the foundations of fair participation and distorts the democratic process to serve oligarchic interests.

If democracy, understood as a continuous process of improving the forms of political participation in society, is to survive, the potential use of land as a tool to provide public goods can play a crucial role in mitigating inequalities and overcoming the climate of widespread resentment that prevails today (Yang, 2022b). Urban land, more than a physical resource, represents the last focus of resistance against the inegalitarian trend that has recently prevailed in many countries.

In cities, where the central themes of contemporary life unfold, land can be the foundation of a more socially and environmentally balanced development model. The digital revolution offers tools to renew urban occupation, promoting justice and inclusion, but it is human will, consciously guiding these logics, that will avoid downside risks accompanying an unbridled impersonal mechanism of the market. Urban land management, based on collective purpose, must be recognized as a strategic asset in building a future in which progress is guided by equity, resilience, and social responsibility, with human dignity and the environment at the center of decisions.

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ABOUT THE POLICY CENTER FOR THE NEW SOUTH

The Policy Center for the New South (PCNS) is a Moroccan think tank aiming to contribute to the improvement of economic and social public policies that challenge Morocco and the rest of Africa as integral parts of the global South.

The PCNS pleads for an open, accountable and enterprising "new South" that defines its own narratives and mental maps around the Mediterranean and South Atlantic basins, as part of a forward-looking relationship with the rest of the world. Through its analytical endeavours, the think tank aims to support the development of public policies in Africa and to give the floor to experts from the South. This stance is focused on dialogue and partnership, and aims to cultivate African expertise and excellence needed for the accurate analysis of African and global challenges and the suggestion of appropriate solutions.

All opinions expressed in this publication are those of the authors.

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