Democratic Managerial Capitalism

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Paul Mason, following Joseph Schumpeter, says that the seeds of post-capitalism are beginning to bear fruit: "Capitalism will not be abolished by forced-march techniques. It will be abolished by creating something more dynamic that exists, at first, almost unseen within the old system, but which breaks through, reshaping the economy around new values, behaviours, and norms." We can see in modern societies *clues* that point in the direction of the new system. Mason believes that they point towards "a more collaborative production of goods, services, and organisations is appearing that no longer responds to the dictates of the market and to managerial hierarchy".

Yes, a new form of social organisation is likely emerging from the clues left by the present and by the recent past, but he is too optimist. He believes that the Information Revolution is producing a "new man". All utopians believe that, but human behaviour will continue to be the dialectical vector from two contradictory instincts: survival and convivial instincts. Societies are not just the outcomes of the survival instinct or self-interest but also from the need that each one of us has for sharing or solidarity. Changes in individual and group behaviour towards a more collaborative and simple way of life are a reaction to 40 years of neoliberalism and exacerbated individualism. These changes in behaviour are confirmation of Aristotle's classical claim that man is by nature a social animal, or of an Indian thinker who said that "to exist is to be part." Take, for instance, the large number of vegans. They are the harbingers of a new republican citizens whose commitments are to nations and democracy but to the fight to save nature.

The Information Revolution created a networked society, but it did not create a better society. A society in which the volume of information increased chaotically, in which the elites lost their monopoly of organised information, and, as the investigative journalist Max Fisher demonstrated how the big media *deliberately* reproduced fake news that others generated because fake news brings them more clicks and this means more money.²

The Information Revolution made room for new and progressive ideas, but it also opened the way for conspiracy theories and fake news.

In the new context produced by the Information Revolution, the new form of social organisation that may emerge is embodied in Democratic Managerial Capitalism. It is the *second* managerial capitalism. The first was just called "managerial capitalism" – the phase from the 1840s to 1929 – which I discussed in Chapter 3 in the context of the four previous phases of capitalist development: mercantilism, economic liberalism, managerial, and rentier-financier capitalism. The new phase of capitalist development is also a managerial phase, but two things make it different. It is democratic phase while the previous one was democratic but not fully. Take, for instance, the case of Fascism and Nazism, which were in its centre together with really democratic countries. Secondly, the managers are the primary associate in managerial-capitalist class coalition, while in the previous phase the greater associate and the capitalists the minor ones.

In Democratic Managerial Capitalism, change is taking place not towards an ideal society but only towards a society possible, where power moves from rentier capitalists to the managers, and political power moves mainly to democratically elected professional politicians. My argument for this change is associated with the *weariness of capitalism*. Capitalists have lost their strategic role in controlling the process of capital accumulation and innovation. Today, the manager controls most of the capital accumulation and innovations within the corporations. Within the capitalist class, only the young business entrepreneurs retain an important role: to control start-ups that are today the main source of radical innovation. This is the only thing that assures some legitimacy to capitalism and keeps it alive; the other things are just *the remains* of capitalism. Rentiers' wealth without a social function is one of them. Thus, capitalists are leaving a void of power to be filled.

I believe that democratic professional politicians and public and private managers will occupy this void. One question is whether modern society is getting ready for this change. American society, severely hurt by the neoliberal experience, and more recently by right-wing national populism, is far from ready. Smaller societies like Switzerland and the Scandinavian nations are closer to being ready. In these countries, politicians already have more power and are more respected; society is more cohesive, and the state is more robust. Also, the law is seriously observed in these societies, not just because of the state's coercive power, but out of respect for law and democracy, which define a good society and a legitimate state.

Why managerial? And the command of innovation

Capitalism in the more advanced countries will be managerial, developmental, and democratic. Capitalism proved again that its potential for progress is poor if not negative when the policy regime is liberal, which caused quasi-stagnation, the brutal increase in economic inequality and the

division of national societies that were previously relatively cohesive. When I say that "Democratic Managerial Capitalism" is an appropriate name for the transitional social formation that developed countries have just entered, I am thinking on the present phase of capitalism and the clues of a new form of social organisation that wants to be born.

Branko Milanovic, in a book with the suggestive title Capitalism, Alone argues that capitalism is the only relevant socioeconomic system in the world, which is true. He says that there are two competing forms of capitalism: liberal or meritocratic capitalism led by the US, and political capitalism led by China, what is a doubtful form of capitalism.³ The US is far from being a meritocratic society, it is just an imperial country with a liberal-individualistic society in which democracy has decayed to a plutocracy, while in China the state is authoritarian, and capitalism is developmental and managerial. The US and the other advanced countries are now abandoning economic liberalism because of quasi-stagnation and the lack of a competition strategy. Although the Chinese path is economically successful - Chinese politicians have used their relative autonomy to formulate a competent economic strategy and, more recently, effective social policies – the "China solution" is not really an alternative for the world, because it is an authoritarian system in a world where democracy is a universal value. But the American capitalism is not much better. As Milanovic argues, having in mind America's hyper commercialised capitalism, "societies around the world are structured to glorify success and power, which in a commercialized society are expressed only in money, which is obtained through labor, the ownership of assets, and especially corruption".4

How can we explain the emergence of Democratic Managerial Capitalism? I see four main causes which are behind the more general cause: the failure of rentier-financier neoliberal capitalism; the vigour of the managerial class; the fact that the only alternative to economic liberalism is developmentalism, and the new strength of democracy, as it successfully resisted the attacks of neoliberalism and, more recently, the attacks of right-wing national populism.

I have already discussed the failure of the rentier-financier coalition in raising the standard of living of most people in advanced countries since capitalism fell back into economic liberalism. This was an inevitable failure – mainly in developing countries but also in rich ones – because economic liberalism was unable to assure stability, produce growth, reduce inequality, and protect life from climate change. This inability has been one of the main themes of this book. The market alone is unable to coordinate national and the world economies in the way that economic liberalism wants. This is particularly true in developing countries because, among other factors, the market is just not sufficiently developed. But it is also true in advanced countries, first, because, as Keynes argued, their economies, when left to the market, tend to the insufficiency of demand. Second, because they suffer

from a structural excess of capital or a savings glut which originates from the accumulation of capital which was destroyed by the 1929 Great Depression and later by the great wars. And third, because technical progress has the tendency to be capital-using and to cause the productivity of capital to fall and new investment opportunities to shrink. These are problems that the market alone is unable to face and overcome. The solutions depend on policymaking, human ingenuity, and creativeness.

That managers will have a key position in the new governing-class coalition should not be surprising. This is a social class that has been on the rise for a long time – since the Organisational Revolution at the turn to the 20th century – when private corporations replaced families and family enterprises as the basic units of production, and states began to assume new roles and to increase in size. Corporations and the state required managers. In the case of the state, not only a greater number of non-elected bureaucrats, but also many elected politicians increasingly originated from the managerial middle class. Since then, this social class has grown in size and has continually and persistently assumed new roles. The rise of this managerial class was soon recognised.

In 1939, Bruno Rizzi published a book on the bureaucratic character of the Soviet Union. In 1941, James Burnham published his book The Managerial Revolution on the capitalist West. In this book, as I have argued, capitalism was managerial, developmental, and democratic from 1945 to 1974. Yet in the late 1970s, neoliberal academics and politicians profited from the 1970s' economic crisis to make classical liberalism again dominant. It then transformed into neoliberalism. But at that time, the managerial class hadn't yet exhausted its governing potential. We know that neoliberalism involved an attack on the working class, but it also signified an attack on the managerial class. The objective was to reduce its power in organising and running the corporations and the state organisations. The attack happened when the managerial class was booming and the complexity of the public and private organisations to be managed continued to grow. This attack started from three assumptions: that small, competitive companies are more efficient than corporations; that private companies are more efficient than state-owned enterprises, and that the economic losses involved in Keynesian macroeconomic policy and industrial policy are greater than the losses that non-intervention would cause. These three mistaken assumptions were never confirmed by practice. Also, they made claims that underestimated the ability of managers to govern the corporations and the state organisations.

With the Information Revolution, the strategic role of knowledge as a factor of production was enhanced, and the power and privilege of the managerial class kept increasing, while the excess of capital and the loss of command of investments and innovation weakened the capitalist class. The supply of capital was already bigger than demand due to the introduction of capital-saving technologies, and especially due to the unrelenting

accumulation of rentiers' savings, while capitalists lost control of capital accumulation in the great corporations to managers. Only the young, innovative entrepreneurs of start-ups maintained a main role in the economy, but they were half-capitalist, half-professional entrepreneurs. Although the number of students in higher education will continue to increase, managerial knowledge will remain scarce, and the relative power of these technobureaucrats will continue to grow.

The poor capabilities of the rentier class derive from its origin and main character: it is a class of heirs and of the idle rich. In three of the four phases of capitalist development (the mercantilist phase, the liberal-industrial entrepreneurs, and the capitalist-managerial phase) business entrepreneurs played a leading role in the production process. That is why Schumpeter viewed them as the heroes of capitalism. They were not simply just rich people becoming increasingly rich while exploiting labour, they were also a kind of self-appointed "delegate of society" in charge of conducting the process of capital accumulation and innovation on which economic growth depended. It was this key role that justified and supported their power and wealth.

This is not the case with rentiers, who are idle recipients of rents, nor the case with financiers, who are just financial agents of capital. There is no good justification for the rentiers' power and income, but, as they are the holders of capital, they remain the ruling class. This, however, is not a sustainable condition and is one of the reasons why neoliberal rentier-financier capitalism was short-lived – it only lasted 28 years, from 1980 to 2008.

The poor capabilities of the rentier class are an essential argument behind my contention that, in the new form of social organisation that is now on the rise, the holders of capital will not be the dominant class within the ruling class but will be a secondary class – much the same as the managerial class was a secondary ruling class within managerial capitalism. Capitalist industrial entrepreneurs were at the core of the process of capitalist development, which lost some of its functionality when managers replaced entrepreneurs in the management of the private corporations, but entrepreneurs continued to control the accumulation of capital and innovation. Entrepreneurs effectively lost functionality and legitimacy in the Neoliberal Years when they were reduced to the idle status of mere rentiers. The rentier class and the financiers are not committed to the nation and its national development projects. Increasingly, they are mere shareholders of multinational corporations whose profits do not mainly originate in the corporations' country of origin, thus alienating them from the nation. Rentiers are just interested in short-term dividends, interest, and real-estate rents, not in the long-term expansion of the corporations. The exception are the entrepreneurs of technology start-ups; they are central to the innovation process, but their role in capital accumulation remains managerial. As for the corporations' top executives – the third member of the rentier-financier-class coalition – they will have the central role in the new form of social organisation that is developing. The vigour of the managerial class is directly associated with the ever-increasing number of capable young women and men who have a graduate degree in good universities. When neoliberalism proved unable to offer solutions to these problems, and the capitalist class lost its capacity to control the processes of capital accumulation and technical progress, these two essential economic processes had already shifted from the capitalist class to the managerial class. The managers, who were already part of the dominant class coalition, would now be the leading class.

Why developmental? And its difficulties Historically, there are only two forms of organising capitalism economically: the developmental form and the liberal form, as we saw in Chapter 3. The new social organisation will be developmental, because it was economic liberalism that failed with the 1930s' Great Depression – and it failed again with the 2008 Great Financial Crisis and the Great Recession – and because economic liberalism is an form of organising capitalism when compared developmentalism. The first historical phase of capitalism was mercantilism: a developmental phase. This was followed between the mid-19th century and 1929 by the liberal form of capitalism: the capitalism of the industrial entrepreneurs. After the Great Depression and after World War II, we had a second developmentalism: the social-developmental capitalism of the Golden Age. Now that the Neoliberal Years have come to an end, the new social formation will necessarily be developmental. The state will again intervene moderately in the economy and competition among the nation-states will be acknowledged and reasonably regulated instead of being hidden. Economic liberalism has again demonstrated its inability to ensure satisfying growth rates and financial stability, thus seriously aggravating economic inequality and proving ineffective in counteracting the effects of climate change.

The great financial crisis of 2008 demoralised Neoclassical Economics and economic liberalism. Yet the transition from a liberal to a developmental policy regime will face obstacles in academia. This transition will not be easy, but it will happen, because pragmatic politicians and pragmatic businessmen have already recognised the failure of neoliberalism, and because the state is backing it. But the major universities continue to teach the neoclassical and the Austrian school economic theories – the "scientific" ideology of economic liberalism – as if nothing had happened. The models they teach are mathematical castles in the air that have no practical use, except to "scientifically" justify self-regulating and efficient markets, or, in other words, to play the role of a meta-ideology that justifies a broader ideology, namely, neoliberalism.

The power of the economic academic elites are based on its supposed knowledge, which we already saw to be discussable. The interests of rentiers and financiers and an insufficient consensus on the required developmental policies will continue to make the adoption of developmental strategies and policies difficult. Nevertheless, it will happen out of necessity; developmental policies will be imposed by reality. Leading economists with neoclassical backgrounds, such as Paul Krugman, Jeffrey Sachs, Joseph Stiglitz, and Dani Rodrik, are helping this transition because they belong to the mainstream but, in practice, they became heterodox economists.

In the heyday of neoliberalism, liberal economists repeatedly said that economic liberalism was intrinsically superior to developmentalism. They claimed that state failures are worse than market failures and that markets are more efficient than the state. But this non-sense. There are state failures, but its successes are bigger than the failures. With the market we have something similar, but its failures may be huge as are the great financial crises. New Developmental Economics sees the market as an insuperable institution coordinating the competitive sector of the economy, while the state is supposed to coordinate the non-competitive sectors, such as infrastructure, the basic inputs industry, the large "too-big-to-fail" retail banks, and the protection of the environment – sectors where the market is absent or quasi-absent – while also working to reduce inequality; all things that the market is unable to do. To perform its role, the market must be competitive, while the government must be reasonably competent.

To govern a modern nation-state is a difficult task that requires capable politicians and bureaucrats. If markets and companies produced growth independently of the state, without policymaking, the task of the managers in governing nation-states would be relatively simple and easy. Governments would only be required to assure social order and keep the fiscal account balanced, while the market would make the five macroeconomic prices right, keep the external current account balanced, and control the distribution of income in a just way; but we know that this is not true. These sectors are supposed to be state-coordinated despite the shortcomings involved. The neoliberal claim that state failures are worse than market failures was never confirmed in practice. What we usually see is the opposite. To ask the market to take care of non-competitive sectors and activities in which the market is absent is absurd. Market fundamentalists expect from the market much more than it can do.

In developmental capitalism not only companies but also nation-states require an active and capable government. Governing a country is to build institutions, to define objectives, and to take decisions. Governing requires cultured and experienced politicians, top public officials, and citizens in the private sector endowed with republican virtues. Elected and non-elected public officials are supposed to have technical and political competence as well as to embody, to reaffirm again and again, and to interpret the main values and beliefs of the nation. Meanwhile, citizens are expected to defend not only their own interests but also the public interest.

I know that politicians and top civil servants as well as citizens with such qualities are rare, but they do exist; a capable state always relies on a reasonable number of them. This is not the case with rentiers and financiers in neoliberal capitalism. This is not only because rentiers and financiers lack involvement in the collective task of producing wealth, but also because neoliberal ideology, as well as public choice and rational choice theories, relieves them of such a responsibility. Politicians are defined as people who just make trade-offs between rent-seeking and the desire to be re-elected. Citizens, including rentiers and financiers, are just supposed to defend their own interests, while the law and the institutions will take care of the rest. This is a claim like the "invisible hand", it does not hold in the economy, what to say about the political and cultural domains?

Competent developmental governments will do their best to not only keep inflation right but also keep the other four macroeconomic prices right. They will reject current-account deficits which are associated with the overvaluation of the national currency; they will not see capital inflows as "foreign savings" that will finance capital accumulation; they will control capital flows and will work with a managed rather than with a purely floating exchange-rate regime; they will use state-owned enterprises to invest in infrastructure and in the basic input industries, and they will turn to strategic industrial policies to make companies internationally competitive.

The economies of competent developmental governments will be integrated in the global economy, but the integration will not be a subordinated integration – as the American globalisation project wanted and Latin America adopted from the late 1980s – but a *competitive integration*, like the one practised by the East Asian countries. Differently from Latin America and Africa, the East Asian countries didn't have the Dutch disease, and their only option for developing was to industrialise and to export manufactured goods. Thus, they didn't have to adopt high import tariffs on manufactured goods, and they suffered less from the pressure applied by the US to open up their economies.

In Democratic Managerial Capitalism, the fact that the policy regime will be developmental means the nation-states will be strengthened. When a country is developmental, its policies have a national perspective which may configure a national development project. In Chapter 1, I argued that developmentalism is a superior form of economic coordination of capitalism than economic liberalism, because it generates more growth and with greater financial stability. It is also more able than liberalism to reduce inequality and to protect the environment. This is true on condition that it is *Democratic Managerial Capitalism*.

Why democratic? Phases of democratisation

Liberals insist that economic liberalism is the only form of economic organisation of capitalism consistent with democracy, but this is not true.

What we have is a historical process of *democratisation* – of improvement of the quality of democracy – in which I don't include liberal democracy. From the Democratic Revolution in the turn to the 20th century we had until the World War II we had *elites' democracy* or Schumpeterian democracy. Despite its limitations, this was a victory of the popular classes. In elites' democracy, once elected, the politicians would ignore their electors until the next election, when they would have to consult the electorate again. It was a democracy in which the power of the elected politicians was firmly checked or limited by the liberal ruling class, which used as instruments sensible institutions like the division of powers and the checks and balances, but also authoritarian instruments like to finance – actually, bribe – politicians in the electoral campaigns, and gerrymandering, i.e., manipulate the boundaries of an electoral constituency so as to favor one party or class. These practices remain dominant in the US, although we are in a different and superior phase of democracy in the advanced countries of Europe.

In the 1930s, specialised organisations started routinely polling public opinion and using powerful statistical methods to analyse the results. This soon spread to other countries. George Gallup was the pioneer of public polling. In 1936, he achieved national recognition by correctly predicting, from the replies of only 50,000 respondents, that Franklin D. Roosevelt would win the presidential election. When, with political polls measuring the popularity of politicians, the politicians began to "hear" the people and began directing some of their actions according to the public's political opinion, democracy took a step forward.

I call the second democratisation, the *public-opinion democracy phase*. This change didn't happen without resistance. Before it, in a 1922 book, the liberal journalist Walter Lipman – one of the founders of neoliberalism – made a critique of the role of public opinion in politics. Lipman argued that public polling allowed irrational and often self-interested popular perceptions that led to incorrect political decisions. Public polling improved democracy, albeit modestly, because policymakers had to start considering public opinion when they defined policies.

After World War II, in the framework of the Golden Age, democracy increased once more its quality, and a third phase of democratisation materialised, which I propose to call the *social democracy phase*, which became dominant in Europe. This was the time of the Declaration of Human Rights of the United Nations, the reduction of the role of money in elections, the affirmation of social rights, and the beginning of the protection of the environment.

One country, Switzerland, made a step forward with the radical adoption of referendums, configuring *participative democracy*, while some Northern European countries made another step forward, deepening the affirmation of social rights. I call these two superior outcomes of the modernisation process *republican democracy*. This democracy rejects exacerbated

individualism, claiming that public interest is above private interests. It requires that citizens are active in protecting the public interest, thus making the state and the legal systems strong, because they could rely on the support of the public apparatus *and* the citizens. They could also rely on a reasonable number of politicians to sacrifice their private interests in the name of public interest.

Yet with the Neoliberal Turn, the ruling classes, although they accepted democracy, sought to limit the political power of the people and their representatives. They would prefer a "democracy" in which only the civil liberties were assured, and where universal suffrage did not represent the interests of the people. They were not happy with the increasing participation of the people in the political debate that democratisation encouraged. Thus, conservative democracy, as well as neoliberal democracy, is a political regression that I call liberal democracy. This is a good expression to denominate a democracy which, under neoliberalism, became less representative and less free than it was in the time of social democratic phase. Less free mainly because the people lost control of economic policies to the extent that the respective institutions were technocratically shielded – another form besides the financing of campaigns and gerrymandering to limit the will of the people. For sure, liberals don't use liberal democracy to designate a diminished form of democracy, but, as they don't think in terms of historical social formations, they only identify a-historical forms of democracy and liberal democracy is superior to false democracies as we have in Russia or Hungary. Besides, what I have been calling critically rentier-financier capitalism or neoliberal capitalism in this book, they call "liberal democracy".

Despite the attack it is suffering from neoliberalism and from right-wing national populism, capitalism is becoming more, not less, democratic. I call the transition phase in which we are living Democratic Managerial Capitalism to emphasise its democratic character, which we cannot infer from its managerial or developmental character. Today, both neoliberalism and capitalism are in crisis, but not democracy. Democracy is a universal value and victory of the people, not a victory of capitalists or liberals. In the last 40 years, democracy has proved resilient to all political assaults, to the attacks of neoliberalism and, more recently, of right-wing national populism.

In Chapter 6, I argued that in those countries that are democracies and have completed their Capitalist Revolution, democracy is consolidated. Around that time, the dominant social class had ceased to depend on the use of violence and the direct control of the state to appropriate the economic surplus realised in the market. The fact that of all the countries that originally participated in the Democratic Revolution, 120 remain democratic, and none has surrendered to autocratic politicians. This is good proof of the strength and vigour of the democratic regime.

In each country, the transition to democracy happened when, historically, the state assured its citizens of a minimal level of citizenships' rights, including the right of respect. The popular classes and the socialist parties showed an interest in participating in elections, and they achieved universal suffrage. Each country completed its Capitalist Revolution and became a market economy endowed with a reasonable level of political stability, and, finally, the level of education of the people created the minimal conditions for each country's participation in politics. After these four conditions were satisfied in the individual countries, democracy became the preferred political regime by all social classes, and so democracy became consolidated and was no longer subject to political coups.

Neoliberalism, and more recently right-wing national populism, have hurt democracy, but considering the argument that I summarised in Chapter 4, I am persuaded that democracies in the more advanced countries are consolidated democracies. Their quality may deteriorate, as it happened in the US, but it relies on the support in modern societies. As a political regime, democracy is definitively superior to any "enlightened" authoritarian regime. After World War II, the fall of the imperial–colonial regimes and, 45 years later, the collapse of statism in the Soviet Union, democracy historically became a *universal value*. Since then, in the West, democracy is preferred by the right and the left – except by the extreme right and the extreme left – by the poor and the rich, and by developmental and liberal citizens. Today, if the ruling classes were to choose between authoritarian and democratic rule, they would choose democracy. Dictators are arbitrary rulers; their arbitrium is usually against the poor but can also be used against the rich, and the rich know that.

Democracy is not usually thought of as an ideology, but as a form of government. Nevertheless, to the extent that democracy has become a universal value and a political objective, it is also an ideology. It is a progressive ideology, because it was historically the outcome of popular demand and gave some power to the popular classes and to minority identities that had their social and political rights gradually more strongly affirmed. Neoliberalism was a reaction against such advances, but democracy is today the most important political instrument with which the popular classes and democrats rely on to progress towards the achievement of the final political objectives of modern societies. – individual freedoms; increased standards of living; social justice, and the protection of the environment. To democratic socialists, democracy is also the means for achieving socialism in the long-term.

The Chinese affirm that China is democratic, but it is an authoritarian society. It is not a totalitarian society, because political debate is part of the game, but it is a society that does not assure basic civil liberties or, more broadly, it does not assure the rule of law. Also, the Communist Party is the only political party, which means there is no alternance of political power

in China. China has developed a very efficient economic model – a developmental model – but it has proved unable to become reasonably democratic like the advanced capitalist countries.

Why ecological? Climate change is the main challenge

Capitalism will be ecological; since 1970 we learned that the control of climate change requires that all countries must change their power matrix, protect the rain forests, and dramatically reduction the consumption of meat. This will require high fix investments that most developing countries are unable to make. On the other hand, the poorest countries of the world, in which people don't have a realistic chance of achieving a satisfying standard of living, must make social investments – investments in water and electric power, housing, and cash transfers – to assure a decent life. All this involves international cooperation, in a world where rich countries are always speaking of it but doing little.

Until mid-twentieth century, the protection of nature was not a problem that economists discussed; it was a challenge that humans were just taking its first steps to face it. It was only with the 1972 United Nations Stockholm Conference on the Human Environment that the ecological issue became a major issue. Today, with the threat represented by climate change, the protection of nature has become a condition for the survival of humanity. Survival of humanity but, more concretely, the survival of the very poor and black people. As Raquel Ludermir, manager of Habitat for Humanity, Brazil, says reporting a study of UN Intergovernmental Panel on Climate Change, "For the black persons, poor and peripheral, the impacts of floods, flash floods, and other extreme weather events are up to 15 times more severe than for other population groups." And she offers an example: in the winter of 2022, in the metropolitan region of Recife, torrential rains killed 140 people, and the hardest-hit territories had a majority of black people.⁵

Today a large number of scientists associated with the United Nations Intergovernmental Panel on Climate Change are today, together with a large number of social scientists and engineers, studying the issue and proposing policies. The consequences of climate change are well known: the extinction of animal and plant species; a reduction of biodiversity; changes in the frequency and intensity of rainfall, interfering, for example, with agriculture; a sea-level rise that will submerge low coastal lands and the population living there, and the intensification of meteorological phenomena, such as severe storms, floods, windstorms, heat waves, and prolonged droughts. A hotter planet is becoming a place of extremes. In terms of short-lived events, the worst that the weather can offer is a world hit by tropical hurricanes or typhoons. A single hurricane can do more than 100 billion US dollars in damage, as hurricane Harvey did when it hit Houston, Texas in August 2017, or kill thousands, as Maria did in the following month in Puerto Rico.

Several studies predict that people living according to where they have lived historically will see such areas move beyond those climatic bounds as the world gets warmer. The temperature rises by 2070 would quite plausibly see many areas where people live today develop climates unlike any that people have lived in before. Some econometric analyses based on interannual differences suggest that, in general, higher temperatures lead to lower labour productivity and more violence.

A long-term change refers to the sea level. The sea's rise comes from three different mechanisms: the expansion of the oceans as they absorb more heat; the addition of meltwater from shrinking glaciers on land, and the physical break down of ice sheets such as those in Antarctica and Greenland. The first two factors are currently driving an increase of the sea level of about 1 centimeter every three years and are set to do so at a similar rate well into the 21st century, even if global warming is held well below 2°C. The time that it takes seawater to warm up gives the process a significant inertia. Such rises will erode coasts and increase flooding, especially when they are pushed inland by the surges produced by intense storms.

Nature is a public or common patrimony, and its protection is a *republican right* – the right that all of us have that laws or their absence allow powerful individuals and groups to capture the *res publica* – which the state must assure. Nevertheless, for a long time, the law assured the abuse of nature or was silent about it, and nature depredations were immense. The challenge that we have today is more than just to protect the environment, it is to restore it. We cannot, and should not, privatise nature. For historical and practical reasons, land is private, but the underground, the air, the atmosphere cannot be privatised, and the use of land must be regulated by the state in the interest of the public good.

Human development is a *collective* endeavour associated with happiness. Collective, because there is no individual happiness – happiness is achieved within communities: families, friends, professions, cities, civil society, and nations. Collective, because within the framework of nation-states – the most complex and advanced form of political-territorial society built to date – the common good is called the public interest. Collective, because freedom is not whatever an individual wants, it is the ability to defend the public interest, even when that interest is in relative conflict with our own individual interests.

The reduction of greenhouse gas emissions will require huge investments. Stopping climate change involves large investments. Investments in *renewable energy* are at the top of the list of measures to be adopted: investments in wind and solar energy power, and in biofuels. Second, it is necessary to switch *to* sustainable transport systems. The change to electric cars and buses is under way, although the problem of planes and ships has still to be solved. Third, to build "green" houses which

save energy. Fourth, to change the food we eat, and to encourage diets that cut or drastically reduce the consumption of meat, and, in the end, to become vegan. Fifth, to protect forests like the Amazon against occupation for agriculture and animal farming. Sixth, to restore nature that absorbs more carbon by planting trees in the right places or by giving land back to nature through "rewilding" schemes. Seventh, to protect the oceans against overfishing. Oceans also absorb large amounts of carbon dioxide from the atmosphere, and this helps to keep our climate stable. Eight, to reduce unnecessary consumption. Luxury goods should be taxed, and plastic goods especially.

In November 2012, the UN High-Level Climate Action Champions conducted research, with support from Vivid Economics, on the costs involved. By 2050, 125 trillion US dollars of climate investment will be needed to meet net zero carbon emissions, with investments from now until 2025 needing to triple – compared with the last five years – to put the world on track. These investments are job creator and are nature savers.

How to discourage companies from making investments that use nature? Everybody knows that the best thing to do is to tax such investments, but such taxes are limited because people don't like taxes. And also, because if a country increases its taxes on tradeable goods, other countries must do the same to maintain an even level of taxation. This would require international agreements that are not on the agenda.

The alternative that was recently presented was the creation of carbon markets. Companies are authorised to emit more carbon than the norms of the country allow, on the condition that they buy carbon credits from other companies – a trading carbon credit being equal to one tonne of carbon dioxide, or the equivalent amount of a different greenhouse gas reduced, sequestered or avoided. It is a smart system. Instead of paying taxes, some companies may emit more greenhouse gas than they should, while opening investment opportunities for other companies that are in "surplus". However, the system has drawbacks. As with all markets, carbon markets are legally created and regulated, and they depend on the standards of authorised emissions. Besides, many carbon credits would be produced anyway. Since the 2015 Paris Agreement, progress has been made towards agreeing on the processes and the methodologies that countries need to follow to access the carbon markets, but, according to a report of the United Nations Development Programme (UNDP) Climate Promise, "there are also serious concerns, including issues related to double-counting of GHG emission reductions, human rights abuses, and greenwashing (in which companies falsely market their green credentials, for example, misrepresentations of climate-neutral products or services)."⁷

One alternative that is working very well are subsidies. All countries are subsidising investments in renewable energy – particular wind energy and solar energy – and progress is huge, not only on the production of energy

but also on the technical progress that reduces costs. According to the International Energy Agency (IEA), during the period 2022–2027, renewables are forecast to grow by almost 2,400 GW. This is equal to the entire installed power capacity of China today. That's an 85% acceleration from the previous five years, leading the IEA to revise its forecasts upwards. Renewables are set to account for over 90% of the expansion of global electricity capacity over the next five years. Electricity from wind-powered and solar-powered generation will more than double in the next five years, providing almost 20% of global power generation by 2027, and surpassing the generation of coal-powered energy. In addition, the global biofuel demand will expand by 35,000 million litres per year, or 22%, in the period 2022–2027. The US, Canada, Brazil, Indonesia and India make up 80% of global expansion in biofuel use, as all five countries have comprehensive policy packages that support growth.⁸

In 2021, Raghuram Rajan made the best and most original economic proposal for progress in the fight to control GHG emissions. He argued that it is generally agreed that a carbon tax is the best solution, but it is not viable at the global level due to free riding. If some countries decide to tax GHG emissions while others don't, the competitiveness of those that do will fall. Rajan's proposal to solve this fairness problem was to leave the policies to each country and to create a fair system of financing the required carbonsaving investments. As it is unfair that a country works hard to reduce its emissions while another continues to pump as much oil as possible,

...there is profound inequity in asking a country that emitted just 0.13 tons of carbon dioxide per capita in 2017 to bear the same burden as the US or Saudi Arabia, with their respective per capita emissions of 16 and 17.5 tons.

The solution for the problem is simple: a Global Carbon Incentive (GCI):

Every country that emits more than the global average of around five tons per capita would pay annually into a global incentive fund. The amount calculated by multiplying the excess emissions per capita by the population and the GCI. If the GCI started at \$10 per ton, the US would pay around \$36 billion, and Saudi Arabia would pay \$4.6 billion. Meanwhile, countries below the global per capita average would receive a commensurate pay-out (Uganda, for example, would receive around \$2.1 billion).

Rajan adds:

Low emitters, which are often the poorest countries and the ones most vulnerable to climatic changes they did not cause, would receive a payment with which they could help their people adapt. If the GCI is raised over time, the collective sums paid out would approach the US\$100 billion per year that rich countries promised to poor countries at COP15 in 2009. That would far exceed the meagre sums that have been made available thus far.⁹

He says that the incentive is self-financing. It is not. The higher percapita-emitter countries will pay – and this is the reason why, for the moment, the proposal is not as seriously discussed as it should be.

Giulio Guarini and José Luis Oreiro recently proposed a distinction between a green and a brown manufacturing sector. With this differentiation it would be possible "to integrate the ecological approach into new developmentalism". They understand that in a country that faces the Dutch disease (particularly the oil exporters),

...the reasonable rate of profit for green industries is higher than the reasonable rate of profit for brown industries due to the higher uncertainty perception of investment in green technologies. This liquidity-premium of investment in green industries will demand a more depreciated real exchange rate for the green manufacturing sector to be competitive in international markets.¹⁰

To do this, the government, when acting to neutralise the Dutch disease, would have to consider two industrial equilibriums.

There are many other actions that are part of the fight to protect the environment. In defence of biodiversity, Inger Andersen, director of **United Nations Environment Programme**, declared recently that the "five horsemen of the apocalypse" are climate change; pollution; invasive species; overexploitation of natural resources, and, most important of all, the conversion of forests to agriculture and livestock. The protection of Amazonia and other rainforests is essential to mitigate climate change and to defend biodiversity.

Change in consumer habits, particularly the strong reduction in the consumption of meat, is another change that is relevant and is happening. When some time ago a young man told me that he was becoming vegan, as a contribution to the protection of nature, I thought that this type of individual action was admirable, but would not make a difference, but I have changed my mind, because the number of people who are reducing their consumption of meat is increasing everywhere.

The time to prevent global temperatures from rising by more than 1.5°C above pre-industrial averages is rapidly closing. Decisions being made now will determine whether that target is met or whether the world overshoots it by the middle of this century and has to deal with severe climate extremes before attempting to turn the thermostat back down in the second half of the century. These are the warnings delivered by the Intergovernmental Panel on Climate Change (IPCC) in April 2022. The panel offers a comprehensive menu of possibilities for how humans could stabilise the climate and avoid catastrophic global warming while still fulfilling the commitments made in the 2015 Paris Agreement. The aim of that pact was to keep average global warming between 1.5°C and 2°C above pre-industrial levels.

The attainment of these targets is the greatest challenge that humanity faces today. Efforts are being made, and progress until now has been great, but far from sufficient. Failure will be bad for everyone, but particularly bad for the poor living in the regions more vulnerable to climate change – the coastal areas of all continents and the tropical semi-desert regions of Africa.

It is important to believe that failure will be avoided. Isabella Teixeira, former Minister of the Environment of Brazil (2010–2016), in an interview to Daniela Chiaretti, said that at the time of the Paris Agreement, what existed was climate denialism, and this had been overcome. Now it is necessary to overcome the feeling that there is no way out. The same journalist asked Mary Robson, former president of the UN High Commissioner for Human Rights, if she agreed. She answered:

She is right. There are people who say this problem is too big and that since nothing can be done, it's better to get on with life. We have to encourage people not to do that. I tell everyone that you have to do three steps. The first is to make the climate crisis personal in everyday life and that means recycling more carefully, changing our diet, changing the way we get around. Walking more, cycling more is good for weather anxiety. The second thing is getting mad at whoever has more responsibility and isn't doing what they should. It's governments around the world, cities, local authorities, businesses. The third step is the most important – by 2030 we have to cut emissions in a way that lets nature breathe. We have to imagine greener cities, rural areas with more water, reforestation. And we have to get excited, because only in this way will people be motivated. ¹¹

In the same interview, Mary Robinson repeated what Pope Francis said in a conversation with former UN Secretary-General Ban Ki-Moon, "God forgives everyone. We sometimes forgive others. Nature, never". Faithful to this quote, he pronounced a beautiful encyclical letter *Laudato Si' – On Care for Our Common Home* in which he quoted Saint Francis: "Praise be to you, my Lord, through our Sister, Mother Earth, who sustains and governs us, and who produces various fruit with coloured flowers and herbs", ending with, "This sister now cries out to us because of the harm we have inflicted on her by our irresponsible use and abuse of the goods with which God has endowed her".¹²

³ Milanovic (2019).

¹ Mason (2013: xiv–xv).

² Fisher (2022).

⁴ Milanovic (2019: 251).

⁵ Raquel Ludermir, *Injustiça Climática*, *Carta Capital*, April 10, 2024: 16-17.

⁶ For the concept of "republican rights", see Bresser-Pereira (2002) "Citizenship and the emergence of republican rights".

⁷ UNDP Climate Promise, "What are carbon markets and why are they important?", *Blog Posts*, May 18, 2022.

⁸ IEA, 2022 Report.

- ¹⁰ Guarini and Oreiro (2022: 249) "An ecological view of New Developmentalism: a proposal of integration".
- ¹¹ Chiaretti in Valor (04/10/2021): "At COP 26, climate fatalism must be overcome"; Robinson in Valor (26/10/2021): "We live in a crisis of justice".

⁹ Rajan (2021) "A global incentive to reduce emissions".

¹² Pope Francis (2015: 3) Encycical Letter Laudato Si' - On Care for Our Common Home.