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# CATASTROPHE OR REVOLUTION

Emiliano Brancaccio\* & Marco Veronese Passarella†

## Abstract

*Before and during a debate with one of the authors of this paper, the former chief economist of the IMF Olivier Blanchard argued that a Keynesian “revolution” is needed to avert a future “catastrophe”. We critically examine this statement through an analysis of the historical process that we call “law of reproduction and tendency towards capital centralisation”. This method leads to a grim prediction: freedom of capital and the connected tendency of capital to centralise jeopardise all the other freedoms and even threaten today’s liberal-democratic hegemonic institutions. In the face of this prospect, neither Keynesian policy nor a basic income seem to be enough. The only revolution that may avert a future catastrophe is a redefinition of the most powerful tool in the history of political struggles: a collective planning, subversively regarded as a factor of development of the free social individuality and a new, liberated, human being.*

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## **1. Preface**

A “revolution” of economic policy is necessary to avert a future “catastrophe”. Thus spoke Olivier Blanchard, the former chief economist of the International Monetary Fund, before and during a debate inspired by the “Anti-Blanchard”, a critical book dedicated to his approach (Blanchard and Brancaccio 2019; Blanchard and Summers 2019; Brancaccio and Califano 2018). It is quite unusual to hear such audacious expressions from a world-leading cardinal of the economic orthodoxy. Even more surprising is the fact that Blanchard made his statement before the pandemic crisis. It is then urgent to understand whether Blanchard’s crossroads, “catastrophe or revolution”, was just a quip or was rather a sign of a zeitgeist that is turning from current farce to future tragedy. This is the question that our essay aims to address.

The key objective of this paper is to try to answer this crucial question while remaining as much as possible within a precise perimeter of analysis, which we call the “law of reproduction and tendency”. Inspired by modern versions of the Marxian analysis of capitalism, this new "law" refers to a nexus between the solvency conditions subtended by the reproduction of capital and the tendency for capital to centralize in fewer and fewer hands. These two mechanisms have been the subject of theoretical and empirical studies for several years, with new evidence drawn from the application of advanced statistical and network analysis techniques (Brancaccio and Fontana 2013, 2016; Brancaccio and Suppa 2018; Brancaccio et al. 2018, 2019,

2020; on a related subject, see also Baron and Veronese Passarella 2015). These studies suggest that the connection between reproduction and tendency can have a general heuristic significance: since it is located in the capitalist economic base, its different configurations seem to interact with all levels of the social relationship of production, up to the political and cultural level. On the basis of these general characteristics of the "law", we shall try to verify whether Blanchard's crossroads is only an ill-timed suggestion or a timely call. In a sense, by extending the Althusserian principle, our fundamental thesis can be summarized in these terms: it is only possible to raise and answer the question on "catastrophe or revolution" from the viewpoint of reproduction and tendency, particularly the tendency towards the centralisation of capital.

## **2. Physiognomy of a catastrophe**

The etymon of "catastrophe" is "overturning", "reversing", but also, from the Greek tragedy, "unravelling a drama's plot". Taking cue from Jan Kott (1961), it can be translated as an "act of resolution", which solves a systemic contradiction. This etymology also seems suitable for Blanchard's mention of possible "future catastrophes" (Blanchard and Brancaccio 2019) that, laconic though it is, clearly refers to both economic and political upheavals, which are mainly driven by the worsening of social inequalities. Whether or not this is the time for such a catastrophe is the subject of our analysis.

It would not be useful to add another *narrative* answer to the question above: we will keep ourselves from sailing the *mare magnum* of the futurological novels, including both the Panglossian world of Steven Pinker and the Cassandraian Millennium Project. Rather, the question will be addressed within a well-defined observation perimeter: we name it *law of reproduction and tendency*, meaning the tendency towards the centralisation of capital. In the contemporary literature, there are just a few tentative contributions in this crucial research field. As far as we are concerned, the most celebrated analysis that has got quite close to it is Thomas Piketty's work (Piketty 2014). One can certainly question the presentation of data, the historical rendition of critical thinking in economics, and the theoretical framework, which remains halfway between the traditional neoclassical view and a quite confused approach. However, Piketty's work has an undeniable merit: it attempts at deriving a law of tendency from a relationship of capital reproduction. The latter is named by Piketty "the fundamental inequality", and it is formalised as the difference between the rate of return on capital and the growth rate of income. Piketty's thesis is that the twenty-first century will be characterised by a return rate on capital systematically higher than the growth rate of income. As a result, under certain circumstances, the capital stock will outgrow income. This will entail a continuous increase in inherited wealth compared with income flows over a lifespan. If the reproduction of the system needs the return on capital to be higher than the income growth rate, this brings about an incessant tendency for the inequality between the wealthy and wage

earners to increase. A flourishing century is announced, for modern rentiers and their pupils.

The founding father of the neoclassical theory of growth, and Nobel laureate in economics, Robert Solow, named it the “rich-get-richer” effect. He claimed that nobody had conceived it before Piketty (Solow 2014). This is not quite true, but there is a more relevant point that is worth stressing here. The attempt made by Piketty to frame his secular thesis in a traditional, neoclassical-like, model is inconsistent. A continuous growth of the capital to income ratio, hence a growing share of product going to the inheritors, do not quite fit with the “natural equilibria” implied by the neoclassical models, be they stationary, non-stationary or secular. This conclusion is also independent of the exogenous or endogenous nature of economic growth. Consequently, the tendency identified by Piketty seems self-contradictory, even if one sets aside the logical inconsistencies and empirical rejections of the neoclassical approach. Although Piketty may find it disturbing, his insight can only be developed elsewhere. The appropriate framework, in this regard, seems to be precisely the “law of reproduction and tendency” whose roots are planted in an alternative research program based on the Marxian analysis of capitalism and its contemporary interpretations.

This alternative theoretical framework shows us something new. The Pikettian “fundamental inequality” conceals an additional, deeper, aspect. If we split the average return rate on capital into two components, notably the average profit rate and the average interest rate on loans, we can see that inside the law of reproduction

represented by the “fundamental inequality” there is also a “solvency condition” of the system. It is no coincidence that this general condition is linked with the general order of economic policy, which elsewhere we have defined as the *solvency rule* of the central banker (Brancaccio and Fontana 2013; Brancaccio and Suppa 2018; Brancaccio et al. 2020). Under certain conditions, it is possible to show that the higher the average return rate on capital compared with the average income growth rate, the higher the average interest rate with respect to the average profit rate, hence the stricter the solvency condition. In other words, if income growth is relatively low, there is a risk that it will be insufficient even to pay interest on loans. Therefore, it will become harder and harder to fulfil debt obligations. This will lead to a rise in insolvencies and bankruptcies of capitals that are relatively more fragile and exposed to risks, thus fostering hostile takeovers, mergers and acquisitions conducted by the strongest capitals. In Marx’s words, “one capitalist always strikes down many others”. This is exactly the Marxian process of “centralisation of capital” in fewer and fewer hands, which leads to “the ruin of many small capitalists, whose capitals partly pass into the hands of their conquerors, and partly vanish completely” (Marx 1867, pp. 929, 777). Although for a long time it was only theorized, this tendency towards capital centralisation finds today new support in unprecedented empirical evidence. Elsewhere we have shown that this Marxian concept of centralization of capital, although multifaceted, finds its more general analytical expression in the so-called “net control”, which measures the percentage of shareholders holding a prevailing share - usually 80% - of the capital stock listed on the stock exchanges, at

the level of individual nations, groups of nations or even worldwide. By adopting this measure and making use of new network analysis techniques, we have provided the first empirical evidence of a global trend towards centralization: eighty percent of the equity capital listed on the world's stock exchanges is controlled by less than two percent of total shareholders, and this small percentage of big capitalists tends to decrease over time, especially at the turn of the economic crises (Brancaccio et al. 2018, 2019, 2020; on this point, see also some recent IMF evidence: Georgieva et al. 2021; Akcigit et al. 2021).

The link between reproduction, solvency and centralization is a more pervasive and, arguably, more insidious phenomenon compared with the simple “rich-get-richer” tendency. Unlike the latter, the former only needs to control the relative majority stakes of the capital and does not necessarily have to go through a formal transfer of ownership. Although it is still an uneven phenomenon with national and geopolitical differences, data show that capital centralization has no limits or borders, having the potential to be spread worldwide. Consequently, one can derive a twofold tendency from the system of reproduction: not only does capital outgrow income, as argued by Piketty, but it also tends to centralise in fewer and fewer hands. Like in Bruegel’s allegory, big fish eat little fish.

The essential features of the law of reproduction and tendency have been outlined. So, are we in the presence of a big Shakespearian mechanism, as threatening as it is unavoidable? Or are there counter-tendencies? We have observed elsewhere that capital centralisation can trigger a reaction. The smallest capitals, facing bankruptcy



and hostile takeover risks, can try to compel the central banker and policy-makers to opt for a policy stance that can possibly soften the solvency conditions, thus challenging the tendency towards centralisation. A struggle arises within the capitalist class, between the attacking big and the withstanding small. This fight may well give rise to a counter-tendency having crucial implications in the short term, and even an historical relevance. However, the available empirical evidence raises doubts as to whether such a reaction could overturn the underlying tendency towards centralisation. There is still no theory of economic policy that can explain this fact. However, it seems that the very growth in the capital to income ratio could possibly be connected with the ability of the centralisation process to overcome its counter-tendencies.

The points made above are enough to raise the most pressing question for us: is the tendency for the capital stock to outgrow income and centralise the proof of a tendency for the system to lean towards “catastrophe”? Although this is still an unexplored field of investigation, we can preliminarily give an affirmative answer, in a sense that transcends mere economic analysis and concerns the social and political dimensions of the mode of production. In short, the point is that the growth of capital with respect to income and the centralisation of its control are tendencies that bring about a progressive concentration of economic power, which in turn creates the premises for a concentration of political power. As Blanchard and Piketty themselves briefly point out, this capital dynamics not only affects the economic setting, but can have also a major impact on the political and institutional frame, and

more generally on the current system of rights. In other words, capitalist centralisation undermines democracy and freedom, even in a mere liberal-democratic meaning. In fact, under certain circumstances, the above tendency may well threaten the foundations of liberal-democracy (on this point, see also the debate between Acemoglu and Brancaccio 2021). If this was the case, the old but long-standing Kojevian belief that global liberal-democratic capitalism was the wonderful final stage of the whole of human history would be proved wrong.

The dominant ideology and its related economic theory lead us to look at capitalism through a crystallised lens of its glorious inception, where the rising bourgeoisie was committed to overthrowing the *ancient regime* and its aristocratic privileges. In that very short moment in History, the defeat of the feudal rentier inflicted by the capitalist entrepreneur really represents a general progress, economically, socially and politically. The conquest of power by capitalists is objectively a step forward in liberal and democratic development, for quite obvious material reasons: the mode of production embodied in the bourgeoisie not only boosts growth in social wealth, but distributes it more evenly within the society, for the simple reason that there are more capitalists than landowners. This is the reason that early capitalism is associated with an increasing political participation and a primordial expansion of human rights. However, the objective movement that we are analysing shows that this early phase is surpassed with the development of capital. The current regime of centralisation comes to resemble more and more the old feudalism than the shining capitalism of the Nineteenth century.

Should the law of the tendency towards the centralisation of capital be confirmed by future analyses, one of the main implications would be that it might imply an “authoritarian neoliberalism” as the way out (see, for instance, Bruff 2014). The physiognomy of a catastrophe begins to take shape.

### **3. Tendency, reaction, conflict**

The original meaning of “revolution” is associated with “turning upside-down”, “winding back”. It must have been some kind of retrospection that induced Olivier Blanchard and Larry Summers to invoke a “revolution” in economic policy to prevent future catastrophes (Blanchard and Summers 2019). In their view, revolution means no more than a simple recovery of the old Keynesian legacy: highly expansionary monetary and fiscal policies, and even capital controls and measures of financial repression, possibly coupled with some extension of the welfare state in the form of a basic income (which, beyond rhetoric, has always been nothing more than a liberal-democratic variant of Keynesianism).

Although Joan Robinson would regard it as “bastard”, such a heartfelt Keynesianism at the pinnacle of mainstream thought had not been seen for years and should be welcomed as a relevant novelty. However, it does not seem quite practicable. We have argued elsewhere that this reference to Keynes, however influential, could be in vain (Blanchard and Brancaccio 2019). Although seldom historiography sheds light on this aspect, the Keynesian political synthesis was forged in the middle of a harsh, gigantic, epochal conflict, between capitalism and

Soviet socialism. There is some reason to suppose that this dialectical origin has general validity: today, as then, a Keynesian synthesis could only arise from a socialist threat. Is there such a threat today? Is there a clash between alternative systems comparable with the 1930s? Although there is no reason to share Ronald Coase's extreme view – which holds that China has become now a pure capitalist economy (Coase and Wang 2016) – it seems difficult to trace anything in the world that could resemble a challenge similar to that of the twentieth century. Therefore, it is unclear how the dialectic necessary to conceive a new “Keynesian” revolution could come into play.

And yet a Keynesian policy could materialise in a different way: *not revolutionary, but reactionary*. This would happen if it were used at the exclusive service of the weakest and most fragile capitals, for the sole purpose of keeping them from going bankrupt, thus slowing down the centralisation in the hands of the strongest. This is a real possibility. Contrary to what Blanchard, Summers, and the neoclassical tradition in general argued, the “fundamental inequality” between the return rate on capital and the income growth rate is not the result of a “natural equilibrium”, but it is rather the outcome of macroeconomic decisions. Notice that a Keynesian policy influences the very crucial component of the fundamental inequality, that is, the difference between the average interest rate on loans and the income growth rate. As we said before, this is the solvency condition, which is linked with the solvency rule of the central banker. By steering the policy rate in such a way to keep the actual interest rate below the growth rate, the Keynesian policy-maker loosens the solvency

conditions of the system and reduces bankruptcies, thus putting a brake on mergers and acquisitions conducted by the stronger capitals against the weaker capitals (Brancaccio and Fontana 2016). It is like a kind of *helicopter money for the petty bourgeoisie*, rather than *the people* – which also was marked by the populist limitation of being neutral in terms of distribution effects, in the meaning of Patinkin (1965).

For the above reasons, this line can hardly outdo the mechanism of centralisation of capital in the long run. However, the “Keynesian reaction” can certainly trigger counter-tendencies to Marxian centralisation. Counter-tendencies are likely to be weak, meaning that they only slow down the tendency thanks to a compromise between different factions of capital. However, they can also be so violent and pervasive as to transform the economic struggle between capitals into a political conflict across nations. This upgrade can occur, once again, for material reasons: on the one hand, the more solvent, bigger and increasingly globalised capitals; on the other hand, the smaller, distressed, capitals, which mainly operate within domestic borders and identify themselves with the nation, possibly resurrecting a revanchist policy. The latter is potentially xenophobic and fascist, although still neoliberal in its own way. In this Keynesian recoil, the reaction takes on a nationalist nature, or at least it can put capital’s centralisation tendency in a geopolitical cage.

This phenomenology seems evident to us also in the structuring of the political struggle of these years. After all, between the great recession of 2008 and the pandemic crisis of 2020, in the West and in a large part of the world, the quarrel between political forces saw essentially two types of representatives of capital

opposing each other. On the one hand, there were the parties sometimes defined as “establishment”, which mainly represent the interests of the big capital with strong international ramifications, and therefore characterized by a strong vocation to free trade and ultimately to capitalist centralization. On the other hand, there were the forces that are generically defined “populists”. The latter have been the recipient of various forms of dissent. However, they have ultimately represented the interests of the small and medium bourgeoisie, generally locked up in the economic perimeter of the national market, often in trouble and marked by solvency problems, and eager to launch a national and Keynesian reaction against the Marxian centralization in progress. In short, from the law of reproduction and tendency we can also draw a thesis on the structuring of the political contest of recent years: in a struggle that takes place almost entirely within the capitalist class, *Keynes can be moved against Marx*.

#### **4. Ecology, technology and dystopia**

The fact that, in the current historical phase, class struggle is only the prerogative of the dominant class has additional consequences. One of the most important implications is that every dispute is shaped by the ideological apparatus based upon the codes of that political struggle alone.

The case of climate change is emblematic. The Nobel laureate William Nordhaus has claimed that the costs of ecological transition should be mainly beared by future generations, as they will be wealthier than current generations thanks to economic growth (Nordhaus 1991). The environmental movements have questioned this

conclusion, arguing that the current generation should take charge of it, averting irreparable damages to future ones. Let us examine this controversy from the viewpoint of the law of reproduction and tendency of capital. Unlike the neoclassical model used by Nordhaus, the alternative framework recognises the undetermined nature of both future economic growth and potential damages caused by an ecological crisis. In this sense, it proves that the environmentalists are right: we must opt for a precautionary principle that leads the current generation to take responsibility, here and now, for the costs of the ecological transition. However, the law of reproduction and tendency shed light on another aspect: none of the contenders in the dispute above mentions the inherent class division within the social relations of production. As it happens also for other disputes, including those on government debt and social security, the majority of contenders only focus on the general generational conflict. Class struggle seems to be completely neglected by mainstream ecologists. Yet the conflict over climate change is inherently linked with the conflict between social classes. In this regard, the reproduction and tendency framework shows that ecological crises affect relative prices in a way that mainly affect the lower class. Besides, this framework highlights that the prevalent effects of climate change are not captured by capitalist prices: this is what the economists would name a general “externality”, that is, a phenomenon that goes beyond the ability of rational calculation within the capitalist mode of production. The capitalist monopoly of politics prevents one from visualising these issues. As has been argued,

today it is even possible to conceive the end of life, but not the end of capitalism. Be it utopian or dystopian, the collective image is historically determined too.

Another major implication of the monopolist power of political struggle is that the development of science and technology acquires a univocal social connotation. It should be stressed that technical-scientific innovation is never an exogenous variable of the system. The innovative process does not fall from the sky, but it is part of the social mechanism. Arguably, innovation is the core of social reproduction, which most clearly expresses the state of productive forces and power relations in the society. The organisation of technical-scientific production is primarily the organisation of the economic power of science. The fiercest political fights are about this power. However, since these fights are only fought by capitalist agents, technical-scientific production, particularly the production of innovation, are placed at the exclusive service of the reproduction of capital and its return. This explains the incessant movement towards privatisation of technical-scientific knowledge by means of patents, intellectual property rights and confidentiality agreements. This work has not even been stopped by a general threat of death, such as with Coronavirus-19. Several commentators call for this privatistic logic to be put aside to pool knowledge, share it internationally, and coordinate research groups to accelerate research on Covid-19 (Stiglitz, Jayadev, and Prabhala 2020; Brancaccio and Pagano 2020; for a more general view, see Pagano 2014). However, under the current state of social relations of production, a *scientific communism in the fight against the virus* sounds like nothing more than a rational voice in the desert.



In his titanic undertaking, Prometheus is not a lone hero, but a piece of the machine, that is, a science worker. Like other workers, he is ultimately at the service of capital reproduction and its underlying relations. This is also the reason that the law of reproduction and tendency of capital gives rise to a movement that no trajectory of technical development alone can overturn. Under certain circumstances, technical change can even magnify these tendencies of capital, as in a kind of *accelerationist dystopia*.

## **5. Speculation and capital freedom**

Historically, the above tendencies have dominated the development of the capitalist mode of production, with the notable exception of the so-called “short century”. These tendencies, which were held back by the First World War and the concomitant rise of Bolshevism, regained momentum with the beginning of the crisis of the Soviet Union and the inception of the political phase that is sometimes named the “neoliberal counterrevolution”. The primacy of a specific form of freedom is reaffirmed in this era: the freedom of the owners of capital to move their financial assets and speculate on markets without any legal obstacles. The ideological apparatus that was associated with that change was based on a simple idea: the efficiency of the free market, particularly the financial market, brings peace and prosperity. This is still the dominant view, although it is not supported by evidence. In fact, when market forces are free to work, the system is continually subject to speculative movements: that is to say, the agents of capital instinctively aim at gaining

from the differences between the purchase price and sale price of goods, from the related securities, from differences in techniques and even from climate change. In short, they speculate on every object of transaction.

As Shiller and other advocates of the dominant economic doctrine now recognise, this speculative impulse is by no means a symptom of system efficiency (Shiller 2000; see also Brancaccio and Monti 2020). In fact, it is strongly associated with the euphoria-depression cycle, the systematic under-employment of the means of production, adverse selection in the technical-scientific process, and the chaotic phenomenon sometimes named “market disorganisation”. This disorganisation arises, among other things, in the sifting of the future: what contributes to the private accumulation of capital is the only thing that matters, whereas what concerns the collective future, such as interventions to prevent systemic disasters, is almost completely neglected.

As Marx was well aware of, the speculative impulse is not a mere heritage of the old economy, prior to primitive accumulation, but an inner feature of developed capitalism. It can be demonstrated that the speculation movement even underpins the law of reproduction and tendency (e.g. Brancaccio and Buonaguidi 2019; Algieri, Brancaccio, and Bonaguidi 2020). This evidence has a relevant implication for our argument. If the freedom of capital gives rise to speculation, and if speculation is a key component of the mechanism that fosters both the growth of capital relative to income, and the centralisation of its control, we can assert that the freedom of capital does not just disseminate systemic inefficiency, but is in itself a potential threat for

liberal democracy. We could state that *the financial freedom of capital's agents tends to smother other freedoms*, and hence other rights. Historically, there is no shortage of experiments of neoliberal fascism. As a result, there is reason to believe that it could spread again in future. There is some irony in this great muddle.

## **6. Polarisation and standardisation**

Like the von Neumann's model, Sraffa's price equations and Leontief's input-output tables, the law of reproduction and tendency is a mere framework, confined to the economic structure of the system. However, unlike its predecessors, this novel logical framework also aims at dealing with the movements of the political superstructure and its interactions with the economic process. This aim is only seemingly unattainable, as not even a single step can be taken on the "continent of History" if one forgoes nurturing it. So let us summarise our thesis, in a simple and clear way. The tendency of capital to outgrow income and the tendency towards the centralisation of capital control in fewer and fewer hands do not seem compatible with preserving democracy, freedom and peace, at least as we understand them today. The deep movement of the system in itself poses a threat for the survival of the institutions that today's liberal democracies are based upon. As long as the political struggle is almost entirely within the capitalist class, that movement does not seem to allow for alternative outcomes: if everything is reduced to a game between capital groups, the outlined scheme is self-contained. Consequently, an old but not obsolete heresy finds further support: the rationality of free individual

capitalist agents blindly leads towards a catastrophic and illiberal rationality of the system. Using analytical tools that are slightly more general than the usual Nash's non-cooperative equilibria, *a new revenge is taken against Adam Smith's "invisible hand"*.

The Blanchardian bifurcation which we started from, seem to be both confirmed and rejected: the capitalist mode of production has an inner mechanism that actually leads to "catastrophe", but the same mechanism tends to give a reactionary rather than a "revolutionary" spin on the Keynesian turn. The sound of inevitability seems to echo persistently in this frightful conclusion. However, we do not want to celebrate any negative philosophy of history. Similarly, we do not evoke a "random" totality where everything is suddenly possible, perhaps by virtue of an unconscious and hopeful action. The epistemological constraint we want to highlight is that everything should eventually result from the scheme: as the path towards catastrophe is an outcome of the law of reproduction and tendency, the same should go for its possible subversions.

In this sense, a hint comes from the observation that all the predictions that have been derived from the analysis above are based on an assumption: that every struggle had been developed within the dominant class, that is, between the agents of capital only. It is assumed that the working class remains politically silent, therefore reduced to a residual variable in the economic scheme. This residual nature of the subordinates also increases the chances of a peaceful resolution of the conflicts between large and small capitals, perhaps under the banner of a centralisation that slows down but does not stop. Although this is an accurate outline of the current

historical phase, is it necessarily true for the future as well? The law of reproduction and tendency can help answer the above question too. As we shall see, the mechanisms underlying the law induce two other dynamics, towards class polarization and standardization. If examined in a nontrivially deterministic way, these two further movements of the system may allow us to take another small step towards the horizon of the possibilities that are coming.

The first point is that the movement towards a growth of the capital to income ratio, and towards the centralisation of capital in fewer and fewer hands, is destructive for the middle class. Small capitalists, intellectuals, petit bourgeois, professionals, managers, civil servants and rentiers, are being eroded. Only a few of them are pushed to the upper end of the social scale, whereas the others are pushed downwards, thus swelling the ranks of the lower class (OECD 2019). Like the centralisation that produces it, this movement can stop and even temporarily reverse, but, logically, it is the dominant tendency in the medium to long run. The historical evidence supports this. Bernstein's followers may not like this, but the law of reproduction and tendency towards the centralisation of capital seems also to induce an unprecedented tendency towards *class polarisation*.

Finally, class polarisation also fuels a standardisation of the conditions of the lower class. This dynamics levels out cross-country conditions of life and work, usually through a downward convergence. This trend is clearly visible in the data: for about thirty years, there has been a fall in the variance, not only of the wage shares, but also of unionization rates, striker days, and labour protection indices, across OECD

countries. It is as if a "great law of one price" operated at all levels of the system, thereby producing a downward convergence of the institutional superstructures themselves. However, on closer inspection, standardisation means even more than this. The point is that as capitalist centralisation tends to concentrate the power of exploitation in fewer and fewer hands, it also seems to level out differences between the exploited. Whether they are natives or immigrants, women, men or transgender, as capital develops, it seems to treat these individuals in an increasingly undifferentiated way. We do not want to simplify things here and hastily evoke a sort of universalization of work. The critical literature on discrimination based on race, gender and sexual orientation teaches that such divisions are inherent in the very logic of the movement of capital. At the same time, however, both studies on wage differentials and analyses on participation in work, seems to show a contrasting trend towards standardization. In our view, this alternative trend should be considered among the factors that are undermining the old institutions, disintegrating the ancient family ties based on the subjection of women to men, and loosening the national borders that divided the domestic labour-force from the foreign one. This movement inevitably creates more of a problem for the ancient social balances based on gender and race discrimination. It also undermines family institutions and social conventions defining emotional and sexual ties: in other words, whether the labour-force is straight or LGBTQIAPK could make no difference to the capital. However, that very movement, at the same time, is driven by a pure logic of purchasing an undifferentiated labour-force to intensify exploitation. As a result, whatever the

gender, sexual orientation, nationality, and ethnicity, capital seems to make us equal over time, and this is its progressive and universalistic aspect. Yet it makes us equal in terms of exploitation too, and this is its regressive and divisive aspect. Class standardisation is also a contradictory movement, like everything in capital.

## **7. A new human capital**

There is a last movement that the law of reproduction and tendency puts into effect, and that Marx and some of his followers knew well the importance of. It is the fact that the law of capital implies a progressive absorption of labour-force in the accumulation process. As capital accumulates and centralises, more labour is being extracted and bound to the global capitalist machine. Legs, arms and synapses from the most remote places on Earth are led, through long wires, by boards of directors that are located in the most central and branched hubs of the system. This is dominated by an impersonal law of movement.

As it is brought into the system, the labour-force turns into a gear, that is, an indistinguishable part of the machine, the working class. Notice that this transformation happens for the simplest tasks as well as for the most sophisticated ones. As a result, it spreads from a narrowly defined productive activity to everything, whether it is about consuming, establishing social and personal relationships, playing, being lost in thought, feeling pain or satisfying a wish. In this sense, “being bound to the machine” is a general expression that becomes a metaphor for the whole world: it is no longer about the industrial worker or the

patient in intensive care only, but it concerns anyone, anywhere and anytime. Whether they are in the factory or in the bedroom, whether they are engaged in thoughts, words, works, omissions, or sensations, they are constantly “bound to the machine”. Thus, productivity, sexuality, affectivity, everything in life becomes technical. Bio-political theorists in some way have foreseen this destiny of capitalist colonisation of life. However, their epistemology has prevented them from inferring a precise “law of tendency” and the related implications (on the relationship between tendency and bio-politics, see Negri 2012; see also Di Pierro 2018). The essential point here is that the Marxian thesis that human history is nothing but a continuous transformation of human nature means that the law of reproduction and tendency of capital is also the law of reproduction and tendency of a *new capitalistic human type*. In fact, we can even name it *a new human capital*. In this way, we can free this expression from the aporetic and childish neoclassical conceptualisations of Becker (1964) and his followers and can suggest a capitalist “human” evolution which is also in striking contrast with the theoretical humanism of “late Neoclassical economics” (Madra 2017). This tendential reproduction, continuously modified, of a new human type, is far more persistent and pervasive than Mussolini’s virile new man and the Soviet altruistic new humanity. It is a new human capital.

## **8. Which revolution**

The analytical framework that we have outlined has reached its extreme limit of application. It is no coincidence that this happens where the human is embedded



into the term “class”, where even the most fruitful manuscripts, as is well known, are interrupted. However, a few questions remain, which cannot be avoided. In short: the tendency of capital to centralise seems to imply a movement towards class polarisation and standardisation, as well as towards the accumulation of new human capital. However, are these trends enough to foresee a development of the political struggle beyond the boundary of the dominant social group? Besides, can this dynamics restore the Blanchardian nod to a “revolution” capable of averting the “catastrophe”?

There is something in the above questions that makes them particularly difficult. In the first place, they pose a problem of the speed of the various processes involved. Assuming that the trends we have evoked find continuous confirmation in the facts, it is risky to foresee that the respective rates of variation will also converge towards a single common path of the historical process. For example, predicting whether the reactions against capitalist centralization are more or less effective brakes compared to reactions against class standardisation, is such a complex exercise that it is likely to be beyond the possibilities of the most refined methods of forecasting. Above all and beyond the problems of mere prediction, the aforementioned questions seem to involve something that works “from outside”, as Lenin would say, that is, beyond the scheme that describes the law of reproduction and tendency. Defining it as “subjective”, would give rise to a plethora of misunderstandings. A better term is “collective intellect”: a material thing, which we need to outline the genesis of. From now on, the forest of the “history continent” becomes even denser, almost

inscrutable using the means employed up to now. Academic practice would suggest stopping the discussion here, inside the scientific walls of the law of movement. However, the very catastrophic progress of it does not allow us to stop. Based on our method, there is still a step that we should take into the hinterland of the new world.

Let us summarise the intricate links of the law of reproduction and the tendency towards centralisation: speculation and market disorganisation; accelerationist dystopia;; formation of new human capital; and even a possible movement towards class polarization and standardisation; at the same time, a growing freedom of capital that threatens other freedoms and liberal-democracy itself. The great mechanism is therefore fully deployed. Undeniably, some of its gears still seem fragile, as they are only inferred from a sort of economic application of the “semiotic paradigm” (Ginzburg 1979). However, they are all still bound to the driving shaft of the law of reproduction and tendency to capital centralisation, which, in contrast, has a precise logic of movement. As we have argued, this movement tends to form an all-encompassing structure that allows neither exodus nor hermitage, and, above all, it is almost insensitive to course corrections. In fact, it seems to attract, engulf and shape things that are seemingly unrelated to it. This is especially true for political things. In the great mechanism, the Keynesian “revolution” is reduced to a mere middle-class “reaction”, and so are its extensions, meaning the universal basic income and helicopter money for people. Even an enlightened technological

accelerationism (Williams and Srnicek 2013) turns into a dystopian engine. Arguably, the same goes for any manifesto for a “progressive capitalism” (Stiglitz 2019).

The law of movement towards the “catastrophe” is so pervasive that the only “revolution” capable of averting it can possibly be made by virtue of an exceptional movement, an unprecedented move. What move can it be? A seductive metaphor is the *jamara* practice of “scientific” judo: adapting to the adverse force, exploiting it to bend it forward, until it is overturned and controlled. It is an elegant gesture, of undoubted charm. Yet, what can its counterpart be in the harsh practice of politics? Well, we think that it can only be identified by patiently developing a new collective intellect, for a new purpose. The main target of this rising common *intelligere* should be to teach the new generation to grasp the arcane of the law of movement of capital, and to discover that there are enormous inner contradictions within its powerful gears. We discuss below what these contradictions are.

Centralisation, along with the reproduction of new human capital and the possibility of class polarisation and standardisation, have a twofold implication. On the one hand, they bring us closer to the catastrophic, concentrationary and illiberal scenario described above. On the other hand, they seem to undermine the heterogeneities across subordinates, thus creating unprecedented political opportunities. As capital accumulates in the hands of a smaller and smaller handful of capitalists, their power becomes concentrated, and as the catastrophe of liberal democracy approaches, it might become increasingly difficult to split the interests of the lower classes. As a result, the ancient Macedonian exercise of dividing and ruling could be more and

more burdensome. In an impersonal heterogony of ends, the fragility of the political monopoly of centralised capital raises as its power grows. The closer the catastrophe, the closer is the opportunity for change.

A hard lesson is taught us by this new collective *intelligere*, which can only be such if it is avant-gardist, and therefore against every “tailism”. If one looks at the world in the terms outlined so far, one understands that a collective intellect can find favourable conditions for overthrowing the dominant production relationship only within the social transformations brought about by the objective movement of capital. It therefore becomes clear that the contagious, continuous, pampering of the so-called middle-class is inexorably a “tailist” policy towards small capitals and their political representatives. This policy is as widespread as it is unsuccessful. It leads to indulgence of any possible petty-bourgeois “reaction” and its bigoted, familist and ultra-nationalist suggestions, imbued with the illusions of interclass populism, which follows from the basic contradictions of the system. In short, the middle class is past that endures. We can possibly interact politically with them, but only if we are aware of this temporal location. For only polarisation, class standardisation and the development of a new human capital create tangible conditions for change.

However, an opposite “tailism” must be averted as well. It is the even more widespread temptation to follow in the footsteps of large capitals and their political representatives. We refer to the passive political view that stems from the second-internationalist, Hilferdingian, illusion that the objective movement of capital leads to overthrowing the dominant social relationship (Hilferding 1910). That is not the

case at all. To outdo the immense forces of the law of movement, the class *intelligere* needs to gather, think and act based on a key, a motto, a flag for the hegemony. The same law described above leads us to believe that this key is the *modernity of collective planning*. All the creativity of the collective movement, all the physical and intellectual strength of militancy, must gather around this extraordinarily fruitful concept. All the initiatives must therefore be logically rethought within the plan's logical framework. Even the most well-intentioned and enlightened proposals – which we ourselves have supported – can no longer be accepted uncritically: we refer to anti-austerity policies (Brancaccio and De Cristofaro 2020), employment protections (Brancaccio, De Cristofaro, and Giammetti, 2020), capital controls and other interventions on the balance of payments and related international relations based on certain “social standards” (Brancaccio, Califano, and De Cristofaro 2021). Symmetrically, the fight for a fair income no longer necessarily reduces to a small reform proposal. In fact, every initiative takes on a revolutionary or reactionary nature depending on whether or not they are intended as blocks of the collective plan.

Collective planning is the strongest lever ever conceived in the history of political struggle. It is the only option that can possibly outdo the law of movement of capital, before it drags us into the catastrophe. Yet, how can this economic policy weapon be defined as a “modern” one? How can it be freed from the mainstream historiography of the Twentieth century? How do we cleanse it of the tears and blood of the past? There is an intellectually clear way, which must be practiced. We

must develop a synthesis between collective planning and a concept that is only seemingly antagonistic: individual freedom. The idea of the absolute impracticability of such a matching is the litany of our time, a constant of political communication, even in the absence of an actual threat, as if the spectre of the plan continually disturbed the sleep of capital's scribblers. Today's ideological apparatuses keep holding that economic planning, regarded as a synonym of authoritarianism, would also be an inherent destructive factor of individual freedoms, which would only be protected within the capitalist organisation of society. Actually, things are different. We have already rejected the equation that capitalism equals rights when discussing neoliberal fascism. Both the violent capitalist dictatorships of the past as well as its future prospect outlined by the law of movement suggest that the freedom of capital is a potential threat to all other freedoms and democratic liberalism itself. On closer inspection, even the idea of the plan as a synonym of authoritarian oppression is fallacious. In historical terms, suffice it to recall an obvious fact: the history of economic planning goes far beyond the Soviet shipwreck. It even concerned an ideological temple of the free market like the United States (Leontief 1974). But above all, in perspective terms, we should return to the crucial lesson of historical materialism, which reminds us that scientific and technical development continually delineates new frontiers of the relationship between material constraints and political possibilities. Techno-scientific innovation, that is, not only makes collective planning of complex contemporary economies feasible, but also reveals unprecedented possibilities regarding the propulsive potential of freedom in a collective plan

context. Ultimately, the deep logic of the relationship between economic planning and freedom is still to be fully explored (on this point, see also De Carolis 2021). This is the main effort of "radical imagination and scientific method" that we should make today (Laibman 2012).

We shall not recall the long thread of Marx and his followers on these issues and, more generally, on "communist freedom" (see, among others: Della Volpe 1946; NLR 1970). What we need here, is just to remember a fundamental point. For Marx, collective control of the totality of productive forces is a condition for the development of the totality of individual capacities. In other words, the free expression of individuality is only made possible by the repression of the financial freedom of capital and the communist planning of technology. It is worth stressing that this free expression of the totality of individual capacities concerns the totality of actions, sensory perceptions, imagination and creativity in every human activity. It does not only recall the productive power of labour or the limitless possibilities of consumption. It also involves the development of pedagogy, games, care, sexuality, affection, that is, what Engels and Kollontaj would define as the social production of love. Foreseeing the most recent developments in social neurosciences, Marx asserts that the five senses and human sensitivity are constrained by private ownership, for the former expand as the latter shrink. That is to say, when centralised capital is socialised within a collective plan, the relationship between history and human nature changes too. The extreme limit of the law of reproduction of the capitalist human type is reached. As a result, the conditions are created for the social

production of a new humanity, which can develop the corporeal and psychic materiality in terms of a complex, highly refined and liberated, playful exercise. Keynes of Bloomsbury realised this point, looking somewhat with sympathy at the yet-to-be Stalinised early Soviet experiment, regarded precisely as a laboratory for a new driving force of human action (Keynes 1925). By contrast, Freud hastily and mistakenly reduced that same experiment to a mere celebration of the anthropological naiveties of the Rousseauian *Emilio* (Freud 1930). Freudian-Marxists themselves seem not to have grasped all the potential implications of planning for liberation. In the inquiry into the new humanity freed by the plan, there is therefore an obscene object – queer, we would dare to say – which is yet to be explored. If they do not start this investigation soon, the same civil rights movements against racism and sexual discrimination will be overwhelmed by the crisis of democratic liberalism, which is currently their only, narrow, ideological landmark.

*Planning is freedom*, therefore, in a constructive sense that goes far beyond the simplifications of liberalism on the negative or positive meaning of freedoms (Sen 1987). It does not matter whether one names it *libercommunism*, in a non-liberal but libertine sense, or chooses another name in order not to *épater le bourgeois*. What matters is to show the way for the only revolution that can possibly avert the future catastrophe.



## 9. Capital virus

The world is still tackling a virus disease that has killed more than four million and half people worldwide in less than two years, has affected human relationships more than the AIDS plague, and has caused the most dramatic economic collapse in the history of capitalism (Lyon-Callo 2020). The pandemic has driven the already-weak world economy into a disaster that is worse than the Global Financial Crisis and can possibly rival with Great Depression of the last century. However, contrary to appearances, the healthcare and economic response was not very different from the ordinary, that is, something in between an improvised subsidy-driven Keynesianism and a Coronavirus-19 research agenda undermined by intellectual property rights and a lack of global scientific cooperation agreements. As mentioned, the rational call for a “scientific communism in the fight against the virus” falls inexorably on deaf ears. As for the economic policy response, the enormity of the crisis forced a truce between the struggling capitals that led to an agreed Keynesian "reaction". The support to the average profit was crucially based on a massive increase in public debt. Overall, the economic and health measures adopted made it possible to contain the number of victims and boost GDP after the collapse. However, hopes of returning to the normal pre-Covid state of affairs must be seen as just a mirage.

This “totalitarian crisis”, which affects every level of the system, has not been resolved at all. Over time, its effects will provoke a new intensification of the struggle between capitals, which will have a violent impact on the subordinate class and will give new impetus to the law of reproduction and tendency described so far. The

centralization of capital grants respite when necessary but does not stop, nor does it stop the consequent concentration of economic and political powers and the related erosion of liberal democratic institutions. A catastrophic scenario is getting closer. A revolutionary collective intellect is yet to be developed.

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