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April 2022

Europe's Third Way to Technological Sovereignty.

A Critique

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TABLE OF CONTENTS

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IMPRINT

2022

transform! european network for alternative thinking and political dialogue

Square de Meeûs 25

1000 Brussels, Belgium

transform! europe is partially financed through a subsidy from the European Parliament.

Layout: sanja.at e.U.

Cover: DragosCondreaW; depositphotos.com

Introduction: A Clash between models: USA, China, and the European Union

The European Union is witnessing a radical epistemic and societal change, so fast and so furious that neither the post-Westphalian and Cold War aftermatch shocking scenarios are comparable. It wouldn't be an exaggeration to state that the way we communicate, produce, socialise, and even govern, are being shaped by privately owned digital infrastructures. Nearly every person in Europe owns a mobile device with access to the Internet. People in places as different as Spain and Poland are funneled through the same private conducts to culture, jobs and potential romantic partners. An ultralibertarian version of capitalism has been able to penetrate and monetise our darkest and deepest thoughts, to commodify the provision of public education, to own the public sphere.

Data, an abstract, inasible and imprecise concept, has become key to understanding the conditions enabling the reproduction of capital. Even more, capitalism's own survival in fields as different as pharmaceutics and the automotive industry depends on an intensive use of data processing technologies. This is why, no matter what real social needs are, polities at every level and corporations are fast tracking and fueling enormous amounts of resources for the development of digital tools, and with it, enhancing the extraction, processing, exploitation and monetisation of data. This has led to the growing creation of platforms, infrastructures and standards such as 5G. Big Tech corporations have become gatekeeping powers controlling the access to culture, commerce, jobs, scientific research and even technological development. Despite several attempts to regulate data fluxes, to establish mechanisms for platform governance, corporations are still reigning the digital economy. Its well-known data extractivist behaviour reflects how data has become something more than a series of zeroes and ones. Data is no longer a good by itself, but a key asset for dominating critical fields ranging from communication, to smart cities, edtech, agritech, defence and health tech to name a few. In other words, in order to keep their hegemony the capitalist class needs to seize full control of today's digital infrastructural backbone, the data supply chain. But as environmental activists highlight, the digital economy does not float in an abstract cloud, it stands on a very material basis leaving behind a tremendous carbon footprint. The internet exists thanks to a vast assemblage of cables, data centers, energy plants, factories, and an enormous work-force running behind scenes. The physical layer of the digital sphere determines the shape, form and becoming of the digital world, and with it the wider economy impacted by it, extending from E-covid passes to predictive policing. Herein, talking about digital politics means speaking about geopolitics, mining, international trade, production, logistics, economy, unions, waste management, energy, law and of course, politics.

Another key feature of this system often passes inadvertently. As the Belarusian philosopher Evgeny Morozov denounces, these technological infrastructures would have find a way to subsume and to monetise an unsettling aspect of our humanity: our everyday discoveries, or as firstly stated by the Brazilian social theorist Roberto Mangabeira, "the permanent creation of the new".[1] Capitalism would hence be capturing creativity, talent, the intrinsic human's inspiring principle to invent, solve problems, in sum our ability to imagine ways of transforming our material conditions. Large technology companies would have managed to commodify these human features and left undeveloped all those that are not profitable. Ultimately, this fact would have opened the door for political and institutional solutions that take full advantage of this "creative agency" for purposes other than those of the market. If the conditions of opportunity are understood correctly, European left organisations and their allies in the Global South and the Global North could unleash the full potential of human creativity to think of forms of social coordination other than the capitalist ones. Together the left should work to enable the possibilities of designing, developing and executing technologies in a way that allows for the sustainable self-reproduction of human life. In sum, those involved with the construction of a socialist future need to challenge hegemonic digital capitalism. For instance, building scientific solidarity between nations, colectivising and decomodifying notions such as innovation and of course democratising and socialising digital infrastructures.

1 This idea has been outlined firstly in Roberto Mangabeira Unger, *The Left Alternative* (London: Verso, 2005). 23.

Unfortunately our technological narratives, and herein our potential for transformation, is trapped by three hegemonic iterations of digital capitalism: Silicon Valley's, the European and the Chinese. What do we know about these models? One of the great unknowns about digital capitalism resides in its lack of homogeneity, in its diverse adaptation to the international environment, as well as the systemic disturbances.[2] In the same way, despite falling under one or another technological area of influence, not every polity enjoys the same capacity to challenge technological imperialism. The position held by different nations, including those without a state in the global economy, the colonial legacies, and its financialization levels, impact the nation's ability to secure their technological sovereignty. Therefore, polities as disparate as China, Russia, Europe, the United States, Brazil, Lebanon, Palestina and Euskal Herria world share the same regime of capitalist exploitation, but different ways of understanding politics, the State, democracy, society or laws such as the freedom of expression, to give a few examples. At the same time, the recurring crises of the capitalist system have placed certain institutional actors such as sovereign wealth funds, large asset managers, banks and investment funds and the big four consultancy firms to name a few, in a privileged position from where they can determine the technological development of entire nations. These actors constitute a reticular and ironically internationalist power in search of the profitability promised by Big Tech. This vicious alliance is attempting to colonise global markets and to commodify everything: health, security, education, transportation, welfare, energy and real estate.[3]

The struggle for the digital economy is not limited to the so called platforms. Gigantic corporations and politics are competing for the domination of the critical infrastructures where the digital sphere is built upon: Cables, wires, protocols, data centers. The digital economy has never been so material, physical, and critical for the security of nations, and herein has become a key to understanding ongoing geopolitical struggles. The multiplicity of interest in display is configuring a myriad of models of digital capitalism with different characteristics and particular conceptions of hegemony. [4] According to the prisoner of Bari, a relationship between states in the essence of which is to exercise power in the form of subjugation over their neighbors. That is, a form of domination that has become *de facto* legitimate.

SILICON VALLEY DOCTRINE

Digital capitalism emerged in a very specific ecosystem shaped by the United States' neoliberal imperialist strategy. Silicon Valley was nurtured and generously funded by the military-industrial complex and ever since both have maintained an enriching symbiotic relationship.[5] Mazzucato (2015) has described how what she terms an entrepreneurial state (or, in other words, public funding) hides behind the success of the region. As Levine explains, the Silicon Valley techno-industrial ecosystem prospered in the heat of public funds destined for defence (military) research. Tax-payers' money flowed into private corporations such as Apple or Google, and elite educational institutions like Stanford, creating a unique ecosystem that occupies a privileged place in the development of current (digital) global capitalism (Fisher, 2018). Silicon Valley also benefited from the neoliberal project adamantly defended by Ronald Reagand and Bill Clinton. Both Democrats and Republicans laid the legal infrastructural grounds of digital capitalism, and helped to privatise basic telecommunication infrastructures. The Internet, formerly a public asset, became under the 1990s iteration of the US Democrats a private "information highway" designed to benefit the interests of the dominant classes. However until the 2000's the Internet represented only a marginal aspect of the wider knowledge economy, a Californian silo of nerd capitalism

Though it was during the 2000's when Silicon Valley's hemonic power truly began to take form under the auspices

2 Jakob Linaa Jensen, *The Medieval Internet: Power, politics and participation in the digital age* (Bingley: Emerald Group Publishing, 2020).

3 Giuseppe Fontana, Christos Pitelis, and Jochen Runde, "Financialization and the new capitalism?," *Cambridge Journal of Economics,* 43 (4) (2019): 799–804.

4 Michael Keane and HQ Yu, "A digital empire in the making: China's outbound digital platforms," *International Journal of Communication* 13(20) (2019): 4624-4641.

5 Yasha Levine, *Surveillance valley: The secret military history of the Internet* (New York: PublicAffairs, 2018).

of two major political and economic events. First, George W. Bush neoliberal crusade against terror triggered the development of what today is known as surveillance capitalism. Again, public funding fueled the design of GPS technologies, data processing software, the expansion of networks, infrastructures, the standardization of protocols and above everything, the military enclosure of the Internet. The Internet became under the National Security Agency reign a territory of exception where users could be surveilled and punished. They were not alone in that, CIA funded companies such as Google helped to frame a narrowed, enclosed, traceable and burdened version of the Internet. This is how under the infamous presidency of George Bush capitalism found in surveillance a form of suppression of dissent —exemplified in the frequent confusion between the functions of the American intelligence services and the cloud computing services of large companies such as Amazon Web Service, Microsoft Azure or Oracle.

US liberal imperialism has made its way into our day thanks to what prophets like Robert Keohane and Joseph Nye call the apparently peaceful Silicon Valley's soft power. [6] In a way, it is easier and less expensive to open foreign markets by facilitating the connection of millions of consumers to the Internet than through more coercive means such as the military. Although, as evidenced during the presidency of Barack Obama, both are not exclusionary. It was during his presidency where the Silicon Valley ideology took its form, reaching palpable political power. Obama and Silicon Valley's ideology share some common ontological, political and economic grounds. In both cases, they unapologetically defend active climate change policies. They have also encouraged a racial progressive narrative, affirmative action campaigns, and to increase the visibility of minorities. Silicon Valley and Barack Obama updated the narrative of the United States as an agent of progress and modernization whose interests are universal.[7] However, President Obama wasted no time in multiplying the war on terror efforts trough a hevaily technologised warfare, which as Apple said in its devices, was designed in California. Drones, cyberwarfare, new surveillance technologies among other,s have been used to terrorise, murder and mutilate people around the world, specially in the Global South. This very same military technologies have been used to coerce, surveil and to punish migrants and racialised populations within the US and its borders.

The Obama administration's romance with Silicon Valley led to the consolidation of a "solutionist" ideology, by which every social problem could be tamed via sociotechnical systems. Under this perspective technology develops in a political and sociological vacuum, neutral and independent, immunised from ideologies. This heavily ideologically charged myth politicizes technology in a way that does not stain, does not leave a mark. However, as we have sadly witnessed and suffered, Big Tech algorithms are authoritarian coded capitalism standing on a voracious data and resource thirst apparatus. Washington still remains the main driver of digital capitalism, thanks to its data and fusion centers, closely connected with a vast network of military bases around the world. The relation between capitalism, imperialism, technology and racism has never been so evident.

The legislature of President Donald Trump represented a turning point in Silicon Valley's recent history. A series of scandals involving Big Tech massive mismanagement of data, market manipulation, anti-competitive behavior and information manipulation put Silicon Valley on the spot of academical, civil society and congressional investigations. Some of Silicon Valley's CEOs had to testify before the US Congress on an antitrust enquiry. Similar hearings are taking place around the world.[8] However the arguments outlined by the majority of political actors and academics have not questioned digital capitalism's surveillance backbone. Instead, they have referred to the ongoing situation as a revived Gilded Age, the era of economic growth based on a series of monopolists -Robber Barons- and cartels in control of the economy that made the liberal "American Dream" a misleading tune. For them, the problem is not the model of colonial capitalist accumulation based on data and resource extractivism and labor exploitation, but the market disturbance caused by the hegemonic position of some companies. Herein, despite these debates, we can assert that the fundamentals of the US industrial policy

6 Joseph S. Nye Jr, *Soft power: The means to success in world politics* (New York: PublicAffairs, 2004).

7 Steven Johnson, "The political education of Silicon Valley." *Wired* 26, no. 8 (2018): 64-73.

8 "Digital Markets Investigation. Antitrust Investigation of the Rise and Use of Market Power Online and the Adequacy of Existing Antitrust Laws and Current Enforcement Level," *House Judiciary Committee*, 2021.

remain intact, both with Joe Biden and Donald Trump: a blind defense of the capitalist market, activism against any type of state regulation —apart from an antitrust law that has as the ultimate goal of maintaining the lowest possible prices for consumers—, as well as the manifest disdain for regulatory frameworks of all kinds, whether they be labor, related to user privacy or human rights.

These political strategies have allowed the United States to navigate the seas of globalization and remain an important hegemon in the digital world economy. Paradoxically, the integration into global capitalism of the United States, characterized by deregulation and privatization of its industries, leaves no alternative to its leaders than to use the full force of protectionist trade policy to maintain the main advantage of Silicon Valley and ensure that they obtain the highest possible profits in the competition process, another reminiscent of its nineteenth-century commercialism. The recent offensive against Huawei is a clear example of this fact. In a certain way, this model has served the United States, and therefore they have no categorical imperative to deviate from the capitalist path.

ADAM SMITH IN BEIJING? CHINESE'S PATH TO DIGITAL CAPITALISM

Beijing's translation of Adam Smith's liberal doctrine is based on a political and economic architecture different from that of westernised countries. It constitutes a combination of planning, free markets and state intervention, that reinterpret westernised ideas of socialism, capitalism and welfare, at the light of Chinese political, economic and religious traditions. This architecture is sustained by two fundamental axes articulated through a key principle. Chinese State hegemony over its capitalist class. On the one hand, the Chinese State assures the prevalence of the State interests over particular ones through its ideological and political hegemony. This does not equate with centralist control, but rather a directed alignment of the national capitalist class in tone with the path defined by political elites. Although it is often subject to tension, there is a space of understanding between the great organizers of the Chinese economy: the leaders of the Chinese Communist Party (CCP) and the executives, or CEOs, of the country's main companies. On the other hand, the CCP leadership has established a public-private governance system with the nation's strongest providers resulting in the rapid creation of a huge network of commercial, digital and financial infrastructures.

China has also strengthened its version of soft power through what has been labelled as 'debt diplomacy'. The new Silk Road initiative is to establish a corridor between Asia and the West, where the conditions of investments, exchange and regulations are governed from Guangzhou. This strategy has also created a technological market for countries not aligned with Washington, granting them essential digital infrastructures designed and produced in China. Such a strategy could have an Achilles heel, which US leaders are desperately trying to take advantage of: although China has become one of the indispensable global centers for the manufacture of high-tech machinery and the provision of digital services, a good chunk of the pieces that support their production are owned by foreign companies. China is decisively moving forward to tame this technological dependency. It is currently growing its semiconductor production capacity. And it is also developing new legal (soft and hard law) infrastructures to contest western hegemony over intellectual property and intangible protocols.

Nonetheless, since the 2013's Third Plenary Session of the 18th CPC Central Committee, China has been trying to change the state of play. Their industrial policy plans, highlighting the 'Made in China 2025', aim to update the structural power of the country through huge public investments in areas such as artificial intelligence, advanced robotics and the creation of platforms capable of providing *smart city* solutions in any metropolis of the planet. In sum, Beijing's path to digital capitalism is characterized by a strong overlap between the country's large private corporations (Alibaba, Baidu, Tencent) and the economic planning policies dictated by the Communist Party. Contrary to what arises from the western media tribunes, it is not possible to speak of a state control of the powerful Chinese private companies, but, rather, of an alignment of interests that is not always free of conflict: while the large national corporations manage to compete in the global context thanks to the scale achieved in the internal market, the State ensures digital means of coercion and a decisive cultural, political and economic influence in the world. In this sense, three types of political interventions could be outlined in three types: 1) Regulations aligned with the

west: for example, China Personal Information Protection Law, a Chinese equivalent to the European GDPR designed for regulation of the interactions between private citizens and tech companies. 2) Chinese idiosyncratic regulations: such as limiting the number of hours children can play online video games every week. 3) Regulations that put China in a vanguard position: among others, Governments interventions to regulate algorithms.[9]

China's enormous economic growth and geopolitical consolidation had come at a high cost. In the first place, society is suffering from a massive restructuration that has widened the rural-urban divide. Millions of rural migrants have become the cheap labor force that has allowed rapid capital accumulation and industrial expansion. The government has also increased the capillarity and intensity of its surveillance apparatus over the population. As happened in the United States, military technologies are being deployed to police citizens. Face recognition devices now populate public and private spaces. The massive amount of gathered data is feeding the state social credit system, a publicly owned cybernetic system of control allowing the state to punish and reward citizen's activities.

Chinese corporations have rarely encountered legal or political limitations —rather, the full support of the party-state— when deploying algorithmic governmental technologies. An example of these logics is the aforementioned installation of facial recognition technologies in cities, something strongly questioned for its use by state authorities in Western countries. This form of algorithmic surveillance apparatus is enhancing new forms of ethnic cleansing and political repression as is the case of the Uyghur people in Xinjiang (today under Chinese rule). However, these technologies have also opened new paths for thinking of new ways of using digital technologies to radically rethink ways of distributing credit, money and reputation that can be extrapolated to any democratic utopia.

Be that as it may, China's route to capitalism has also been a successful one. China has been able to find a successful path to technological sovereignty and 'disconnect' from the American empire.

EUROPEAN UNION, THE ROAD TO THE COLONY

Unlike the Californian libertarian regime, the former European colonial powers advocate a governance structure where the most powerful industries of the member countries shape the traditional ordoliberal regulatory framework of the European institutions to ensure competitiveness in the global market.[10] In this way, what in Brussels' jargon is called *Digital Single Market*,[11] alludes to the famous and failed plan that the former president of the Commission Jacque Delors began in the nineties (*Single Market*). [12] Without abandoning the blind faith in free markets and competition, characteristic of its founding fathers, the European Union model proposes a model that is respectful of the individual rights of consumers.

In this sense, the European Commission has been at the forefront of liberal regulation of the digital economy, and has insisted on legal instruments to guarantee consumer privacy —see standards such as the General Data Protection Regulation (RGPD)-. The EU is also pursuing a more ambitious economic agenda focused on the regulation of US' "very large digital platforms" in areas such as online content moderation, competition and taxation, with forthcoming regulations such as the Digital Services and Digital Markers Act. These political interventions believe that there really exists an End of History (à la Fukuyama), that global capitalism works and offers prosperity as long as individual property rights to data are secured and the notion of the sovereign consumer and free markets are imposed. But this is a technocratic neoliberal mindset, and a very naive one: Having outsourced its defense strategy to the Penta-

9 Vicent Ni, "TechScape: Xi Jinping's 'Little Red Book' of tech regulation could lead the way", *The Guardian*, 3rd of November, 2021 For a good overview on Chinese privacy policies see Rogier Creemers, "China's Emerging Data Protection Framework", Leiden University, November 26, 2021.

10 Jacques Crémer, Yves-Alexandre de Montjoye, and Heike Schweitzer. "Competition policy for the digital era." *Report for the European Commission,* 2019.

11 Mirela Mărcuț, *Crystalizing the EU digital policy* (Luxembourg: Springer, 2017).

12 Neil Fligstein, and Iona Mara-Drita, "How to make a market: Reflections on the attempt to create a single market in the European Union," *American journal of sociology* 102, no. 1 (1996): 1-33.

gon and its industrial strategy to the carmakers, Europe has lost the ability to think strategically about how to source its electronics. Nor does it know why this is something worth thinking about.[13] The digital infrastructure maintaining the European economies is not impervious to geopolitics and solely relying on the market doesn't look like the way to go.

In addition, it is worth mentioning that the Digital Sovereignty European's rhetoric has resulted in a strong political response from the United States. This country has established sanctions on some of the most important goods and services produced by EU members, triggering a plethora of threats (not only from the White House, but from euro conformist *think tanks* of different orientations) with the ultimate goal of linking European industrial policy to Washington's interests. In view of what happened, it could be said that, if Obama sought a dialogue with the European Union —mainly through Germany and France—[14] to recover the lost influence in a world that pivots towards Asia —which was materialized in commercial agreements such as the TTIP—, Trump has not been afraid to impose by force what had cost so many hours of negotiation and diplomacy. In fact, Biden has taken advantage of the macabre strategy of his predecessor to revive the TTIP, but under another name, and place different technocrats in even more opaque rounds of negotiation. Furthermore, it is no longer just about seat belts or pharmaceuticals, but about artificial intelligence, semiconductors and data.[15] Again, this means that the United States continues to use Europe's blind faith in free trade to impose its rules on the 21st century economy.

In this context, some discourses on European digital sovereignty have gained momentum. Faced with an enormous pressure from franco-German national industries to advance their interests in the digital economy in the face of Trump's protectionist offensive[16] and the enveloping opening of Xi Jinping, Angela Merkel and Emmanuel Macron promoted a novel campaign. Based more on rhetoric than on facts it aims to promote European digital sovereignty through the creation of competitive companies in new markets, innovation policies of different sizes and rules in accordance with the needs of the most technologically advanced industries.[17] In short, Brussels is trying to impose an idea that takes us back to his foundational scenario: the promotion of greater competition will bring about the flourishing of European giants.[18]

However, there are several problems with this strategy. In the first place, it comes nearly one century later with respect to powers such as the United States, with a production process already reorganized since the neoliberal turn of the eighties, and consolidated into irrevocably technological dominant positions since the First World War. Second, German sacrosanct respect for competition is avoiding the Union from grasping a material fact:[19] It has been the global capitalist competition that has left German and French companies at a disadvantage from predatory corporations exerting even more onerous forms of exploitation over its working class. And even more, the natural tendency of capitalism to embark in a competition `process, in a context of crisis and growing economic instability, has triggered a strong intra-corporate conflict within the European Union that obliged those two countries to embrace draconic strategies and self-harming measures in order to preserve their interests.

In sum, capitalist motion laws, the predatory search for profits and the Squid Game like savage competition between the actors, especially, between nations, have placed the EU at a crossroad. It must choose between corporate profit or people's well-being. The EU needs to transcend

13 Evgeny Morozov, "Chips with everything", *Le monde diplomatique*, August, 2021.

14 Andreas Sandre, *Digital diplomacy: Conversations on innovation in foreign policy* (Lanham, MD: Rowman & Littlefield, 2015).

15 Barbara Mones and Mark Scott, "Transatlantic trade deal rises from the grave to fight China," *POLITICO EUROPE,* September 9, 2021.

16 Doug Palmer and Mark Scott, "Trump's latest trade war: French champagne vs. Google taxes," *POLITICO*, December 2, 2019.

17 Luciano Floridi, "The fight for digital sovereignty: What it is, and why it matters, especially for the EU." *Philosophy & Technology.* 33, no. 3 (2020): 369-378.

18 Jacques Crémer, Yves-Alexandre de Montjoye, and Heike Schweitzer. "Competition policy for the digital era," *Report for the European Commission* (2019).

19 Anwar Shaikh, *Capitalism: Competition, Conflict and Crises* (London: Oxford University Press, 2016).

the neoliberal project tying its politics with market logic. Fueling billions of Euros to "European Champions" in order to straighten a European single market, won't stop the path to technological dependency we have already taken. We should abandon the paradigm of capitalist innovation already hegemonically dominated by Chinese and US's corporations. We should abandon our current strategies aiming to establish a European technological power that would only reproduce the same exploitative and imperialist practices over other countries we are already seeing in other models

We propose instead a Democratic Technological Development not shaped by market rules, but inspired by the ideas of solidarity, cooperation and wealth distribution. A community centered technological development built on the basis od democratic digital infrastructures. A fair ecosystem where vast networks of cooperatives can flourish. A space where the logic underpinning digital services is that of the common well-being, the respect for fundamental human rights, and not the profits of soulless shareholders. A space where concepts such as digital economy does not equate with disinformation, data and resource extractivism or algorithmic discrimination.

Part I: Europe's Third Way

The strategy of the United States has been translated into embracing the vision of Silicon Valley, which for decades has been trying to impose a libertarian and almost teleological version of the digital economy: where a bunch of creative entrepreneurs from the "Valley of the Geniuses"[20] laid the foundations of the most dynamic economic sector of the 21st century; as if they were the strongest representatives of modernity and human progress. In part due to the intense lobbying efforts of its biggest industries, the European Union has awakened. Their bureaucrats understood that the success story coming from Silicon Valley is not the result of the self-made genius-entrepreneur model, but of calculated long-term economic planning, generously financed with public resources. Analysis like this, which has earned economists like Mariana Mazzucato[21] a prominent role in capitalist intellectual forums, have been echoing in Brussels offices for several years, where a question is often repeated: Who and how should invest, regulate, control and lead the digital economy?

The outcome of these debates has brought industrial policy back to the center of the community debate, pursuing what we called a Third Way to digital sovereignty.[22] Even if at the beginning the European Commission repeatedly positioned itself in favor of regulation,[23] It was not until very recently, coinciding with the explosive development of digital capitalism in the United States and the progressive penetration of the most powerful firms in the world, especially Chinese, into European markets, that the concern has begun to become general in the European Union. Digital transformations are seen as a risk to its economic, technological and cultural sovereignty. In this context, all the institutions have spoken out and expressed different kinds of 'dirigisme' behaviors that reificates European "dictatorship of no alternatives".[24] Ursula von der Leyen, President of the Commission, has made digital policy one of the key political priorities of her 2019-2024 mandate, placing the appropriation and valuation of data at the center of its strategy and as the major political challenge for Europe. The European Parliament, boasting of Sinophobia, has also

20 Noam Cohen, *The know-it-alls: The rise of Silicon Valley as a political powerhouse and social wrecking ball*. (New York: Simon and Schuster, 2018).

21 Mariana Mazzucato. *The Entrepreneurial State: Debunking Public vs. Private Sector Myths*. (London: Penguin Books, 2017).

22 Since we coined this term, with the intention of parodying and criticising the social democratic path chosen by Tony Blair, its intellectual apostles have taken the concept so seriously that they have used it to legitimise the agenda criticised here. See Carmen Colomina. "Europa, la tercera vía de la transformación tecnológica," *Cibod*. 2021

23 See *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on The Mid-Term Review on the Implementation of the Digital Single Market Strategy a Connected Digital Single Market for All* (2017)*; Communication on Exchanging and Protecting Personal Data in A Globalised World: Questions And Answers* (2017). *Digital Single Market Bringing Down Barriers to Unlock Online Opportunities*. EC Fact Sheet (2018).

24 *The Left Alternative*, 1-11.

expressed concern about security threats related to the growing Chinese technological presence in the EU and has called for possible action to reduce such dependence. The European Council underlined that the EU must go further in developing a competitive, secure, inclusive and ethical digital economy with world-class connectivity, and called for special emphasis to be placed on data security and issues of artificial intelligence. Even the Court of Justice of the European Union (EU) has pointed out that the US does not offer sufficient guarantees on the surveillance and security of personal data, and therefore invalidates the Data Protection Shield, the agreement that regulates the transfer of data from European users to processors in the US for commercial purposes. All these institutional arrangements, we will argue, European politics are trapped on a political philosophy and legal thought that humanizes capitalism through various initiatives: on the one hand, compensatory redistribution mechanisms through tax and transfers imposed to the Big Tech; on the other, an idealization of law as principle and policy, denying the resources which to develop the practical imagination of alternatives outside Brussels' army of technocrats.

Before delving into the details of the digital strategy, it is worth offering a brief description of how the European Union is trying to poorly challenge the hegemony of the digital economy from the other two major global powers, China and the United States. In this struggle the EU is acting at a triple level. On the one hand, it has configured the legal framework necessary to define what it has called the digital single market. That is, a digital capitalism whose limits are defined by the political criteria of the European Union, in turn determined in a very significant way by the pressure groups operating in the Belgian capital. Second, knowing that it cannot compete economically or scientifically with the other two powers, the European technocracy is making use of soft power[25] to enforce its vision of the digital economy through supranational regulations. In recent years, various political and legislative proposals have emerged, now in a very advanced state of discussion or already approved, aimed at regulating crucial aspects of the digital economy such as the management of public and private data, communications, the tax scheme, or the situation of the workforce. That is, the EU has proposed to define international standards in matters of privacy, ethics in AI, labor, social and digital rights, which shows that the battle is to establish the legal, political and discursive terms on which the digital economy is being built.

Finally, the third level has to do with the green or digital industrial transformation, which corresponds to the desire of the EU to undertake a qualitative leap in its production model that allows it to safeguard its sovereignty, understood as the beliefs and values of the founding fathers, while maintaining a market economy strongly subjected to the beautiful set of laws produced in national parliaments. In this sense, there are several distinctions: both Emmanuel Macron and Angela Merkel speak of digital sovereignty referring to national industrial projects (French and German respectively) that can be extrapolated supranationally (EU), a position quite different from that of the Belgian von der Leyen. The former have a clear statist character, typical of the political traditions of both countries, as well as mercantilist. They range from the rhetoric of enforcing national champions, existing or to be created, to articulating digital sovereignty in a similar way to monetary sovereignty in the Eurozone, with both national and supranational levels of implementation.[26] Therefore, the natural evolution of this policy will tend to the following logic: digital sovereignty will take place at the EU level through specific regulations and laws, while German and French multinationals will lead the way for digital sovereignty at the supranational one (*de jure* and not only possibly *de facto*), thus aligning industrial strategies and national homeland policies with the interests of the Franco-German axis. A maneuver as old as the existence of the European Union itself.

BUILDING A NEW OLD SINGLE MARKET

The European Union has opted for a model that navigates between the libertarianism of Silicon Valley and the intense interventionism of the Chinese Government. On the one hand, it claims a central position in defining the legal and political framework where the green and digital industrial transition will develop. It does it in a similar way

25 Thomas Biersteker, "The Potential of Europe's Sharp and Soft Power," *Global Policy* 11, no. 3 (2020): 384-387.

26 "Luciano Floridi. The Fight for Digital Sovereignty: What It Is, and Why It Matters, Especially for the EU," *Philosophy & Technology* 33 (2020): 369–378.

to social theorist à la Ulrick Beck, who at the dawn of the millennium spoke of "Europeanization" as "the return of a metapower". On the other hand, faithful to the ordoliberal ideology present at its birth, Europe aims to delegate direct control and exploitation of the productive forces involved in this transformation to the private sector. Then, a question arises: is this strategy new at all? The answer is simple: Brussels lines of action not only give continuity, but also exacerbate previous industrial development strategies that are located in the very genesis of the Union. And what is more: they cancel all the debates about the suitability of these institutional roads (the monetary union along Maastricht, the expansion towards the East or the fateful implications of German reunification for the rest of the countries). The intention of the national elites and their leading Euro-conformist propagandists with the debate on digital sovereignty is to create a common signifier on which to articulate the collective concerns of the main capitals, mostly about the power of the so-called Big Tech, which it gravitates on the their loss of influence in the world. Of course, to attend this event it is not necessary to look at Silicon Valley, but rather at the rotten state of the trade balance and therefore the national economies of most countries outside Germany. For example, just focusing on one of the pillars in the digital economy, in 2018 the United States registered a 178 billion dollars trade surplus in digitally-enabled services with the world. Its main commercial partner was Europe, to which it exported over 213 billion in digitally enabled services and from which it imported 120 billion, generating a trade surplus with Europe in this area of 93 billion. On the other hand, that year the United States accounted for 32% of the EU's digitally-enabled services exports to non-EU countries, and 39% of EU digitally-enabled services imports from non-EU countries. The EU member state with the largest estimated value of digitally-enabled services exports was Germany (189.8 billion of dollars).[27] It is worth noting that there are no trade instruments in the EU's toolbox to correct the economic weakness vis-à-vis the United States because any political intervention in the economy does not arise from jeopardising the fundamental pillars of the EU project.

Beyond the essentialist and identity rhetoric to which vulgar debates within the union about migration policy are accustomed, the EU is fundamentally the result of three important instruments of economic planning that emerged and imbued so much with Keynesianism prevailing economic economy in the middle of the last century: the Schuman plan (1950) that two years later led to the European Coal and Steel Community (1952), illuminated precisely by the insecurities of France, who it demanded shared sovereignty over common resources as an antidote to the possible resurgence of German militarism; the 1957 Treaty of Rome, which that same year led to the European Economic Community and years later to the European Atomic Energy Community, both born in parallel with the establishment of free access for French industry to the German market. Following the most accurate historical analysis, ultimately several events could be mentioned: Charles de Gaulle's attempts to consolidate the Common Agricultural Policy to establish a kind of exclusive protectionism for French farmers, followed by the veto of British entry into the Community, and The Luxembourg Compromise (1966), which blocked majority voting in the Council of Ministers, granting in practice more powers than they should have; the European Monetary System, created as a counterweight to the effects of the failure of the Bretton Woods System, outside the framework of the Community at the request of France and Germany, which would have the approval of the Commission.[28]

The processes that took place at that time laid the foundations for the common market, giving it a quasi-federal political structure in 1993 with the entry into force of the Maastricht Treaty. Quasi in as much as there were supranational political instruments endowed with a strong power to guide the executive direction and courts with sufficient capacity to suppress any national legislative initiative, as well as a strictly federalist and technocratic component advanced in a rather Orwellian way by Jean Monnet's men. The leader, who went on to point out that "the elements of the economy, finance or social policy" would never again take place through "vertical integration", but rather "should begin to be horizontal."[29] This historical character is

27 Daniel S. Hamilton, and Joseph P. Quinlan, "The Transatlantic Economy 2020: Annual Survey of Jobs, Trade and Investment between the United States and Europe" (Washington D.C.: Foreign Policy Institute, Johns Hopkins University SAIS, 2020) 32-33.

28 Perry Anderson. *El viejo nuevo mundo* (Madrid: Akal, 2009), 24-27.

29 Jean Monnet. *Memoirs. 1976*. (London: Profile Books), 401.

relevant for understanding today's digital Europe because the people grouped around the integration faced a dialectical moment: they conceived their own political project, different from that of the United States, although aware that they constituted the bastion of this country against the Soviet Union. However, both the French, who wanted to dethrone nationalism, holding Germany, which in turn sought to consolidate itself as a power, had their own project, in which the newly acceded United Kingdom swung according to its own interests; the economic status of the Six, consolidated as a geopolitical rival, bled postwar social commitments.

This short history is important because even if many of these integration failures worsened over time, they reached their peak in 1986, when the Delors cabinet promoted the Single European Act. These were times when the famous 'bicycle theory' was invoked to advance the domestic market, the claim that once the advancement of European integration had been launched, it would have to continue at high speed because, as history showed, if the 'bike' stopped, it was difficult to start over. In the digital age, one could argue that Europe is still trying to pedal a bicycle, while the United States and China ride around the world on a supersonic motorbike. Arguments crafted by public relations experts led to a situation that allowed Delors to persuade national leaders into the deliberations of the European Council, win Franco-German support, and have British objections silenced because Thatcher favored liberalization of financial markets. However, Delors wanted more. Backed by the French and other countries, it had succeeded in promoting a dialogue between large business and trade unions at the European level that could, if the two parties deem it appropriate, lead to relations based on collective bargaining at the European level.[30] The evolution of this event, expressed by a member of the Delors Administration, illustrates what the European project was like: "It was supposed that this would provoke a politicization of the entire European debate, which would move from the economy to the social, then the social to the political. I think that in doing so, we did not see either the enlargement of the East or globalization. Nobody foresaw that we were trying to make a single market and, in the meantime, the technological revolution and commercial and financial liberalization were going to transform the situation…. the European Industrial Roundtable has not maintained its former status… It has become a machine, now replaced by the octopus of mixed American and European lobbies. "[31] Indeed, the individual interests of the multinationals turned Brussels into a corporate paradise, not a political entity capable of making strategic decisions in the course of globalization.[32] This means that the definition of European integration along corporate lines, which were also quite short-sighted, truncated the ability to respond to the challenges of the future. Europe never became the intended Keynesian paradise, but rather an institutional amalgam with a monetary union focused on the doctrine of monetarist orientation (fiscal discipline, avoidance of moral hazard, prioritization of price stability, included in the Maastricht Treaty, concluded in 1992) .

Despite everything, the EU is pleased to have been able to establish a federal model of productive management for its member countries, which is timidly exercised by the European Commission (EC). This executive body was conceived to coordinate the design and planning of EU industrial policies.[33] The Commission's activity must be read in terms of economic planning and political direction by indirect means (or a soft horizontal approach), dedicated to initiating laws and implementing regulatory directives rather than defying free trade dogmas. However, it should be noted that from the mid-1980s onwards, the concept of industrial policy became obsolete due to the wave of economic liberalisation. That is, the idea that the most effective way to achieve a successful industry was to ensure an effective competitive environment, which in practice amounted to having no industrial policy at all. In fact, this word was treated until relatively recently as a taboo, old-fashioned subject, widely associated with interventionist supply-side policies, dirigisme, and state aid to protect declining indus-

30 George Ross and Jane Jenson. "Reconsidering Jacques Delors' Leadership of the European Union". *Journal of European Integration*, 39 no. 2 (2017): 113-127.

31 International Trade, Corporate Lobbying, and the European Political Project: A Conversation with Pierre Defraigne. *Corporate Europe Observatory*. April 22, 2015.

32 *Europa, SA: La influencia de las multinacionales en la construcción de la UE. (*Madrid: Icaria, 2002), 45-99.

33 Neill Nugent and Mark Rhinard. *The European Commission*. (London: Bloomsbury, 2015).

trial sectors. Paradoxically, only with the Maastricht Treaty was it attempted for the first time to establish a legal basis for the establishment of a supranational industrial policy (Article 130). In the end, the priority given to the liberalization of sectors that in many member states operate as monopolies (Article 90, which became Article 86 in the Treaty of Nice) meant that, paradoxically, industrial policy was de facto neutralized by the first European treaty that granted it a certain status.[34]

These political inertias have resulted in a sterile supranational structure, at least from an executive point of view, which they have tried to camouflage under various subterfuges, but the aim has always been to strengthen economic union. For example, the European Union launched an ambitious ten-year plan in 2010 to close the gap with its competitors and lead the race for dominating the digital economy. The founding document of the EU's digital industrial strategy was entitled *A Digital Agenda for Europe* and it set out some of the fundamental objectives that even today continue to guide the most important industrial strategies of the EU member countries. The objective of this Agenda was to chart a course that allows maximizing the economic and social potential of ICTs, and in particular the Internet, as an essential support for economic and social activity: to do business, work, play, communicate and express oneself in Liberty. The document posed two major challenges: establishing a single digital market for and designing the necessary legal infrastructure to govern it. Nothing less than promoting what had been tried for several decades without any success, but giving this process a digital surname.

As the organisational structure and ideological framework of the monetary system (closer to Hayek than to the quickly abandoned Keynes) have been a key element of the Eurozone crisis, the European proposal for a digital economy has been built on that very same logic. Given that the architects left aside the possible socioeconomic implications of the dialectic between monetary policies coming from central banks and fiscal policies, decisions such as those to implement the Stability Pact have had enormous socioeconomic implications on the digital era. Altering the balance of power relationship between the state and central banks by reducing the capacities of the latter to manage money and finances affected the amount of money that many countries could redirect to innovation. In fact, this has also produced the fiscal crisis in the peripheral countries of Europe such as Portugal, Ireland, Italy, Greece and, of course, Spain.[35] We cannot forget that the European digital agenda came at a time when Europe's only remaining political imagination was to implement austerity, which constrained these peripheral territories to implement their own digital policies, sovereign to those of the Franco-German axis. For example, in Spain, A Digital Agenda for Europe was signed by José Manuel Soria, the Minister of Energy, Tourism and Digital Agenda, who privatised Aena and was accused of commodifying even the Sun due to his links with the energy industry; José Ignacio Wert, Minister of Education, Culture and Sport, but also author of the controversial 'Informe Wert', a reform proposal based on imposing the education-employment ratio, aimed at drastically cutting public universities, boosting private campuses and imposing undemocratic governance methods on them; Luis de Guindos, Minister of Economy, Industry and Competitiveness who demanded a bank bailout for Spain of 50 billion, privatised the public bank Bankia and thus set the economic conditions for shifting the costs of the crisis onto the public budget; and also the public business entity red.es, whose director César Miralles came from the National Institute of Cybersecurity and had previously been an advisor to the Commission on the Smart Digital Future. Given such a staff of technocrats, composed of neoliberals and solutionists, can anyone imagine what was the real meaning attributed to the keyword "connection" in that agenda?

Highlighting these events becomes essential to understand the spending ceiling that many national economies face when pursuing industrial plans or projects focused on the development of technologies such as artificial intelligence, the chip industry or any other strategic sector. But it also reflects other factors: the austerity policies imposed on many countries in the periphery to strengthen European economic unity at a time of crisis have forced them to outsource

34 Jean-Marc Trouille. "Re-inventing industrial policy in the EU: A Franco-German approach," *West European Politics* 30, no. 3 (2007): 508.

35 Saurabh Kumar, "European Monetary System and the Fiscal Crisis: The Ideology, Institution and the Policy," *India Quarterly: A Journal of International Affairs* 68 no. 2 (2012): 201.

every digital service. Unable to spend money, the only available alternative has been to transform their economies and societies but just to connect them to Silicon Valley.

THE ORDOLIBERAL DOGMAS OF THE JUNCKER STRATEGY: THE LIMITS OF ANTITRUST POLICY

Despite these efforts, it was not until the presidency of Jean-Claude Juncker (2014-2019) that the EU showed interest in the digital economy, by then taken over by Silicon Valley's and Guanzhong's leviathans . The founding document of the Juncker strategy, the germ of current industrial policies, was titled *A Strategy for Europe's Digital Single Market*[36]. This document defined Europe's Digital Single Market as one "in which people and companies can easily access activities and carry them out online under competitive conditions, with a high level of protection of personal and consumer data, regardless of their nationality or place of residence." It also stated that "achieving a digital single market will allow Europe to maintain its position as a world leader in the digital economy, helping European companies to grow on a global scale."[37] Even if it apparently seemed respectful with the European mantra of "free movement of people, goods, services, capital and data," the truth is that the strategy proposed a model of a controlled and regulated market, which was situated within a broader industrial policy push orchestrated by the European institutions.

In its early days, this policy was characterised by the defense of a European path to digital capitalism through antitrust policies. For more than a decade, the European Commission has launched a series of lawsuits against large digital corporations, including the battle against Google. If in a first phase of digital capitalist development the EC was hesitant with the aggressive behavior of this US corporation, allowing acquisitions that de facto eliminated competition, in a second phase the EC has tried to stop the dominant company in both online search engines and smartphone operating systems (it had a market shares close to 85%). American companies have managed to enter the lives of Europe's nearly 485 million consumers and serve as their *de facto* providers of digital services, which is a lot, given the very nature of the digital market characterized by the *network effect* , that is, where one more client does not add to but multiplies the value of the company. Therefore, it is not surprising that the first antitrust procedure in the battle against Silicon Valley came from the hand of the so-called Google Search (Shopping) case. It was initiated under the leadership of Joaquín Almunia following the classic parameters of antitrust present in the Chicago school: persecuting corporations not because of the damage they could cause in the market or society but because of the possible damages to consumers. In this sense, antitrust laws are seen as a matter of consumer welfare, innovation and choice, not with protection against intercapitalist competition. "My responsibility when enforcing the antitrust rules in this case is to make sure that Internet users are provided with choice, so they can decide between services based on their merits, and to preserve incentives to innovate across the board, so that users can benefit from new or better services tomorrow".[38]

Led by Margrethe Vestager, the process followed other paths, closely linked to the very mantras of European integration: free competition. The EC succeeded in showing that Google prioritized its online shopping algorithm in contravention of its own neutrality policies, and that prevented its competitors from reaching customers. The EC blamed Google for undermining competition and thereby blocking the development of the digital economy in Europe. It imposed a sanction of 2.4 million euros. For this reason, the second episode of the battle was related to one of the fundamental instruments of Google's productive gear, its PageRank algorithm, which orders and ranks the websites that Google indexes. Accessing or not to a website by users browsing the network depends on their online positioning, which according to Google responds to a pseudo-Enlightenment criterion (objective and scientific), although linked to the relevance and popularity, characteristic of a neoliberal vision of the consumer as a sovereign entity. As many authors have

36 Simone Schroff and John Street, "The Politics of the Digital Single Market: Culture vs. Competition vs. Copyright," *Information, Communication & Society* 21, no. 10 (2018): 1305-1321.

37 European Commission, "Comunicación de la comisión al parlamento europeo, al consejo, al comité económico y social europeo y al comité de las regiones. Una estrategia para el mercado único digital de europa" Report for the European Commission, 2015.

38 Joaquin Almunia, "The Google antitrust case: what is at stake?" (speech, Brussels, October, 2013).

shown, these algorithms, far from being neutral, are opaque instruments at the service of digital companies, with which they manage to impose their own business logic and set prices in accordance with their commercial strategies.[39] In the course of that investigation, the EC revealed that Google imposed how its customers should behave when advertising, obliging them to buy a minimum amount of ads, to use its services exclusively and to communicate any relevant changes in their business strategy. Considering that it represented an abuse of a dominant position, and having in mind that Google's main business is advertising, which accounted for 70% of its income; the EC sanctioned Google with 1,4 million euros.

Finally, the EC launched an investigation regarding the Android operating system and its app sales service where it managed to demonstrate that Google has imposed its operating system, search apps or services to device manufacturers and distributors, that is, that Google abuses its dominant position by making its software prevail over the others. According to the EC, this has caused damage in different dimensions: competition, innovation and consumers, [so] Google was sanctioned with 4,300 million.[40] Throughout this process, the EC has designed a whole new legal narrative capable of confronting the new reality of the markets and technological change in accordance with its vision of the world, one where competition must prevail over any other consideration. This openness and change in strategy, which, for example, has managed to link the abuse of competition with the ability of corporations to accumulate data, has been key in the union's initiatives. For example, the *Strategy for the Digital Single Market for Europe* led by Juncker, organized the contours of a regulated market that standardizes the criteria that the member countries need to follow, its scope and its limits. The Digital Single Market approach was considerably more interventionist than previous policy approaches, and aimed to establish a harmonized regulatory framework that provides businesses and consumers with unrestricted access to digital goods and services across the EU. According to the most optimistic estimates of the European Commission, this strategy would increase the EU's GDP by 415 billion euros. For Juncker, the EU needed to prioritize the standardization of digital roads and eliminating barriers (such as geolocation) that fragment the European Internet. Paving and guaranteeing Internet access for all Europeans is significant for understanding the strategic dimension of the digital market.

This strategy could be understood in the context of the market homogenization processes that the emerging European national states undertook in their own territories in order to build a solid model of capitalism between the 17th-19th centuries. As countless Marxist scholars have been repeating, markets do not emerge spontaneously, as neoliberal apologists claim. Markets are created under the umbrella of political institutions in order to establish and enforce a particular vision of the economy. Or in other words, the political economy of the digital age is the real field of dispute for EU integration policy, as well as for Juncker's reform. Defining the terms and scope of the market denotes that the EU aspires not only to be a regulatory entity, but also a creator of international standards. The *soft power* of the digital age therefore acts as a tool for internal solidification, consolidation and protection against the outside. Timidly perhaps, but this was the strategy for navigating the waters of globalisation.

Certainly, there are solid arguments that could point to associating the European digital strategy as the umpteenth neoliberal attempt. After all, the Juncker presidency itself stated that "we must take much better advantage of the great opportunities offered by digital technologies, which know no borders" and to do so, he claimed that "we need to have the courage to break down national silos in telecommunications regulation, copyright and data protection legislation, and competition law enforcement" [41] However, this reading of Juncker as mere neoliberal is slightly limited. Rather, in Juncker's plans and initial strategy for the digital economy we can find a long tradition of the Protestant and secular ordoliberal concept of the 'social market economy',

39 Frank Pasquale. *The Black Box Society: The Secret Algorithms That Control Money and Information*. (Cambridge: Harvard University Press, 2015).

40 Jacques Crémer, Yves-Alexandre de Montjoye, and Heike Schweitzer. "Competition policy for the digital era," Report for the European Commission (2019).

41 Jean-Claude Juncker, "A New Start for Europe: My Agenda for Jobs, Growth, Fairness and Democratic Change," European Commission (speech, Brussels, 15 de Julio, 2014).

which holds that market competition is not distorted by successive enlargements of the European Union, and much less in the advent of the digital age.[42] In line with the Protestant ordoliberal core of the German Christian Democrats, that is, with the European People's Party (EPP) represented by Juncker, European politics has emphasized "the initiative of the individual", the "efficiency" and "competition" in the free market together with the central Catholic social positions of "active solidarity" and a "better distribution of' economic and property decision-making powers".[43] This strengthening of the socio-economic ideology of classical ordoliberalism has been converging with the neoliberalism of the main conservative parties in Europe in each enlargement of the Union until it became hegemonic. In a way, it has been present since the Monetary Union, in the policies promoted by the German government during the eurozone crisis and in those of the health and economic crisis caused by the coronavirus, since it has always been reluctant to support Eurobonds and it has only grudgingly accepted the European Stability Mechanism (ESM).[44]

That is why it is not surprising that, as Walter Eucken boys points out, the European Union has followed the ordoliberal German path as a regulatory policy for the digital age. From this economic perspective, cartels and trusts, monopolies and oligopolies tend to diminish the welfare of consumers and competitors, in the form of lower quality services or higher product prices. From a sociopolitical perspective, these business forms are a potential threat to democracy and the rule of law, influencing the development of laws that can pervert the results of elections.[45] Beyond the sweet siren songs about Juncker's strategy that come from pro-European propagandists, the President of the European Commission has been a pioneer in presenting digitization as a bulwark of an authoritarian ideology, at least as far as to the reaction of political elites against a class consciousness similar to that of the interwar period that gave rise to the Union.[46] The pragmatism of the German ideology present in the Commission has been adapted to the 2.0 era by updating the sovereign constitution established in Maastricht through technocratic and legal means, protecting the economy from the disruption of democracy, be it carried out from Silicon Valley the streets of Greece or Spain does not matter. There is no possible alternative to economic liberalism based on popular democracy and austerity reigns. This approach is maintained to this day thanks to a third factor: the material and ideological pressure to stay within the digital euro-regime itself, which creates a kind of fiction where national governments, in the absence of an alternative political vision, believe that the Commission Europe is still defending the interests of the 27. The circle is closed by allowing "rescue programmes" based on digital transformation, but not as an act of democratic solidarity, but through a "grey area" of EU law, with strict conditionality attached afterwards, and always loaded with a corporatist vision that advocates the creation of new national markets so that German companies can do business and benefit more from the crisis in the periphery.

As we will see, the way in which this sort of ordoliberalism is legitimized, embodied in European digital sovereignty, has to do with a particular variant of the impasse that governments face after embracing Silicon Valley ideology: since the former have borrowed too much, have a public spending ceiling, and cannot develop sovereign public infrastructure, California firms do the job. The Commission's antitrust measures go in the direction of having German or French companies fulfilling the function that Palo Alto companies are playing. Ultimately, this is coherent with the neocolonial relationship established by the eurozone where a creditor-center demands that the debtor-periphery nations pay the cost of the crisis and threatens the punishment of expulsion to anyone who chooses a different route.

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42 Josef Hien, "European integration and the reconstitution of socio-economic ideologies: Protestant ordoliberalism vs social Catholicism," *Journal of European Public Policy* 27, no. 9 (2020).

43 Thomas Jansen and Steven Van Hecke, "Political Programme, Adopted by the First EPP Congress in Brussels on 6–7 March 1978,"At Europe's Service (2011): 253-281.

44 Lars P. Feld, Ekkehard A. Köhler, and Daniel Nientiedt. "Ordoliberalism, Pragmatism and The Eurozone Crisis: How the German Tradition Shaped Economic Policy in Europe," *European Review of International Studies* 2 no. 3 (2015): 48-61.

45 Manuel Wörsdörfer. "Ordoliberalism 2.0: Towards a New Regulatory Policy for the Digital Age," *Philosophy of Management*. (2020)

46 Michael A. Wilkinson. "Authoritarian Liberalism in Europe: A Common Critique of Neoliberalism and Ordoliberalism." *Critical Sociology*, 45 no. 7-8 (2019): 1023-1034.

In this sense, are some of the political responses effective in ensuring European sovereignty, not from a left perspective, but from the ordoliberal hypothesis itself and the legal agenda deployed by the European Union?

TAX ON DIGITAL SERVICES, PILLARS OF A NEW SOCIAL ORDER?

From many euro conformist Brussels forums comes the idea that tax policies for digital services represent a kind of fraternal process, where the EU will be able to achieve a new constitutional or re-founding moment in which its "social" soul is finally rediscovered. However, different analyzes argue that the EU cannot regenerate itself merely through law since trust in an inherently depoliticized institution always works ideologically to maintain social order. By cloaking an unjust capitalist system under the guise of equality, justice, and neutrality, the law helps legitimize a fundamentally commodified social order.[47] A careful reading of the European documents leaves us with a very similar interpretation, which reveals the true intentions of the EU, aimed at defining, rather than controlling, the conditions of the digital single market.[48]

For example, the European Commission is trying to build "a fair and efficient tax system in the European Union for the Digital Single Market"[49]. In other words, this means that it is the EU and not the member countries that will have to negotiate and set tax conditions with the Big Tech corporations, as has been the case until now. This is not a mere protectionist gesture. On the contrary, it denotes an active policy aimed at creating the necessary conditions for the emergence of a European digital productive ecosystem. Two underlying interests are in place: accelerating the integration and interdependence relations between the economic actors of the union, and creating the conditions for the emergence of "European champions" capable of competing with the international giants. Let us underline how naive it is to think that it is possible to compete against US national champions who have received public sector support for several decades to innovate.

One of the stellar measures that are being proposed in Europe to deal with large digital corporations is to adapt the current tax models, incapable of taxing the real profits of companies, to the reality of the digital economy. In 2018, the European Commission proposed a directive to impose a provisional tax on income from large companies digital services, including advertising, online marketplaces and data services. In fact, France, the United Kingdom, Italy, Spain, Austria and even Australia announced new taxes that would raise the figure to 3%, and that are designed to target large multinational technology companies in response to trade sanctions from the White House, which has included European actions in its famous "key barriers to digital trade."[50] After sanctions of several billion euros on European products, the United States has initiated a process of intimidation of the various national leaders. In January 2020, both Donald Trump and Emmanuel Macron agreed that France would refrain from collecting the tax this year and the United States would stop an offensive that sparked an investigation within section 301.[51] In October of 2021, the US reached an agreement to end European digital services taxes. France, Austria, Italy, Spain and Britain have agreed to withdraw digital services taxes on US tech giants in 2023, while the US will drop retaliatory punitive tariffs. Trump's threats served Biden.

Beyond this sad story, the initiative reminds us how far the European Union is from being a place for the progressive regulation of the digital economy. They were prevented of stopping a profuse fiscal engineering scheme, one in which the tax contribution of companies like Apple is being set at

47 Gareth Dale, Nadine El-Enany. "The Limits of Social Europe: EU Law and the Ordoliberal Agenda." *German Law Journal* 14, no. 5 (2020): 613–649.

48 Aneta Wiewiórowska-Domagalska, "Online platforms: How to adapt regulatory framework to the digital age." European Parliament (2017).

49 European Commission, European Political Strategy Centre. Report from the High-Level Hearing 'Strategic Autonomy in the Digital Age', Report from the European Commission, 2012.

50 Office of the United States Trade Representative, Fact Sheet On 2019 National Trade Estimate: Key Barriers to Digital Trade, 2019.

51 Office of the United States Trade Representative, Conclusion of USTR's Investigation Under Section 301 into France's Digital Services Tax, (Washington: Office of the United States Trade Representative, 2019).

percentages close to 0.005%[52]. After all, what can these figures mean for these corporations compared to their global revenues? Furthermore, these measures point to the lack of scope of vision of the national and community authorities, focused on questioning the business model of Silicon Valley, not the digital capitalism regime as such. The EC wanted to adopt a proposal that would allow the auditing of digital activities that generate a turnover of more than 7 million euros and companies with more than 100,000 users or 3,000 companies, but at no point will it put an end to corporate influence in decision-making, which undermines any possible social Europe. There is no possible European fraternity, no matter how much tax measures are imposed, when big technology companies such as Google, Amazon, Microsoft, Facebook and Apple set the course for digitization, being those who spend the most on lobbying in Brussels. Their most recent statements show a combined spending of 21 million euros in lobbying for opposing the adoption of the General Data Protection Regulation (GDPR), blocking the Electronic Privacy Directive, delaying new competition rules or the much-discussed Digital Services Law.[53] With the help of the strong US state, but this directive also collapsed. In short, this tax policy represented a progressive vision as much as any marketing strategy does with any given product that they need to sell. Scratching a few euros from the enormous profits of these companies was the closest that this technocracy was to creating a European social contract. Compensatory redistribution through tax and transfers cannot do anything for the mined welfare states of the members of the Union. It doesn't matter if the big tech companies pay if they maintain the basic digital infrastructure on which the healthcare or education of the future is built. Without recovering it, there is no political or digital sovereignty.

THE LIMITED POLITICAL DIMENSION OF PRIVACY REGULATION

Within European policies to ensure digital sovereignty, it is worth looking at one of the legal instruments that has been the most talked about in recent years. In April 2016, the European Parliament managed to overcome its traditional partisan division by approving what would be one of the most influential legal instruments of the digital age: the GDPR. Since its approval, the European Union has been strengthening its own vision of the digital economy, one that distances itself from the Chinese and American proposals. The regulatory power that Europe is trying to impose is consistent with previous initiatives. This encourages access to the community market and its framework developed to enforce regulations, encourage other states to follow European practice and promote similar regulations in other jurisdictions.

Following the dictates of the European Charter of Human Rights, the RGPD considers privacy as a fundamental right and therefore puts it before other legal rights, such as freedom of expression or the right to information. In the words of the European Commission: privacy is not a commodity to be traded. This is not, of course, meant to be an innocent and disinterested defense of digital rights, but rather a concrete and specific attack on the business model based on the exploitation of data defended by Silicon Valley. Although designed as a privacy protection instrument, the RGPD goes beyond this dimension, since in practice it regulates, or at least that is what it intends, the social structure in which the fundamental actors of the data economy operate. To this end, the GDPR identifies three main roles within the data economy: Data processor, data controller, and data subject.[54]

This data protection scheme represents the main vision of supranational digital sovereignty, in addition to the recognition of citizenship as subjects being constructed by Silicon Valley's data extractivism. It also has had profound

52 Sean Farrell and Henry McDonald, "Apple ordered to pay €13bn after EU rules Ireland broke state aid laws," *The Guardian*, August 30, 2016.

53 Big Tech Lobbying: Google, Amazon & friends and their hidden influence. *Corporate Europe Observatory*. September, 2019.

54 The data subject is a subject of rights produced in and for the digital age. A subject produced within a series of economic processes that will be controlled and protected directly or indirectly by European legislation. This is not a minor fact. The creation of the data subject implies the creation of a new type of subjectivity with legal recognition based not on national legislation, but on a European instrument. This act, which seems irrelevant, can nevertheless be read as one of the first exercises of European sovereignty.

repercussions and replications in numerous legal systems such as Brazil, Japan, South Korea or New Zealand. The RGDP has become the standard for defining privacy rights, thus becoming the lingua franca or Magna Carta of digital law in this key area of the new economy. In this way, despite lacking infrastructures or corporations comparable to those of China or the United States, the European Union tries to impose a governance model of the digital economy through the exercise of soft-power.

However, the possibility that this will lead to greater economic autonomy is highly doubtful due to the mere fact that the United States won't develop a federal privacy regime similar to the European model, which means that many processes will have to be adapted to the model protection of California, which will entail a high expenditure of time and money.[55] There are also other weighty economic constraints that public entities face, such as enormous corporate pressure against regulation.[56] In addition, from the point of view of consumers, they are also affected by the enormous lack of transparency of the black boxes of the algorithms, insurmountable through community regulation, as inherent in the business model of technology firms and the market driven by data, where information asymmetries prevail.[57] The question is whether a regulation, no matter how ambitious it may be, can be used for a State, or a supranational group of them, to exercise some type of regulation when the operating model of capitalist technology firms is so guided towards extraction, monitoring and manipulating the behavior of the subject without attacking their sources of profits. That is, the question is whether it is possible to establish a law, when "capital, codified in law, is left free so that profits can be made and stored anywhere and losses can be left wherever they fall."[58] And on the other hand, the alliance of states (many of them European) with big technology in matters such as defense infrastructure through contracts for cybersecurity or intelligence services leaves little or no margin for people to resist and invoke individual freedom and use the mechanisms of checks and balances to protect it.[59]

EUROPEAN ARTIFICIAL INTELLIGENCE STRATEGY, DIGITAL SOVEREIGNTY OR EMPTY WORDS?

The European Commission, believing to have seen in this regulation the highest stage of the power of *the loi* [law, in French] and the potentialities that it entails, has proposed to define the standards in areas such as Artificial Intelligence, digital work or communications within the framework of the Strategy for a Digital Single Market. In this context, the EC has published its White Paper on Artificial Intelligence, outlining the key elements of a regulatory regime adapted to this new technological phenomenon. This declaration of principles, the one most aimed at digital sovereignty, has only taken true shape since Commissioner Ursula Von der Leyden took the lead. However, this concept has been on the European agenda since the Wikileaks revelations became known, which beyond verifying the involvement of large US technology companies in the intelligence services of many countries, revealed how the National Security Agency The NSA wiretapped phone calls involving German Chancellor Angela Merkel and her closest advisers for years and who spied on the staff of her predecessors. On the other hand, the Cambridge analytical scandal once again exposed the fragility of the European digital public sphere, something that was reflected in the press, in academic publications and in numerous internal EC reports.[60]

55 Thomas Hoeren and Stefan Pinelli, "The New Californian Data Protection Law – In the Light of the EU General Data Protection Regulation". March 20, 2020.

56 Shannon Togawa Mercer. "The Limitations of European Data Protection As A Model for Global Privacy Regulation." *American Society of International Law* 114 (2020): 20-25.

57 Peter J. van de Waerdt. Information Asymmetries: Recognizing the Limits of the GDPR on the Data-driven Market. *Computer Law & Security Review* 38 (2020).

58 Katharina Pistor. *The Code of Capital: How the Law Creates Wealth and Inequality*. (New Jersey: Princeton University Press, 2019), 9.

59 Katharina Pistor. "Statehood in the digital age," *Constellations* 27, no. 1 (2020): 3-18.

60 "European Parliament resolution on the use of Facebook users' data by Cambridge Analytica and the impact on data protection." Report from European Parliament, 25 October, 2018.

However, it was not until 2020 that the notion of technological sovereignty fully entered the EU's political agenda, positioning itself as a compass for the rest of digital policies. In that year the research service of the European Parliament published a document entitled *A Digital Sovereignty for Europe*, becoming the founding text of European digital sovereignty. In this text, digital sovereignty is defined as the "ability of Europe to act independently in the digital world, and must be understood both in its protectionist dimension and in Europe's offensive capacity to build tools that accelerate digital innovation."[61] The document identifies three types of problems derived from European technological dependence. First, there are those that affect the economy and innovation. The document highlights that Europe is lagging behind in the race to develop key digital technologies such as *clouding*, 5G and 6G, as well as the Internet of Things. The second typology of problems identified has to do with data and privacy issues. As mentioned, there is a growing awareness on the part of the authorities regarding corporate control of the data of millions of users. Finally, the strategic document highlights the dimension of security in the cyber age. In this sense, it identifies the main areas where legislators and politicians should accentuate their attention in order to build the desired European technological sovereignty. The first area is related to the data regulatory framework, where aspects related to clouding services stand out. The second aspect has to do with trust and standards. The third and fourth blocks point to the need to establish an economic protection shield, which could feed the European start-up ecosystem, as well as establish a fair tax framework for foreign corporations.

Regarding the European Commission, although there are discordant voices (Internal Market Commissioner Thierry Breton emphasizes the need for EU companies to be among the main digital leaders, while the Competition Commissioner argues that companies must compete within if they want to succeed in global competition), the central element of the strategy is clear: the relations of production must be organized and negotiated between the EU institutions and the private sector, following the parameters of the social market ideaolgy that inspires the single market, the true articulating axis of European policy.[62] In this sense, the Commission's strategy adopts the Vestager approach, which in the literature is called the horizontal approach to industrial policy against the vertical one that Breton maintains. Roughly, the horizontal is typical of the liberal mentality of laissez-faire, which directs all political efforts in creating a favorable economic and legal environment for business investment, allowing market mechanisms to do the rest to create sustainable economic development where businesses can emerge and prosper. The second conception is the 'vertical' interpretation, where the nation state intervenes to preserve corporate structures through selective sectoral interventions in order to protect sectors perceived as strategic, save jobs and create "national champions".

In this sense, both the White Paper on Artificial Intelligence and the European strategy for data limit themselves to defining a series of key elements of a future regulatory framework for AI in Europe, which should give rise to an unique "ecosystem of trust". As the document points out, "building an ecosystem of trust is a political goal in itself, and it should give citizens the confidence to use AI applications and provide companies and public organizations with the legal certainty to innovate using AI." On the other hand, it argues, measures must be established to align efforts at the European, national and regional level. The underlying goal is the creation of the so called public-private partnerships, with the aim of mobilizing resources to achieve the now called "ecosystem of excellence" throughout the entire value chain, starting with research and innovation, and create the right incentives to accelerate the adoption of AI-based solutions, including small and medium-sized enterprises (SMEs).[63]

In short, one more step in the Horizon Europe project, the metaphor is worth as evidence, only by taking up the notion of public-private partnership to adapt it to fields such as robotics. This is the liberal perspective defended by the

61 Tambiama Andre Madiega, "Digital sovereignty for Europe". Report from the European Parliament, 2020.

62 Claassen, Rutger, Anna Gerbrandy, Sebastiaan Princen, and Mathieu Segers. "Rethinking the European Social Market Economy", *JCMS: Journal of Common Market Studies* 57, no. 1 (2019): 3-12.

63 "White Paper: On Artificial Intelligence – A European approach to excellence and trust". Report from the European Commission, 2020.

European Commission, which can be traced back to the first Franco-German Congress for the Competitiveness of Industry that took place in January 2004, organized by the Ministries of Economy and Industry of France and Germany, in cooperation with the most powerful employers' organizations both countries and France (Bundesverband der deutschen Industrie and Mouvement des Entreprises de France), the Confederation of French Chambers of Industry and Commerce and 300 experts and senior managers to discuss the need to improve the framework in the that European companies operate, and define a series of joint objectives to promote the bilateral relations of both countries in a way similar to that read in The White Paper for Artificial Intelligence. This not only means that the European Commission is an expression of the somewhat outdated interests of the Franco-German axis, but that given the political form of this institution it becomes almost impossible to transcend the usual technological modernization of intervening in the economy indirectly by any other member state.

For this reason, the joint position of the Franco-German axis to promote a European industrial policy is paradigmatic. Both go beyond the usual toolbox and point three of the joint manifesto envisages effective measures to "defend our technologies, companies and markets." Among them, expanding foreign investment control mechanisms, as both countries already have, to protect Europe's technologies and strategic assets; effective reciprocity mechanisms for public procurement with third countries to take into account factors other than price, that is, to deliver awards to French and German multinationals; and the modernization of the World Trade Organization regulations to more effectively combat trade-distorting practices, including excessive subsidies to industry.[64] At first glance, this joint understanding of digital sovereignty represents a new paradigm in the perspective prevailing during the last decades, and would mark the beginning of a decisive intervention in the economy to ensure pre-eminence over the Chinese and American competitors, who had spent decades mobilizing policies of a similar tint.

EUROPE'S BATTLE FOR DISCOURSE

Much more could be said about the different strategies of the European Union, the effectiveness of its regulations and directives or the business actors that dominate the decision-making processes in Brussels. This last section is limited to one of the most recent measures to curb the power of large technology firms in order to highlight the real influence of European initiatives: Digital Service Act (DSA) and Digital Markets Act (DMA). In this direction, it is argued, the enormous (and perhaps unique) strength of institutions such as the European Commission lies in a power that is based on the discourse, in this case on the need to guarantee consumer rights and competition, but not so much on an effective implementation. A good part of the European economy is stagnant and unable to recover sufficient growth rates to ensure the competitiveness of national firms. Furthermore, there are no short-term solutions to recover from this crisis and stand up against the US giants, mainly because the European Union depends on the US in all spheres that determine the hegemony and influence of a region (military, political, economic). In this context, all European measures are aimed at consolidating a kind of state of paralysis, a terminal crisis that has not yet taken place. There is no reaction aimed at turning the game board around, mobilizing the full power of the nation states and responding to foreign competitors, but rather continuing with the same decisions of yesteryear, although endowing them with a narrative that reaches the media. Europe communicates its initiatives in such a way that they appear to be really responding to an exceptional situation on progressive terms. In the end, these are measures that continue with the stubbornness and obstinacy of European thinking about free competition, but finally acknowledging that none of these measures will take proper effect. As one analyst put it: "You can see the situation deteriorating on a daily basis and you realize that even your best repair efforts are useless, even counterproductive. Welcome to Europe's digital dilemma."[65]

In this regard, the two naïve fronts of the European Union are as follows: the DMA conceptualizes technology companies as *gatekeepers* of markets capable of determining how

64 "Bundesministeriums für Wirtschaft und Energie y Ministère de l'Économie et des Finances, A Franco-German Manifesto for a European Industrial Policy fit for the 21st Century" (Paris-Berlin, 2019).

65 Dimitar Lilkov, "Sword, Shield and Social Media: Europe's Digital Dilemma", *Accidental Europe*, December 2, 2020.

companies behave, supposedly smaller and incapable of competing in the processes of creating users-consumers; the DSA impose a series of obligations to prevent the dissemination of illegal content. While these measures target companies with more than 45 million users (that is, most of the best-known platforms), both measures are designed to target Google, Twitter, Facebook, or Amazon. For this, these directives contemplate fines of up to 10% of the annual turnover. Without a doubt, this is Brussels' most ambitious measure to defend its prized internal market and force US companies to respect European regulations. Again, there are some limitations to this approach.

In more theoretical terms, as it has been pointed out, the figure of these companies is more similar to that of "regulatory capitals". This means that within a given industry, in this case the technological one, there is a set of capitals that have the best production and reproduction conditions, that is, the lowest costs.[66] This often results in a situation in which old industries continue to operate, but without being competitive. Therefore, they end up incorporating the production norms of the new industries, producing a mobility of capital between the industries that ends up turbulently equalizing the profit rate between the industries and implementing the best production practices among the actors. In this context, the problem is that a good part of European technology companies need the computational capacity and the implementation of American technology firms to operate, reduce their costs and continue in the competition battle. The European Union put an end to the wildest practices carried out by companies such as Amazon, who take advantage of the data of their competitors to design their own prices, but do not presented any solution to the fact that a large part of the companies need to operate in the market that Amazon has created or, in other words, on the platform where both production takes place (the cloud, through Amazon Web Service) or consumption (through the company's catalog and Amazon *prime*). This does not eliminate the fact that the only companies capable of providing the most advanced means of production are foreign, something that will not change through fines, much less through efforts to create national champions. Unless, of course, the European institutions follow Chinese political decisions and drive Silicon Valley out of the European market. After all, the Commission's proposals only require transparency requirements to operate in markets such as online advertising, without imposing limits on their practice itself. This is the problem.

In this sense, we can talk about the second obstacle, if it could be called that, which is political and confronts Commissioners Thierry Breton and Margarethe Vestager. The former is known for an aggressive policy against US companies and has been branded inside the business circles as protectionist due to its impulses to implement data localization measures that force competitors to store data in the European Union. In addition, it promotes the concept of "strategic autonomy", or "strategic sovereignty", as promoted by European telecommunications companies such as Telefónica,[67] and he is committed to promoting local industries over foreign ones, particularly after the pandemic of COVID-19. Breton follows a standard neoclassical schema: Silicon Valley firms are monopolies because they are not small or medium-sized firms; the only way to ensure competition is to reduce their size. Marx's empirical findings on real competition indicate that competition between capitals does not disappear with the development of the means of production, but intensifies between large capitals. For example, the big five in Silicon Valley spend about 57 billion euros a year on research and development to drive out their competitors. Meanwhile, Vestager has leaned toward the five-year-old European business regulation that seeks to help them compete on a global stage. In this sense, commercial and digital relations with the US under the new administration will be more decisive than any other consideration of individual initiatives coming from member countries.[68] For this reason, Vestager is likely to win with the arrival of Biden and his approach towards safeguarding competition without blocking access or control of European infrastructures to American companies.

For this reason, the third problem with the European measures, and this reflects everything that about rhetorical component, is that it is not so certain that the US, which

66 *Capitalism: Competition, Conflict, Crisis*, 265-267.

67 Carla Hobbs, "Europe's digital sovereignty: From rulemaker to superpower in the age of US-China rivalry", *European Council on Foreign Relations*, July 30, 2020.

68 Laura Kayali, "Inside the EU's divisions on how to go after Big Tech ", *POLITICO Europe,* December 14, 2020.

actually has the last word when deciding whether foreign jurisdictions affect their companies, is going to accept the unidirectional movements of Europe in a battle as international as this. And by this we not only mean to follow a Donald Trump-style behavior, responding with sanctions and a trade war, but through more indirect mechanisms of negotiation. The Chamber of Commerce of the United States has been clear about this: "It seems that Europe intends to punish successful companies that have invested heavily in economic growth and recovery in Europe."[69] As stated by *The Economist* in an editorial about the transatlantic regulatory attempts: "The maximum fine contemplated by the EU is only 1% of the market value of large technologies. It's hard to imagine how you could break up an American company on its own."[70] Let's also not forget that in the first half of 2020, Google, Facebook, Amazon, Apple and Microsoft declared a combined total expenditure of 19 million euros in Brussels, equal to what they had declared for all of 2019. After all, "the risk is that [we] are [not] altering] a system that benefits those who have more money."[71]

Part II: The Franco-German axis

MACRON'S START-UP NATION

For more than a century, France has claimed an enlightened tradition of technological autonomy and industrial power. In turn, the classic perspective of the French elites embraces an idea about economic development where prosperity and good jobs must be guaranteed at home, even though emerging countries acquire higher levels of the global market and a greater influence on the international board.[72] However, globalization and the rise of China have greatly affected these plans. In turn, both fiscal and social integration in the European Union as well as the economic stagnation caused by the 2008 crisis have led the country to a huge competition process with its partners through a somewhat curious strategy: competitive disinflation. The meager public budgets are directed towards propagandist strategies to attract start-ups while reducing national tax rates, then initiating the privatization of strategic companies or opening access to foreign investors (due to the liberalization driven from Europe). A public tendering policy is also imposed where there is still a small redoubt of sovereignty to impose the terms of the common market, but it is rarely fulfilled. This has been translated into the complete abandonment of industrial policy to receive in return a considerable profit ratio for the national companies more specialized in digital services. Educational reform to attract human capital from other countries is imposed against the European leadership in innovation and the creation of powerful indigenous knowledge ecosystems capable of redistributing well-being inside the realms of the nation.

The result is an organizational amalgam (rather than statist) inherited from the lack of own initiative in the industrial field for more than three decades. France has failed to be a hegemon, neither at the European level, and presents itself as a state that does not lead, but supports the different internationalization strategies of French companies, which are not subject to any common strategic objective other than making money in the short term to survive against capitalist competition. This French model of digital capitalism is a replica of the old Napoleonic, even with its egocentric biases, albeit with a much less decisive power in Europe or the interstate relations than in the past. The ambitions and political trajectory of its current president Emmanuel Macron (banker, progressive neoliberal, pro-European and supporter of the technology industry) have given rise to what the French Republic has defined as "Startup nation", a private but managed "entrepreneurial ecosystem" (financed) by public institutions. In the words of the Presi-

69 Thibault Larger," 5 challenges to the new EU digital rulebook ", POLITICO *Europe*, December 16, 2020.

70 " America and Europe clamp down on big tech," *The Economist*, December 19, 2020.

71 Adam Satariano, Matina Stevis-Gridneff, "Big Tech Turns Its Lobbyists Loose on Europe, Alarming Regulators," *The New York Times,* December 14, 2020.

72 Pierre-André Buigues, Elie Cohen. "The Failure of French Industrial Policy," *Journal of Industry, Competition and Trade* 20 (2020): 249–277.

dent, "a nation of startups is a nation where everyone can say they can create a startup. I want France to be one." Briefly, this understanding of entrepreneurship, human agency and creativity is a replication of the Silicon Valley model, but without strong support from the military industry.

Beyond the pompous statements, what does this model consist of? Macron has been consistent with his particular vision of politics, to which he arrived late during the Hollande executive from the private investment bank to assume the economy and technology portfolio, which speaks well of the type of private investment and model of finances preferred by the Prime Minister. As Minister of Economy, Industry and Digital, he proposed the Law of New Economic Opportunities (NOÈ), a kind of digital approach to the flexibility of the labor market to further enhance the figure of the entrepreneur. Thus, Macron's neoliberal discourse is not articulated with an appeal to the market as such but to the digital world. This movement tries to turn state activity into the continuation of self-government, in which citizens behave like entrepreneurs.[73] The State merely intervenes in a calibrated and effective manner when it is necessary to provide companies with the necessary capabilities by simplifying the intricate and bureaucratic French regulatory framework. It should be understood "as a platform, not as a limitation", in the words of Macron. It means fostering business through tax breaks and by reducing the "cost of failure". But it also means having, as Macron claims to have, a "direct understanding" of "risk takers" and their needs.[74] In the end, this conception is based on creating a French model of Government as a Platform, based on intense institutional regulation, a notable public investment effort that serves private capital, and the development of a software-based digital industry model. This means, in the words of the creator of this concept (Tim O'Reilly), the government is reduced to its essentials.[75] A minimal administrative space where large corporations would go on to provide the fundamental infrastructure and services, leaving the State as a mere passive regulator. For these pseudo-progressive assumptions, the forces of capitalism, technological change, and globalization are so strong that job protection and social equality, which France has tried to maintain with an expensive welfare state, are no longer viable political goals.[76] Many of the country's political and social problems have to do with this ideology.

In this direction, Macron has set out to create a political, legal and ideological framework that has made it possible to adjust the values of Silicon Valley to the republican idiosyncrasies of France. In practice, this plan has followed the digital revolution through the example, if not the direct assistance, of Microsoft, Google, Amazon, Facebook or Apple. In 2018, when thousands of business leaders flocked to the World Economic Forum in Davos, Switzerland, the President convinced 140 top executives to make a stop in Versailles to learn about the country's campaign to get companies into #ChooseFrance. The objective of this is to create a conducive environment so that national technology companies can develop without being crushed by their international rivals, on the part that it is about turning France, but especially Paris into a startup hub that manages to wrest London's leadership in start-up innovation.

In this context we must understand the French strategy of Artificial Intelligence, entitled "Artificial AI for humanity" and has been developed on the basis of the policy brief known as "Report Villani". As the first important element, it describes the ethical framework in which both the research and the development of new technologies should be implemented, as well as the principles that inspired the

73 Ekaitz Cancela, ¿Quién es Emmanuel Macron?. La Marea. 21st April 2017.

74 Carla Ibled. Macron and the imaginary of a "start-up nation". Political Economy Research Centre. 17-19-2019.

75 In 2005, O'Reilly coined the concept of Web 2.0 and with it a complete redefinition of the characteristics of the new Internet based on the "cooperation" of the wiki, networks and of course the total commercialization of the network … and its # Five years later, O'Reilly launched its Government Proposal as a Platform (GP) (also open government and gov 2.0) concepts that have come to define the digital policy and strategies of most countries in the Global North. O'Reilly, who never concealed his ultra-capitalist devotions, did not take too many detours in launching his proposal. A minimal administrative space where large corporations would go on to provide the fundamental infrastructures and services, leaving the State as a mere passive regulator. In that same document O'Reilly invites the states to sink the digital revolution following the example of Microsoft, Google, Amazon or Apple (companies by the way, all of them played and condemned for systematically violating the regulations of half the world). The author's book can be found at Tim O'Reilly "Government as a Platform." *Innovations: Technology, Governance, Globalization* 6, no. 1 (2011): 13-40. and a criminological biography of the character in Evgeny Morozov, "The Meme Hustler", *The Baffler*, 2013.

76 Philippe Askenazy, "The Contradictions of Macronism." *Dissent*, 2018.

relationships between public and private agents meant to co-govern the new techno-industrial ecosystem, thus complementing the previous attempt to create the so-called Digital Republic.[77] The main goal of the French AI strategy is to improve the AI education and training ecosystem to develop and attract the best AI human capital, establish an open data policy for the implementation of applications and create an ethical framework for a transparent and fair use of AI applications. To this end, the Macron government has dedicated 1.5 billion euros to the development of artificial intelligence until the end of 2022, including 700 millions for research. This strategic document has been accompanied by different presidential and ministerial orders, judicial decisions as well as specific legislation, aimed at regulating the taxes of digital corporations,[78] labor relations,[79] or freedom of expression online,[80] assigning new responsibilities to existing institutions such as "Commission nationale de l'informatique et des libertés" or the "Conseil national du numérique".[81] This set of institutions, policies and legal instruments are aimed at defining the architecture of the great business platform with which Macron intends to deal with the United States and China. Again, none of these institutional arrangements aims to replace the intellectual vanguards of Silicon Valley, but to create new centers of power in France. The idea is not to turn artificial intelligence into a common good so that French citizens can enjoy the welfare state as in the past, and to turbocharge it through digital means. On the contrary, the idea is to centralize data in French companies so that they provide the services that are essential to people's digital lives. It is neoliberalism with French characteristics.

In fact, one of Macron's first political acts after being elected president was to attend the inauguration of the largest startup campus in Europe, the technology hotbed known as Station-F. Funded by digital capitalist Xavier Niel, and cared for by politicians of all stripes including Anne Hidalgo, Station-F embodies the liberal, cosmopolitan and techno-entrepreneur narrative of the France that Macron envisioned.[82] As a representative of his whole vision, does it have any political viability? While thousands of start-ups are being developed in incubators like Station F, France only has a handful of so-called unicorns or startups valued at more than a billion dollars, including the ride-sharing service BlaBlaCar and the e-commerce site Vente-Privee.com. That is a measure of how difficult it is to create the next Facebook or Google in that country. Moreover, the figures published in the *Financial Times* bear this out: in the first half of 2019, French startups raised a record 279 billion euros, 43% more than the previous year, and the size of its fundraisers continues to increase. France is behind the UK, which raised 5.3 billions (+ 75%), but ahead of Germany, which raised 2.47 billions (+ 4%). After last year's funding rounds boosted valuations for Doctolib (medical reserves), Meero (photography) and Ivalua (sourcing software), there are now 13 unicorns in France. In Europe, France is now second only to the UK in terms of possible future unicorns, defined as companies valued between 250 millions and 1 billion.[83] Meanwhile, technology-related investments in Britain rose almost 90 percent last year to more than 7 billion, more than in France, Germany and Sweden combined.[84] It is this context that credits and other financing mechanisms that Macron has mobilized are understood. In March 2019, he managed to secure 5,000 million euros from large capitalist investment funds.[85] A year and a month later, the French state once again demonstrated that it is the guardian of digital capital, securing another 4,000 million euros to ensure liquidity to digital startups

77 Cédric Villani, "For a Meaningful Artificial Intelligence: towards a French and European Strategy". Report from the French Parliament, 2018.

78 Alex Ledsom, "Tech Tax Is Just The Beginning, Says France," *Forbes*, 2020.

79 Sam Schechner and Preetika Rana, "Uber Ruling in France Boosts Gig Workers' Rights," *The Wall Street Journal*, March 4, 2020.

80 Makena Kelly, "France wants to fine Facebook over hate speech," The Verge, 4th of July, 2019.

81 Future of Life Institute, AI Policy- France (Paris: Future of Life Institute, 2020).

82 Romain Dillet, "A walk around Station F with Emmanuel Macron," *Tech Crunch*, July 1, 2017.

83 Harriet Agnew. "Paris Overtakes Berlin for Tech Start-ups after Boost from Macron," *Financial Times*, November 25, 2019.

84 Liz Alderman, "Macron Vowed to Make France a 'Start-Up Nation.' Is It Getting There?," *The New York Times*, 23 May, 2018.

85 "Investment Climate Statements: France and Monaco," (Washington: U.S. Department of State, 2020).

that suffered funding shortages during the pandemic.[86] In September 2020, Macron once again showed its commitment to the sector by announcing another 7,000 million, of which almost 4,000 million were cash transfers for the startup ecosystem, planned for them to develop artificial intelligence, cybersecurity and computing. All of this has to do with the second element of Macron's strategy: the development of a heavily financialized and software-centric model of digital capitalism. It is at this level where the French political strategy has bet with greater force, allocating a huge amount of funds in the last two years through its investment bank as well as a large political capital in order to capture the attention of Venture Capital Funds in the near future.

However, France is aware that private capital is not enough to grow and scale the national corporations at a high enough rate to cope with the extra-European giants. In the words of Cedric O, Secretary of State for Digital Affairs: "We have to foster the tech giants so they can compete on the same level as Uber or Airbnb."[87] This strategy has been complemented by a strong public initiative to create entrepreneurial ecosystems, agile and innovative start-ups that can scale quickly and then be absorbed by French giants. At least, that is the idea behind "French Tech" brand, which aims to create certifications for regional ecosystems, such as the well known as "Métropoles French Tech" ("French Technology Centers"), made up of nine centers that obtained initial certification in November 2014. Axelle Lemaire and Emmanuel Macron announced a new wave of certifications (both thematic centers and ecosystems) in June 2015, creating four new French technology centers (Brest, Lorraine, Nice and Normandy) and four thematic ecosystems (Saint-Étienne, Alsace, Avignon and Angers). Other examples in this direction have been the French Mission, an initiative that promotes French startups globally and helps them grow into large companies. The French Tech Mission chooses the top 40 French startups and they label them Next40. These startups are meant to have better Government treatment, such as access to a fast track administrative system and all the support they need for further development. Macron has set a goal of having 25 unicorn companies by 2025, privately owned startups worth more than € 1 billion. In theory, this special treatment provided by The French Tech Mission could help startups and lower-level entrepreneurs 'move fast and break things' as Facebook's philosophy states.[88]

This political and legal architecture designed by Macron and his predecessors is complemented by a model of digital capitalism financed in a *co-joint* public-private sector. This milestone was consolidated in early 2015, when the Prime Minister met John Chambers, CEO of the Cisco group, to approve the framework for a partnership between the American company and the French government. Then, Cisco announced its plan to invest 100 million euros in the French technology ecosystem. A few months later, the American company also announced its first commitments in the form of NUMA Sprint (a startup acceleration program), The Camp (a campus dedicated to digital innovation), Le Défi (a contest related to social and environmental issues), 6WIND (for telecommunications) and Actility (a machine-to-machine service operator).

Despite all efforts, the limits of the French strategy (the strengthening of the country in the world within a co-led Europe alongside Germany) have been well known since the beginning of Macron's term. It was made clear in his first decision as President of the Republic: convincing the tech giants to carry out large investments in the country. Although Facebook opened an AI research center in Paris a couple of years ago, more recently opened an incubator on the Paris Station F startup campus, and promised to increase its Paris AI team by 50 to 100 people and spend 12.2 million on new equipment by 2022, such as servers to host data for public agencies. Meanwhile, Google announced that it would open a new AI lab in Paris, with a focus on technologies that could be applied to health and the environment. The company said it expects to hire up to 120 researchers for the lab, which would equal the 120 engineers already there.[89]

86 Marie Mawad, "France pledges €4bn liquidity support to startups," *Sifted*, 25 March, 2020.

87 Mathieu Rosemain, "France's Macron Bets on Private-Sector Funding to Fuel Startup Push," *Reuters*, 18 September, 2020.

88 Ilker Koksal, "France On Its Way To Become A Tech Giant: Macron's Speech And The Recent Investment," *Forbes*, 29 October, 2019.

89 Chris O'Brien, "Google and Facebook expand AI investment in France following Macron's courtship at Versailles," *Venturebeat*, 23 January, 2018.

These logics explain the concern of a large part of the French bureaucracy about digital sovereignty and the growing internal criticism of Macron, which has led him to modify many of his public statements. In 2013, a report issued by the French Senate expressed concern because it was clear that the Old Continent was on its way to becoming a "digital colony". Certainly, Europe lags behind in private investment in AI, which amounted to approximately 2.4 and 3.2 billion euros in 2016, compared to 6.5 and 9.7 billion in Asia and 12.1 and 18.6 billion in North America .[90] It is this geopolitical awareness that makes France push for a European rather than an exclusively national approach, not a firm conviction for a sort of communitarian federalism. Also, that's the reason why the government is actively promoting the French technology mission: becoming a technology giant in Europe and preserving its position on a global scale. Finally, the statements by Bruno Le Maire demanding national companies not hire Silicon Valley digital services represent the latest chapter of the French soap opera. As he put in a tweet, "there is no political sovereignty without technological sovereignty."

Beyond the false idealistic abstractions that leaders try to convey, and according to empirical data, France's dependence on the United States is absolute. An illustrative example is Cloudwatt's death on February 1, the date when the last computers were disconnected from one of France's attempts to build a local computer industry. The Andromède project was announced in 2009 as a government wish for cloud computing controlled by France and aimed at a "cloud souverain", a secure data hosting service to offer administrations and companies a national offer of online hosting of sensitive data that guarantees the confidentiality of the companies. Despite the 285 million euros invested by the State and by the main national partners, including Orange and SFR, this project failed to find an audience. The lag compared to US suppliers, Amazon, Microsoft and Google, has only grown since then. And in the absence of a national platform, "users have had no choice but to resort to non-sovereign solutions", as stated Stéphane Volant, president of the Club of Directors of Business Security and Safety (CDSE).[91] Indeed, the effective result of the lack of French planning is absolute digital dependence. Recently, the decision of the French Ministry of National Education pointed in that direction allowing the acquisition of licenses of a hundred Microsoft software without real competition and without justification for the use of this software instead of its free equivalents, as revealed by Le Canard Enchaîné.[92]

The pandemic has only accelerated these trends towards digital dependency. In order to support French companies at the end of the coronavirus period, the French government launched a loan guaranteed by the State. To carry out these operations at a technical level, Bpifrance, which manages the certification system through its online banking, used the services of the American giant Amazon Web Services.[93] On the other hand, as denounced by several French open source software firms, the awarding of a public contract for the hosting of the Health Data Hub's health data on Microsoft Azure servers, goes against any notion of European digital sovereignty. Beyond managing the architecture of the French national health data platform, this way of operating to solve certain political issues implies a high need to use U.S. infrastructures.[94] Is France's much-lauded digital sovereignty one iota different from the $10 billion contract to move the Pentagon's Joint Enterprise Defense Infrastructure (JEDI), and more specifically, the U.S. Department of Defense, to the Microsoft cloud? France is just an extension of this empire, and it is shown by the brutality with which it has faced Huawei and ZTE, blocking their services in full allusion to national autonomy, while handing over all its public platforms to the Silicon Valley capitalists. Macron is just a vassal, mind you, with a great public relations strategy at his disposal.

90 Nicolas Miailhe, "The Geopolitics of Artificial Intelligence: The Return of Empires?" *Politique étrangère* 3 (2018): 105-117.

91 Sophy Caulier, "Numérique : le cloud, enjeu de souveraineté," *Le Monde*, February 16, 2020.

92 CNLL, "Le CNLL auditionné par la mission Bothorel sur l'ouverture des codes et des données de l'Etat" *CNLL Actualité*, October 10, 2020.

93 Franck DeCloquement, "Souveraineté numérique : le choix inquiétant fait par la BPI pour l'hébergement des données sur les prêts des entreprises françaises affaiblies par le Covid-19," Atlantico, 5th of July, 2020.

94 CNLL, "Hébergement de données de santé du Health Data Hub chez Microsoft," *CNLL Actualité*, March 6, 2020.

THE HYPE OF THE GERMAN INDUSTRY 4.0

The German model of technological development shows a clear line of continuity with the industrial policies of the country, which did not suffer the process of deindustrialization and reconversion to the tertiary model to which countries such as the United Kingdom, Spain or even France were subjected. Export-oriented growth models that emerged due to the structural weakness of domestic market demand in the postwar years have had a particular influence on the diffusion of information and communication technologies (ICT) in the German economy. And it is mainly due to the weight of the industrial productive sector, which ranges between 20% and 25%.[95] The German digital capitalism model is therefore not based on the attempt to configure a new Silicon Valley that orbits around software, but on the digitization of the already existing industrial sector, in order to transfer the high profit margins of digital capitalism to the German manufacturing sector. In other words, maintaining a constant rate of growth in the gross value added of industrial production without increasing costs.[96] This is a response to the high added value production model, which presents significant costs for employers, partly due to the high price of labor power. It should be noted that the number of workers engaged in the global manufacturing sector increased from 496 million workers in 1991 to 768 million in 2017.[97]

Consequently, unlike the rest of European countries, the German proposal for digital capitalism has been called Industry 4.0, born as the result of the joint effort of the German employers and the government to integrate manufacturing industrial production systems with the whole of digital technologies based on communication. In the words of Chancellor Angela Merkel, this entails the "comprehensive transformation of the entire scope of industrial production by merging digital technology and the internet with conventional industry."[98] That is, the establishment of a techno-industrial complex made up of cybernetic and physical elements. Within the German narrative, now assumed in much of the world, Industry 4.0 entails a new evolutionary step on industrial production. According to this scheme, the first industrial revolution was characterized by the use of coal and steam engines. As for the second, it was characterized by the extensive use of fossil fuels and explosion engines. The third, which we are still navigating, began in the 1970s and involved the incorporation of information technologies. The fourth industrial revolution would be characterized by the interconnectivity between production factors, the integration of production chains, interactivity, personality and especially by the automation of production, thus sweeping off the border between digital and analog. In this direction, the new phase of industry 4.0 has to do with the platformization of the German model, an aspect that is related to the French proposal, and even more so with the projection of both nations with respect to their joint direction of the European digital industrial policy.

This is, the new German strategy, which covers until 2030, aims to replicate the platform capitalism model of software companies at the manufacturing level.[99] For that, the 2020 strategy is organized around three main ideas: autonomy (what we have previously described as technological sovereignty), interoperability (between public and private agents in Europe, this is, "public-private partnership as usual") and sustainability (in relation to the social, ecological and economic conceptualization of made by the EU). Since 2011, the German employers' association together with various German ministries have been working to achieve these great areas of industrial transformation 4.0 and promoting them in forums of different kinds. First by modifying the production process itself by including AI and automation technologies. Secondly, promoting the transformation of production logistics, seeking to integrate production factors, forming industrial synergies. The third and fourth elements have to do with the inclusion of advances in software in the final products, with a greater presence of intelligent products and services, as well as in the management and service itself with respect to customers.

95 Wolfgang Schroeder, "Germany's Industry 4.0 Strategy", *Friedrich Ebert Stiftung*, 2016.

96 "World Employment and Social Outlook", *International Labour Organization*, 2020.

97 Ron Davies, "Industry 4.0: Digitalisation for productivity and growth," Report from the European Parliament, 2020.

98 Wolfgang Schroeder, "Germany's Industry 4.0 Strategy: Rhine Capitalism in the Age of Digitalisation", Friedrich-Ebert-Stiftung, 2016.

99 Servaas Storm and C. W. M. Naastepad, "Crisis and recovery in the German economy: The real lessons." *Structural Change and Economic Dynamics* 32 (2015): 11-24.

To carry out this transformation, the German government has established fluid channels of communication with the German employers. Contrary to the French model, the German state has not played a strategic role as a guarantor of financial capital, with relatively low initial investments of 200 million euros, but rather as a coordinator and political director of the process. In this sense, it has coordinated a series of sectoral policies aimed at directing and facilitating industrial business innovation with the aim of expanding the strength of national industrial capital after the crash of 2008. Even for several years, these strategies have been oriented to the basic and applied research priorities, reordered methods, protocols and standards in cutting-edge industries, adapted the educational system at all levels to the needs of the industry, homogenized and stabilized the labor market and regulation, as well as social security and protection (guaranteeing a stable, fluid and prepared workforce), and guaranteeing a sufficient network of infrastructures of all kinds. To this end, Germany has coordinated a good part of its main Ministries (Economy and Energy, Education, Labor, Transport, Interior, Justice), as well as established numerous working groups between public and private actors.[100] It is a top down approach where bureaucrats collaborate with the private sector. For its part, the employers' association has established clear and direct communication channels between the different conglomerates involved, integrating, standardizing and creating productive poles that generate a benefit to German industrial capitalists. First and foremost, this is a business project driven and led by strategic private sectors, who define the different strategies of Big Data (2011-2013), Robotics, Intelligence of Things and Automation (2014-2016) and Artificial Intelligence (2017- 2018).[101]

Be that as it may, if anything, the German industrial strategy and the Industry 4.0 concept have influenced the discursive positions of the various European countries (and even China, which has created its own version). The various German business organizations, conformist trade unions and the conservative intelligentsia have embraced this fictitious debate and invoked new technologies for aligning their capitalist strategy: to exploit and intensify working hours. The clearest expression is in the impact of technologies on workers in the Global South, to whom they reach thanks to the digital integration of Industry 4.0 with global production. Thus, the growth possibilities of German companies are deposited in the reduction of the quality of work or the reduction of costs.[102] There are other indicators that German companies and their Industry 4.0 means increasing the competition among workers.[103] This is, ensuring that a large number of producers could enjoy low wages thanks to the systematic use of the "reserve army mechanism" in the digital age: using sharing economy platforms to access huge amounts of labour in southern countries, thereby reducing business costs, or simply introducing algorithms into the workspace to intensify the use of labour in the South.[104] On the other hand, there is also evidence that Industry 4.0 is more of a way to innovate with ways of controlling the workforce than a strategy determined to efficiently implement digital planning of the production process. In Germany, Amazon has confirmed the existence of equipment consisting of a microphone and camera that monitors employees to record working hours, log incoming goods and maximise employee efficiency.[105]

Obviously, this industrial strategy will achieve the goal of increasing corporate spending on means of production, revitalizing the stagnant German entrepreneurial state, and doing a good propaganda favor to heavy industries, whose pollution-based business models will be better perceived abroad. Probably, it will also weaken the position of the workers in the different political conflicts, since all civil

100 Johannes Horst and Fernando Santiago, "What Can Policymakers Learn from Germany's Industrie 4.0 Development Strategy?," UNIDO, 2018.

101 "Germany AI Strategy Report," Report from the European Commission. 2018. Available at: https://ec.europa.eu/knowledge4policy/ai-watch/germany-ai-strategy-report_en

102 Al Rainnie and Mark Dean, "Industry 4.0 and the Future of Quality Work in the Global Digital Economy," *Labour & Industry: a journal of the social and economic relations of work*. (2020): 1-19.

103 Philipp Staab, "Digitaler Kapitalismus. Markt und Herrschaft in der Ökonomie der Unknappheit" (Berlin: Suhrkam, 2019): 154.

104 Ekaitz Cancela. "No hay alternativa al socialismo: los límites de la lucha de clases en el capitalismo digital," *Teknocultura* 17, no. 2 (2020).

105 Philipp Staab, Oliver Nachtwey, "Market and Labour Control in Digital Capitalism". *tripleC* 14, no. (2016): 467.

society has embraced the corporatist discourse of Industry 4.0. Nonetheless, the achievement of these objectives is far from taming Silicon Valley and its presence in the country, let alone facilitating the control of profitability by the state. Again, the calls of the big German lobbies, as well as the repetition of their messages by the federal cabinet, are more of a discursive question than a real strategy with effective political capacity.[106]

This is eminently due to the corporatist nature that the debate has adopted, not only when implementing the common premise in this theory of class harmony and its organic unity through the organization of work, but also of capital.[107] This latest event takes place in Germany through the reformulation of antitrust policy. At the core of this idea is the assertion that "if antitrust policy is not 'domestic to the titans of technology, it will be more likely that another type of regulation will be imposed, less driven by free market ideas. In this sense, the prevailing position in the debate on these policies when confronting Google is 'keep the markets open, otherwise, the intervention may come too late'".[108] In a slightly broader way, it can be said that in terms of protecting competition in the market against the emergence of giant online platforms and their business models it is present in the recent ninth amendment of the German competition law. In fact, there has even been an institutional change for the competition authority, the Federal Cartel Office of Germany (FCO; Bundeskartellamt), to adequately address anti-competitive agreements and strategies involving digital goods. In addition, oriented towards cooperation between German press publishers, who have initiated one of the largest crusades against Silicon Valley, the aforementioned German law establishes a series of criteria to consider the market power of platforms: direct and indirect network effects, parallel use of various services, economies of scale connected to network purposes, access to data relevant to competition, and competitive pressure driven by innovation.[109] In relation to this last point, the R&D spending of the entire German automobile industry in 2018 was approximately 30,000 million, a figure 5,000 million less than Amazon's expenditure each year.

Without going into complex details, beyond the issues that are already on the agenda of the debate in Germany, due to the ordoliberal roots of the economic thought of the Germans, the ultimate maxim to which the large conglomerates aspire is to regulate the power in terms of the influence that the big players obtain on the regulators and politicians, which will degenerate into giving even more priority to actively listen to the German lobbyists. On the other hand, the competition authorities can put an end to the data-based price discrimination strategies that consumers face, they could even regulate how much they charge for blocks of data in data-free markets endowed with individual ownership, but hardly is this a successful long-term strategy. The latest announcements of the German Antitrust Commission will not achieve the ultimate goal of guaranteeing German digital sovereignty, let alone European, but they do show where the debate is evolving. Referring to "Chinese state capitalism", it proposes to reduce distortions of competition in the internal market with an instrument of European competition law applicable to subsidies from third countries, which aims to guarantee the equality of treatment of subsidies granted by third countries such as China and state aid from Member States.[110] In other words, Germany is trying to transpose its laws into European directives on this matter to become a kind of last defender of European interests in a world divided between two great powers. Hence, the proposed instrument suggests allowing the European Commission to intervene in cases of acquisition of a company and contracting of a Member State; it may even apply a suspension obligation to all interested parties. There is no need to add more arguments than the following comparison: where Germany spent 200 million

106 Thomas Haipeter, "Digitalisation, Unions and Participation: the German Case of 'Industry 4.0'". *Industrial Relations* 51, no. 3 (2020): 242-260.

107 Leo Panitch, *Working Class Politics in Crisis. Essays on Labour and the State*. (London: Verso, 1986): 132-160.

108 Rupprecht Podszun, "How to Reform the Law on Abusive Practices: The study that will serve as a basis for reform in Germany (and Europe?)," *Competition Policy International Journal* (2018).

109 Oliver Budzinski, and Annika Stöhr. "Competition Policy Reform in Europe and Germany– Institutional Change in the Light of Digitization," *European Competition Journal* 15 no. 1, (2019): 15-54.

110 "Monopolies Commission: Strengthening the competition regime in Europe in times of the Corona crisis, digital change and growing challenges from Chinese state capitalism. Biennial Report of the Monopolies Commission under § 44(1)" *ARC* 29 (2020).

euros on digital infrastructure and research and development in its Industry 4.0 program, China spent almost 200 billion for its "Made in China" funds, not counting that it has enabled private and state companies to merge in order to create national champions large enough to sweep German competitors out of the world market guided by ideal legal views on competition.

In fact, this is a curious quality about the pseudo German sovereignty strategy, as it tries to use the entire regulatory force of the European Union to advance its particular inter-capitalist competition against China. If it exploits German leadership in automation and digitization, Germany aims to expand its influence in the large Chinese market amid US concerns that this country will become a major competitor in the coming years.[111] German measures move in this tension, where there is also a strong internal debate among members of Angela Merkel's Party (and even this one with Emmanuel Macron) on how to deal with power. Some German lawmakers want to exclude China's Huawei from 5G contracts, following warnings from the United States that this could lead to spying on Beijing. Merkel prefers safety standards to be the yardstick rather than singling out individual companies.[112] After all, Volkswagen, Daimler and BMW sell more cars in China than anywhere else. In addition, these companies already cooperate with Huawei, a dependency that Beijing wants to exploit without caring much about the antitrust strategies of Berlin. Again, the power of this power encompasses far more areas than antitrust policy can cover. Konstantin von Notz, legislator and member of the committee for digital affairs in the German Parliament, put it this way: "The Chinese have made it clear that they will retaliate where it hurts the most: the automobile industry."[113]

In general terms, both France and Germany support bilateral or multilateral cooperation and the simultaneous adoption of national and European objectives in their national artificial intelligence strategies. However, the motivations and ulterior goals of the two are radically different. In the German case, the focus on European cooperation, specifically Franco-German, seems to present itself as a goal in itself, a tender collaboration with its European partners. The French strategy, by contrast, draws on a more pragmatic approach, supporting European cooperation only in areas where the authors of the strategy consider useful. On the other hand, both governments defend the relaxation of the EU competition rules to allow states to create mega-companies. The most prominent example came this spring when a German-led investment lawsuit to the EU over a local vaccine company, CureVac, which the Trump Administration was said to be seeking to control, resulted in the company receiving a funding package. of the EU of 80 million euros.[114]

Issues like this generate intrastate asymmetries. The problem is that when Macron and Merkel speak of digital sovereignty, they refer to the national one, while von der Leyen does it to the supranational. In this fight of visions there must always be a winner. And everything points to this being the German government. On the one hand, the campaign that started some years ago to create a collective legal data protection regulation is more a move to allow German companies to sell their goods and services in the European single market without having to adapt to national capitals than a concern for citizens' privacy. Moreover, common standards also allow foreign capital to enter the market. Who will be the governments that will mobilise private investment to develop domestically and continue to control domestic markets is not a question that requires much thought. As a recent article put it, despite the eloquent rhetoric about "shared values" from the President of the European Commission, European digital sovereignty is nothing less than an imperialist agenda to take a position in global inter-capitalist competition: it is a bid to enforce the rules, rather than to receive them. In effect, this is aimed at strengthening Europe's position in the world as long as it also strengthens Germany's position within the European Union.[115]

111 Nicoletta Corrocher, Roberto Mavilia, and Melissa Giorgio. "The Sino-German Alliance for the Fourth Industrial Revolution: Dynamics and Policy Implications," *Journal of Economic Policy Reform* 24, no. 4 (2020): 1-21.

112 "Merkel wants Europe to aim for a joint stance on China and 5G". *Reuters*. November 11, 2019

113 Katrin Bennhold, and Jack Ewing. "In Huawei Battle, China Threatens Germany 'Where It Hurts': Automakers." *The New York Times*. January 16, 2020.

114 Georgi Gotev. "EU offers support to German vaccine company coveted by Trump," *Euractiv*. March 17, 2020.

115 Peter Schadt, and Hans Zobel. "How Digitalization Is Preparing a Fight for World Market Supremacy". *Jacobin*. 14 November, 2020.

Part III: The Gaia-X project, fake technological sovereignty

Paradoxically, the European commitment to technological sovereignty depends on the joint digital industrial policy strategy launched by Germany and France, the so-called Gaia-X Plan. According to the narrative of its promoters, among whom are also renowned German industrial giants, this initiative represents the next generation of data infrastructure for Europe: a federated, decentralized and secure system that meets the highest standards of digital sovereignty at the same time. that promotes innovation. In other words, as expressed in the Digital Summit of October 29, 2019, "this project is the cradle of an open and transparent digital ecosystem, where data and services can be made available, collected and shared in a trusted environment."[116] Gaia-X would be the most advanced solution against Europe's serious problem of technological dependency and industrial strategic vulnerability. It proposes a data infrastructure solution based on the values and principles of the Union, which claims to defend the objectives of the European data strategy (protection, fundamental rights, laws relating to cybersecurity / openness, fairness, diversity, democracy and confidence).[117] More specifically, this project could be described as the creation of a technological and legal architecture that allows the intra-European flow of data in order to be exploited by companies, science and the public sector, as well as by citizens. It would be a multi-location clouding meta-service with sufficient capacity to provide productive capacities to all the Union's actors. This is intended to erect a framework that, without aspiring to compete in market terms with the data hosting and clouding giants of Silicon Valley, at least allows the constitution of an autonomous European entity with sufficient capacity to provide similar services to governments and the industrial sector. digital, both software and manufacturing.[118]

That is, it is about promoting nothing more and nothing less than the implementation of a cloud infrastructure throughout the sovereign European Union of Google Cloud, Microsoft Azure or Amazon Web Service. In this sense, the project would be the materialization of the political intention of the EU when it comes to raising its digital single market for Europe by establishing a public private platform for exchange, sale and access to services, protected, but not isolated, from dominant digital corporations. It would therefore be the consensus solution of the Franco-German axis to provide the material basis for the longed-for European technological sovereignty.[119] In this way, as it is professed, Europe could finally have its own digital productive ecosystem and imbued with its humanistic, ecological and social commitment values.

However, and simply paying attention to the names of the 22 founding partners of the project,[120] as well as the governmental enthusiasm shown by the German and French governments, it is easy to intuit other interests, which although not incompatible with the above, are placed first in the priority scale of the Gaia-X project. This aims to establish a protected space for Franco-German capital, which would allow it to strengthen the integration and corporate consolidation processes underway. The objective is to generate the material conditions necessary to constitute a techno-industrial ecosystem capable of producing corporate champions in a position to compete with the Chinese or Americans. Therefore, the strategy has a clear Franco-German component, whose industries are the only

116 Bundesministerium für Wirtschaft und Energie, Project GAIA-X: A Federated Data Infrastructure as the Cradle of a Vibrant European Ecosystem (Berlin, 2020). Available at: https://www.bmwi.de/Redaktion/EN/Publikationen/Digitale-Welt/project-gaia-x.pdf

117 Bundesministerium für Wirtschaft und Energie, GAIA-X: A Pitch Towards Europe (Berlin, 2019). Available at: https: //www.data-infrastructure.eu/GAIAX/Redaktion/EN/Publications/gaia-xa-pitch-towards-europe.pdf?__blob=publicationFile&v=6

118 Bundesministerium für Wirtschaft und Energie, GAIA-X: Technical Architecture (Berlin, 2019). Available at: https://www.data-infrastructure.eu/GAIAX/Redaktion/EN/Publications/gaia -x-technical-architecture.pdf

119 Ursula von der Leyen, "State of the Union Address by President von der Leyen at the European Parliament Plenary, European Commission," September 16, 2020.

120 Those names are Atos Amadeus, Beckhoff, Bosch, BMW, Cispe Cloud, DE-CIX, Deutsche Telekom, Docaposte, EDF, Fraunhofer, German Edge Cloud, Institut Mines-Telecom, International Data Spaces Association, Orange, 3DS Outscale, OVHcloud, PlusServer, Safran, SAP, Scaleway, and Siemens.

ones capable of performing that function. Although there are some frictions between the two (while France focuses its efforts on becoming a communications and software development powerhouse, Germany is focused on protecting its manufacturing industry by integrating with new technological developments), both efforts require a material, legal, technological and human infrastructure, which is impossible to achieve individually and not through an alliance limited to both countries. For this reason, and for the benefit of their large corporations, France and Germany propose Gaia-x as the great solution for the rest of the member states.

Undoubtedly, this is a completely innovative project: it enshrines the relationship between capitalists and the State in an entity of European dimensions —and without being perceived as such by the other member states!. However, this project raises innumerable doubts and problems for European digital sovereignty. As some pro-European media have raised from the Brussels bubble, this is the "Trojan Horse" for large foreign technology companies to access Europe.[121] Unless, of course, someone wants to do business with the French and German business establishment. To cite one example, on the project's own website, companies such as Palantir, or the cloud computing areas of Google, IBM, Microsoft or Amazon are mentioned as "Day 1 Members". Not to mention that senior members of Europe's Gaia-X cloud computing initiative have voiced concerns about sponsorship of its annual gathering in Milan by Chinese tech companies (Huawei and Alibaba).[122] And what is even more disturbing.: Microsoft and Amazon reacted to the initial announcement of the European project with a good deal of haughtiness, breaking the arguments of the new German idealists that a cloud in Europe will not have the scale necessary to be competitive in today's market. Let's not forget that Amazon Web Services is the world leader in public cloud (39% market share), Microsoft Azure is second (19%), followed by Google Cloud (9%) and Alibaba Cloud (5%). Also, the four giants had a combined market share of 72% in the third quarter of 2019, up from 57% in early 2016. "We think the idea of a national cloud is interesting as a theory, but it actually removes many fundamental advantages of cloud computing (…) true sovereignty requires the most powerful cloud solutions; otherwise, Europe only consolidates its digital divide," said a representative of Jeff Bezos' company about the Gaia-X project. For its part, Microsoft stated that it is legitimate for Europe to seek greater digital sovereignty, but it is a mistake to focus on the location of suppliers.[123]

Certainly, to understand the implications of this fallacy on European technological sovereignty, it is enough to look at the way in which European companies depend on the Silicon Valley cloud architecture to understand the Gaia-X plans. Airbus, the most powerful company in Europe, signed a strategic partnership with Palantir, a data mining giant strongly integrated in the Department of States, especially in Defense and Intelligence, to collect all the information of the A350 program, clean it and create correlations after. This work increased production of the A350, reduced quality problems and resulted in huge savings.[124] This same company was hired by French intelligence services in the wake of the militant attacks in November 2015 that killed 130 people in Paris. The initial three-year contract with Palantir, whose clients range from the CIA to large global banks, was renewed last year because there was no homegrown alternative, as recognized by the national intelligence agency DGSI.[125] Palantir has had access since 2013 to personal information such as text messages, passport numbers, criminal records and maiden names of mothers thanks to the intimate connection with government agencies, a fact that has not prevented the company from establishing conversations with the authorities of France, Germany, Austria, Spain and Switzerland to establish a health service similar to the one offered to the United Kingdom's National Health Service to combat the

121 Stefane Fermigier, and Sven Franck "Gaia-X: A trojan horse for Big Tech in Europe," *Euractiv*. November 23, 2020.

122 Clothilde Goujard, "Huawei, Alibaba sponsorship overshadows European cloud Gaia-X's summit", *POLITICO Europe*. November 17, 2021.

123 Aysegul Ceylan, "GAIA-X, the French-Allemand cloud that provides the foundations of the European numerical souvenir," *Le Portail*. November 26, 2020.

124 Véronique Guillermard, and Fabrice Brégier, "Palantir veut être un acteur majeur de la Tech française". *Le Figaro*. April 10, 2018.

125 Mathieu Rosemain, "A French alternative to Palantir would take two years to make, Thales CEO says," *Reuters*. October 23, 2020.

pandemic.[126] The 9/11 terrorist attacks proved momentous for Palantir because, at the time, its founder Peter Thiel decided to start a data mining company aimed at identifying and pursuing terrorists through the rapidly growing data streams on the Internet. Now, apart from Airbus, FiatChrysler, Merck and other European companies, they make up the majority of Palantir's clientele. British oil company BP, for example, says it has increased its North Sea oil and gas production by about 10% using the company's analytical tools. Where is the acclaimed European sovereignty? In this context, it's not a mystery to understand why Scaleway, the second largest player in the French cloud behind OVHCloud, announces that it is withdrawing from the European cloud project Gaia-X. While Ursula Von Der Leyen had made the project one of the bases of the European Union's data strategy, Scaleway explains that he no longer believes in it, against the backdrop of the entrism of American and Chinese digital companies within Gaia-X.[127]

At the moment, Microsoft offers its Azure public cloud infrastructure in German data centers to much of the industry, with national provider T-Systems acting only as trustee of customer data. Even with the commitment to combat climate change, this company has been ahead of the European ones. On the other hand, Microsoft will launch a new data center region in Sweden next year and has promised that the deployment in the country will feature the company's most advanced and sustainable equipment in order to use 100% renewable energy in all its buildings and centers. data for 2025. This country has also been chosen by Amazon Web Service to increase its presence in Europe with a new region of cloud computing that is expected to open in the second half of 2022. The measure will further expand the great power of the company on the continent, with six AWS regions already active in France. Germany, Ireland, Italy, Sweden and the United Kingdom, and another location to be launched in Spain (Zaragoza) by 2023. Recently, IBM opened a research and sales center for Watson, its cloud-based cognitive computing platform, in Munich.[128] In fact, another characteristic fact is that this company, together with Oracle, accumulates more than half of the contracts (60 million of the possible 104 million) that the National Supercomputing Center has needed to build the first supercomputer, in theory destined to guarantee European digital sovereignty. On the other hand, Google Cloud Platform locations in Europe, the equivalent of military bases in the digital age, can be found in London, Belgium, the Netherlands, Zurich, Frankfurt, Finland, and recently Poland[129] and Madrid. Thanks to these data centers, it can offer computing services, storage and management of huge databases, big data and machine learning, network management and development tools, as well as security management to many governments and companies. European. Afterwards, the companies of the member countries are in charge of selling these services to the highest bidders. This means that GAIA-X serves to consolidate a logic that is not productive, but commercial. It is the same condition that peripheral areas of the world-economy have acquired for centuries, with the added consequences for the cultural, social, political and identity relations of national populations.

It is difficult for affirmations such as the following from French Minister Bruno Le Maire to not squeak: "We are not China, we are not the United States, we are European countries with our own values and with our own economic interest that we want to defend." Or those of the EU Commissioner, Thierry Breton, who pointed out that this is a way of "keeping our destiny in our own hands". Just a year later, not even the market analysis firms believe it. "GAIA-X will need to prove its worth in the coming months if it is to avoid an embarrassing descent into irrelevance," noted a report from analytics company Forrester. "As AWS, Microsoft Azure and Google Cloud continue to expand the scope of their services, the European cloud project has not proven to provide more value than the average infrastructure

126 Oscar Williams, "Revealed: Palantir secures £ 1m contract extension for NHS data store work," *New Statesman*. August 21, 2020.

127 Gabriel Mouchès, "Retrait de Scaleway de l'initiative Gaia-X: un rendez-vous manqué pour le cloud européen ?" *Portail de l'IE*. 21 November, 2021.

128 Sheenagh Matthews, "Building a National Fortress in the Cloud," *Bloomberg*, May 19, 2016.

129 Google also announced its partnership with the national cloud provider (DCP) of Poland, which was jointly founded by PKO Bank Polski and the Polish Development Fund. DCP will serve as a Google Cloud services reseller in Poland and provide Google Cloud managed services capabilities. Estephanie Condon, "Google adds new Cloud region in Poland", *Zdnet*, September 27, 2019.

provider." If GAIA-X does not do so by mid-2021, the report says, the initiative will be "dead on arrival" on the market.[130] And this is not a crazy conclusion at all: Amazon is the leading cloud provider in Europe and also the leading company in all major individual country markets, based on revenue from cloud infrastructure services. Microsoft is the second ranked cloud provider across the board. Beyond the first two, the rankings vary. The third ranked cloud provider in Europe is Google. It is also the third largest cloud service provider in many major countries, although in France, for example, it is behind OVH and Orange. This isn't usually a problem for tech giants either. Recently, the French company (OVH) succumbed to Google to push European cloud computing within its markets. IBM is the fourth ranked vendor in Europe as a whole and almost inevitably figures somewhere in the top six in each individual country. In total, European cloud infrastructure services revenue was 6 billion in the first quarter, with annual revenues exceeding 21 billion, representing an annual growth of 38%. Although it is much smaller than the US market, European cloud revenues are growing faster.[131] It is therefore clear that these companies do not want to isolate themselves from the United States, but rather to take advantage of its capabilities to continue to exist in the capitalist cloud market. Whether this will serve to fulfil the social democratic promises of a return to the welfare state is not so clear.

While this project can serve to strengthen the position of Franco-German digital capitalism by ensuring its dominant position on the continent, it is more difficult to understand how Europe as a whole benefits by maintaining a relationship of technological dependence with foreign giants. The Gaia-X project also poses serious deficits in democratic control and transparency. If the productive future of Europe truly depends on the establishment of a pan-European data infrastructure, it is worth at least wondering who, how and why do you make the decisions in the project, to whom are they accountable, the citizens or the shareholders of the corporations promoting the project? draft? And perhaps most importantly, do we want to delegate to large corporations the planning, construction, management and direction of tomorrow's basic infrastructure to capitalist companies in the face of the inability of European regulators to maintain an outdated vision of free markets? The answer to these questions is not simple, but it surely goes through claiming a digital sovereignty where the European position is not given by Washington and its commercial revolt Huawei ergo China.

WHAT TO DO?

It seems clear that one of the central ideas of European integration -that free markets guarantee democracy- has been destroyed precisely because of the success of non-European companies in the process of competition, partly due to a prolonged state support. This is a fact that both France and Germany have recognised, leading to an unprecedented mobilisation of political power in both states to deal with the foreign threat. Nonetheless, digital sovereignty initiatives have failed for a variety of geopolitical, economic and political reasons.

First, the viability of many of the alternatives to digital capitalism are only possible supranationally through solutions at the EU level. The approach in which one or two countries (Germany and France) concentrates the political energies of the rest has not fulfilled its promise. In this respect, the problem is that the European digital market is made up of a set of industries that are technologically underdeveloped compared to the American or Chinese ones. The insular vanguard present in both countries severely limits the ability to harness the political creativity, talent and radical entrepreneurial spirit of European citizens. An entity as large as the European Union can no longer adopt the position of a consumer of digital services, allowing the data of its territories to be extracted in order to make them pay for it later when making political decisions or organising their economies and societies or just when mobilizing their welfare states in a pandemic. This choice imposes the subalternity on South regions, i.e. chronic poverty and permanent inequality. Basic income has appeared in this context from different corporate bodies to respond to the needs of consumption of digital services. This is nothing other than a farce: capitalists want the state to ensure the neoliberal maxim of the sovereign consumer, while at the same time blocking any possible revolt arising. The only possible basic income must be accompanied by free public services so

130 "Demystifying Europe's New Sovereign Data Cloud", *Forrester*, November 11, 2020.

131 "Amazon & Microsoft Lead the Cloud Market in all Major European Countries", *Synergy Research*, 2019.

that citizens do not end up spending their income money on paying for private services in Silicon Valley.

With regard to the organisation of production processes, it seems clear that European multinationals are not capable of doing so in a competitive manner. In this sense, the vision of the Franco-German axis is extremely one-dimensional, or incapable of seeing beyond the history of the industrial policies of a few countries. As we have seen, the classical German ordoliberal dogma, and the French variants of statist interventionism, are insufficient to survive in the class struggle between capitalists. Let alone to block any attempt to be controlled by the intelligence (in terms of national security, not just intellectual or media) of foreign countries, or to develop a culture other than American consumerism or the mentality of enjoying low prices thanks to China's ultra-exploitation of labour.

Thus, the third problem is related to democratic processes: the structure of the European Union is not designed to meet the major challenges that require altering the course of digitalisation. At a time when the ground on which social life takes place has been broken by digital technologies, the technocratic mentality of Brussels is not sufficient to promote methods of radicalising democratic processes, let alone to reform institutions, be they European, national or regional, to achieve a certain strategic autonomy.

These are the central reasons why Southern European countries must spearhead a new conceptualisation of the state, something of a political vanguard in the design of a hitherto unimplemented digital society. Progressive forces must move beyond colonial epistemology, at the risk of becoming one of them, and neoliberal sophistry such as the entrepreneurial state. A paradigm more in tune with our times should be one of invention or discovery (through digital technologies or otherwise) of solutions to the problems of our time. This should be accompanied by the restructuring of many of today's institutions in order to emancipate ourselves from modernity in a democratic way and to transform the reality and the system in which we live. The opposite means allowing authoritarian forces to entrench themselves in the preservation of capitalism until it becomes the dystopia that is increasingly the present. In this respect, there is no doubt that it would be possible to massively promote a process of citizen interaction with institutions to experiment with new methods of social coordination or alternative political practices.

The enormous volume of information on public life extracted by private companies cannot end up on foreign servers. Data must be managed more locally, by organisations capable of understanding it and connecting it to the local community. To do this, digital infrastructures must look more like archives with a method of operation similar to existing public platforms, such as libraries, universities, postal services or the public fabric that supports welfare state services. Indeed, this is only possible through pan-European initiatives capable of ensuring sufficient computing capacity in all regions. Not, however, as is currently the case, by delegating to the Eurozone all the loopholes of monetary sovereignty, but by demanding property rights over the means of discovery (supercomputers, data centres, or clouds) and another set of basic and universal civil rights in the digital age: the right to strong encryption, privacy and transparency of algorithms. The latter goes far beyond the current consumer-focused perspective and proposes a radical empowerment of citizens by using the latest technologies to initiate all sorts of pilot projects to find better ways of unlocking the creativity present in everyday actions and using that data to establish socially and politically different ways of relating to each other. In a context where private power trumps public power, political debates do not focus on data ownership rights, and thus the infrastructures created by data, not only because of a lack of democracy in the media sphere, but precisely because of the absence of public alternatives to Silicon Valley.

These changes would automatically lead to a cultural shift in how citizens perceive their membership in the broader collective of institutions that regulate their behaviour. It would also encourage the release of democratic energies and transcend the limits imposed by competition. If neoliberalism understood capitalism as a method of discovery tied to markets, as Evgeny Morozov has shown, any alternative must start from a means of discovery where the invention of ordinary citizens is the pillar of a state and that which secures citizenship, not individual ownership.

Indeed, some European legislative designs can serve as a template for designing a new bill of rights, but it will have to be complemented by processes to plan productive processes in a different way, which should be local and

popular. Also through ways of inventing concepts other than the classic factory worker. Let's say that the richness of the data around us should give rise to quite different production processes. How to promote methods of social coordination far from the labour market or the capital-labour paradigm? That is, could an alliance between technical intelligence and social structure, in turn mediated by thinkers at the service of the public good, not the audience of the big media groups work?. Synergies can occur between what Marxist thinkers called the petty bourgeoisie, but that nowadays represents the labour force at the forefront of the technological revolution (i.e. the technical vanguard of developers, programmers or software designers, to cite a few examples) alongside those of the decaying proletariat that paradoxically suffers the consequences of such designs. From the agreements between the two will come solutions for connecting and coordinating collective responses to social problems, using technological or even analogue systems.

The acquisition of anti-systemic consciousness depends, in part, on the rejection of neoliberal value-laden universals. It must be free technologies, not private ones, that unlock the radical consciousness of citizens, their creativity to solve existing problems and generate radical reforms in the system so that it increasingly resembles socialism. For this reason, a new approach to science cannot create or inculcate certain vital ends in human beings, as the apostates of algorithmic governance profess. It can, however, create the conditions that will push enough people in a society to implement laws of motion other than capitalist ones without the need to be guided by technocracy. Ultimately it would be a matter of reflecting the nature of capitalist social relations with the aim of transforming them in another direction. Inspecting both the depth of these changes and their limits can be the task of scientific thought. In short, this is a moment when politics must gain primacy over history and steer technological change towards a progressive utopia. Again, a question as old as it is necessary: What to do? The new digital policy should concentrate its revolutionary efforts in three areas: radical democratisation of institutions and deliberative processes, empowering citizens through constitutionally binding methods (thanks to the adoption of machine learning, blockchain or any other less bombastic method) to make public decisions or coordinate socially; collective planning of production processes through the implementation of public platforms as the main vector of the industrial strategy of the 21st century; and the social organisation of creative labor, in such a way that it is possible to go forward private property and guarantee the means of subsistence. Together with other areas of utmost importance, such as international relations or science, these are the axes from which to start thinking not only about alternatives and radical public policies, but also about new paradigms of thought. Together with other areas of utmost importance, such as international relations or science, these are the axes from which to start thinking not only about alternatives and radical public policies, but also about new paradigms of thought.

First of all, new technological tools can be an opportunity to advance in the processes of democratisation and transparency that institutions require. In this sense, there have been interesting initiatives at the local level, such as those in Barcelona, which have placed citizens at the centre when thinking about the new digital administration. However, they have not been scaled up to the State as a whole, where the initiative (and the contracts) for digital transformation were delegated to private corporations. It is not a question of digitising in order to build endless 'smart institutions', thus opening up new spaces of accumulation for capital. Nor is it about applying technologies to analogue institutional and bureaucratic problems, but about using them as a lever to solve certain problems of information and knowledge exchange between different public bodies, i.e. to establish a feedback infrastructure as a basis for democratic processes.

Second, the foundation of a digital economy must be built on public infrastructure and it must be ensured that citizens can take advantage of its full potential. ensure that citizens can take advantage of its full potential. To this end, the data that fuels artificial intelligence or cloud computing must be a common resource. Current approaches to data ownership tend to emphasise two approaches: individual or corporate ownership. Neither respects the rights of citizens to share their data collectively for specific issues, such as improving traffic in a city, promoting sustainable mobility or reducing emissions. The opposite prevents fair, equitable and democratic control over the data economy. It also hinders the development of an industry composed of public companies connected to archives, libraries, art centers or cultural circuits that tap into the richness of the knowledge ecosystem. In order to address these problems,

it would be necessary to socialise the infrastructures where the exchange of information or feedback takes place and make it available to the productive needs of public firms, which will not be oriented towards the accumulation of profit, but towards the fulfilment of collective needs. There can be no change in the direction of technology without radically transforming the market economy.

Third, the only way to regain democratic control of industrial platforms is the collective ownership of these infrastructures by creative agents, who must have the capacity to organise themselves at the political level to design and create institutions capable of socialising the benefits of human action on nature. None of this can happen if the main mechanism that regulates life in society, consumption or productive activities is subject to the corrosive logics of the market and the price system. Such decommodification can only be achieved through altruistic behaviour oriented towards just social ends, such as the redistribution of wealth, not through the exploitation and alienation that characterise the concentration of capital, sublimated by the uberisation of labour. In this way, both profitability as the ultimate goal of the functioning of the system and the savage competition between workers will be replaced by behaviour guided by an ethic of responsibility. This can only happen by rethinking the institution of work in order to creatively overcome it. On the one hand, developing labour rights protection software that, through an easily accessible interface, would allow the input of anonymised information by workers on the proprietary algorithms of digital platforms (such as Uber or Deliveroo) in order to signal violations of rights in real time. On the other hand, it will also be necessary to create open source software to collectivise platforms and to think of forms of organisation of creation capable of ensuring the sustainable self-reproduction of humanity.

Finally, it is also important to abandon the EU's colonial outlook. Many of the regulations designed for the digital age are extremely Eurocentric and seek to preserve certain political privileges. For example, the concern in Africa is not privacy, but that the only way to access the internet is through Facebook or Google. European institutional imagination is stultified and is not even capable of understanding that the only way to intervene in the digital era is to attack Silicon Valley's power base: the control of infrastructure. In this sense, there are currently two major obstacles standing in the way of achieving a democratic, fair and balanced digital transformation: corporate domination and the lack of solidarity in international scientific production. The current scenario of the digital economy leaves us with a grim picture where no nation is equipped with the tools to deal with it. Only an internationalist management of what are de facto global platforms will allow us to maintain the Internet as a common heritage of humanity. Secondly, the intangible basis of the digital transformation, namely standards and —especially— innovation patents, or protocols, are conditioned by the status as commodities that capitalism attributes to them. In addition to this, there are other major challenges that prevent knowledge from flowing freely, i.e. the Global South from having equal access to scientific progress. The consideration of science as a commodity impedes fair, democratic and balanced scientific progress, thus hindering the progress of humanity. For all these reasons, due to its responsibility as part of the international community, Europe must promote and support initiatives that contribute to a transformation in the design of global scientific progress.

On the one hand, an international dialogue should be promoted that focuses on the design of a new global order that respects cultural differences, abandons colonial, imperial or simply capitalist legacies and jointly takes full of advantage of creativity in a similar way to the initiatives that allowed the USSR and the USA to expand technological advances with their allies in the previous century. To this end, forums must be organised within international bodies to encourage these talks, preventing the declining empires from cancelling popular demands. It becomes clear that Europe must advance and promote an international structure based on solidarity and internationalism. To this end, it must promote the multiplication of scientific and technical cooperation missions at all levels: from large research and education centres to public and mixed companies. This will also be in addition to current efforts that have called for a multilateral rethink of protocol, patent and intellectual property policies in a process that should result in the decommodification of science. Again, what to do? Promoting alliances between Southern European countries to achieve the elimination of all clauses in trade treaties that impose the free flow of data, i.e. to prevent data from flowing freely to technological empires and from being acquired by local centers.

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ISBN 978–3–903343–19–1

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