

Framework and Perspectives for a Citizen Internet

“The struggle against our own weaknesses (...) whatever difficulties the enemy may put in our way, this struggle against ourselves is the most difficult of all, both in the present and the future of our peoples.¹” - Amilcar Cabral (1966).

“Our problem is not the problem of governance in cyberspace. Our problem is a problem with governance.²” - Lawrence Lessig (1998).

Author: François Soulard, February 2018. francois@rio20.net @franersees

Introduction

Digital interconnectivity is one of the most relevant challenges of our time. Many societies have become as dependent on this space as on energy, money or language. Ultimately, this interconnectivity is inseparable from the acceleration of mundialization in the last seven decades, making every corner of the planet more dependent on and related to every other corner of the planet, one way or another. The much-hailed *digital revolution* played its part in this growing planetary interconnection, strengthening and transforming it in the last twenty years. In other words, a *digital mundialization* is underway and advancing rapidly and irreversibly, creating an interdependent reality from village level to global scale, with all the ups and downs this entails. Far from being a peripheral change, this state of interdependence, which both makes up and goes beyond the digital dimension, causes a major shift in the sociopolitical architecture.

While this movement continues to accelerate, the digital sphere develops in an architecture of international relations, citizenship, economics and power, manufactured in other historic periods and sealed by a series of geopolitical ruptures. It doesn't just burst suddenly into this context; it causes it, and it exceeds it. We could almost say that electronic communication and the technology that sustains it, i.e. the internet, were invented in the cracks of this architecture. They flow in its interstices like a transnational fluid—to paraphrase Manuel Castells and Zygmunt Bauman—that mostly evades the restrictions to which human activities are traditionally tied. In turn, the digital universe does not orbit in an absence of powers; various regulatory mechanisms already existed from its beginnings. But now that the digital sphere has climbed higher up the strata of power, more searching questions have to be asked about its own regulation and the question of its interaction with other social and international dynamics.

¹ Excerpt from his speech *El arma de la teoría* (“The Weapon of Theory”) given at the Tricontinental Conference in Havana in 1966.

² Taken from Lawrence Lessig's October 1998 lecture to Computer Professionals for Social Responsibility (CPSR), MIT Cambridge, USA.

Electronic communications have entered more firmly than ever today the orbit of global power disputes. Various signs indicate that these communications are going through a period of inflection and to some extent a crisis of growth. From now on, it will be hard to apprehend them without understanding the course of the global chessboard, its contradictions and disputes. In this regard, the challenge in the digital sphere raises two questions. Firstly, because here we see a first attempt at collective management of a complex, mundialized, supranational communication system. Aside from its young, unfinished nature, this first attempt of some thirty years constitutes an unprecedented experience of collective management of a supranational good and new interdependences. An attempt of this nature takes on greater relevance if one admits that the current scarcity of political responses to these global (and regional) interdependencies is a central problem of our times. Secondly, because the open nature of the digital sphere leads to a very extensive range of collective action. As a *global commons*, the digital sphere is the business of imaginaries, citizenship, communication technologies, social struggles, public policies, rights, industrial conflicts and interests, and geopolitical potencies. This kind of plebeian space in a thousand layers in the electronic terrain leads us to a central issue, namely that of defending the internet as a common good and putting it at the service of general interests. In other words, it is a question of consolidating a social, citizen framework capable of sustaining what we can call a horizon of *digital democracy*.

To investigate this perspective here, we will try to answer the following questions: What stage are we at today in the digital sphere and how do we deal with the dynamics that drive it? How do we consolidate a regulatory framework that can manage the internet fairly, democratically and effectively? How do we implement changes in the current architecture of international relations that influence, in short, how digital resources are managed? These questions are neither self-evident nor simple, and beyond the scope of this article. Our intention is to sketch out the main pillars and lines of action.

A digital revolution trapped in the web of world power

Observing the digital space is by no means a simple task. Numerous angles are needed to investigate this complex, opaque environment. Furthermore, we do not have a methodology³ to analyze this dynamic space. Its continuous evolution constantly modifies criteria for reading and comparing. Furthermore, analyses are often wrapped up in a narrative of permanent revolution which while showing certain disruptive changes, does not reflect the inherent complexity of sociotechnological transformations, transformations that Schumpeter and Kondratiev systemized with regards to industrial revolutions in the last century. In simple terms, what are the most structural, emergent or anecdotal impacts of digital expansion? Is the rise of digital industry monopolies and the mass capture of data the main milestone of the moment? Is it the complex factors of risk and technological insecurity, amplified by the mass surveillance implemented by some industrial states? Is it the growing presence of artificial intelligence, of algorithms and platforms of services incompatible with the basics of social communication and democracy? Is it the geopolitical rivalries among the United States, China and Russia, and more broadly of emerging countries? Or is it the evolutionary geometry of the internet under the effect of its use and of its expansion into an “internet of things”? In his survey of over fifty countries, journalist Frédéric Martel pointed out that there are numerous local and regional⁴ nuances in

³ We can see initiatives of an overall report on the internet in, for example, *Global Internet Report*, Internet Society. Available at <https://future.internetsociety.org/>.

⁴ Martel, Frédéric (2014), *Smart. Enquête sur les internets*.

terms of internet cultures and uses, which cannot be reduced to a global whole. All these dynamics are related to each other, without a single approach becoming the sole explanatory variable, whether geopolitical, economic or technological.

Following this dynamic logic, let us take a general overview of some facts, signs and trends of the last decade to sketch a picture of the digital sphere. In general terms, half the population of the planet is involved today as internet users. Around fifty percent are in Asia⁵, a proportion that is set to grow. The access growth curve shows mass entry to the internet in recent years, thanks to mobile access which, while still not widespread in the whole human population, is synonymous with democratic access via digital resources. There has been notable adaptability and stability in the structure of electronic communication to sustain this exponential growth and contain more and more services and users. In terms of the modality of interaction, globally we continue in the model of web 2.0, which began in about 2003. That is, a modality where users post their content and interact directly online. Today, most data traffic, which doubles every two years, is generated by users and their own devices. This growth stage has led to an exponential concentration of certain resources, particularly servers and storage, summed up particularly in the metaphor of *cloud computing*. The web 3.0 stage is starting to appear now, in which the experience of internet users is more formatted by algorithms and where an “Internet of things” comes into play. This new stage foreshadows a new leap in connectivity, meaning a new level of dependences and vulnerabilities on the internet. This will most probably cause an evolution towards a more decentralized geometry, not necessarily equivalent to a demonopolization, with digital traffic mostly generated by these devices. The semantic web 3.0 has not succeeded in expanding any further.

In terms of content, the internet has become the main space for alternative expression in a landscape where traditional media lacks plurality on a global level and is becoming increasingly concentrated.⁶ The same trend is developing partly in digital media, but within a logic that allows for greater asymmetric coexistence. The small and the weak can exist more easily and fight for public opinion with big media. In 2011, the last major episode of this kind on the international stage, the viralization of mobilizations in Tunisia, led to the explosion of a wave of protests in the Mediterranean and throughout the Arab world. Aside from the political result of this movement, social media is in one way or another strengthening a public opinion that weighs like a new centre of gravity in imaginaries and on the political stage. In a less massive way but bringing with it major ruptures, collaborative practices coordinated on the internet are becoming consolidated, often on a territorial level, reinventing the way goods and services are accessed. For example, one study into forty experiences of local currencies⁷ in Europe shows that these initiatives pursue above all goals that are of use to society, territorially resilient, with responsible consumption and democratization of the currency. Numerous experiences of this type spread over digital technologies, taking advantage of their potential for connectivity.

In economic terms, 2017 certainly marked a major shift as the top ten of leading world businesses included seven corporations in the new information technologies sector⁸. Most are US companies, reflecting the position the United States still holds in this domain, but two of them are Chinese (Tencent and Alibaba.) The technology sector now leads the stock market, ahead of the oil and finance sectors. According to various studies, the internet now channels a gross product equivalent to the sixth

⁵ According to data provided by *Internet World Stats*. Recovered at <http://www.internetworldstats.com/stats.htm>

⁶ UNESCO (2017), *Tendencias mundiales en libertad de expresión y desarrollo de los medios, Informe mundial 2017/2018*. Available at <http://unesdoc.unesco.org/images/0025/002597/259756s.pdf>

⁷ Alternatives Économiques (May 2016), *Réinventer la monnaie*, France.

⁸ The ranking is set according to the capitalization of the markets. Taken from PricewaterhouseCoopers (2017), *Global Top 100 Companies by Market capitalisation*. Available at <https://www.pwc.com/top100>

economy in the world. It drives twenty per cent of growth in advanced economies⁹. These figures illustrate a cyberindustrial revolution underway, in an economy where the incorporation of immaterial factors in production processes is increasing. While immaterial capital had already drawn level in the 1980s with material investment in various productive sectors of advanced countries¹⁰, this trend has continued to rise. This volume could be in the region today of eighty per cent of corporate investment. In 2006, the component of immaterial capital in the gross domestic product of various countries was up to sixty per cent, including an increasingly large proportion of information technologies¹¹. In terms of employment and international division of labour, it is estimated that this qualitative shift in the economy has wiped out ten per cent of jobs in Europe since 1990¹², while it is estimated that forty to sixty per cent of the labour force in the same region will suffer the effects of automation¹³ in the coming decades. In this context, it is realistic to claim that the internet has become the nervous system of the economy and modern society. All economic sectors are going through these changes, but particularly communications, services, finance and insurance, and trade, with major reconfigurations in the way they are organized.

While this transition and growth continues, digital resources are being homogenized and hyperconcentrated in an unprecedented manner. The digital experience of an internet user ten years ago was freer and more diverse, although with more limited services in comparison with those of today. The range of services has expanded but their interaction is framed far more within an ecosystem of hegemonized services. Each ecosystem tends to be structured as an oligopoly, letting innovations develop outside of their ecosystem to often assimilate them and extend their market¹⁴. This concentration can be measured from several angles. No less than eighty-five per cent of global online advertising income now moves through Google and Facebook¹⁵. Both companies channel around seventy-five per cent of traffic to news sites through managing social networks. In other words, they have become central access points and components of the infrastructure of the digital space, with all that this implies in terms of control and corporate responsibility. This concentration is not only of relevance to the giants of the digital industry. In the case of the Bitcoin cryptocurrency, an alternative decentralized from the current monetary system, ninety-five per cent of wealth is concentrated in the hands of four per cent of its users¹⁶. These monopolistic logics are unprecedented and exponential in the digital sector. They have stirred much debate in the economy about what Joseph Stiglitz calls a “new era of monopolies.”¹⁷ Consequently, digital data, their storage in data centres, their monetization

⁹ MacKinsey Institute report (October 2011), *The Great Transformer: The impact of the internet on economic growth and prosperity*. Available at <https://www.mckinsey.com/industries/high-tech/our-insights/the-great-transformer>

¹⁰ Bouvard, Loïc. Calame, Pierre (1988), *Le dialogue des entreprises et du territoire*, éditions Charles Léopold Mayer.

¹¹ OECD (2006). *Bulletin New Sources of Growth: Intangible Assets*. Recovered at <https://www.oecd.org/sti/inno/46349020.pdf>

¹² This measurement only measures job losses, and not the creation of future sources of work. Extract from Mc Kinsey Institute (November 2017), *What the future of work will mean for jobs skills and wages*. Available at <https://www.mckinsey.com/global-themes/future-of-organizations-and-work/what-the-future-of-work-will-mean-for-jobs-skills-and-wages>

¹³ Degryse, Christophe (2016). *Digitalisation of the economy and its impact on labour markets*. https://www.researchgate.net/publication/297392058_Digitalisation_of_the_Economy_and_its_Impact_on_Labour_Markets

¹⁴ For example, Google acquired fifty-seven companies during 2011.

¹⁵ Ninety-eight per cent of Facebook’s annual income is from advertising. Reuters (May 2017), *Facebook Now Has an Almost Advertising-Only Business Model*. Recovered at <http://fortune.com/2017/05/05/facebook-digital-advertising-business-model/>

¹⁶ By way of comparison, in Brazil the richest five per cent of the population possess ninety-five per cent of the wealth in the country (2017).

¹⁷ Stiglitz, Joseph (2016), *The new era of monopoly is here*. Available at: <https://www.theguardian.com/business/2016/may/13/-new-era-monopoly-joseph-stiglitz>

and capacity for gaining intelligence from them has become established as one of the strategic pillars of this industry. In this sector, more than in any other, the lack of regulation and accountability feeds a kind of “shadow industry” that contradicts the founding spirit of the internet and various principles of international law.

On a state and interstate level, electronic connectivity has continued to have a disturbing effect on various foundations of international life, particularly on the level of dispersion of power, erosion of the sovereignty of the State¹⁸ and of international law. However, this disturbance is far from translating into a Copernican shift in international relations or into a radically alternative architecture in terms of the politics of digital resources. The United States continues to be the leading power in this domain, with increasingly serious competition from other countries. A new era began with Edward Snowden’s revelations in 2013 on the extent of the global surveillance policy. This showed the volume of resources that “imperial republics”—to paraphrase Raymon Aron—invest in intercepting electronic communications, in complicity with private actors. On the one hand, this generated a crisis of confidence, exposing a double standard of regulation, characteristic of what we can find in other transnational questions. On the other hand, it triggered a break-up in the unity of the internet, with a trend towards re-territorializing its regulation on a national or regional scale. The most extreme examples of this trend are China and Russia. In 2013, a French Senate report into digital matters in the EU went with the title *The European Union: Colony of the Digital World?*¹⁹ It will not be until May 2018 that the EU will manage to bring into force a number of stricter privacy laws²⁰. All this has contributed to eroding the trust of public opinion and the hegemony of the United States, perceived as a new aristocracy in the digital era. Despite the promises and diplomatic pressure of emerging countries expressed in the 2013 Montevideo Declaration²¹ and at NetMundial in Brazil in 2014, US diplomacy has shown no signs of ceding ground in the running of critical internet resources. In late 2017, Donald Trump decided to put an end to the principle of net neutrality. There is no indication that the United States will alter its project of supremacy in digital technologies that Bill Clinton and Al Gore began in the 1990s. Meanwhile, the digital sphere has become a deeper strategic challenge in which a new race for power is underway. Doctrines are progressively permeating strategic environments and defence apparatus. In 2010, NATO organized the first meeting on the protection of *strategic global commons*. In the field of soft power, both Russia and the United States are channelling their efforts towards IT rivalry and intensifying propaganda. In the 2016 US elections, in Ukraine, in Syria, to name just three examples, the wagers of violence experiment with new forms of globalization in their strategies, but now via the internet. We see that cyber war and artificial intelligence have become a new challenge²². However, aside from the war of words and the lack of a critical perspective²³, cyber attacks have had disturbing²⁴ rather than destructive effects so far. In recent years, we have seen that the weaknesses that inevitably come with greater interconnectivity lead to an erosion of the digital rights and freedoms of states. This erosion is implemented in the name of control, national security or commercial interests²⁵.

¹⁸ Faure, Juliette (2018). *¿Puede la inteligencia artificial gobernarnos?*, Diploweb. Available at <https://www.diploweb.com/L-intelligence-artificielle-peut-elle-nous-gouverner.html>

¹⁹ <https://www.senat.fr/notice-rapport/2012/r12-443-notice.html>

²⁰ European Union (2018), *General Data Protection Regulation*. Available at <https://gdpr-info.eu>

²¹ Available at <https://www.icann.org/news/announcement-2013-10-07-es>

²² Hence the concept of *Revolution in Military Affairs* in the United States, which had been more anticipated in Russia.

²³ Various analysts point out the “thirst for certainties”, the overvaluing of analytical and the fetishizing of artificial intelligence which tend to bias strategic reflections.

²⁴ There were forty-five cyber conflicts between 2001 and 2011. Taken from Valeriano, Brandon and C. Maness, Ryan (2015), *Cyber War versus Cyber Realities: Cyber Conflict in the International System*, New York, Oxford University Press, p. 88.

²⁵ For example, at the last World Trade Organization summit in Buenos Aires in December 2017.

A sign of this trend can be seen in the twofold increase every year in blocks on the internet or the closure of domains²⁶.

In this context, civilians have been travelling along a road that is narrower, but more active. Recently, the organizations that participate in internet regulatory agencies have increasingly reported the polarization of positions and corporate influence. This situation led in 2014 to the initiative of the Internet Social Forum²⁷, marking a break with the Forum's level of internet governance. In recent years, a mosaic of digital resistances has gradually formed nationally, regionally and globally. This was the case of the international demonstrations over the ACTA²⁸ from 2006 to 2010. In India, Facebook's Free Basics was rejected in 2015 thanks to a well-organized citizen campaign²⁹. In Europe between 2015 and 2016, various demonstrations succeeded in bringing pressure on the European Union to maintain the principle of neutrality³⁰. In Latin America, to counter security projects that initially dominated the Brazilian Congress, in 2014 Brazil successfully created the Civil Rights Framework for the Internet law, sanctioned by Dilma Rouseff. More university centres and organizations have got involved in the conceptual exploration of the digital sphere and the promotion of digital rights, both in societies of the North and the South. There have also been a number of direct experiments in the decentralized sovereign use of digital resources, in the terrain of social communication, communication networks, local currencies, open knowledge, peer-to-peer, free software and many other sectors of activity. These alternatives have grown in recent years in response to the corporatization of digital resources, forming a very diverse and heterogeneous constellation of initiatives. However, transnational communication facilitated by the internet does not appear so far to have given a sufficient boost so that civil society is capable of making its influence felt more deeply in global trends. In other words, the transnational circulation of knowledge and information, as well as the new possibility of coordinating on the internet, does not appear to have led to a new phase of organization.

As well as these developments, it is important to take into account that the digital sphere is evolving in a world that is still regulated by a more or less contained anarchy, where international law gives way to power relationships and economic competition. Digital communication could perhaps embody a certain vision of "exceptionality," somehow evading the forces of the international space, which was partly the case in the early days of the internet three decades ago. It continues to be so as long as its regulatory model does not enter totally into the traditional framework of national states or multilateralism. However, the realities we have covered here show that the new dependencies that come with connectivity clash with other frictions in global geopolitics. Its general lines of division are reproduced in terms of inequality, concentration, strategic disputes, and deregulation. This crossroads is not exclusive to electronic communication. We can observe it in other areas, such as the regulation of the weather, collective security, or human migration. They are all essentially related to the limits of the present architecture of international relations in understanding and tackling new interdependencies that make up the web of world power. This web constitutes "something more" than the mere juxtaposition of national and international powers. More broadly, it has to do with an era of world governance, that is, a capacity to interpret and respond politically to the levels of complexity underlying local and global spheres. The internet is already closely wound up with this matter. This leads us in a way to the question we asked at the beginning. If on the one hand it is necessary to transform the interior of the digital sphere, it also becomes necessary to enquire how to influence the sociopolitical architecture that

²⁶ #KeepItOn campaign, Access Now. recovered at <https://www.accessnow.org/keepiton-shutdown-tracker/>

²⁷ <http://internetsocialforum.net>

²⁸ Anti-Counterfeiting Trade Agreement (ACTA)

²⁹ However, the Free Basics programme is currently in force in sixty-three countries. Recovered at: <https://info.internet.org/en/story/where-weve-launched/>

³⁰ <https://savetheinternet.eu/>

surrounds it. The internet, as a technology for the interchange of data, emerges as a new dimension of transnational interdependences. This gives it a unique role to invent forms of management adapted to mundialization and therefore to citizenship.

From common pool resources to global commons

Considering the above panorama, and before exploring the main lines of a framework for action for a citizen internet, it is worth pausing a moment to consider the notions of *common goods* and *global commons*. Neither are new, particularly the first. In the case of digital goods, scientific literature is relatively extensive, especially in the US, birthplace of the internet. It has also favoured a technocentrist approach, in detriment to other cultural, economic, and political factors that all come into play in the definition of the internet. Consequently, academic research has tended to compartmentalize international relations specialists and internet experts, whether these be from the disciplines of communication sciences or IT. The present situation makes it necessary to break down these barriers between conceptual worlds and bring these perspectives together.

The internet is basically a network of information networks that allows the exchange of information between computers via a shared protocol: the TCP/IP protocol. It is also a complex system, in as much as it constitutes in itself a web of interconnection of sociotechnical subsystems, where local, regional and global models of infrastructures, uses and content are juxtaposed. Subsequently, resources mobilized in the digital sphere are by definition combined and plural. There are mixed resources (assignation of domains, exchange points); public resources (energy, digital services), shared resources (protocols, standards, norms, servers, open code, content), and private resources (transoceanic fibres, data centres, proprietary code, content.) Regarding the nature of resources, commons specialists do not narrow the digital environment down to strictly one common good. For them, it is rather a common pool resource, a hybrid compound of shared resources. In this context, the notion of *common good*, applied to the internet, refers to a regulatory perspective or aim. This very current debate also occupies the field of telecommunications and other areas like collective security and ecosystem services. As we shall see later, the characterization of resources, goals and regulatory models needs to be expanded. All the same, the explosion of electronic communication has driven the notion of *universal commons*³¹, and it has done so beyond the scope of the internet. This idea has become intensified in recent decades. It has in some way become formalized with mundialization, along with the paradigm of *common goods*³². Until quite recently, the architecture of world governance based on the United Nations system and the movement of *common goods* coexisted in two worlds that barely communicated with each other.

It is essential to remember that *common goods* have a philosophical and political genealogy. Classical political philosophy is predicated on the hypothesis of the *social contract* that envelopes the *state of nature* to which human beings are subjected. This vision can be found in western philosophers who have strongly influenced political thought: Aristotle, Hobbes, Locke, Rousseau, to name just a few. The *state of nature* where goods are common is a sphere characterized by the absence of government in which private property does not yet exist. When the notion of property emerges, the *state of nature* rapidly turns into state of war, and individuals protect themselves by drawing up a social contract as a

³¹ Blin, Arnaud (2017), *La gouvernance mondiale et les communs*, Forum for a New World Governance. Available at <http://world-governance.org/fr/node/2180>

³² *Bienes comunes mundiales* (2014). Diccionario del poder mundial, Available at <http://poder-mundial.net/termino/bienes-comunes-mundiales/>

first step towards a social and political construction. Then governments appear whose main reason for existing is to guarantee the goods converted into individual goods. Later, laws and institutions appear. Different people's commercial interests lead to a continuous retreat of the frontier of common goods, which are subject to the constant assault of individuals, companies, or predatory states. In the long term, this phenomenon leads to what specialists call the capture of common goods. That is, the process through which shared resources become resources under private or semi-private control.

Native American philosophy, especially Andean philosophy, reached via a different paradigm the notion of commons through the idea of *we-ness* and *communalization*. Various South American thinkers like Russel, Mejía and Quintanilla stress that in different indigenous world views a relational view of coexistence developed, based on principles of reciprocity, complementarity and sharing. In fact, indigenous peoples created forms of common management of certain goods, especially cognitive and natural goods, inconceivable outside of their belonging to a broader community. So there were *mingas*, *tambos* and the *Qhapaq Ñan* as infrastructure guaranteeing the continuity of the communities. Property was defined above all in relation to the collective. Researcher Sofia Chacaltan Cortez sums up *tambos* as follows: "The *tambos* were small to medium-sized buildings systematically built fifteen to twenty kilometres apart along the main roads of the *Qhapaq Ñan*, which unified ideologically and spatially the Tawantinsuyo territory. The *tambos* functioned under the system of reciprocity and redistribution characteristic of the Inca (and pre-Hispanic) economy. They were sustained and administered by imperial officials immersed in a bureaucratic hierarchical Inca system."³³ Economics Nobel Elinor Ostrom showed evidence of similar elements in African and Asian philosophies. In short, the commons movement seems to be as old as the first need to administer a shared resource. It is probably no coincidence that these philosophical roots should have been vividly expressed in the *Manifesto for the Recovery of the Common Goods of Humanity*, summarized in 2009 at the World Social Forum in Belém, Brazil. The manifesto states in its preamble: "The privatization and commercialization of elements vital to humanity and the planet are stronger than ever. After the exploitation of natural resources and human work, the process has accelerated and extended to knowledges, cultures, health, education, communications, genetic assets, living beings and their modifications. The welfare of everyone and the preservation of the Earth are sacrificed for the immediate financial gain of the few."³⁴

As early as the nineteenth century the philosophers Proudhon and Frantz predicted precisely these future problems. Both based themselves on observations that they had made from the creation of the unified Italian and German states. They understood the fundamental nature of these questions, as well as some of their ramifications for the ruling powers. They reached the conclusion that the main mission of governments is to generate economic growth and that the all-powerful modern state is not naturally inclined to promote common goods. Their analysis is very similar to that of the commoners of the current century. In 1968, the biologist Garrett Hardin, and a little earlier Mancur Olson (1965), opened up an epistemological breach with their interpretation of the *tragedy of the commons*³⁵. Hardin worked from the principle of the state of nature to bury the notion of the collective management of common goods. Contrary to classical liberal theory, starting with Adam Smith, that saw in the selfishness of individual action the main driving force behind the liberal economy, Hardin saw in it the root of all ills, leading to the tragedy of the commons. However, considering his initial differences with Adam Smith

³³ Chacaltana Cortez, Sofia (2016), *De los tambos incas a las tambarrías coloniales economía colonial, legislación de tambos y actividades «licenciosas» de las mujeres indígenas*. Recovered at <http://revistas.pucp.edu.pe/index.php/boletindeferqueologia/article/viewFile/19341/19464>

³⁴ *Manifesto pela recuperação dos bens comuns da humanidade* (2009). Available at <http://samadeu.blogspot.com.ar/2009/02/manifesto-pelo-resgate-dos-bens-comuns.html>

³⁵ Hardin, Garret (1968), *The Tragedy of the Commons*, Science.

and liberal economists, Hardin defended private property as a solution to the problem of common goods. He legitimized the neoliberal economy as the main guarantee of the common goods of the State. It is this vision of the commons that has become established in most academic circles.

Later, in the 1990s, Elinor Ostrom took an opposite approach in *Governing the Commons*³⁶. She used specific examples to demonstrate that the tragedy of the commons is not inevitable. Based on her pioneering study, other researchers confirmed her observations and showed the breadth of the phenomenon on a global scale. In the notable case study *The Wealth of the Commons: A World Beyond Market and State* (2012), Silke Helfrich and David Bollier made an important contribution to the subject, showing many successful cases from all over the planet. David Bollier sees commons as essentially a combination of a resource, a community, and a group of social rules. The important thing is not only to determine what is common, but rather to establish a community that can administer a given resource, and see if that community is capable of drawing up norms, rules, institutions and appropriate sanctions. From the moment when the commons go beyond territorial management, the question arises of their *polycentric governance*, that is, the regulation of overlapping, multiple centres of regulation. One of the important characteristics of the commons is that they are generally rooted in the terrain, with the primacy of the practical dimension. There has been no priority to have a theory of common goods, or even a doctrine of governance.

Recently, geopolitical debates have installed the notion of the *global commons*. US geopolitologist Zbigniew Brzezinski calls them *strategic commons* or *strategic global commons*. In more general terms, global commons are commons whose use and administration are far beyond the scope of a single country, requiring the participation of multiple parties. Under this term they are defined as non-governed spaces that affect directly or indirectly the security of the states, the people and sometimes the whole planet. For commons specialists, this definition of *global commons* is incorrect. As we saw above with *common goods*, these goods are closer to the notion of *shared resources* as described by Elinor Ostrom, or *common pool resources*. Historically, the sea was the first strategic common. For a long time, the seas and oceans were subject to the laws of Realpolitik and power relations, with the most powerful fleets controlling the maritime space, allowing the strongest nation to control maritime communications. In this way, England was capable of ensuring its expansionist policy, at the expense of the Netherlands, its great trade rival. In time, international law gradually developed to provide an infrastructure that codifies navigation and the use of sea resources.

Today, airspace and cyberspace—as well as space itself, with the role of satellites—occupy a central place in geostrategic questions. Max Weber wrote that states traditionally claim the monopoly of legitimate violence, and we might add that they also have the monopoly on strategic activities, a sphere in which even transnational corporations must be left behind the more powerful countries. Zbigniew Brzezinski writes that “the *strategic commons* will probably be the area most affected by the change of paradigm of global power, in its relationship with the progressive growth of capacities and the activism of emerging powers like China and India, and the potential decline of the United States. The sea and the air, space and cyberspace, which are at the centre of the national interest of every country, are essentially dominated today by the United States. However, in the coming years a growing number of players will become involved and they will be the object of greater competition as the strength and ambitions of other countries grow.”³⁷ Therefore, it is *a priori* states that will be the main candidates to dispute an increasingly intense geostrategic competition in the field of the strategic commons. Given

³⁶ Ostrom, Elinor (1990), *Governing the Commons: The Evolution of Institutions for Collective Action*, Cambridge University Press.

³⁷ Brzezinski, Zbigniew (2012), *Strategic Vision*, New York, Basic Books, p. 110-111.

that this area knows no physical boundaries, or limits between the public space and the strategic space, and its regulatory regime is generally limited, the challenge of preventing governments from invading the public space, civil and individual liberties, will not be an easy one. In practice, the security policies undertaken by China and the United States, allied with other industrial countries, confirm this perspective. In this scenario, the question of a new regulation of *global commons* becomes a central issue. The awareness of public opinion to go beyond the states' security lag should be a key factor of the future.

A governance model with a growth crisis, in search of itself

The architecture of governance holding up the internet is thus a central issue and, as recent years have shown, increasingly in dispute. One of the specificities of the internet, unlike other communication technologies, is that during its first twenty years it was administered in the context of a horizontal model, founded on scientific cooperation between peers. This model evolved subsequently towards the creation of institutional organs according to a more hierarchical model. But it was always maintained within a model irreducible to traditional multilateral logic. In fact, it would have been impossible to build a pioneering internet of this kind if an interstate realm had been proposed from the beginning. This is a young, original, unfinished architecture, whose principles are revealed to be theoretically better suited to the characteristics of the *global commons* under analysis here.

Generally, the governance model of the digital sphere is akin to a polycentric model, or akin in its layers to the image of the common pool resources that make it up. Its geometry juxtaposes various institutional arrangements around the functions of the critical questions to be regulated. One of these central questions has to do with the standards and domains of the internet. This is what determines its uniqueness. In this function, diverse groups or institutionalized organs are grouped together³⁸, involving civilian, scientific, business and institutional actors. The other generally formalized areas have to do with: accesses and interconnections; online security; intermediaries of data and information; intellectual property. Each of these areas holds up various regulatory mechanisms that tie together both national and regional actors, multilateral agencies or coordinated groups, and private and public international laws. There is no one multilateral agency specializing in the digital question, nor is there a single legal organ with binding power in these issues. Therefore, the internet governance model resembles above all a transversal, multi-sector geometry. Due to the extent of electronic communication, its regulation crosses over horizontally with many other levels of regulation, from local to international, whether in the social, cultural, economic or political sphere. It intersects, for example, with the policies of the World Trade Organization, the G20, the International Telecommunications Union (ITU), intelligence agencies, trade and intellectual property treaties, as well as national laws within states. All this configures a plural, loose architecture, with a functioning that must be evaluated more due to its capacity to raise responsibilities and coordinate relations than to segment frontiers and competences. Therein lies an important innovation of regulation. It is a model that must fundamentally treat the relation between scales, actors and thematic questions, combining diverse modalities of action (multilateral dialogue, sovereign decision-making, coproduction of norms, multi-sector participation, subsidiarity of civil and commercial law, etc.) This complex geometry is new and disturbing, in terms of both political practice and theory. Various theoretical currents have lent their weight to this field. This is the case of the regime theory and of international relations, of hegemonic

³⁸ IETF (definition of standards), W3C (normalization), ISOC (coordination), ICANN (assignation and domains), IAB (monitoring and development.)

stability, of realism (dominant in global geopolitics today), of commons, etc. However, none of these areas took primacy in the building of the current architecture of internet governance.

If we look more specifically at the critical area of administration of standards and domains, the US association ICANN took responsibility from 1998 for the assignation and administration of domains, after the first cycle of self-administration of this function between scientist peers as indicated above. The United Nations has attempted to internationalize this organ at multilateral information society summits in Geneva (2003) and Tunis (2005.) These summits did not see any progress in the priorities, means, and types of associations and instruments of deliberation to further regulation in the digital sphere. Their scarce resources led the United Nations to create a new informal forum, the Internet Governance Forum (IGF), with the task of continuing the debate for several years. The security crisis in the wake of Edward Snowden's revelations in 2013 brought the issue back into debate. Due to this profound crisis, increasingly more voices have risen up in Europe and in emerging countries to demand the internationalization of the critical function of domain assignation. Further mobilizations in 2014 and 2015 broadened the scope of the demand. However, to date, the US hegemony appears to remain unmoved in this matter.

This fracture line, perhaps the most recognized at present in regulatory organizations, is useful for understanding that internet governance means fundamentally conflictive deliberation or jurisprudence processes where rivalries and struggles for interests are manifested. This conflict goes hand in hand with the density of the internet. This is especially true when there is no clear framework of arbitration, sanction and anticipation, as may be the case, for example, in the International Panel on Climate Change (IPCC) and the recent incorporation of environmental questions into the competence of the International Criminal Court³⁹. In the field of international justice, most of the times it is cases of rupture and even international scandals that generate new measures of jurisprudence and that drive the agenda of legal framework evolution. Analysing the model of internet governance, the researcher Françoise Massit-Follea⁴⁰ stresses that its diffuse logic has led to the creation of power structures and coalitions of influence operating within the instances of participation. One of the conclusions of the report by the Global Commission on Internet Governance⁴¹ (2016) is precisely regarding these two dimensions: “to anticipate and approach new challenges arising from technological change and innovation; to improve coordination among actors and their activities in the realm of governance.”

However, aside from the critical—but not unique—function of standards and assignation of domains, what broader balance can we extract from this architecture of regulation over twenty years of experimentation? In structural terms, we can highlight a trend towards what one could call an inversion between the means and the ends of regulation. That is, a phenomenon in which the technical dimension takes priority and imposes its logic on the political dimension of the administration of digital resources. This trend means that burning questions about the crisis of security in the Snowden era, the mass violation of the right to privacy, the hypermonopolization of resources, are not raised as new questions to incorporate into regulation. Secondly, the modality of multi-sector governance tends to be raised as a single model for administering diverse aspects of the digital world. In practice, this model leaves a net balance of many ambiguities in terms of decisions and roles assumed by each of the actors involved. The technical approach was perceived once again in the preparatory document of the Netmundial organizations in 2014, where the world “multistakeholder” was used almost fifty times, while the word “democracy” was never mentioned. At that meeting, twenty-five civil associations declared that the

³⁹ Available at the website of the International Criminal Court: <https://www.icc-cpi.int/Pages/item.aspx?name=pr1238>

⁴⁰ Massit-Follea, Françoise (2014). *Internet et les errances du multistakeholderism*, IFRI.

⁴¹ This commission is an initiative of the Center for International Governance Innovation, USA.

debates “had not really helped to change the status quo in terms of the protection of the fundamental rights, or balance the powers and influence of the actors involved.”⁴² According to researcher François Massit-Follea, at the level of concrete cooperation processes, various instances created with the intention of encouraging general interest end up moving decisions away from participation and construct, essentially, a pretence of collaboration. In the case of the Internet Governance Forum, after ten annual meetings, accompanied sometimes by regional and national forums, the unresolved issues are accumulating. Some analysts see this scenario as the challenge of moving from a governance focusing on the technical infrastructure of the internet to a global governance of a digital common.

Aside from the goals assigned to digital regulation, we are yet to find a way to implement the broader approach to internet governance arising from the multilateral summits of 2003 and 2005. At that time, there was a suggestion that the management of technical resources and questions of public policies should adopt a multi-party, multi-polar approach. That is, institutionalize a greater international cooperation and raise new questions politically. However, while power relations between the states, private operators and civil society intensify, a technical consensus is still in place, with very uneven levels of depth. One of the consequences is that this tends to polarize ideologically the supporters of a free and open internet on one side, and on the other side a governance based on territorial sovereignty, and finally the promoters of the current model defending their economic performance. Some conceive digital technology as a field of international relations orchestrated by the States, considering that digital sovereignty is an avatar of it. They oppose the idea that globalization and the internet weaken the regulatory power of the States in economic terms. Others sustain that digital technology radically transforms the nature of the international system, as the internet has extended to all sectors of society. This dividing line leads us in some way to the tensions that have developed historically between the state and the economy, and led to the four macro models: the soviet model; the Hamiltonian and Chinese model; the social democrat model; and the liberal Reaganite/Thatcherite model. In all these experiences, civil society has in the best of cases been a passenger shaken by government decisions and economic avalanches.

As a predictable consequence of the above points, the architecture of governance is influenced by a greater privatization and instrumentalization of the spaces of negotiation over particular interests. This trend can only remind us of the phenomenon of the capture of commons. In the legal field, the jurist Olivier Itenu⁴³ stresses how the hegemony of the US right is consolidated thanks to loose lobbying exerted in the different regulatory bodies. In the IT sector, private and non-governmental actors have always played an important, legitimate role, laying fibre optics, multiplying exchange points between networks or feeding the definition of technical standards. However, both their current influence in the digital services and their central role in mediating content makes them a top-level regulatory actor. The actions of private operators directly influence policies of privacy, control of financial flows, censorship and monitoring of copyright. In fact, the reports that monopolistic companies like Google and Facebook provide show that governments are submitting more and more requests to these digital industries⁴⁴. Furthermore, the interception policy implemented by the industrial powers has shown that cooperation with private operators is essential. It should also be remembered that the NetMundial summit of 2014 was jointly sponsored by the organizers of the World Economic Forum in Davos, which gives another indication of the connivance between institutions and corporate actors, selective connivance typical of the diplomacy of the private club. This form is increasingly being called into

⁴² Declaration available at <http://bestbits.net/es/netmundial-response/>

⁴³ Itenu, Olivier (2016), *Quand le digital défie l'État de droit*.

⁴⁴ European Digital Rights (2012), *Google Transparency report: increasing trend of government censorship*. Available at <https://edri.org/edri-gram-number-10-12-google-transparency-report-increased-govt-surveillance/>

question, as well as revealing itself to be less influential on the global agenda. In this context, the private sector is today at the crossroads of these tensions. It will play a crucial role in the way in which internet governance develops in the near future.

Perspectives for a citizen's internet

Having summed up the main dynamics of the digital sphere, we shall now look at the prospects for transformation and the last two questions put forward in our introduction of how to dispute and consolidate a regulatory framework that can manage the digital world fairly, democratically and effectively; and how to implement changes in the architecture of international relations that influence *in fine* the managing of digital resources? To this end, we will turn to the reflections reached in two collective processes: the Internet Social Forum and the World Forum of Free Media. This is by no means an exhaustive sweep of all the proposals in this field. But these two forums have provided a relatively consistent, cross-disciplinary debate in which the author of the present article participated, allowing us to organize a more collective perspective. These processes were able to approach diverse visions from academics, activists, state officials and civil networks from Latin America and other continents. The Dialogues for a Citizen Internet meeting that brought together some seventy participants in Ecuador in September 2017 will be of particular use to us in summing up general ideas.

Five perspectives can be highlighted to back up a strategic action in favour of a citizen internet: reinterpreting the internet and measuring its metabolism; perceiving a new horizon of struggle; allying and coordinating; constructing a collective actor; deepening new paradigms. We will now detail each of these perspectives, to show the genuine vision that these processes have produced. The content naturally overlaps what was shown above; but the important thing here is that these main areas should contribute to ordering a considerable vision of the practice and should therefore be better oriented towards transformative action.

Reinterpreting the internet and measuring its metabolism

This first perspective, inseparable from the others, has to do with the perception that the internet has changed in nature and that it is going through a new era, very different from that of its beginnings around 1993, when the World Wide Web began, and even in comparison to its situation in the 2000s. There is a great need for knowledge, for measuring, and for renovation of the framework of interpretation of the internet. This echoes what was said in the document written up by the Internet Social Forum in 2016: “While dominant actors in the digital space are densely interconnected and well on their way to the formation of the digital society according to their interests, progressive forces are only in the early stages of working out the outline of the problems and identifying them, generally around a specific issue. There have been few advances in the creation of networks, the development of appropriate collaborations and alternatives, the creation of strategies and the implementation of actions on a broader level.”⁴⁵

One of the needs that we can observe in the current debate about the internet has to do precisely with the characterization of corporate-state advances in recent years. While the digital commons continues to expand, it is highly notable that the contrary trend in favour of the concentration of data and digital services constitutes an unprecedented phenomenon in the contemporary economy. A handful of corporations have grown rapidly as pivotal actors of the digital sphere and even give new meaning to the notion of monopoly. Aside from the figures that are always useful in measuring this phenomenon of

⁴⁵ *Internet Social Forum: Why the Future of the Internet Needs Social Justice Movements* (October 2016). Available at <http://internetsocialforum.net/isf/wp-content/uploads/2016/11/ISF-Working-Paper-27-October-2016.pdf>

concentration, this is above all a question of understanding the mechanisms and impacts of this mass capture of digital resources (data, algorithms, platforms, and services.) On a sociocultural level, this corporate concentration has a correlation in the installation of a logic of control, commercialization, consumerism, uniformization, even *objectification* of subjects over the public interest and rights. The gathering and mass treatment of data bring out new capacities, such as artificial intelligence, as well as the growing integration of computerized services in social and industrial activities. In more extreme terms, one can also observe a phenomenon of colonization of traditional cultural ways of thinking by the instrumental thought brought about by technologies.

On the political plain, we can see that the monopolization of informational capacity is often characterized as a *transfer of sovereignty* or an *imperialism of interpenetration*, that is, a delegation outside of the State or the political sphere of management of public ecosystems of data and of the potential of the internet. Although the internet tends on the one hand to radicalize democracy, one can perceive that its current concentration erodes democratic processes both directly and indirectly. In fact, as an open space, the internet is often manipulated by offensive actors. In all Latin American countries, planned violence is spread by trolls, bots or human groups with certain sociopolitical objectives. The concentration also leads corporate-state partnerships—particularly in pharmaceutical, agro-industrial and security sectors—and provides *in fine* a logic of citizen surveillance.

Reinterpreting the internet from the citizen perspective does not mean producing static or merely academic knowledge. It is above all a question of generating knowledge that can go beyond technicalities, to understand a very dynamic reality, to drive action, to permit the exercise of shared responsibilities. Indeed, the opacity and permanent evolution that characterize the internet requires a watchdog role and considerable intellectual mobility. Proposals suggest that it is necessary to measure how the internet expands, includes or excludes, how it hides or makes visible, how it concentrates or distributes. Something that is not measured can hardly be raised in public debates or bring about answers. This measuring makes it possible to gauge rights and responsibilities all over the internet. In this context, the role of whistle blowers is very important. There is a need to trace the impact of technologies in the world of work and map power relations in the field of production and labour relations. The transparency of algorithms and intelligence agencies is another central issue in this measuring. It is not just a question of making the code transparent, but also that each actor, especially the most powerful ones, be accountable for their actions in the virtual, social and physical field.

Understanding the digital sphere also means incorporating a prospective dimension. The growing involvement of algorithms raises a number of new questions. How to approach the responsibility of algorithms and automats in the future from a legal or political point of view? How to regulate the convergence underway between biotechnologies, nanotechnologies, geo-engineering and IT? How to get past anti-trust laws that do not make it possible to guarantee the principle of free competition in a new era of monopolies? What will be the consequences of the growing dematerialization of production and automation in terms of the organization of labour and the need for jobs in the future? Other concerns aim at a knowledge that may be biased by a fetishism for data and artificial intelligence. The latter may be a danger for the sole fact of delegating control in the hands of the machines and groups that manage them. But it also brings a potential risk because of the effect of substitution or polarization of intelligence that they entail. In general, it is seen that with each technological advance a possible vicious circle arises that brings new problems and systemic risks, which are often not incorporated into the political debate, or even conceptualized. The case of digital monopolies is an example of this. Obviously, not every socio-technological advance entails negative elements. But it is notable that the entrance point for describing the digital continent is located above all in a more questioning and less “techo-optimist” place.

In other words, if the internet carried with it a clearer hope of democratization at its beginnings in the 1990s, this promise today is recontextualized in an ambiguous, uncertain imaginary, contaminated by a desire for monopolization and mass control. Although until the 2000s the internet could function with a limited diversity of actors, led by relatively equal interests, today the exacerbated competition among the major powers and commercial interests have spread onto the internet, reproducing with them the anarchic character of global geopolitics. The internet has gone through stages and has in some way been “reprogrammed” from the point of view of the diversity of the actors, their logics and what drives them ideologically. This is why there is a need to develop a new framework of interpretation of the electronic space. Globally, there is a lack of politicization, of perception of interests at stake, a certain fetishism and technicality, which somehow echo other difficulties in perceiving the transformations that societies are going through. All this contributes to underestimating the role played by the internet in the sociopolitical sphere and leaving the most powerful actors in a situation of leveraging their margin for manoeuvre in reality.

Proposing a new framework of interpretation is inseparable from the values, vision and project underlying the development of the digital sphere. Any knowledge or measuring instrument forms part of a system guided by a given finality. *Internet Society*'s annual reports establish a common model of analysis that takes in nine major issues⁴⁶ and different categories, such as transparency, security approaches, accountability. This model responds to a determined vision. Other tools, such as the world governance index⁴⁷ or the active citizenship index⁴⁸ may be experiences that inspire measurement. All this underlines the question that today there is no independent, binding evaluation methodology of the digital commons. Because of this, in the debates the question arises of thinking how to formalize a capacity for measurement in the architecture of internet governance. This would provide a formal, consensus-based mechanism to continue the evolution of the internet in the light of a set of priorities. In the area of the atmospheric global commons, the regulatory architecture incorporated precisely an independent group of experts on the evolution of the climate (IPCC) from 1988. Their reports have had a significant influence both on public opinion and in inter-governmental negotiations.

There are other possible strategies for strengthening the creation of a new framework of understanding. It is important to come out of the instrumental and sectoral debate and recognize the digital sphere as a *global commons*. Ethics, systemic or socio-technical approaches are generally absent in the knowledge transmitted around new information technologies. It is necessarily to work at the level of technical and scientific conceptions. As we saw above, the internet can no longer be reduced to mere technological infrastructure. There has been a change in its meaning and politics. This means disputing a systemic, social, complex and ethical vision of technological systems over techno-centrist and economic concepts. To do so, new interdisciplinary approaches are necessary. Work on training and education in these issues therefore becomes a priority. Training can be seen at schools through digital literacy, and also at universities, in trade unions and social movements.

Various proposals also have to do with the resignification of notions naturalized at different levels in the digital sphere. For example, the concept of *sovereignty* tends to be relocated in the sense of general interest, aside from the notion of technological sovereignty or state sovereignty. The concepts of *property*, *freedom* or a *multi-party model* also need to be resignified. Each one of these concepts

⁴⁶ The internet economy, the role of government, the internet and the physical world, artificial intelligence, cyber threats, standards and interoperability, media and society, digital divides, freedoms and rights. Recovered at <https://future.internetsociety.org/>

⁴⁷ World governance index, Forum for a new world governance. Available at <http://world-governance.org/en/node/2113>

⁴⁸ Active citizenship index. Available at <http://incid.org.br/>

condenses a given vision of the world and of the internet that is constructed. It is said that the notion of *security*, for example, tends to limit the debate around state or governmental security. We propose prioritizing a more open notion of *trust*. The notion of *correction of asymmetries*, of *wealth and inequalities* can be more accurate than the notion of *equity* and *digital divides* used in international debates. *Responsibility* or *accountability* carry with them a wider meaning than the mere notion of *transparency*. The same is proposed with the *right to diversity* instead of the notion of *inclusion*; *exchange economy* more than *information economy*; *sociopolitical network format* to go further than *technical neutrality*. In short, a new glossary is needed, with the clarification that this glossary reflects a project that will transform the digital world.

It is interesting to stress that these proposals echo what other movements promote through the paradigm of a *technical democracy* in response to the rapid advance of emerging sciences and technologies. Ultimately, the central question lies in establishing a new framework of responsibilities and governance of innovations in a world that is populated with new interdependences and vulnerabilities. A retrospective perspective in history and sociology shows that any innovation or technical norm influences social norms, while the creation of a suitable right comes later, once the use of innovations has spread.

Perceiving a new horizon of struggle

There is today a narrative, ideological asymmetry in favour of the internet's major players. Indeed, the digital sphere has followed two closely-tied ideological paths. For the industrial elites, the internet is a vector at the service of capitalist economic growth, or technological innovation, or the thirst for control and power. For the connected world, it is a form of consumerism, a kind of *religiousness* combining virtual freedom, cognitive mobility and new sociabilities, with a low consciousness of digital rights and of the internet's capacity for organization. In this model, what is important is not so much the real content of ideologies as the motivation it is capable of generating. Additionally, the concrete results it is capable of offering are fundamental. Without the main variable that consolidates this equation, i.e. economic growth, it is evident that the dominant narrative would not have the hegemony it possesses today. This rather binary model would be more nuanced. For example, there are very many collaborative forms consubstantial with electronic communications which are not related to digital consumerism nor what collaborative economics specialist Michel Bauwens calls *netarchical capitalism*. But we can show that this main asymmetry is often seen to be dominant in the internet. The long-term consequence of this ideological panorama is that a utopian horizon has gradually been eroded for the defenders of an internet at the service of general interest. The possibility of a digital commons at the service of the people and of the democratization of the economy has been reduced. However, many debates on the internet reaffirm its initial premise. We continue to insist on the emancipatory power of the digital commons. As a new global commons, the internet has been, is, and continues to be in some way a hope—albeit perhaps less so than before—tied to mundialization.

There is evidence here of the importance of the ideological driving force and of the transforming imaginary in the digital world. Electronic communications, even when they include a principle of technical neutrality in order to prioritize an equal transport of data, are not neutral in socio-technical terms. Infrastructure imposes a geometry on social processes and it is also the multitude of users with their respective quota of power who impose a collective direction on this global commons. In fact, if we look at the demographic proportion of users, the trend is for the internet to be more Asian and “emerging” in the coming decades. From this point of view, there is a *de-westernizing* movement in the internet that will continue to generate its effects, just as it is generating it on the diplomatic plain

through greater demand from emergent countries⁴⁹ to open up internet regulation. This is no minor change. But the central factor is to understand that the advance of the commercial logic of the internet is inseparable from an *ideological weakening*, that is, an ideological disposition to subscribe, whether passively or actively, to a model that some analysts characterize at times as *digital neofeudalism*. This ideological weakness or asymmetry can be seen in the cultural field, where the instrumental thinking of technologies, i.e., the knowledge elevated by the current framework of modern innovations, gradually contaminates other forms of knowledge. Ultimately, this ideological weakness has limited the capacity to drive another internet agenda. This has been facilitated by the model of technical consensus that has regulated the internet since its beginnings. In fact, various analysts stress the *ideological factor* as a key condition in the construction of power on the internet. The Chinese government consultant Wang Yukai identifies the fields of education, creativity, and research, fundamentally *intellectual involvement*, as a factor of potential, among other factors⁵⁰. One of the challenges that we shall see below is that of boosting these identities with other territorial and political struggles external to the internet.

Therefore, the question that arises in the context of a citizen internet is how to re-invert the digital terrain with a motivating, ideological force. In general, there is no single, consolidated perspective to answer this question. There is on the one hand a posture rooted solidly in the promotion of human rights and of a digital democracy, there is also in reality more plurality in the ideological frameworks of the actors of the digital sphere. The same diffuse reality can be found more broadly with the movement of the *commons*. However, we can sketch at least four lines. Firstly, there is a posture affirmed of *intelligent adaptation* in response to the wave of digital innovation. This means it would be counterproductive to reject this wave of connectivity on the part of a *modern imperialism* or *neocolonization* that needs to entrench itself in an anti-modern bastion of communication. This imperialism and this colonization exist. But proposals conclude that there is a greater power of motivation in the fact of absorbing intelligently technopolitical changes brought by this wave to put them at the service of society. This means being able to reject their negative elements, relate them to local and regional thinking, interpreting contradictions and the model of vulnerability or domination that may be reproduced. In the public sphere, for example, various state officials indicate that it is vital that society appropriate the concept of e-government and become aware that the state and society need to adapt to the expansion of digital technologies. Secondly, it is necessary to generate critical questioning. This means questioning the current paradigm and elevating the focus of the debate to a more proactive, structural terrain. What would an alternative proposal of internet governance look like? What tools are necessary to construct a more advanced communication? What actions can be undertaken against the concentration? How can consumer power be mobilized? This questioning requires training in direct communication, that is, a sociopolitical organization in the real physical terrain. In the case of the Brazil's Landless Workers Movement, communication technologies have been incorporated into the goals of the movement and as tools for tackling the current dominant model. Thirdly, many elements of the transformative imaginary tend to have to do with the valuation of advances and the assimilation of prior conquests. From the experiences of public policies in migration to free software, nationalization of state companies, of education or of legislative debates an regulation, to the multiple initiatives carried out by civil society, the need is expressed to have an active conscience of these struggles⁵¹. In this regard, it is diagnosed that experiences should possess a potential for

⁴⁹ Nocetti, Julien (2015), *Puissances émergentes et Internet : vers une « troisième voie » ?*, IFRI.

⁵⁰ These other factors are: 1. Infrastructures and industrial capacities; 2. International strategy, stability, and the protection of networks and the economy; 3. Cultural, social and educational factors. Taken from Wang Yukai, supplement from *People's Daily* (2014), China. Available at <http://theory.people.com.cn/GB/40764/127620/134447/>. Also recovered from the *Council on Foreign Relations*, USA. Available at <https://www.cfr.org/blog/how-china-becomes-cyber-power>

⁵¹ See in this regard the mapping of regional initiatives during the Dialogues for a Citizen Internet in Quito, September 2017. Available at http://www.desmodo.net/dialogos_ciudadanos/#381

transformation higher than other knowledges. Therefore, the challenge is to create processes that go back and forth between action and reflection. Fourthly, the need to occupy the ideological terrain brings us to the fact that the struggle needs to be defined as a struggle itself, with identities and narratives. It is necessary to consolidate narratives that are motivating and easy to understand (*Another internet is possible. We must not give up the struggle for a common global space. For rights on the internet, etc.*) The goal is to create a framework of social appropriation of the digital world.

Mobilization campaigns and the writing of a universal charter for a citizen internet appear as priority areas to bring all these elements together. Many ideas of citizen campaigns are already on the table: the non-proliferation of cyber weapons, the sovereign protection of data, digital security, culture and free software. Often these campaigns begin as a result of current events or the political agenda. It has been mentioned that the transition process towards the new generation of IPv6 addresses could encourage a wider debate on the digital sphere. The horizon of a universal charter for the internet crystallizes all these elements. In the case of the World Forum of Free Media, the Global Free Media Charter⁵² was designed over the course of several years, as both a method and a goal to condense an independent, militant voice on the role of information and the media in the world. The new era the digital space has entered appeals to a similar process that is capable of leading to a *constituent phase of cyberspace*. These elements remind us that the imaginary of the reappropriation of the internet does not work self-referentially, disconnected from other political challenges. On the contrary, due to the ideological asymmetry in this terrain, digital struggles have to be strengthened closely with other social transformations.

Coordinating and allying

The internet is a horizontal space of connectivity, so while sectoral, thematic or specialized approaches are necessary, they are not suited to bringing about citizen appropriation. We mentioned above the relational model that internet regulation entails. In this regard, it is notable how a kind of *art of coordination* underlies the basic ideas for a citizen internet. This aspiration is expressed firstly on the conceptual plane. We saw before that it is necessary to reinterpret cyberspace and that this interpretation goes hand in hand with a greater aptitude in connecting evolutions in the national, regional and global context. In Latin America, analyses of the digital situation often try to weave together media/legal offensives present in various countries, with the scenarios of monopoly and economic dependence, against a background of regional integration that has postponed the progress of autonomy in terms of communication and infrastructure policies. This is also contextualized in cities and in local territories. These latter play a decisive role in the construction of post-neoliberal models that can confront the productivist logic. In practice, weaving together all these issues is not easy. The spaces for debate underline this difficulty of a cross-section perspective. How to prioritize one question or another? With what criteria does one prioritize one coordination over the other? Consequently, the struggle for a citizen internet should deal with a dual aptitude to contextualize and relate. It is necessary to connect the actors with the issues, going beyond traditional demarcations. With regards to the issues, the preferential questions to tackle must be allied with the right political agenda and citizens' concerns: inequality, social justice, human rights, multilateral institutions (such as the World Trade Organization,) governments and democratic institutions, the regulation of transnationals⁵³, networks of communicators, and communication policies. The logic is similar to the level of alliances with social actors. In Brazil, for example, the Civil Rights Framework for the Internet stimulated the creation of

⁵² World Charter of Free Media (2015), Available at <http://www.fmml.net/spip.php?article145>

⁵³ See the project for a binding treaty on the violation of rights by multinationals, currently under negotiation in the UN.

various coalitions for the defence of digital rights. But these modalities of coordination must find their own initiatives, not just respond to government bills.

This emphasis on coordination means that the strategies for transforming the digital world are not necessarily to be found within the cybernetic sector itself. What occurs on its frontiers, in interaction with other social transformations, can at the same time boost a greater insertion in general and set the agenda for digital transformation. One of these intersections has to do with democracy movements and their expression in the sphere of electronic communications. Generally, human rights organizations often drive the disputes at national level on digital rights. Another intersection is the growing role of local governments in the invention of new forms of inclusion, consumption, human mobility and sustainability. Let us imagine, for example, the potential that would be had in an alliance of cities promoting ecosystems of sovereign, decentralized connectivity, similar to the commitment of cities to act in favour of an energy and weather transition. In some ways, a citizen internet is already on the agenda of municipalism currently underway in Spain and other countries. Another intersection is already being consolidated with alternative, citizen's media. It is important to indicate that this aptitude to relate constitutes in itself a response to a deficit in the model of governance organized around the State and the market. One of its weaknesses is precisely the increasing visible inability to handle the diversities and complexities that arise around goods and resources. The cost of this inability is measured in terms of concentration, inequalities and negative externalities.

Constructing a collective actor

In continuation of the above, it is necessary to consolidate an organized social force, capable of disputing a citizen internet. But what are the possible forms and organizational models that inhabit the imaginaries and concrete experiences in the field of digital struggles? In principle, there are many organizational models. They reflect the variety of identities, approaches and initiatives. In the digital field, recent years have seen the emergence of national forums, coalitions, associations, communities, networks, collectives, campaigns, technopolitical processes, etc. However, there does not yet exist an experience that makes it possible to outline a meta-organization capable of driving a citizen internet at local or global level. In fact, the spaces for debate on the internet do not add to the sense of creating a formal organization, with a rigid ideological framework, with a leadership organ giving direction to the collective action. The organizational form is designed above all through shared processes and goals, tending to form a unity of perspectives. These processes lead to the construction of a collective actor, capable of carrying out an agenda of transformation, connecting emerging issues, taking initiatives and harnessing opportunities in the public debate. This collective actor is not synonymous with creating a new institution. It is rather a case of coordinating diversities and constituting a coordinated, dynamic action that can combine unities of perspectives and diversity of initiatives. Obviously this perspective is inseparable from a political determination and a will-based determination of the civil sectors to commit here and now to that horizon. It is a collective effort that implies a collective will to converge and act together.

More specifically, what processes can sustain the organic model of this collective actor? Firstly, many social actors express the need to grow in terms of capacity of *intelligibility*. This is the capacity to establish a shared framework of references, to analyse scenarios and circulate information to raise the level of collective understanding. Furthermore, there is a need to consolidate a programmatic unity. This is essentially the political project promoted for the internet. In the current phase, we see that there exists a growing consensus on the general terms for promoting an internet that is decolonized and demopolitized, decentralized, inter-operable, plural and open. In this vision, the internet must be placed

at the service of general interest and an inclusive social project, regulated by democratic institutions and mechanisms. Thirdly, the priority is set forward to provide the public debate. This means acting here and now in the public space to advance the political and culture debate. Experience shows that it is necessary to cling on to the burning issues in the media and public agenda. The questions of digital taxation, regulation of data, internet governance, the right to privacy, and the responsibility of multinationals that already form part of the everyday agenda. All too often, this debate follows a defensive, “under siege”,⁵⁴ logic from the civilian sectors, which tend to follow the agenda put forward by the dominant economic and political actors. Lastly, the valuation of experiences is found here once again as a proposed agenda. It is necessary to incorporate the lessons from the experience in the frameworks of action and reflection. Although these experiences are shared, incorporating the experiences means that their content, their achievements and their complexity is socialized. It is an expensive process, and one often undervalued. This perspective also refers to a certain imaginary of social transformation. It is argued that concrete action creates a greater potential for intelligence than theory. In this sense, ground-breaking perspectives or merely political-institutional change is relativized. In other words, although it is necessary to take the power to implement changes, the reality has shown that often it has not been enough to broaden the alternatives.

Two other lines consolidate this challenge to constitute a collective actor: community and territorial networks, and the horizon of a regional infrastructure. The insistence on community logic suggests that this is a favourable sphere to advance an agenda of transformation. If state and legal action is necessary but insufficient, what would be the most pertinent level of transformation? There is no linear response to this question. However, various factors converge in the perspective that the community aspect allows for greater integration of the principles of decentralization, social construction and territorial rooting. This line is similar to the elements we saw above concerning the polycentric logic of the *commons*. The digital grammar also makes it possible to federalize these communities with federated architectures. That is, instead of broadening the use of a resource through the centralization of data, the expansion is constructed through common standards and protocols with a decentralized model. In this community scale we see that a double alternative to market-state bipolarity is attempted: on the one hand, an alternative to the capture of digital resources; on the other, an alternative to the deterritorialization of digital questions that become comprehensible in the context of the local economy. The search for a regional infrastructure goes hand in hand with this perspective. It is perceived in general that regionalism can allow a greater level of technological independence in Latin America. The UNASUR’s optical fibre ring project is part of this, as to is the development of federated systems, community servers and diverse nets of communication.

Broadening new paradigms

The digital sphere enables new resources and a network potential that is leveraged by the most powerful or organized actors. Consequently, the internet acts as an ambiguous and contradictory disturber of the sociopolitical matrix and the economy. However, these influential actors do not have the exclusive right to modify the parameters of the economy in the internet. From the beginning, civil users and actors have also made use of digital resources to explore new paradigms. The seeds of these new paradigms can be found in many areas. When reflecting on the perspective of a citizen internet, attention is focused on four thematic fields: services and economic production; data and the regulatory frameworks; the regulatory architecture on the web; the radicalization of democracy.

⁵⁴ The phrase is from the communicator Aram Arahonian (2017), in *El progresismo en su laberinto*, Ciccus, Argentina.

The first case of services and production echoes what we highlighted above about the role of the community. There is an attempt to leave behind the institutional arrangement made by the State and corporations who encourage the current monopolistic trend. In practice, aside from the formal separation of State and market, an institutional pattern is configured in which certain concepts, interests and power groups coincide. Economic growth is at the heart of this pattern. In response to this, collaborative economy experiments turn to the internet's capacity for coordination to elude the intermediary role of the market and the State. This disintermediation makes it possible to encourage an economy at the service of territorial, democratic goals. Various experiences of this type of collaborative economy are underway in different countries, while digital industries develop similar platforms but with a thirst for maximizing digital profit. However, the question that arises in this panorama is how to construct a framework for expansion of these experiences and how they can bring about a more profound change in the reconfiguration of the means of production and distribution. For now there are no clear answers. But debates appear to install this search for a post-productivist model as the horizon of a citizen internet.

The second case has to do with models of governance of digital data. The shift from a situation of weak or inexistent regulation of digital data to new frameworks of regulation capable of limiting corporate greed and protecting data naturally arises as a priority area. In this regard, there exists a proposal to advance towards a regional framework of characterization of data, promoting data ecosystem territorialization laws. But ultimately, there are other elements that have to do with the conception of digital goods. These goods tend to be reintegrated in their socio-technical environment and their form of definition revised. Today, the form of definition is defined essentially around the form of production. Data can be private, state, public, individual, open, etc. However, the expansion of the internet as a global common and as an almost cost-free vector of multiplication of digital goods modifies this kind of reading. Digital goods multiply when they are shared and their value grows around their mutualisation, like social connections, knowledges, etc. In an immaterial economy, the definition of goods tends to be displaced towards form and finality depending on how they are shared and how these goods circulate. It is therefore necessary to incorporate other variables into their definition, as well as their form, source or sphere of production. In this field, there is a transition underway aside from the public-private limits and positivist property. This is also why we understand that the strategy of digital monopolies goes in the direction of isolating data in their sociopolitical context, hardening the terms of international property and maintaining an instrumental approach to its categorization on the conceptual and legal plane. In short, a perspective for a citizen internet is about raising the debate over the goods in the economy and disputing a new matrix of definition of digital goods.

A similar horizon emerges around the model of internet governance. We saw that this model is in dispute, with a greater conscience of its crisis and limits. This model is criticised and perceived as functional to dominant interests. On the one hand, there is a proposal to influence the existing multi-actor spaces, with more determination and citizen postures, from national to global level. On the other hand, it is valued as a limited but innovative experiment of governance in the digital sphere⁵⁵. Therefore, this is a question of going further in the criticism of this model and broadening the terms of an alternative model of regulation. Going further in this direction means drawing up proposals on the framework of rules, definitions, responsibilities and specific processes that can improve this architecture.

Lastly, various proposals group together around the idea of putting the internet at the service of a renewal of politics and citizenship. We often denounce the instrumental use of technologies in the field

⁵⁵ See for example the case of the Internet Management Committee in Brazil.

of security, in the drawing-up of public policies or of media construction. In these areas, electronic technologies can reinforce a superficial and instrumental conception, or they can strengthen a radicalizing vision of the construction of power. The potential of a citizen internet lies in this capacity for generating processes that can radicalize citizen participation. That is, to put the *digital common* at the development of the *democratic common*, or what we might call the security common. Without having prefabricated or replicable solutions, it is necessary above all to consolidate a renewed approach to the modalities of democracy participation, digital experiences, and the construction of power.

By way of conclusion

Without seeking to be exhaustive, we have sought here to draw an overview of the foundations, trends and citizen perspectives that sustain the *global common* of the internet. We insist that we are going through a new phase in the internet's history that appeals to a new way of thinking, organizing and acting. For a more dynamic, strategic and relational way of thinking, there is a way of organizing oriented towards the articulation, mobilization and the taking of initiative. The numerous paths that we have seen above illustrate this possible, challenging protagonism for citizens in general. In fact, diverse voices presently appeal to pushing forward a *constituent process* on the internet. It is necessary to gradually imagine new rules of play. Unlike other commons, which historically have been reserved for a more exclusive race between States, the internet maintains a utopian horizon where the *plebeian potential* is expressed. Or rather, where a *plebeian multitude* expressed itself, whose challenge is to increasingly become a *plebeian power*. For this, we have seen a new *ideological and intellectual involvement* underlying the electronic terrain, an involvement that the traditional powers have undertaken in the context of a geopolitical transition that is reflected in all strata of power. In this regard, much remains to be done for interconnected citizens. And there is nothing to indicate that the *digital revolution* will coincide immediately with a revolution in democracy and universal rights. The battle is open and resistances are being consolidated.

This notion of plebeian power allows us to conclude on the third question raised in the introduction: how do we modify the relations of forces and transcend the current architecture of international relations that influences *in fine* the management of digital resources? This is a complex question and the answers have remained open so far. Although civil society has achieved many things, not just in the digital sphere, civil society has historically stood as a third actor, tossed about by the dispute between the States and the economy. All the more so at the present time, where the race of powers on various terrains is intensifying. Furthermore, organized society has not seriously asked itself the question about regional or global policy of digital resources, less so about a new political architecture capable of dealing with current interdependences. Neither the World Social Forum, nor other progressive processes have been able to truly advance in this debate, both in the conceptualization and in the construction of a collective subject. However, this double tension between the change necessary in power relations on the one hand and the contribution of power from the bottom by another is already active in the practice of the commons. A citizen's internet goes hand in hand with the formation of a *political community* doing the collective learning of the foundations and rules for managing the digital common and its relationship with a broader political environment. The comparative advantage of the digital common in comparison with other commons is that it allows us to construct a plebeian power vector without acting solely in the plane of relationships of power as traditional actors do in the framework of traditional power laws. We have also seen that it is necessary to broaden this capacity for transformation to advance towards new paradigms. All this allows us to insist that the construction of a *political community* is a consubstantial key of the commons, particularly of the common created by the internet. It is perhaps important to contemplate and take advantage of this instituent potential of

citizens. What we have seen in these pages argues precisely in favour of setting up an alliance for the promotion of a democratic, citizen internet. It remains to be seen who and above all what processes could help to bring about the formation of this alliance. However, following this course and looking further down the line, could it be that this *digital path*, along with other alliances created around other global commons, is the starting point for rethinking the architecture and the political community that the twenty-first century needs?