The position of Ecologistas en Acción on 5G (and its world)

Ecologists in Action believes that the project to digitalize the world, far from being a tool to mitigate the ongoing ecosocial collapse, is building societies that are less prepared to face it and exacerbating some of its most dangerous dynamics. Given the importance of the 5G network as the infrastructural underpinning of this process, Ecologistas en Acción believes that its deployment should be halted and subjected to a thorough political, technical, ecological and health assessment.

In the age of Digital Capitalism

In recent decades we have witnessed the formation of an ICT (Information and Communication Technologies) oligopoly that concentrates gigantic power in the hands of the owners of information technology and the owners of the Internet. A few companies (Microsoft, Apple, Foxconn, Google, Amazon...) control the communications of a large majority of the population, have control over the information that people generate and put it at the service of purposes of dubious social utility, such as the creation of economic profit or the engineering of opinion1.

The origin of this power has been the identification of a new accumulation niche: what Shoshana Zuboff has called the "behavioral surplus value", which yields "surveillance dividends".2 The companies involved in this Surveillance Capitalism have profited by obtaining enormous masses of data from our daily use of platforms such as Facebook, Twitter or Google.

Those known as GAFAM (Google, Amazon, Facebook, Apple and Microsoft) use Big Data to feed algorithms that progressively take the place of human expertise, labor or evaluation capacity. To the already

known algorithms for word search, facial identification, translation, etc. are beginning to be joined by algorithms that dictate judicial sentences or evaluate the suitability of certain profiles for a job or the criminal dangerousness of certain individuals or neighborhoods.

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Among the many risks that the generalization of this algorithmic logic entails,3 one of the most worrying is political. On the one hand, because of the way in which states such as China are using these new digital media to create what Marta Peirano does not hesitate to describe as technodictatorship.4 Especially now that their management of the COVID-19 pandemic has legitimized their practices, with some in the West openly inviting their imitation.5 On the other hand, because of the power of these algorithms to interfere in the democratic elections that

these algorithms are creating. On the other, because of the power of interference in democratic elections of these algorithms that the Cambridge Analytica scandal has brought to light6 and that has been partially responsible for the rise to power of figures such as Donald Trump or Jair Bolsonaro.

Green and digital? The dangerous metabolic burden of digitalization.

In addition to its socially alarming effects, digitalization has become the industrial sector with the most explosive metabolic growth on the planet. Far from being "immaterial," the digital economy has an immense ecological footprint.7

Cloud computing alone already consumes around 2% of the electricity produced in the world.8 Google subsidiary YouTube is the world's largest electricity consumer - the company, and streaming video in general, accounts for up to 80% of all Internet traffic - and, according to Greenpeace's 2017 report Clickling Clean9 - which takes the entire IT sector as a benchmark and compares it to the rest of the world - it is the world's largest consumer of electricity.

In addition to the above, there is the increasingly worrying problem of waste associated with digitization. Programmed obsolescence and the dynamic of constant renewal of computer terminals are at the root of a veritable e-waste emergency, which is responsible for water pollution and disease in areas of dumping, such as Ghana.14

At cruising speed towards collapse: the digital shock doctrine

If the impacts associated with "truly existing digitization" are already alarming in themselves, the current commitment to 5G technology aims to create the conditions for the so-called "Fourth Industrial Revolution". This, ideally, would set in motion a new cycle of capitalist accumulation based on automation, hyper-connectivity, deregulated work through platforms, new forms of urban governance (smart cities), the digitization of agriculture, etc.

It is an attempt at a new "Great Acceleration" that goes in the opposite direction of what we really need.15 The flight forward that 5G represents can be compared to the deployment of the last moais (giant sculptures) on Easter Island (Rapa-Nui). 16 In a world suffering from a climate emergency and on a trajectory of ecological-social collapse, what we need is not to accelerate further (and ICTs in general function as accelerators of "turbo-capitalism"), but precisely the opposite: to slow down, relocate, contract the social metabolism, reconnect with nature and build a new meaning of life that is not based on the consumption of commodities.

The massive digitalization that 5G aims to make possible would exacerbate each and every one of the problems we face. On the one hand, politically, because the project of the elites is the extension of algorithmic logic and surveillance capitalism far beyond the screens of our

computers and cell phones. The so-called "internet of things" (IoT) aims to make almost all our domestic objects data collectors that continue to fatten the surveillance dividends of the large telecommunications multinationals. Autonomous cars, smart refrigerators, interconnected clothing, smart cities... All of these would be synonymous with an explosion of sensors that would record our

explosion of sensors that would register our movements, our consumption patterns, etc. In short, the bulk of our daily lives.

Such a scenario launches worrying projections in areas such as privacy, but above all it would conceal a major challenge for our already limited democracies. The combination of such a flow of data with opaque algorithms invading more and more areas of our lives promises to draw a scenario in which our decision-making capacity will be strongly diminished. It would seem that this Fourth Industrial Revolution (IVRI) has the pretension of giving shape to the longed-for Machine of Ruling that replaces popular decision and human judgment with a sum of objective parameters, technical decisions and algorithmic calculations. Today, digitalization has become a key tool of Capital and States both for increasing social control and for settling the different geopolitical disputes that cross an increasingly multipolar world.

But, in addition, the metabolic impacts of such a social transformation would be on a monstrous scale, and would undoubtedly go in the opposite direction to the kind of emergency landings that the present ecosocial collapse requires. It is not unreasonable to say that the IVRI is a genuine ecosocial disaster in the making.

For one thing, energy consumption promises to explode due to skyrocketing data traffic. Although today only a few objects can connect to the Internet, the energy consumption of devices and servers, and their associated emissions, are already comparable to those of entire countries. What to expect from scenarios in which the number of interconnected objects would reach, as projected, the number of 1,000,000 per km2? What other interpretation remains possible in light of the fact that 1,000,000 autonomous cars would require a level of data exchange equivalent to that of 3,000,000,000,000 people using their smartphone? Already today, the power consumption of the few 5G antennas installed in China is so high that the companies responsible for them are being forced to turn them off during the night...

On the other hand, it is also easy to foresee that the impact of this 5G world on climate change would also be profound. Especially because the increase in energy consumption that it would generate would be difficult to separate from the burning of fossil fuels that are not as easy to replace with renewable energies as some would like to defend.

In addition, private companies and governments have already launched hundreds of satellites linked to the deployment of 5G and the launch of thousands more has already been approved. Astronomers warn that this massive deployment will not only completely change our firmament (which should be the heritage of humanity), but will also interfere with astronomical observations and affect weather forecasts at a time when they are crucial for the fight against

the Climate Emergency. In conclusion, and as Ben Tarnoff reminds us, to decarbonize we need to de-digitize and decomputerize.

In short, the world's digitalization project is building societies that are not very resilient. Especially because, as Jorge Riechmann reminds us, making everything depend on the large telecommunications multinationals (the GAFAMs) and their digitalization proposals leads to scenarios of enormous social fragility. First, because of the tremendous defenselessness in which States and individuals are left as they depend in more and more areas of their lives on private companies that make use of opaque algorithms to achieve their own ends. But, above all, because the extreme digitalization proposed by the Fourth Industrial Revolution will not be viable in contexts of energy decline such as those we have before us. Every time we surrender a facet of our social activity or our productive capacity to these new digital proposals, we reduce the possibility of building emergency exits that, while assuming some of the inevitable impacts of the collapse, allow us to lead lives that are as dignified, fair, egalitarian and autonomous as possible.

It would also be a mistake to think that the systemic constraints that will accompany the ecosocial collapse will make the generalization of the 5G world impossible, so we should not be unconcerned about this issue. In addition to the fact that its degree of advancement will be inversely proportional to our chances of a good life, as we pointed out earlier, there is a very real risk that its resources will eventually remain in the hands of reduced layers of society who will be able to use them for control and repressive purposes. A scenario of energy decline can be transformed into a social sector that is forced to lead undignified lives and elites that use high-tech paraphernalia to maintain social inequality. A fear that is quite justified in light of the fact that around 70% of the projected investment in 5G will be in the hands of security and video surveillance companies...

Finally, it is more necessary than ever to question the 5G and its world because there is no greater imaginary block today for the construction of just, ecofeminist and degrowth societies than the idea that thanks to technology we will be able to solve all the problems that our industrial capitalist societies have generated. To build a genuine culture of limits that allows us to embrace individual and collective self-restraint, a New Earth Culture, we need to abandon once and for all the technolatry that is leading us step by step towards collapse.

Conclusions: to decrease (and collapse better) we need (also) to de-digitalize

The way in which today the bulk of society assumes the deployment of the 5G network, and the world that would accompany it, as an inevitable phenomenon is nothing more than the umpteenth expression of a technological sleepwalking that actually involves the widespread assumption of an undesirable determinism. Society seems to believe that more devices, more power, more connectivity, more coverage, etc. is little more than the natural trajectory of a

social progress that is confused with technological progress, and this prevents us from understanding that almost every technical decision is, in reality, a political decision.

There is nothing rational or inevitable about the implementation of 5G and a hyper-digitized world; it can and must be exposed to criticism and subjected to democratic debate. No technology is neutral: in its emergence and extension, our political structures, our work, our personal relationships, our health... are at stake.

A socio-technical scenario such as that of 5G (consisting of connecting billions of objects, multiplying data centers, intensifying mining extractivism and enabling unprecedented levels of social control) seems undesirable to us. We are inundated with propaganda about how automatic vehicles will reduce traffic accidents, we will be able to lower the blinds at home from work, or the refrigerator will warn us that the yogurt is about to expire, but what is the point of all this if it accelerates our trajectory of ecosocial collapse? What good will the supposed liberation (of time, of the need for organization) offered by computerization do us if along the way it erodes any possibility of a free life, or of a life at all?

Taking into account all of the above, and within the framework of a necessary global reconsideration of the trajectory of computerization, digitalization and automation of our societies, we conclude that:

1. It is common for social ecologists to assume that the computerization of society is irreversible. While we do question technologies such as those associated with nuclear energy production or, recently, the electric car, demanding the need for a democratic debate on their desirability and dangers, we do not usually extend this demand to ICT or the new 5G technology.

2. It is in this context that the debate on informatization and digitization arises. In light of the large number of impacts (consumption of resources, mining of scarce materials, technological junk, erosion of democracy, social control, etc.) we understand that the use of computing devices must be limited in a sustainable, just and democratic society. Social control over major technological developments (those that have the power to reshape the economy, society and their relationship with the biosphere) remains a basic democratic requirement.

3. Furthermore, and taking up the confederal consensuses of the 2018 Ecologistas en Acción Environmental Program, we affirm that there is sufficient evidence to put into practice the precautionary principle against the deployment of the 5G network, according to the legal principles of the European Union.

4. In line with the above, governments should oblige companies to have liability insurance to respond to possible damages caused by 5G deployments, as already suggested in 2009 by the European Parliament in the face of the generalization of the opposite practice. Allowing the idea

of uninsurable risks to take root means accepting that the benefits of these transformations go to companies while the costs are borne by society...

5. In the hardware dimension, we must abandon the "one person, one device" paradigm. To reduce the enormous environmental footprint of ICTs, it is imperative to separate devices from the dynamics of permanent renewal and think of them as community goods. To this end, it would be necessary to look more closely at models of shared use such as municipal computers or telephone booths.

With regard to telephony and the Internet, we believe it is necessary to opt for a return to wiring to the detriment of wireless technologies. Therefore, there should be a generalized commitment to landline telephones and the use of wired Internet connection.

Finally, it is necessary to promote advances in the design of modular models of telephones and computers, not dependent on rare raw materials, durable and easy to repair.

6. In the software dimension, and in order to erode the enormous power accumulated today by the large technology companies, we would focus on the development of less cumbersome operating systems and programs. This, in turn, would be in harmony with a commitment to free and open formats.

A second key element would be the advancement of the digital commons, on the basis that this is a field that is already well established (open source, free software, p2p networks, etc.).

7. The type of measures outlined above would imply, de facto, the impossibility of developing measures of social control and massive monitoring such as those that currently characterize regimes such as the Chinese one. Moreover, a process of selective de-digitization would imply important advances in antimilitarist positions (today there are already autonomous killer robots) and in the construction of autonomy (reduction of the possibility of repression and surveillance).

limiting the scope of state bureaucracy, increasing food, technological and energy sovereignty).

In order to adapt to this metabolic transformation, it would be imperative to deinform many areas of life (bureaucracy, entertainment, culture, etc.) by returning to their previous organizations or inventing new ones. In this way, we would make our societies more resilient to the transformations of the ongoing ecosocial collapse which, if it follows its most destructive trajectories, would in the near future call into question universal, high-speed access to the Internet. And, therefore, it would weaken economies and institutions dependent on it for their day-to-day functioning.

Economically, minimizing the use of automated technology would not only reduce GHG (Greenhouse Gas) emissions and the consumption of materials and energy, but would leave room for a greater presence of human labor and contribute to the construction of a New Gaian Earth Culture and the exercise of individual and collective self-limitation. This need is especially pressing in areas such as finance, today absolutely dependent on automated algorithms.

In contrast, a modular and convivial design of communication and information technologies would allow a democratic management of both their production and their use and disposal.

In conclusion, in view of the deployment of 5G and the transformations that will accompany it, it is inevitable to ask ourselves: what kind of world do we want to live in: a hyper-digitalized, robotized, monitored, controlled and manipulated society, or a society where human relations, care, the common good and democratic debates on key issues for our future take precedence? In other words, what will we put at the center: life or the machine?.

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