GLOBAL INFORMATION SOCIETY WATCH 2020

Technology, the environment and a sustainable world: Responses from the global South

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Big tech goes green(washing): Feminist lenses to unveil new tools in the master's houses

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Introduction

Posters, videos, speeches. The word "forest" was displayed everywhere, together with sanitised stands and uniformly pruned plants, geometrically positioned while slowly wilting under an office light. These were attempts to represent "nature" at the 25th United Nations Climate Change Conference (COP25) at IFEMA – Feria de Madrid – which happened in December 2019 in a huge shed that looked like a technology fair. And tech was definitely there too, in different layers.

Among the so-called innovations to "combat climate change" there were hyperbolic ideas such as giant mirrors to reflect solar rays or some kind of vacuum cleaner to be positioned in space to aspirate carbon dioxide out of the atmosphere – all under the buzzword "geoengineering". Many tech companies were also taking the stage to make announcements about how the field could save the planet. The director of Google Earth, Earth Engine & Outreach, Rebecca Moore, wrote, for instance, that the company was "making it possible for everyone to build a more sustainable world,"[2] a reference to its partnership with the UN Environment Programme. This was announced by the latter as "a global partnership that promises to change the

way we see our planet,"[3] positioning Google Earth Engine as our new eyes to shape our vision of the whole planet.

Weeks before, in late November 2019, we also heard representatives from some of these same tech companies in another UN diplomatic arena, now held in Berlin: the 14th UN Internet Governance Forum (IGF),[4] organised under the overarching theme "One World. One Net. One Vision". But, whose vision?[5] Again, a planetary ambition, this idea of how we should see the world and, again, tech was positioned – or trying to portray itself – in the centre. Little by little, the languages and narratives from governments and industry representatives start to resemble each other across these two arenas, incorporating the understanding of technologies as "tools" – sometimes as the main tools – to solve human problems, from poverty to democracy and climate change. A dangerous mix of "green economy" and techno-solutionism, which, taken together, are turning claims of marginalised groups into businesses.

This analysis is a result of our joint effort, initiated more than a year ago, to identify a cycle of recurrent narratives promoted in these spaces of power. While these forums represent a stage of international politics, they are also marked by their distance from people and movements that want to address not only climate change, but to show evidence of social-environmental injustice caused by the neoliberal socioeconomic system that we live in today, in a new shape of colonial relations. Movements that point out the need for recognition of multiple forms of existence, of historical uses and collective management

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2   Moore, R. (2019, 10 December). How we power climate insights and action. *Google*. https://blog.google/products/earth/powering-climate-insights-and-action

3   UN Environment. (2018, 16 July). UN Environment and Google announce ground-breaking partnership to protect our planet. *UN Environment*. https://www.unenvironment.org/news-and-stories/press-release/un-environment-and-google-announce-ground-breaking-partnership

4   https://www.igf2019.berlin/IGF/Redaktion/EN/Videos/Welcome-to-the-IGF/image-film.html

5   Borari, V., & Nobrega, C. (2020). One Vision, One World. Whose World Then? *Branch, 1*. https://branch.climateaction.tech/2020/10/15/one-vision-one-world-whose-world-then

of territories,[6] as in the case of Indigenous peoples, family farmers and others. Movements that seek a more autonomous, horizontal and inclusive usage and development of information and communication technologies (ICTs) to protect, and not to threaten, fundamental human rights. Though diversity is a basic principle for a non-monocultural world, lands and livelihoods are increasingly being swallowed by, among other things, techno-solutionism discourses and green economy narratives. And here we make it clear that this is not to deny the importance of the climate debate and international forums. On the contrary, the discussion we bring is about deepening democratic processes, and not the opposite, as extreme right-wing currents try to do by appropriating the debate on the climate and denying it, making everything even more absurd and deepening racism, xenophobia and inequalities.

To unveil power relations we shall not separate the analysis of actions from critical views towards the discourses that aim to subordinate our bodies and territories. Silvia Cusicanqui, an Aymara decolonial thinker, applied the concept of *gatopardismo* to how governments respond to the needs of Indigenous communities: "Change so that everything remains the same,"[7] she wrote. Gatopardismo is defined as "the political philosophy or strategy of advocating for revolutionary changes, but in practice only superficially modifying existing power structures."[8] As we observe the narratives and practices of big tech going green(washing), we raise the question about how these are expressions of the politics of gatopardismo. As Cusicanqui also said: "There can be no discourse of decolonization, no theory of decolonization, without a decolonizing practice." This not only means broadening the debate on these issues, but to question who, after all, has had room to talk, create solutions and point out risks within the system we live in. Which bodies have the power to say no to some of the proposed solutions?[9]

Inspired by feminist theories and practices, with this analysis we hope to contribute towards building a decolonial analytical view of green(washing) and techno-solutionism discourses in public debate. We bring two different perspectives: one focused on the human rights implications in the development and deployment of technologies, and the other on dominant discourses in social-environmental conflicts and their consequences in the territories. Both these perspectives use a feminist lens to unveil power relations. Therefore, although we focus here on big tech companies, our goal is to understand their ties to other powerful actors, like governments and companies from other economic sectors.

Green economy: New names, same goals

Between 2019 and 2020, feeling the pressure from protests by consumers and even employees, choking on the smoke from fires in San Francisco, the home of Silicon Valley, and taking advantage of the buzz around the green economy, big tech companies made a series of climate change commitments. Google promised to operate 24/7 on carbon-free energy in all its data centres and campuses by 2030.[10] Apple announced that "every Apple device sold will have net-zero climate impact" by 2030. Microsoft promised to be "carbon negative in 2030 and by 2050 to remove from the environment all the carbon the company has emitted."[11] Facebook, ignoring its own public discourse of focusing on carbon emissions, built a resource-intensive web page, dirtier than 73% of web pages tested by the Website Carbon Calculator,[12] to promise "net-zero greenhouse gas emissions" for the company's value chain by 2030.[13]

Besides that, Amazon – never forget it refers to the multinational technology-based company with headquarters in Seattle that took the name of the biggest forest in the world – committed to net-zero carbon emissions across its business by 2040.[14] It also announced a multi-billion-dollar Climate Pledge Fund to invest in startups developing "sustainable and decarbonizing technologies". The initiative was highly criticised[15] by some who

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6   Feminist and women's movements in Latin America – mainly Indigenous women and women who define themselves as community feminists – have been developing an understanding of territories not as a synonym of land, but as a more complex notion that challenges the Western academic understanding. "The relationship we have with the territory is not a relationship of the earth as matter, it is an ancestral relationship of the territory as body and spirit," says Célia Nunes Correa – Célia Xakriabá is her Indigenous name – in her 2015 Master's dissertation, entitled "The clay, the genipapo and the chalk in the epistemological doing of Xakriabá authority: Reactivation of the memory by a territorialized education".

7   Rivera Cusicanqui, S. (2012). Ch'ixinakax utxiwa: A Reflection on the Practices and Discourses of Decolonization. *South Atlantic Quarterly, 111*(1), 95-109.

8   https://en.wiktionary.org/wiki/gatopardismo

9   Pena, P., & Varon, J. (2019). *Consent to our Data Bodies: Lessons from feminist theories to enforce data protection*. Coding Rights. https://codingrights.org/docs/ConsentToOurDataBodies.pdf

10 https://sustainability.google/commitments

11 Smith, B. (2020, 16 January). Microsoft will be carbon negative by 2030. *Microsoft*. https://blogs.microsoft.com/blog/2020/01/16/microsoft-will-be-carbon-negative-by-2030

12 https://www.websitecarbon.com

13 https://sustainability.fb.com

14 https://sustainability.aboutamazon.com/about/the-climate-pledge

15 Khan, B. (2020, 23 June). The danger of Amazon's $2 billion climate fund. *Gizmodo*. https://earther.gizmodo.com/the-danger-of-amazon-s-2-billion-climate-fund-1844134160; Stackl, V. (2020, 16 June). Amazon's Corporate Climate Pledge: Too Slow and Not Enough. *Greenpeace*. https://www.greenpeace.org/usa/news/amazons-corporate-climate-pledge-too-slow-and-not-enough

pointed out that using the venture capitalist model to fund solutions just feeds the same system that is producing socio-environmental injustice.

The Fund was also a response to – and an escape from – a scandal after the company threatened to fire a group of employees who spoke out about "Amazon's role in the climate crisis."[16] In this context, the CEO Jeff Bezos said: "We can save Earth. It's going to take a collective effort from big companies, small companies, nation states, global organizations and individuals."[17] But... who exactly is "we"?

Gatopardismo? Well, the last time most big tech companies acted together was probably when they all blocked Trump's social media accounts – a typical case of a situation when there was nothing more to fear, nothing else to lose, and nothing else to do, besides trying to look good in public.

It is part of the media strategy of these companies to guarantee that their "green actions" are widely communicated in marketing campaigns and news outlets. (Food for thought: it is probably not by chance that Bezos, one of the world's richest men, became the sole owner of the *Washington Post*, a powerful force in shaping US politics.) But these commitments are far away from transparency in their own business dynamics, and are more likely to be used as instruments for maintaining the status quo and a logic of capitalist reproduction. We cannot forget that, even after announcing their goals on the carbon market, Facebook was also named and shamed for profiting from climate denial ads,[18] some of them even calling climate change a hoax. A report by InfluenceMap[19] revealed "51 climate disinformation ads, running in the US during the first half of 2020, on Facebook's platforms" gaining "8 million impressions over the 6 month period." The report also pointed out that only one of these ads was taken down by Facebook.

The Brazilian group of activists and researchers on socio-environmental justice Grupo Carta de Belém identifies this kind of process as a phenomenon in which "other names are given by capitalism to continue reproducing its forms of accumulation." In other words, names change, but the logic of extraction and destruction continues.[20] The group points out that the idea of development and progress known for decades as "sustainable development" gave space to new projects for the future, among them, the green economy. Yet the "green economy" is directly related to the financialisation of nature and the so-called "green management" of activities such as logging. These approaches maintain business as usual, but look green and great, and escape the responsibility of really responding to structural changes. Now we are seeing a wave of green tech – and most probably other fruits such as "green data" are on the way.

In recent decades, companies have been under pressure to publish environmental reports. Climate change commitments from corporations usually come with glowing and trendy web pages. In the meantime, there is a significant amount of information hidden in – or left out of – those reports. So we decided to follow some tracks...

Tech minerals: Conflicts upon our bodies and territories

Since 2010, US publicly listed companies have the obligation to check their supply chains for tin, tungsten, tantalum and gold (3TG),[21] the so-called "conflict minerals", to disclose use of minerals that originated in the Democratic Republic of Congo (DRC) or adjoining countries.

To seek compliance with US regulations, and like other tech companies, Alphabet Inc., Google's parent company, annually publishes their "Conflict Minerals Report".[22] We decided to take a look at the most recent one, from 2019, published in the "investors relations" section of their website (it was already interesting to note that it was not targeting consumers or the general public). In the conclusions, the report states:

> We have reason to believe that a portion of the 3TG used in our products originated from the Covered Countries. While we have not identified any instances of sourcing that directly or indirectly supported conflict in the Covered Countries, we are not declaring any of our products to be DRC Conflict free. In some instances, information provided by our in-scope suppliers

16 Milman, O. (2020, 2 January). Amazon threatened to fire employees for speaking out on climate, workers say. *The Guardian*. https://www.theguardian.com/technology/2020/jan/02/amazon-threatened-fire-employees-speaking-out-climate-change-workers-say

17 More on the discourse of Bezos, at the launch of the Fund: Luscombe. R. (2020, 17 February). Amazon's Jeff Bezos pledges $10bn to save Earth's environment. *The Guardian*. https://www.theguardian.com/technology/2020/feb/17/amazon-jeff-bezos-pledge-10bn-fight-climate-crisis

18 Carrington, D. (2020, 8 Oct). Climate denial ads on Facebook seen by millions, report finds. *The Guardian*. https://www.theguardian.com/environment/2020/oct/08/climate-denial-ads-on-facebook-seen-by-millions-report-finds

19 InfluenceMap. (2020). *Climate Change and Digital Advertising: Climate Science Disinformation in Facebook Advertising*. https://influencemap.org/report/Climate-Change-and-Digital-Advertising-86222daed29c6f49ab2da76bodf15f76

20 Grupo Carta de Belém. (2020). *Territórios: Resistências, Direitos e Bem Viver*. https://www.cartadebelem.org.br/wp-content/uploads/2020/12/AT_02-Livro-15x21cm-Vers%C3%A30-06-WEB.pdf

21 U.S. Securities and Exchange Commission, Section 1502, conflict minerals: https://www.sec.gov/spotlight/dodd-frank-section.shtml#1502

22 https://abc.xyz/investor/conflictminerals

was unverifiable or incomplete and, as such, we were unable to verify with certainty the source and chain of custody of all of the necessary 3TG in our products.[23]

While the company assessment is limited to the Democratic Republic of Congo and Covered Countries (meaning countries with borders with the DRC), data from the report shows that 3TGs used by Google come from different parts of the globe, including Brazil.

While US legislation makes reference only to the DRC and adjoining countries, the *OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas*[24] expanded the definition of areas to be considered:

> High-risk areas may include areas of political instability or repression, institutional weakness, insecurity, collapse of civil infrastructure and widespread violence. Such areas are often characterised by widespread human rights abuses and violations of national or international law.

Aligned with that OECD definition, the European regulation,[25] signed in 2017 and in force since January 2021, goes further than just requiring reporting and due diligence and "requires EU companies in the supply chain to ensure they import these minerals and metals from responsible and conflict-free sources only."[26]

According to the *Atlas de Conflitos Socioterritoriais Pan-Amazônico*,[27] between 2017 and 2018, Brazil was the battlefield of 995 socio-environmental conflicts in the Amazon region – the highest number among neighbouring countries.[28] Since then, that number has probably increased under the dismantlement of environmental policies by the presidency of Jair Bolsonaro, a recurrent threat that has repeatedly made international headlines.[29] Under the current federal government, around 3,000 applications for mining permits on Indigenous lands in Brazil's "Legal Amazon"[30] are being processed by the National Mining Agency. And at least 58 have already been authorised, despite the fact they are located in Indigenous territories.[31] This scenario outlines a situation of "institutional weakness", "insecurity", "widespread violence" as well as "human rights abuses" that could easily qualify many territories where mining is being deployed in the Amazon region as "conflict-affected and high-risk areas".

As we are both originally from Brazil, we decided to check what companies based in the country were listed in Google's "Conflict Mineral Report." We found out that 13 smelter companies in Brazil are Alphabet providers for all the four kinds of minerals listed in the report (see Table 1).

Initial research already shows socio-environmental conflicts involving these areas. For instance, the provider Mineração Taboca operates the Pitinga Mine in the municipality of Presidente Figueiredo, a source of tantalum and also one of the world's largest deposits of cassiterite, which is the main source of tin. According to an independent atlas of social and environmental conflicts, organised by the Autonomous University of Barcelona (Global Atlas of Environmental Justice – EJATLAS), the Pitinga mining complex is "emblematic for Brazil's historical injustice against Indigenous population and the systematic downplaying of environmental pollution and the risks associated with tailing dams."[32]

The EJATLAS project adds: "The mine bears large deposits of niobite (niobium ore) and tantalite (tantalum ore), whose extraction has become more important with the rise of the electronics industry in the last two decades, as well as uranium."[33] Indeed, tantalum is a key material for the electronics industry, and Brazil has 61% of the world's tantalum deposits. Some of them under forests, on Indigenous lands, just like the Pitinga Mine. "Mina de Pitinga" can be found on Google Earth, an image of kilometres of devastation in the middle of the Amazon forest (Figures 1 and 2).

23 Alphabet Inc. (2019). *Conflict Minerals Report for the year ended December 31, 2019*. https://abc.xyz/investor/static/pdf/alphabet-2019-conflict-minerals-report.pdf

24 OECD. (2016). *OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas. Third Edition*. OECD Publishing. https://dx.doi.org/10.1787/9789264252479-en

25 https://ec.europa.eu/trade/policy/in-focus/conflict-minerals-regulation/regulation-explained

26 Ibid.

27 Comissão Pastoral da Terra. (2020). *Atlas de Conflitos Socioterritoriais Pan-Amazônico*. https://www.cptnacional.org.br/component/jdownloads/summary/76-publicacoes-amazonia/14207-pt-atlas-de-conflitos-socioterritoriais-pan-amazonico

28 Pontes, N. (2020, 23 September). Brasil é líder em conflitos socioambientais na Amazônia. *Deutsche Welle*. https://www.dw.com/pt-br/brasil-%C3%A9-l%C3%ADder-em-conflitos-socioambientais-na-amaz%C3%B4nia/a-55033933

29 Londoño, E., & Casado, L. (2020, 19 April). As Bolsonaro Keeps Amazon Vows, Brazil's Indigenous Fear "Ethnocide". *The New York Times*. https://www.nytimes.com/2020/04/19/world/americas/bolsonaro-brazil-amazon-indigenous.html

30 https://en.wikipedia.org/wiki/Amaz%C3%B4nia_Legal

31 Potter, H., & Goulart de Andrade, E. (2020, 26 November). Levantamento mostra avanço da mineração em terras indígenas. *Deutsche Welle*. https://www.dw.com/pt-br/levantamento-mostra-avan%C3%A7o-da-minera%C3%A7%C3%A3o-em-terras-ind%C3%ADgenas/a-55713592

32 https://ejatlas.org/conflict/pitinga-mine-amazonas-brazil

33 Ibid.

TABLE 1.		
Alphabet Inc. 3TG suppliers in Brazil		
Mineral	**Company**	**State**
Gold	AngloGold Ashanti Corrego do Sitio Mineracao	Santa Bárbara - Minas Gerais
Gold	Marsam Metals	
Gold	Umicore Brasil Ltda.	São Paulo and Manaus - Amazonia
Tantalum	LSM Brasil S.A.	São João del Rei - Minas Gerais
Tantalum and tin	Mineração Taboca S.A.	Metallurgy plant in São Paulo / Mining at Mina de Pitinga in the Amazon region
Tantalum and tin	Resind Indústria e Comércio Ltda.	São João del Rei, Minas Gerais
Tin	Estanho de Rondônia S.A.	Mina Santa Bárbara em Itapuã do Oeste, fundição em Ariquemes - Rondônia
Tin	Magnu's Minerais Metais e Ligas Ltda.	São João del Rei - Minas
Tin	Melt Metais e Ligas S.A.	Ariquemes - Rondônia
Tin	Soft Metais Ltda.	São Paulo with representatives in many Brazilian states
Tin	Super Ligas	Piracicaba - SP
Tin	White Solder Metalurgia e Mineracao Ltda.	Ariquemes - Rondônia
Tungsten	ACL Metais Eireli	Araçariguama - São Paulo

Source: https://abc.xyz/investor/static/pdf/alphabet-2019-conflict-minerals-report.pdf

FIGURE 1.
"Mina de Pitinga"

Source:https://earth.google.com/web/search/Mina+Pitinga+/@-0.78879742,-60.12751501,128.07390116a,18307.725 40349d,35y,359.99999914h,0t,or/data=CigiJgokCUsk9SwQV_2_EZntbc-yfv2_GVZqNAS8Dk7AlY7cZLbgEE7A
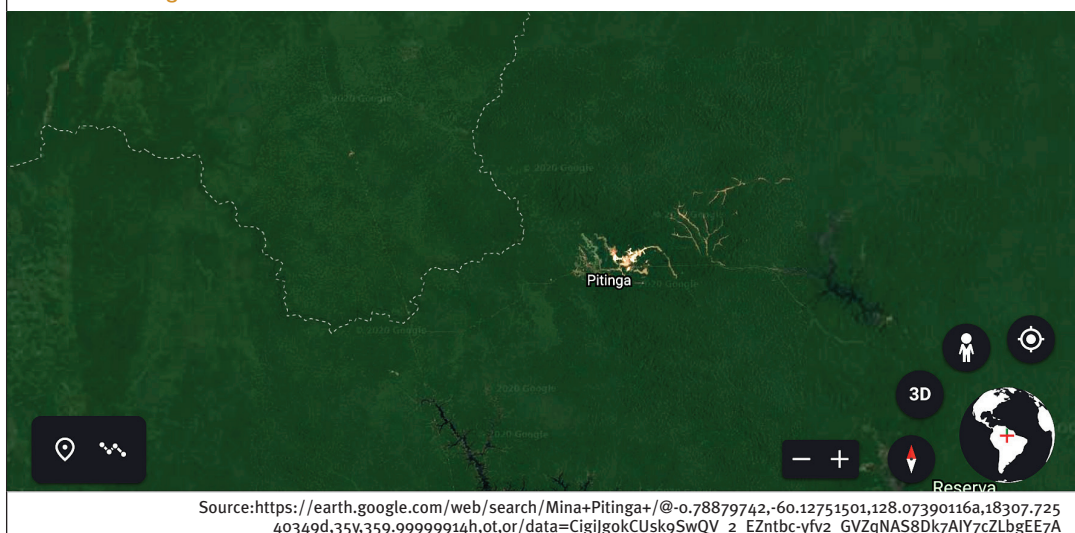
FIGURE 2.

"Mina de Pitinga"

Source:https://earth.google.com/web/search/Mina+Pitinga+/@-0.78879742,-60.12751501,128.07390116a,18307.725
40349d,35y,359.99999914h,ot,or/data=CigiJgokCUsk9SwQV_2_EZntbc-yfv2_GVZqNAS8Dk7AIY7cZLbgEE7A

This is the result when we zoom out. The history of deforestation, the occupation of Indigenous land and corruption surrounding Pitinga Mine has been reported by women-led independent and investigative news agency Amazonia Real.[34] More specifically, on Mineração Taboca, a report from Instituto Socioambiental (ISA)[35] also reveals that the company conducts mining in the Indigenous lands of the Waimiri-Atroari to extract cassiterite (tin).

It is very likely that Mineração Taboca is just one example of a recurrent situation. The list of smelter companies from the Google report shows that many of them are located in Rondônia, one of the most deforested states in the Amazon region, where mining plays a role. In 2019, 34 municipalities from that state were registered with the National Mining Agency.[36] Meanwhile, data from 2019 by a project called Latentes, coordinated by the independent journalism agency Livre.jor, also mapped 126 socio-environmental conflicts related to mining in Rondônia.[37] Furthermore, according to EJATLAS, AngloGold Ashanti, another company on the list, is involved in at least 22 conflicts worldwide.[38]

How many mines are being opened in the forest or are being explored to provide metals for big tech? And what other megaprojects that involve the extraction of common goods are related to the production of technology by large corporations? Clearly, simply portraying magic numbers about the carbon market is far away from any tangible approach towards social-environmental justice – and even further from any decolonial approach to technologies.

From extractivism to data colonialism: AI will (not) save the world

Beyond turning socio-environmental justice demands into carbon market goals, big tech has been quick to jump into the debate, not only promoting a new "green economy", but also quickly suggesting the possibility of a "new world" or "new Earth". Of course, full of tech. In their narratives, artificial intelligence (AI), sensors, satellites, apps, social media and a lot of data can always save us and the planet from climate change. An impressive ability to turn themselves from a cause of the problem into the saviours of the future – a more surveilled and controlled future.

34 Albuquerque, R. (2016, 6 June). Mina do Pitinga, 35 anos de controvérsias e nada a comemorar. *Amazonia Real*. https://amazoniareal.com.br/mina-do-pitinga-35-anos-de-controversias-e-nada-a-comemorar

35 Rolla, A., & Ricardo, F. (2013). *Mineração em Terras Indígenas na Amazônia Brasileira*. Instituto Socioambiental (ISA). https://www.socioambiental.org/sites/blog.socioambiental.org/files/publicacoes/mineracao2013_v6.pdf

36 https://sistemas.anm.gov.br/arrecadacao/extra/relatorios/distribuicao_cfem_muni.aspx?ano=2019&uf=RO

37 Lázaro, J. (2019, 4 April). Nova vítima das barragens, Rondônia tem 126 conflitos socioambientais ligados à mineração. *Livre.jor*. https://livre.jor.br/nova-vitima-das-barragens-rondonia-tem-126-conflitos-socioambientais-ligados-a-mineracao

38 https://ejatlas.org/company/anglo-gold-ashanti

But, as scholar and activist Audre Lorde, who self-identified as a Black lesbian feminist, once said: "What does it mean when the tools of a racist patriarchy are used to examine the fruits of that same patriarchy? It means only the most narrow perimeters of change are possible and allowable." We borrow this thought from the essay "The Master's Tools will Never Dismantle the Master's House" to repurpose it for this scenario: What does it mean when the tools of monopolistic data extractivist companies are used to address the problems that they caused themselves?

Surfing the hype of AI, it is not uncommon to see big tech portraying themselves as the providers of the tools to save the planet. Google says it is entering "the fight against illegal deforestation with TensorFlow,"[39] the company's open-source machine learning framework. The idea is to spread internet-of-things (IoT) sensors in the Amazon forest to feed geolocalised sound data into an AI programme that can recognise, for instance, sounds of chainsaws. On one hand, the company extracts minerals causing deforestation and threatening Indigenous lands and ways of living, on the other, it offers AI to connect with what some have awkwardly called the "Internet of Trees".[40] What could go wrong?

But besides Google, practically all the big tech companies have an AI initiative focused on environmental issues. Microsoft has "AI for Earth" feeding its cloud-computing service Azure, IBM is also prioritising data centre "solutions to protect the environment",[41] Amazon is funding startups with its Climate Pledge Fund. And the list goes on.

It is not by chance that while the "environment" became one of the four thematic tracks for IGF 2020, the main session of that track[42] also positioned digital technologies as "catalysts for sustainable development" and as having a "critical role to play in protecting the planet.". Another session named "Tech for the Planet"[43] followed the overarching assumption that "to make progress on some of these big environmental issues, we need data, lots and lots of data," as the CEO of a UK company that is using Microsoft's Azure put it.

It is not that we do not like data and data science; but it is worrisome to see, again, the promise that "big data" will play the role of saving the planet. Again, monopolistic companies, that have already extracted a lot of resources from our territories and data about our minds and bodies, portraying themselves as capable of filling the gap left by governments in monitoring and acting against deforestation, and other factors contributing to climate change, while using their latest state-of-the-art technologies to extract and own more geopolitical data.

Amazon, Alphabet, Apple and Microsoft revenue and market value is already comparable to the biggest oil companies. And these giants did not think even twice about taking a bite into the profit of the fossil fuel industries, engaging with them under the environmental sustainability narrative, portraying their tech, again, as saviours of the future. From big data, to big oil. A report by Greenpeace[44] shows that at least Google, Microsoft and Amazon have all served fossil fuel industries like Shell, BP, Chevron, ExxonMobil and others with cloud computing and AI that would help them discover, extract, refine, distribute and market oil and gas. In 2018, Google went as far as hiring Darryl Willis, a former president and general manager of BP Angola, as vice president of their new department: Oil, Gas and Energy for Google Cloud. But the hypocrisy of maintaining such contracts was too blunt even for them – after the report, some of them declared they would stop making AI tools for oil and gas. (Willis now works as Global Vice President for Energy at Microsoft.) But nothing has been said, for instance, about these companies developing AI for the agribusinesses that deforest the Amazon to plant soy for the world.

The current paradigm of using data as a tool for concentrating power and profit is worrisome. As Silvia Federicci once said in an online radio conversation with Silvia Cusicanqui,[45] "Digital equipment feeds extraction markets and expropriates land commons." Data under the narrative of the green economy is opening space for more data extractivism and more data-driven businesses. It is more gatopardismo. A change to nothing being changed.

Ecuadorian researcher Paola Ricaurte pointed out how such data extractivist approaches to human

39 White, T. (2018, 21 March). The fight against illegal deforestation with TensorFlow. *Google*. https://blog.google/technology/ai/fight-against-illegal-deforestation-tensorflow

40 Fitzgerald, M. (2016, 17 February). Will the Internet of Trees Be the Next Game Changer? *MIT Sloan Management Review*. https://sloanreview.mit.edu/article/will-the-internet-of-trees-be-the-next-game-changer

41 https://www.research.ibm.com/energy-and-environment

42 https://www.intgovforum.org/multilingual/content/igf-2020-main-session-environment

43 https://www.intgovforum.org/multilingual/content/igf-2020-day-8-ws-72-tech-for-the-planet

44 Donaghy, T., Henderson, C., & Jardim, E. (2020). *Oil in the Cloud*. Greenpeace. https://www.greenpeace.org/usa/reports/oil-in-the-cloud

45 https://reboot.fm/2020/06/04/silvia-rivera-cusicanqui-silvia-federici-in-discussion

problems are a form of neo-colonialism: "Data-centered economies foster extractive models of resource exploitation, the violation of human rights, cultural exclusion, and ecocide. Data extractivism assumes that everything is a data source. In this view, life itself is nothing more than a continuous flow of data."[46]

Over decades, the recurrent narratives of big tech companies were about portraying themselves as "the champions of internet freedom" to "save democracies". The result: we now live in an era of surveillance capitalism,[47] feeding misinformation, hate, polarisation, manipulation and – definitely – a lot of profit. Now, they will save the whole planet... with data.

But, as Shoshana Zuboff wisely puts it, our analytical aim shall not be "a comprehensive critique of these companies as such." What she means is that the companies are part of a bigger picture that needs to be understood. In this sense, Zuboff adds:

> Instead [we should] view them as the petri dishes in which the DNA of surveillance capitalism is best examined. Just as industrial civilization flourished at the expense of nature and now threatens to cost us the Earth, an information civilization shaped by surveillance capitalism and its new instrumentarian power will thrive at the expense of human nature and will threaten to cost us our humanity.[48]

Though agreeing with Zuboff, we do not see this division between nature and humanity. These two elements have always been inseparable. Extraction of *bienes comunes* (our "common good") has frequently occurred in parallel to the control and "extraction" of our bodies. Surveillance capitalism aggravates this potential to extract data about our bodies and territories.

Conclusions

Especially in the context of the new coronavirus pandemic, technology is increasingly invading many parts of our lives – this means more energy consumption, demanding more broadband, data centres, devices, minerals. The fluffy narrative of "the cloud" is abstract, but it is all pretty concrete. It is about the rapid encroachment on territories that people depend on for their livelihoods, the attempt to manipulate our minds and bodies, as we are targeted to become addicted users of data extractivist platforms. Extraction of common goods, of imaginaries, of choices. Amidst all this, more profit. Amazon, Google, Facebook have all reported increases in their revenue in 2020.[49]

Instead of attacking the problems caused by the system we live in, false solutions multiply, and they are led by the same extractivist logic that caused most of the problems.

While social movements and initiatives in various parts of the world struggle to build networks to connect people from local contexts, making visible the differences that our bodies face depending on who we are, top-down solutions gain massive space for debate and projection. Strengthening monopolies and the concentration of power have been the trend. As a result, inequalities are deepening all over the world.

Through feminist lenses, we have searched for some roots of the issue and tried to help reorient the path of criticism. Instead of calculations on trees planted as a way to compensate the impacts on the environment, we want another path. We want to get to where the production chains connect; to identify the territories, relationships, common goods and imaginaries they affect. What dynamics are behind the production and use of technology? Which inequalities are reinforced? Some of them have already come up in this research, but there is still a long way to go.

46 Ricaurte, P. (2019). Data Epistemologies, the Coloniality of Power, and Resistance. *Television & New Media, 20*(4), 350-365. https://doi.org/10.1177/1527476419831640

47 Zuboff, S. (2019). *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. Public Affairs.

48 Ibid.

49 Mattioli, D. (2020, 29 October). Big Tech Companies Reap Gains as Covid-19 Fuels Shift in Demand. *The Wall Street Journal*. https://www.wsj.com/articles/amazon-sales-surge-amid-pandemic-driven-online-shopping-11604003107

Technology, the environment and a sustainable world: Responses from the global South

The world is facing an unprecedented climate and environmental emergency. Scientists have identified human activity as primarily responsible for the climate crisis, which together with rampant environmental pollution, and the unbridled activities of the extractive and agricultural industries, pose a direct threat to the sustainability of life on this planet.

This edition of Global Information Society Watch (GISWatch) seeks to understand the constructive role that technology can play in confronting the crises. It disrupts the normative understanding of technology being an easy panacea to the planet's environmental challenges and suggests that a nuanced and contextual use of technology is necessary for real sustainability to be achieved. A series of thematic reports frame different aspects of the relationship between digital technology and environmental sustainability from a human rights and social justice perspective, while 46 country and regional reports explore the diverse frontiers where technology meets the needs of both the environment and communities, and where technology itself becomes a challenge to a sustainable future.

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