Against Digital Colonialism

Renata Avila

Over the past nearly fifty years, the architecture of the Internet has changed from a largely democratic network of autonomous nodes to a distributed feudal structure, which centralises flows of data into a few hands.\(^1\) Rich countries dominate, with most of the profits heading to Silicon Valley or China.\(^2\) The aim of Big Tech is evident. There is a race to connect the next billion people to their 'walled garden,' a version of the Internet that is no longer open or directed towards the public interest. They want to control critical infrastructure globally, from cables to satellites, in order to get their hands on the missing datasets of the global poor.\(^3\) This paper examines this process of how dominant countries within a global system benefit from the digitisation of poor and middle-income countries in what appears to be a new form of colonialism.

I call this process digital colonialism, referring to the deployment of imperial power over a vast number of people, which takes the form of rules, designs, languages, cultures and belief systems serving the interests of dominant powers. In the past, empires expanded their power through the control of critical assets, from trade routes to precious metals. Today, it is not states but technology empires that dominate the world through the control of critical digital infrastructures, data and the ownership of computational power. By collecting the personal data of citizens on a scale unprecedented in human history, companies can serve as conduits of misinformation campaigns that can alter the flow of global geopolitics and even change the outcome of elections. As Michael Kwet has described:

'this structural form of domination is exercised through the centralised ownership and control of the three core pillars of the digital ecosystem: software, hardware, and network connectivity, which vests the United States with immense political, economic, and social power. As such, GAFAM (Google/ Alphabet, Amazon, Facebook, Apple, and Microsoft) and other corporate giants, as well as state intelligence agencies like the National Security Agency (NSA), are the new imperialists in the international

^{1.} Tai Liu, Zain Tariq, Jay Chen, and Barath Raghavan. "The Barriers to Overthrowing Internet Feudalism." HotNets-XVI: Proceedings of the 16th ACM Workshop on Hot Topics in Networks (November 2017): 72–79.

^{2.} In this picture, the contribution of the EU market is marginal. Europe's presence manifests its power through regulation, with taxes and technical standards to operate in their markets or through litigation. The European strategy, so far, has been merely defensive and focused in the European market, but, as the paper later explains, with increased ambition and an eye on setting global standards as well. See Adam Satariano and Monika Pronczuk, "Europe, Overrun by Foreign Tech Giants, Wants to Grow Its Own." The New York Times. 19 February 2020. https://www.nytimes.com/2020/02/19/business/europe-digital-economy.html.

^{3.} UN News, "Globally, Youth Are the Largest Poverty-Stricken Group, Says New UN Report." United Nations. 20 September 2018. https://news.un.org/en/story/2018/09/1019952.

community. Assimilation into the tech products, models, and ideologies of foreign powers – led by the United States – constitutes a twenty-first century form of colonisation.'

I will add that the phenomenon is not exclusively led by the United States. China is increasingly following the Silicon Valley pattern of behaviour and playing a similar role in digital colonialism. Yet this new form of colonialism is largely invisible. Public disquiet about the growing power of tech companies only touches upon the surface of a much deeper problem. With almost half of humanity without access to basic forms of connectivity and entire countries with a pending digitisation process, new patterns of domination have just begun to emerge. This paper identifies these problems and suggests a technical and regulatory path to neutralise and reverse them in order to secure a future of digital autonomy, democracy, sovereignty and dignity.

The Infrastructural Takeover of the New Tech Envoys

Last century, car manufacturers were shaking hands with Nazi leaders.⁵ Today, the CEOs of the most powerful tech companies act as envoys to seal deals with heads of state accused by human rights watchdogs of enabling genocides and crimes against humanity. In some cases, such as Myanmar, their role has been crucial for the perpetration of a genocide.⁶ The modus operandi of tech companies with poor nations resembles a continuation of former colonial relationships, this time through technology. They offer deals that appear shiny but are ultimately extractive and deprive emerging economies of a digital future they can govern. These countries use software, hardware and platforms produced elsewhere and end up shaping their entire publically funded digital education systems. Tech companies are conditioning generations to learn their way of doing technology, with no room for alternatives.

Early manifestations of this process can be seen in the 'free' provision of critical infrastructure – from cables to connectivity – to large populations. This process led to the silent privatisation of the digital infrastructure of entire nations. Big Tech CEOs were meeting heads of state, shaking hands and promising alliances for a connected future. The most audacious even used Washington as a backdoor

^{4.} Michael Kwet, "Digital Colonialism: US Empire and the New Imperialism in the Global South." Race & Class 60, no. 4 (2020): 3–26.

^{5.} Scott Nehmer, Ford, General Motors and the Nazis (Bloomington, Indiana: Author house, 2013).

^{6.} Paul Mozur, "A Genocide Incited on Facebook, With Posts From Myanmar's Military." The New York Times. 15 October 2018. https://www.nytimes.com/2018/10/15/technology/myanmar-facebook-genocide.html.

^{7.} For instance, the former President of Argentina, Mauricio Macri, wanted to take the entire public administration into "Facebook at Work". https://www.facebook.com/mauriciomacri/photos/a.105382683477/10153937457908478/?type=3.

^{8.} Anderson Antunes, "Mark Zuckerberg Meets With Brazil's President At the 7th Summit of the Americas, In Panama." Forbes. 11 April 2015. https://www.forbes.com/sites/andersonantunes/2015/04/11/mark-zuckerberg-meets-with-brazils-president-at-the-7th-summit-of-the-americas-in-

to reach places like North Korea, Cuba and China. Some nations even opened tech embassies in Silicon Valley, signalling their availability to tech companies, which increasingly behaved like states who provided "aid" and well-intentioned efforts to digitise countries through free infrastructure and services. This included proposals to build broadband cables and spread connectivity in remote areas using balloons. What started as an aggressive public relations campaign around 2013 has continued discreetly by the five leading tech companies in developing countries across the world, particularly in Africa.

The accelerated penetration of tech companies in emerging markets has taken place not only via generous offers of connectivity and infrastructure to populations. Tech giants have also been providing digital infrastructure to dozens of governments, ranging from cloud services to entire mail and office suites. Amazon and Microsoft have led this process, followed closely by Facebook and Google. The fact that an entire nation delegates its digital services to a company based in Silicon Valley is alarming. The company is then in a position to handle not only highly sensitive government documents, but also is in possession of critical information relating to the entire country.

But national security advisors, parliaments and watchdogs remain largely silent about this new form of dependency aside from a few notable cases where sanctions and political pressure have been deployed. This has included the case of Microsoft providing services to Russian firms;¹² Iranian users unable to get security updates from US-based products and services;¹³ and even deleted accounts on services as vital as GitHub, a platform which hosts code for developers. This is an important reflection on the fragility of a tech industry highly dependent on a US-based ecosystem of products and services, which becomes vulnerable to political vendettas, national security letters and collaboration with security services.¹⁴

panama/; Newley Purnell, "Mark Zuckerberg Promotes Facebook Growth in India." The Wall Street Journal. 27 October 2015. https://www.wsj.com/articles/mark-zuckerberg-promotes-facebook-growth-in-india-1445959248.

^{9.} Tom Cheredar, "Google's Eric Schmidt Makes a Secret Visit to Cuba." VentureBeat. 29 June 2014. https://venturebeat.com/2014/06/29/googles-eric-schmidt-makes-a-secret-visit-to-cuba/.

^{10.} Adam Satariano, "The World's First Ambassador to the Tech Industry." The New York Times. 3 September 2019. https://www.nytimes.com/2019/09/03/technology/denmark-tech-ambassador.html; Stephen Shankland, "Google's Third Subsea Cable Will Pump Data from Portugal to South Africa." CNET. 28 June 2019. https://www.cnet.com/news/google-third-subsea-cable-equiano-connect-portugal-south-africa-nigeria/.

^{11. &}quot;Project Loon" was started by Google and is now an independent company actively operating in Africa and other continents to bring connectivity with balloons. See: https://loon.com/.

^{12.} Anastasia Lyrchikova, "Exclusive: U.S. Sanctions Curb Microsoft Sales to Hundreds of Russian Firms." Reuters. 22 January 2018. https://www.reuters.com/article/us-ukraine-crisis-russia-microsoft-exclu/exclusive-u-s-sanctions-curb-microsoft-sales-to-hundreds-of-russian-firms-idUSKBN1FBOMU.

^{13.} Maziar Motamedi, "Locked out: Did US Tech Company Overcomply with Iran Sanctions?" Al Jazeera. 31 July 2019. https://www.aljazeera.com/ajimpact/locked-tech-company-comply-iran-sanctions-190731081829014.html.

^{14.} Erik Kirschbaum, "Snowden Says NSA Engages in Industrial Espionage: TV." Reuters. 26 January 2014. https://www.reuters.com/article/us-security-snowden-germany/snowden-says-nsa-engages-in-industrial-espionage-tv-idUSBREAOPODE20140126.

Digital colonialism is also occurring in the classroom. An entire generation is being prepared as a potential workforce for tech giants. As Kwet has argued:

'the importance of technology choices for schools cannot be overstated: the specific technologies deployed will forge path dependencies by shaping the habits, preferences and knowledge base of the first tech generation from childhood. Education offers the ultimate breeding ground for Big Tech imperialism; product placement in schools can be used to capture emerging markets and tighten the stranglehold of Big Tech products, brands, models and ideology in the Global South.'15

Yet, in schools that can barely afford to function, refusing generous donations by tech companies offering to provide digital infrastructure, including software, hardware and connectivity, is hard to resist. There are almost no rules controlling or prohibiting such donations and no global movement seeking to increase awareness of these nefarious practices. Any effort to bring technology to schools is generally praised. But this masks a colonial diplomacy that provides the companies with more than what it costs to deliver these services. By imposing their products and services on students, and not offering even a glimpse of an alternative, an entire generation will become accustomed to proprietary services and will not be exposed to diverse products.

Workforces receiving training today will only be trained and prepared to use the technologies produced by the current wave of tech companies, creating circles of dependence. Skills developed by workers will be connected to specific products and therefore benefit the profitability of the few. It will have a tremendous impact in stifling the development of new cultures of collaboration. Children all over the world are passively learning technologies they cannot improve, adapt or build upon. This stagnates digital innovation. Instead of building blocks, the children of today are provided with locked digital black boxes they have to accept as they are. Parents, more often than not, are keen and supportive of the implementation of technology in the classroom without further analysis of the tech imposed on their kids. There is little awareness about the long term consequences of the choices adopted by the public education authorities. This has the possibility of effectively colonising a country beyond its future workforce as it locks organisations into specific software which will be difficult to change in the future.

This also leads to a rapid de facto privatisation of education infrastructure. It is not only the individual students that are shaped by the dominant tech firms. It is also educational data that are now in the hands of these firms, allowing them to develop further commercial products instead of facilitating an 'education data commons' that would help countries develop public interest digital services. In this new form of digital colonialism, data and money flow in one direction, with little to no privacy for digital users or taxes on the profits of tech companies. Without ownership and control over this data, developing countries cannot develop the

^{15.} Kwet, "Digital Colonialism: US Empire and the New Imperialism in the Global South."
16. Lionel Laurent, "Google and Facebook Are Sucking the AI Brains Out of Europe." Bloomberg, 1
July 2019. https://www.bloomberg.com/opinion/articles/2019-07-01/google-and-facebook-are-sucking-the-ai-brains-out-of-europe.

products they need to become equal participants in the digital economy. A similar situation is also occurring with health data, emergency response and even citizen security. The technology sector is rapidly moving to provide the infrastructure of oppression and control, especially of the most vulnerable, often disguised as donations. One company engaged in such practices is Palantir, which provided predictive policing systems for six years, 'free of charge,' to New Orleans.¹⁷ Over six years, and without public scrutiny, the program experimented on the population without their knowledge or consent.

The other use of data-driven state intervention is immigration policy in the US. Discriminatory, algorithm-driven immigration enforcement was used to fuel a wave of deportations of vulnerable workers in the US, with little scrutiny or public accountability. The deportation services rely heavily on a data infrastructure provided by tech giants. Today, Amazon is the custodian of the most valuable dataset enabling deportations, with questions surrounding whether they use their customer data to enhance it.

Increasingly, there is also a merger of political power and tech power in the US, which is then extrapolated to the rest of the world. A handful of huge corporations, like Amazon Web Services and Palantir, have built a 'revolving door' to develop and entrench Silicon Valley's capacity to expand their services abroad. 19 The neocolonial role of international aid takes a new shape, this time as technology, as the revolving door between the most powerful governments in the world and technology companies manifests in global diplomacy. The CEOs of tech companies navigate the world as 'new envoys' of digital colonialism - diplomats showcasing the power of their enormous technical empires to heads of state. Often, their revenues are larger than the entire GDP of their countries they are visiting, and their arrival sends a distorted message of prosperity and progress to overcome systemic inequalities and leapfrog into a better future. For many precarious and debt-fuelled governments, it is difficult to reject offers of 'free' digital infrastructure and services. In addition, current global trade rules run the risk of consolidating a regime favourable to digital empires, blocking the possibility of smaller actors to innovate and take ownership of their digital futures.

^{17.} Ali Winston, "New Orleans Ends Its Palantir Predictive Policing Program." The Verge. 15 March 2018. https://www.theverge.com/2018/3/15/17126174/new-orleans-palantir-predictive-policing-program-end.

^{18.} Karen Hao, "Amazon Is the Invisible Backbone of ICE's Immigration Crackdown." MIT Technology Review. 2 April 2020. https://www.technologyreview.com/2018/10/22/139639/amazon-is-the-invisible-backbone-behind-ices-immigration-crackdown/.

^{19.} LLC, Empower, "Who's Behind ICE? The Tech and Data Companies Fuelling Deportations," October 2018. https://mijente.net/wp-content/uploads/2018/10/WHO%E2%80%99S-BEHIND-ICE_-The-Tech-and-Data-Companies-Fueling-Deportations_v3-.pdf.

The Global Regulation of e-Commerce: the Battle Ahead at the WTO

Trade agreements today are the primary source of rulemaking at the global level, encompassing an expansive list of issues. Because of this, they have become the preferred vehicle for an accelerated process of digital colonisation. Trade agreements cover a wide array of subjects that extend far beyond traditional trade matters. They have been useful tools for global corporations to dilute or eliminate government policies protecting local industries, minimise regulatory costs, challenge domestic consumer protections, weaken the leverage of local producers and maximise corporate profits at the expense of citizens' rights.

The growing significance of the Internet for international trade means that attempts at trade liberalisation of digital systems are inevitable. They are the desired vehicle for Big Tech as it is more efficient lobby than influencing domestic processes or even regional processes. A global trade agreement, even if it takes longer to approve, harmonises rules everywhere. Trade agreements are more stable than domestic legislation and cannot be modified when a new government with a different agenda is elected. Any breach to them is costly and national governments cannot legislate against them without risking dispute. Changing a global treaty can take decades and is a costly process. In brief, digital trade agreements are the modern vehicle to consolidate digital colonisation.

In recent years, global trade discussions have increasingly touched on digital issues, such as cross-border data transfers, online privacy, cybersecurity, regulation of spam, and net neutrality. Large tech companies have high stakes in these discussions, as they benefit greatly from both the elimination of what they consider to be trade barriers and also the harmonisation of regulations, which reduces the cost of compliance and government mandates.²⁰ Through further acceleration, we might end 2021 with a global treaty regulating data flows. This will happen at a very vulnerable institutional moment, after the 2020 Covid-19 crisis and the leadership collapse at the World Trade Organisation. The consequence of this chain of events was the suspension of the Ministerial Conference scheduled to take place and the departure of the head of the most important multilateral trade body.

The digital global trade future is both uncertain and unpostponable, and a global treaty might be inevtiable. If it takes place, the global negotiation on digital trade will not be a balanced one. It will be the result of the power of the few and the needs of the many. And, unlike in the past, heads of state will not have the final word – their leadership is rapidly being replaced by tech giants.

^{20.} Burcu Kilic and Renata Avila, "Opening Spaces for Digital Rights Activism: Multilateral Trade Negotiations." Internet Policy Observatory. 31 March 2018. http://globalnetpolicy.org/wp-content/up-loads/2018/06/Trade-Report_IPO_FINAL_060818.pdf.

What happens now when corporations concentrated in a few jurisdictions provide all the vital architecture for digital markets? How are such dependencies reflected in the political arena, as technology becomes yet another diplomatic area of tension? In the most recent global trade negotiation, a new form of polylateralism, that is, the inclusion of non-state actors in diplomatic interactions has emerged. CEOs of tech corporations such as Jack Ma made their way to the World Trade Organisation Ministerial Conference and advocated for provisions favourable to them, organising alliances that merged developed and developing countries with tech giants. 21 The policy goal of economic development provides ample justification for the rapid digital colonisation of entire territories and the rush to approve new rules to regulate e-commerce. Multinational companies and governments together promote a utopian vision of the future in which technology will be a driver of exponential positive leaps for the global poor. However, the reality is far removed from this glittery picture. In fact, there is no conclusive data to show that e-commerce leads to meaningful development with positive benefits for the global poor.

At the moment, talks on digital trade are displacing a development agenda that could dramatically reduce poverty. Disguised as pathways to development that promise a digital future of prosperity, such plurilateral and polylateral alliances are increasingly jeopardising the future of digital sovereignty. For example, accepting the proposed terms by tech corporations in a global treaty could prevent city governments from deciding to hire local cloud providers to manage their public data commons. They could also prohibit a national parliament from restricting the use of proprietary software in schools or demanding audits on the algorithms used to score pupils' performance.

The critical question is to what extent can we rely on privatised services that may limit a country's sovereignty during an emergency or a digital social welfare intervention. These are precisely the aspects of government action that may be restricted by new global trade agreements. The net effect of these agreements has been to impose new standards and practices on people who do not really have a choice or the knowledge to understand their long-term consequences. This could be devastating for workers, creating increasingly precarious work conditions and making enforcement of local labour laws more difficult. It could even enable enhance technology-mediated global control over workers' performance.²²

But most of the headlines, activism and attention around digital issues takes place far away from the multilateral arena. News and reporting are concentrated in Silicon Valley and certain other places. There is an absence of systematic monitoring of what is happening at the global regulatory space, where the higher risk of digital colonialism is not only present but planned and starting to be implemented. The first challenge for a digital liberation movement will be to

^{21.} Amiti Sen, "Jack Ma Champions e-Commerce Liberalisation at WTO." The Hindu BusinessLine. 12 December 2017. https://www.thehindubusinessline.com/news/world/jack-ma-champions-ecommerce-liberalisation-at-wto/article9989936.ece.

^{22.} Duncan McCann, "e-Commerce Free Trade Agreements, Digital Chapters and the Impact on Labour." International Trade Union Confederation. 2019. https://www.ituc-csi.org/IMG/pdf/digital_chapters_and_the_impact_on_labour_en.pdf.

block any attempt at creating a new agreement sponsored by tech companies at the WTO level. Once a global treaty is approved, tech giants will crystallise their dominance through uniform, globally applied rules. This framework would further limit smaller actors, block the possibilities of alternatives to emerge, and constrain nation states in their ability to regulate tech companies.

The next WTO Ministerial Conference will take place while the world is still dealing with a global pandemic which accelerated global digitisation, consolidating the market dominance of tech giants.²³ It will be celebrated in a highly favourable political environment praising the benefits of technology to overcome economic and social crises. It will happen without the vigilant eye of civil society in most countries focussed on other crises. This is particularly the case in African and Latin American nations concerned with internet shutdowns and surveillance.²⁴ It will be the most important trade agreement to either consolidate the digital colonisation of the world or create a path towards digital autonomy and sovereignty.

A Blueprint for Digital Sovereignty

This paper highlights three key issues with which to start a critical conversation about establishing the basis for a dignified, sovereign digital future: public education, public procurement and international cooperation. I include a set of suggested steps below:

1) Public Education for Digital Emancipation

The first point is to encourage the development of ecosystems of digital skills beyond basic coding. One of the areas of strategic intervention to prevent digital colonialism is education and access to knowledge that can create active participation in shaping the digital society. Low income countries should not give up on the possibility of being actively involved in digital creation. Children should be provided with tools and trained in neutral technology to give them options in the future.

Today, many countries fail to do this, training citizens as mere users of predetermined pieces of software rather than creators of their own tools. A profound reform in the global education system is the first step to produce greater awareness of the digital products and services we consume and also the data extractivism and the dynamics of control and domination we are subjected to. It is imperative to develop an education system that explains how technology is made, and how technology could be shaped to reflect other sets of values. Retaking the power of digital creation for the next generation will reactivate the stagnated digital innovation landscape.

^{23.} UN News, "Globally, Youth Are the Largest Poverty-Stricken Group, Says New UN Report." United Nations. 20 September 2018. https://news.un.org/en/story/2018/09/1019952.

^{24.} Digital Rights groups in Africa were easily neutralised and did not oppose or even scrutinise the deployment of free basics in up to 27 African nations. See Nothias, Toussaint. "Access Granted: Facebook's Free Basics in Africa." Media, Culture & Society 42, no. 3 (2020): 329–48.

2) Public Procurement to Change the Rules of the Game and Decentralise Tech Power

The role of public investment and procurement should be a fundamental part of a blueprint against digital colonialism. When imagining a blueprint for the future, governments aiming at gaining back control of vital infrastructure should put public interest first when assessing new investments in technology. They should invest in their own infrastructure to transmit data, at least for government information and also information of strategic sectors. They should prioritise and create incentives for the creation of regional data centres and for local developers and local industries to provide services and equipment. Furthermore, governments should invest more and better in decentralised platforms and services to provide citizens with a basic participatory infrastructure. They should also pass comprehensive legislation to open all black boxes, prioritising sustainability and adaptability of the systems they deploy.

This could be achieved by changing the procurement rules to protect citizens and also to allow small actors to compete and local industries to offer added value beyond just price and efficiency. Together with a comprehensive reform of public procurement of technology, an anti-lobbying frame should be put in place to regulate technology donations and aid projects, especially the large ones.

As an immediate step, attention should be directed to the practices of tech giants, exposing their machinations and questioning their narratives, especially in relation to tech education and bridging the digital gap. Instead of celebrating 'tech envoys,' media and advocacy groups need to closely scrutinise these visits and tech companies' interactions with governments. The visits should be considered as a form of lobbying and both domestic regulation and global ethical norms should regulate them. Donations from tech companies to governments should be regulated, and their acceptance, just because it is free of charge, should not be automatic. This is especially relevant to the education sector, but also important for security and internal governmental affairs. When a government seeks to deploy technology produced elsewhere and donated free of charge, the long-term consequences should be seriously considered

There should be a mandatory and open registry of 'public good' technical projects by tech companies. We should demand the full disclosure of the not-for-profit projects Big Tech companies conduct in emerging economies. Projects such as free laptops and large infrastructure projects should be evaluated as to whether they are giving more to a country than they are receiving in terms of data power. Rights impact assessments should be conducted for such projects, and the highest privacy and data protection standards available globally should be applied. This would avoid the global poor becoming the data mine and testing field of Big Tech companies. These rules should also apply to private-public partnerships.

3) A Different Era of Digital Cooperation

A third point is inter-state collaboration to develop and maintain public digital infrastructure and design a more resilient multilateral digital agenda. There is currently a lack of global coordination against digital colonisation beyond the WTO system. There are many different bodies that all play an important role in shaping our digital future, from standards bodies to institutions like UNESCO or UNCTAD. The global digital agenda cannot only look at trade, but must also consider development, cooperation and even peacebuilding.

Public sector innovation should be well funded and promoted globally, and the public sector North-South exchange should be encouraged as a new form of technical cooperation. Instead of transferring millions every year for new software licenses going to just two jurisdictions, intergovernmental cooperation in public sector free software could grow and lead to the creation of pools of code, optimising investment and resilience. The focus should be on developing local capacities inside public administrations and tech teams able to solve problems.

Designing policies against digital colonialism and a digital transformation based in sovereignty and dignity is possible. Indeed, by taking back our education system, public infrastructure and combining the power of the many, a new digital transformation based on sovereignty and cooperation can be enacted. It would be more creative, participatory and public interest oriented, with citizens and institutions creating the technology they need to serve, instead of serving the data needs of quasi monopolies.

Conclusion

For the battles ahead in the global trade arena, the path will be easier if digital cooperation is already taking place in other areas, such as public education, a new set of practices around public procurement of technology and the reconfiguration of global norms and standards. While this paper has proposed a positive agenda of creating a new public digital infrastructure, current events might prevent it from happening. The imminent global trade negotiations demand rapid action before the global trade system and emerging trade wars shut down this possibility.

The future of digital colonialism looks increasingly tied up in a global struggle between the US and China. As Juan Ortiz Freuler has argued:

Everything seems to indicate that we are entering a digital cold war. If this is so, it is time for the peripheries to start giving shape to a digital non-aligned movement. Such a movement could operate as a buffer between the PRC and the U.S. – striving to protect the value of an open Internet, helping us adapt the Internet to become the knowledge-sharing tool that our times demand, and offering the necessary cover so that no nation feels coerced into joining an intranet that does not work in the interests of its people.^{'25}

Activists, consumer groups and freedom advocates should design a coherent and robust strategy ahead of the next multilateral negotiations on the regulation of e-commerce. A global treaty on e-commerce could consolidate global monopolies, lead to cultural homogeneity and tie the hands of governments in their ability to adapt digital technology to their needs. To avoid a future of subjugation and exploitation, developing countries must have more of a meaningful choice aside from the pre-drafted plans of multi-national tech companies, backed by the most powerful governments of the world. The answer, as presented in this paper, is in a combination of new alliances, considerable investment in the digital transformation of the public sector, and the necessary delay of any multilateral negotiation at the WTO that could block the possibility of a more dignified digital future.

^{25.} Juan Ortiz Freuler, "TikTok, Trump and the Need for a Digital Non-Aligned Movement." openDemocracy. 15 August 2020. https://www.opendemocracy.net/en/oureconomy/tiktok-trump-and-need-digital-non-aligned-movement/.

References

Antunes, Anderson. "Mark Zuckerberg Meets With Brazil's President At the 7th Summit of the Americas, In Panama." Forbes. 11 April 2015. https://www.forbes.com/sites/andersonantunes/2015/04/11/mark-zuckerberg-meets-with-brazils-president-at-the-7th-summit-of-the-americas-in-panama/.

Cheredar, Tom. "Google's Eric Schmidt Makes a Secret Visit to Cuba." VentureBeat. 29 June 2014. https://venturebeat.com/2014/06/29/googles-eric-schmidt-makes-a-secret-visit-to-cuba/.

Freuler, Juan Ortiz. "TikTok, Trump and the Need for a Digital Non-Aligned Movement." openDemocracy. 15 August 2020. https://www.opendemocracy.net/en/oureconomy/tiktok-trump-and-need-digital-non-aligned-movement/.

Hao, Karen. "Amazon Is the Invisible Backbone of ICE's Immigration Crackdown." MIT Technology Review. 2 April 2020. https://www.technologyreview.com/2018/10/22/139639/amazon-is-the-invisible-backbone-behind-ices-immigration-crackdown/.

Kilic, Burcu, and Renata Avila. "Opening Spaces for Digital Rights Activism: Multilateral Trade Negotiations." Internet Policy Observatory. 31 March 2018. http://globalnetpolicy.org/wp-content/uploads/2018/06/Trade-Report_IPO_FINAL_060818.pdf.

Kirschbaum, Erik. "Snowden Says NSA Engages in Industrial Espionage: TV." Reuters. 26 January 2014. https://www.reuters.com/article/us-security-snowden-germany/snowden-says-nsa-engages-in-industrial-espionage-tv-idUSBREAOPODE20140126.

Kwet, Michael. "Digital Colonialism: US Empire and the New Imperialism in the Global South." Race & Class 60, no. 4 (2020): 3–26. https://doi.org/10.1177/0306396818823172.

Laurent, Lionel. "Google and Facebook Are Sucking the Al Brains Out of Europe." Bloomberg. 1 July 2019. https://www.bloomberg.com/opinion/articles/2019-07-01/google-and-facebook-are-sucking-the-ai-brains-out-of-europe.

Liu, Tai, Zain Tariq, Jay Chen, and Barath Raghavan. "The Barriers to Overthrowing Internet Feudalism." HotNets-XVI: Proceedings of the 16th ACM Workshop on Hot Topics in Networks (November 2017): 72–79. https://doi.org/10.1145/3152434.3152454.

LLC, Empower. "Who's Behind ICE? The Tech and Data Companies Fuelling Deportations," October 2018. https://mijente.net/wp-content/uploads/2018/10/WHO%E2%80%99S-BEHIND-ICE_-The-Tech-and-Data-Companies-Fueling-Deportations_v3-.pdf.

McCann, Duncan. "e-Commerce Free Trade Agreements, Digital Chapters and the Impact on Labour." International Trade Union Confederation. 2019. https://www.ituc-csi.org/IMG/pdf/digital_chapters_and_the_impact_on_labour_en.pdf.

Motamedi, Maziar. "Locked out: Did US Tech Company Overcomply with Iran Sanctions?" Al Jazeera. 31 July 2019. https://www.aljazeera.com/ajimpact/locked-tech-company-comply-iran-sanctions-190731081829014.html.

Mozur, Paul. "A Genocide Incited on Facebook, With Posts From Myanmar's Military." The New York Times. 15 October 2018. https://www.nytimes.com/2018/10/15/technology/myanmar-facebook-genocide.html.

Nehmer, Scott. Ford, General Motors and the Nazis. Bloomington, Indiana: Authorhouse, 2013.

Nothias, Toussaint. "Access Granted: Facebook's Free Basics in Africa." Media, Culture & Society 42, no. 3 (2020): 329–48. http://doi.org/10.1177/0163443719890530.

Purnell, Newley. "Mark Zuckerberg Promotes Facebook Growth in India." The Wall Street Journal. 27 October 2015. https://www.wsj.com/articles/mark-zuckerberg-promotes-facebook-growth-in-india-1445959248.

Satariano, Adam. "The World's First Ambassador to the Tech Industry." The New York Times. 3 September 2019. https://www.nytimes.com/2019/09/03/technology/denmark-tech-ambassador.html.

Satariano, Adam and Monika Pronczuk, "Europe, Overrun by Foreign Tech Giants, Wants to Grow Its Own." The New York Times. 19 February 2020. https://www.nytimes.com/2020/02/19/business/europe-digital-economy.html.

Sen, Amiti. "Jack Ma Champions e-Commerce Liberalisation at WTO." The Hindu BusinessLine. 12 December 2017. https://www.thehindubusinessline.com/news/world/jack-ma-champions-ecommerce-liberalisation-at-wto/article9989936.ece.

Shankland, Stephen. "Google's Third Subsea Cable Will Pump Data from Portugal to South Africa." CNET, 28 June 2019. https://www.cnet.com/news/google-third-subsea-cable-equiano-connect-portugal-south-africa-nigeria/.

UN News, "Globally, Youth Are the Largest Poverty-Stricken Group, Says New UN Report." United Nations. 20 September 2018. https://news.un.org/en/story/2018/09/1019952.

Winston, Ali. "New Orleans Ends Its Palantir Predictive Policing Program." The Verge. 15 March 2018. https://www.theverge.com/2018/3/15/17126174/new-orleans-palantir-predictive-policing-program-end.