

Key geopolitical issues before, during and after the Covid 19 pandemic

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Summary: Over the last three decades, information and communication technologies (ICTs) have gained strength, increasing the complexity of the trend to dismantle and privatize. As a result, the major technological powers are setting the course of geopolitics within the framework of a technological trade war. The main global competitors are the USA and China.

As far as education is concerned, ICTs have entered the field with the strength of technological giants such as Facebook, Amazon, Pearson and Microsoft, among others. They have found fertile ground and have taken advantage of the pandemic to expand their power and reach.

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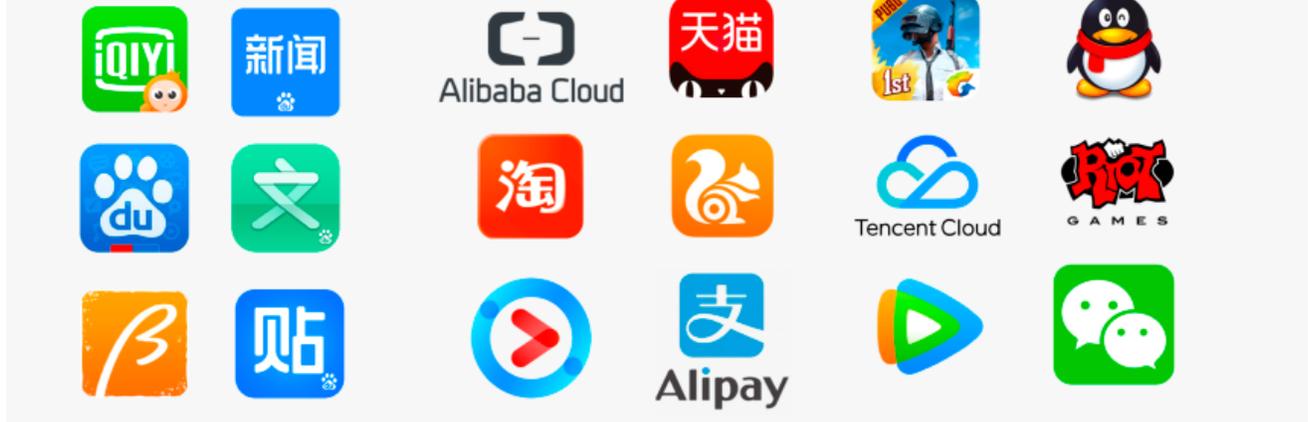
Introduction

I have organized my ideas in a very simple and straightforward way by listing the key geopolitical issues that existed before, during and after the pandemic. The purpose is to convey where we were and how some, but not all, of the fundamental trends have developed.

I

I start from the fact that before the pandemic, we were already experiencing a global crisis caused by the neoliberal economic model. It was seen in the establishment of far-right electoral coalitions in several large and powerful countries, in the use of force against dissident demographic groups and in the loss of credibility of the basic neoliberal recipe: open, deregulate and privatize.

Neoliberalism has focused on dismantling the welfare state in developed countries (public education and health, solidarity-based social security and unemplo-



ymment insurance). The same has happened in emerging and developing countries, where there was barely an "incomplete welfare state". Over three decades of neoliberalism the change was guided by the "minimal state" theory. Thus, we arrived at: a health crisis with a precarious and saturated health system; elementary, secondary and post-secondary education systems dominated by bureaucrats with corporate visions who opposed any participation of teachers and students in defining the course of education; no unemployment insurance and our social security funds in the hands of private investment funds.

The central hypothesis of this work is that now, with the strength of information and communication technologies and the momentum the current health crisis has given them, the dismantling process will become more complex, aggressive and exclusionary. Thus, we need to respond with our own proposals in defense of face-to-face public education.

During the large expansion of the US economy between 2009 and 2019, there was a massive channeling of funds into two major areas: energy, to promote the exploitation of "shale gas" and "tight oil"²; and a wave of investment into ICTs in order to increase control over society, save labour costs, impose corporate-social values and create larger companies. The competition for global hegemony is being fought between the Uni-

ted States and China. That is the main aspect of the current global economic reality. The central dispute is a technological one.

William Robinson of California has drawn attention to how "Investment in the tech sector went from \$17 billion in 1970 to \$65 billion in 1980. Then it grew to \$175 billion in 1990, to \$496 billion in 2000, and to \$654 billion in 2016."

A handful of American high-tech companies soaked up huge amounts of cash: In 2017, Apple had accumulated \$262 billion in reserves, while Microsoft recorded a total of \$133 billion, Alphabet (Google's parent company) had \$95 billion, and Oracle had \$66 billion, and so on and so forth³.

Global economic restructuring has been underway for quite some time now, increasing the significance and weight of oligopolies through mergers and acquisitions (or takeovers) of competitors. But above all, it is seen in the increased accumulation of their Intellectual Property Assets (which already constituted 84% of the S&P 500 companies' value)⁴. This is evident in the high-tech industries (with the leading US companies known as GAFAM: Google, Amazon, Facebook, Apple and Microsoft), but it is also present in agriculture, hospitality, the automotive industry, the energy sector and others.

So let's look at the key geopolitical issues, keeping in mind that the two great technological powers are setting the course for everyone.

2. Shale gas is also known as shale oil, and tight oil is also a crude that is trapped in formations with very low permeability, such as sands or clays.

3. See William I. Robinson, "The Next Economic Crisis? Digital Capitalism and the Global Police State," in ALAI. 20/11/2017, <https://www.alainet.org/es/articulo/189343>

Since the first decade of the 21st century, the world economy has been going through a "Great Transition"⁵ in which the following key geopolitical trends stood out: a dispute for global hegemony between two major world economic powers, the US and China, against the backdrop of an environmental crisis and the increase in global warming and a downward trend in global economic growth. We were already in the midst of serious financial, social, political and environmental risks that were headed towards a global recession in 2020-21 due to the decline in international trade. This was due to multiple causes such as an increase in protectionism and trade wars, a drop in investment because of lower profits and asymmetries in regional performance, the growing weight of debt for countries, companies, households and individuals as well as deep structural misalignments in the global economy.

The impact of the crisis also facilitated the vertiginous rise of the winners, mainly high-tech companies (which are also concentrated in China, where giants such as BAIDU, TENCENT and ALIBABA stand out). That is why the close technological-commercial competition between China and the US is so important, because it is the driving force of an accelerated global scientific-technical change characterized by the OECD as the "4th Industrial Revolution". This technological-trade war is being played out in four strategic areas: 5G technology for mobile telecommunications infrastructure, smartphones, cars and renewable energies.⁶

People speak of a new Industrial Revolution because this scientific-technical change has deepened and complicated the impact of digital technologies through its interaction with other sciences such as: Data-driven Production, Artificial Intelligence (which

paved the way for the "Revolution of Algorithms", i.e., mathematical procedures that have a self-learning component) and Synthetic Biology (which combines molecular and systems biology, using engineering to obtain biofuels, vaccines and the cloning processes of living beings). Likewise, there has been an interaction with other technologies such as 3D printing, the Internet of Things and Advanced Robotics as well as the use of other materials (biotechnological and nano-technological). The current crisis will accelerate and deepen this Industrial Revolution.

II.

The key geopolitical trends observed during the pandemic lead to two observations. First, the big technology companies are taking advantage of the opportunities presented by the pandemic to expand their power and reach. Naomi Klein has shown how, in the case of New York, companies -through a clever twist in political emphasis- first claimed to need public money as a matter of national security and to compete against China, and now are offering themselves as the foundation for "protecting the lives of the population" in the face of the pandemic.

Secondly, it is important to look at what has been going on in China. At the beginning of the spread of the SARS-CoV-2 virus, cell phone manufacturers and suppliers were affected (to the point that in mid-February 2020, Apple sold 500,000 fewer smartphones). But in March, there was an explosive increase in sales as Chinese families flocked to buy them to help their children with online education, depleting iPad stocks.

It should be noted that during the lockdown of February 2020, smartphone users in China made a dramatic shift in their preferences. There was an increase in video games amounting to 67% of the total while educational apps doubled in comparison to 2019, reaching 20%.

4. See Rohinton P. Medhora y Taylor Owen, "A Post COVID19 Digital Bretton Woods", in Project Syndicate-On Point, Apr. 17, 2020, p.2.

5. The primary ideas were developed in the paper presented at SEPLA- Mexico, Alejandro Alvarez Béjar, "La Gran Transición del Capitalismo Contemporáneo y las vulnerabilidades actuales de América Latina y México", paper for the III Encuentro de SEPLA, November 2019, Mexico, UAM-A.

6. These ideas were developed in depth in Alejandro Alvarez Béjar, "El Contexto Nacional e Internacional y su Influencia en la Educación Superior Pública", Keynote presentation, UPIIC-SA-IPN, January 2020.

In line with this expansion, the share value of New Oriental Education (China's largest education company) also increased, enabling the free availability of digital tools for 140,000 schools and 2.9 million classes. That amounts to approximately 120 million students⁷. In China, unlike the US, digital technology is perceived by large sectors of the population as a protective bubble for those affected by the coronavirus, as it is allowing them to continue with their activities in the midst of confinement⁸.

After the pandemic is formally over and given the evolution, we have seen, the return to "normality" will be anything but linear and simultaneous, not even within a single country. But two other crucial facts must be mentioned. Firstly, the number of daily users of "ZOOM Video Communications" has skyrocketed in recent months, from 10 million in December 2019 to 300 million in April 2020. That has pushed ZOOM's market capitalization to \$48.8 billion in May, despite having reported revenues of only \$623 million in 2019. It is now worth more than the 7 largest airline companies combined, namely: Lufthansa, Air France, Southwestern Airlines, Delta Airlines, American Airlines, International Airlines Group and United Airlines⁹. In China, Tencent's market capitalization already exceeds 500 billion dollars. And it is in education that we can see the other side of this spectacular increase in capitalization by the technological giants.

These problems already existed in the US, Canada, China and, of course, Mexico: an increase in inequality of access to digital technologies between urban and rural sectors, the irregularity of signal strength for electronic devices (with higher costs for rural areas), network congestion, the notable expansion of band-width used by each user and the increased power of the large technology companies.

7. See Analysis Group, CELC, *Ibidem*, p. 10.

8. See Analysis Group, CELC, *ibidem*, p.20.

9. See YCharts, as of May 25, 2020. Published by Santa Cruz Económico, <sce.bo/zoom-ahora-vale-mas-que-las-7-aerolineas-mas-grandes-del-mundo/>

In 2019 -and with a big thrust in 2020- ICTs strongly reinforced the process of complete and long-term privatization of health, education and public services in general.¹⁰

At the heart of the technological-commercial battle lies the deployment of 5G technology (use of mobile technologies in telecommunications), an area in which transnational corporations are using a variety of strategies to increase profits through the regional rendering of services. For example, TESLA is focused on a large platform to collect data, SAMSUNG on developing health-related applications, GOOGLE PLAY on organizing public transportation ticketing, AMAZON on developing analytical tools for professionals, patients and hospital¹¹; ALPHABET is relying on the development of a catalogue of diseases, with their corresponding fees for medical treatments (while it is already trading in chains of medical products and goods) and MICROSOFT seeks to bring health professionals closer with SURFACE, while "Dr. Google" is already answering the questions of more than 70% of the 30 million Internet users in Argentina.¹² In Mexico, due to the COVID 19 crisis, some of these platforms are also being tested in the health sector.

The digitalization of the educational sector is driving and deepening a great ideological, pedagogical, occupational and technological divide that is worsening economic and social inequalities. It will reinforce the tendency to centrally control basic pedagogical guidelines.

Pearson, an English company that presents itself as a world leader in learning, started with "Penguin Books" and The Economist magazine. Since 2015, it has focused on education as its main source of revenue and profit. Its business goes from "exams" to "analysis" because digitalization is making "global harmonization" possi-

10. For trends in services, see Kate Lappin, "Digital Public Services," in ALAInet, 23/07/20192019.

11. See <https://www.theguardian.com/society/2019/jul/10/nhs-teams-up-with-amazon-to-bring-alexa-to-patients/>

12. Alfredo Moreno, "Politizar las TIC, las líneas del futuro en salud están mapeadas". 19/07/2019, ALAInet, América Latina en Movimiento.

ble, presenting us with the challenge of holding on to local and national concerns in the educational process.

The Gates Foundation (Microsoft) has spent millions on grants to change the face of education and is now focusing on teacher evaluation. It has decided that teachers should be involved in the process because they want "accountability" to be based on secondary school student testing.

The Pearson Foundation's "Curriculum and Standards", along with those of the Gates Foundation, played an important role in the creation of the "Common Core Curriculum" that was imposed in many US states and European countries. Furthermore, they are deploying multiple digital resources for developing countries: educational management systems, digital textbooks, on-line training for standardized tests, student information systems (demographics, grades, test scores, behavior surveillance) and teacher licensing tests. Along with Stanford University, they have developed a "teacher performance program" for universities to use in their teacher recruitment practices.

III

The first thing to consider is that the large technological companies will do everything in their power to preserve all they have gained during the health crisis. Therefore, after the COVID 19 pandemic, a key geopolitical aspect is that "data" is now at the center of new technologies, and large technology companies want to privatize it and need to proclaim their absolute rights over it in free trade agreements. Meanwhile, ideas about turning data into public patrimony and to establish strong regulations on its access and management are underdeveloped, especially in the four critical areas of health, education, food and social security.

For instance, one of the major problems with the United States-Mexico-Canada Free Trade Agreement (USMCA), which was negotiated before the pandemic and is about to come into effect, is that it includes a whole chapter on electronic commerce with several articles that ensure the free international transfer of data. It

also bans the forced location of computer facilities in the country of origin and eliminates restrictions on the cross-border flow of data. Everything in this chapter favors the large technology monopolies or GAFAMs¹³.

Another geopolitical aspect of major relevance is that the public will only benefit from information and communication technologies if data is recognized as a public good. There should be a publicly regulated innovation system¹⁴.

Obtaining a COVID 19 vaccine requires a public-private and multilateral effort to get the free immunization that will lead us to the urgently needed "herd immunity". China and the EU are moving in this direction although the US is doing whatever it takes to obtain the vaccine for itself as a nation and through private laboratories.

Unemployment, which was already a nightmare throughout the world, will reach insane proportions with the pandemic and strongly affect the educational sector. Additionally, the geopolitics of hydrocarbon energy puts us at risk of the outbreak of regional wars with serious global implications: armed conflicts between the US and Iran, Venezuela or even China are examples. The "disconnect between the governance of intangible goods" (such as Intellectual Property Rights and Data Protection) is accentuating the geopolitical divisions between the United States, China and the European Union, with different standards and regulations, varying data rights regimes and competition policies and tensions between individual rights and incentives for innovation¹⁵.

Regionalization, which is now promoted for the benefit of the technological giants, presents the problem that the three main technological regions do not talk to one another so that none of them can be truly global. Meanwhile, the rest of the world has only two options: either to stick to one of the regions or make a

This critique is summarized in Alejandro Alvarez Béjar, "Reflexiones en torno al T-MEC y el retorno a la incertidumbre global", Paper of the VI Encuentro de la Red de Estudios de América del Norte, UAM- X, September 12, 2019.

See Mariana Mazzucato & Els Torrelee, "How to Develop a COVID 19 Vaccine for All" in Project Syndicate, April 27, 2020.

