**Clashing visions**

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**Abstract**

The paper focuses, from a conceptual perspective, on current challenges for development, especially those related to managing uncertainty and crisis. Today's challenges are not bound to specific fields (e.g. geopolitics, energy, finance, climate change, public communication, the digital revolution). All these challenges merge, fueling a crisis of the whole, which can only be overcome through a new vision, through a grand strategic shift.

The paper follows a qualitative approach to analyze the aforementioned issues, and to discuss relevant case studies. We use secondary data analysis of the most recent, analyses, reports and data available to identify main challenges and to inform on the implementation of a new strategic approach for development.

**Key words:** strategic development, overlapping crises, strategic uncertainty, vision

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**Introduction: the age of strategic uncertainty**

At the moment, the world goes through an age of strategic uncertainty, stemming from multiple sources. Unpredictability is associated with the complexity of the era we live in (Taleb 2010), with its many overlapping crises, each demanding immediate answers, but also medium and long-term solutions. The United Nations noted, with respect to their 2021/2022 Human Development Report a new “uncertainty complex” is emerging (Human Development Report 2022). Each crisis requires stand-alone strategies, but also unifying visions to integrate measures in a unitary approach, intended to guide the overall progress of the society.

This paper aims to probe some of the links between strategic uncertainty and the importance of large-scale strategic planning. The overlapping crises societies are facing today (e.g. the COVID-19 pandemic, climate change, economic crisis, social turmoil, energy crisis) added to, and accentuated the state of uncertainty that already existed. By reflecting on these evolutions, we argue in the following sections that what allowed contemporary societies to be taken by surprise by these developments is the fact that strategic forecasting is lagging behind rapid changes.

The overlapping crises we are facing does not represent a sum of crises, but a new problem altogether, one that sets back development in many countries (Human Development Report 2022). This calls for a new vision able to respond to each individual crisis, but also to the evolution of the whole. We can deal with a crisis on its own, but that area cannot be considered "healed" until the negative influences from related areas are canceled. Solving a crisis must include at least two stages of intervention: the first focusing on the particularities of the crisis itself and its field of manifestation, and the second dealing with the broader economic and social implications.

The literature on development focused on many factors that account for the differences in development outcomes across the globe - the pursuit of strategic, selective objectives being among them (Goldin 2019:14). Another poignant example comes from the very dynamic field of Artificial Intelligence, where incremental changes take place every year. Here, the presence or absence of strategic orientations can make the difference between leaders and countries that lag behind. It is the absence of a strategy to unite efforts and give them direction that left the European Union behind its main competitors (Savage 2020). Recently, the White Paper on Artificial Intelligence (2020) was adopted, setting ambitious targets at the continental level. On the other hand, in order to keep its maintain its global dominance, the US follows a vision, a strategy of deterrence in the technological field, especially directed towards China (Segal 2019).

Here is the fundamental problem of the moment. Overcoming current challenges requires a more extensive and more decisive strategic orientation than it appears at first sight. Leadership-wise, it involves moving the center of gravity to the whole. The energy crisis, inflation, recession, climate change - each requires a strategy at least in the medium term, especially since none of them can be solved overnight. But their inclusion in a unitary vision is imperative and requires the strategic approach of a greater objective.

We believe the age of visions has come, intended to provide an answer to the overlapping crises with which contemporary society is confronted. Today's challenges are fueling a crisis of the whole, which can only be overcome through a new vision, through a grand strategic shift.

**Method**

Starting with these observations, the paper will use three case studies to illustrate the idea that, in order to respond to rising uncertainty and overlapping crises, a unitary vision, a more decisive, comprehensive strategic orientation is needed.

The research questions that guide the analysis are as follows:

*RQ1. What is the importance of developing a unitary vision and a comprehensive strategy for overcoming interconnected/ overlapping challenges at a global level?*

*RQ2. What is the relationship between individual priorities and development as a whole?*

In order to shed light on these issues, we follow a case study research approach, which allows for the investigation of a contemporary phenomenon in its real-life context, by using multiple sources of evidence (Crowe et al. 2011; Yin 1999). Our approach is exploratory and multi-case, in order to compare and highlight different aspects of the research problem.

We have selected case studies that capture the characteristics of the phenomenon we study: high uncertainty, high importance for development, high interconnectedness with other issues or contemporary challenges. The case studies have another shared feature: they make the object of intensive power competition at a global stage. For each case study, we conduct an analysis of qualitative data (recent studies, reports and statistics from reputable secondary sources) to answer the research questions.

The case studies selected include:

1. The AI-driven technological revolution, chosen for its impact in all areas of life, and for development;

2. The competition for the difficult and expensive exploitation of rare earth elements, of crucial importance for a wide range of modern technologies;

3. Big Tech and their disruptive impact in society; we use this case as an illustration of how difficult it is to reconcile individual priorities with the interests of the whole.

**Analysis and discussion**

*Case study 1. The new technological revolution.* The AI-driven technological revolution has been praised for its ability to transform societies, and to open new horizons of progress (Makridakis 2017; Vinuesa et al. 2020). Over time, it was discovered that this rapid progress also presents challenges, such as deepening domestic inequalities, and global inequality between states (Schwab 2021). Since these risks cannot be eliminated altogether, states need to plan ahead to mitigate them: “Deprived of the chance to claw their way out of poverty, poor countries will stagnate while the AI superpowers take off.” (Lee, 2018: 170).

It is in the nature of the areas that make up the new technological revolution to evolve in an integrated manner, each component element depending of another, progress being occasioned precisely by interdependence as the fundamental particularity of progress in the field of new technologies. As shown elsewhere, one of the most significant features of AI is that it needs to have all components working in a in a certain rhythm and in a certain correlation (Dobrescu and Durach 2022: 36). Algorithms rely on big data series to be competitive; this favours the larger, established players, compared to the smaller ones – a phenomenon known as “the network effect”n (Tucker 2019). Countries of organizations with strong traditions in the field of technological innovations could fail in the absence of a friendly entrepreneurial environment. Innovations might not be capitalized upon if the organization or the state lack the financial strength to implement the discovery at scale. Therefore, being truly competitive in the field of AI requires the simultaneous existence of several conditions: funding, entrepreneurship culture, access to big data, and, overall, strategy and coordination (Dobrescu and Durach 2022).

“The fourth industrial revolution” (Schwab 2017), is dominated by critical technologies in a number of key areas: advanced materials and manufacturing; artificial intelligence; computing and communications; energy and environment; quantum technologies; biotechnology, gene technology and vaccines; sensing, timing and navigation; defense, space, robotics and transportation (Gaida et al. 2023).

For every nation involved in the global technology race, winning is a question of having the capacity to support relatively similar levels of progress for each area, being able to ability to attract and retain global talent, and to stimulate innovation (Gaida et al. 2023; Hass et al 2021). In these conditions, having a particular vision for technological development is the essential factor to stay ahead of the race, but also to exert a type of control, to strategically channel the potential of emerging technologies.

The management of the contemporary technological revolution entails two directions for action: the speed at which progress takes place, and the management of the financial, human and conceptual efforts involved. Both dimensions have a cardinal role in taking full advantage of the potential of critical technologies and strategic industries.

In what the speed of progress is concerned, being the first to develop a new technology provides immense advantages (Azhar 2023). This advance can be amplified exponentially, through the rapid succession of innovations and their commercial implementation. The tech pioneers aim to capitalize on the advantages of their discoveries, in terms of commercial benefits, but also in terms of the accumulation of new data, frequently use to develop new, better products and services.

No less important is the effort to support the AI race as the new arm’s race of the moment (Chow and Perrigo 2023; Kamphuis and Leijnen 2021). The cardinal question in this regard is: how many states can afford support the technological race, how many countries can aspire to a type of autonomy? The answer given by Azeem Azhar is clear – there are only two solutions: to achieve strategy autonomy, or to associate with powers that can do that (Azhar 2023). Since not every country can carry out state-of-the-art research activities to support today's technological competition, they will aim ally with those who are in the outposts of the contemporary technological race, changing the geopolitical contours of today.

According to recent analyses, today’s technology race is dominated by the US and China (Gaida et al. 2023). One of the key conclusions of the aforementioned policy brief is that “China has built the foundations to position itself as the world’s leading science and technology superpower” (Gaida et al. 2023: 1). This harsh conclusion is built on the tradition of excessive criticism of Western powers, in order to mobilize policy actors for conclusive action to avoid the risk of lagging behind, and the aforementioned policy brief follows this logic: “These findings should be a wake-up call for democratic nations, who must rapidly pursue a strategic critical technology step-up.” (Gaida et al. 2023: 1). The policy brief discusses the global technological competition by looking at critical and emerging technologies in domains in key areas. Forty-four technologies are mapped in the report, and China is leading in 37 of them. Although the US leads in areas such as high performance computing, quantum computing and vaccines, and has important tech research hubs located in Silicon Valley or leading universities, it comes second to China in the majority of the 44 key technologies. Based on these results, the authors make a claim that may be a little harsh: „Western democracies are losing the global technological competition, including the race for scientific and research breakthroughs, and the ability to retain global talent—crucial ingredients that underpin the development and control of the world’s most important technologies, including those that don’t yet exist” (Gaida et al. 2023: 1).

The technological race is being led by US and China; they are followed, at a distance, by a second-tier group of countries led by India and the UK. Other relevant actors include South Korea, Germany, Australia, Italy, and, to some extent, Japan. Within this second tier, we find visible differences in the strength of their economies (GDP size) and the position they hold in this particular hierarchy. UK would rank in the top five technological powers, ahead of Japan, for example, which has a much larger GDP than UK's (The World Bank, 2021). France has an economic strength equivalent to that of UK, but it does not appear in this group of followers. Where does the difference come from? It is clear that economic strength alone is not sufficient to account for progress in the technological race.

For the purposes of this case study, we are interested in the factors accounting for technological supremacy. China's spectacular rise in a field where American authority seemed unchallenged until recently offers valuable insights: “China’s lead is the product of deliberate design and long-term policy planning” (Gaida et al. 2023: 1). As discussed elsewhere, China’s rise in AI is rooted in Deng Xiaoping’s strategy summed up in the formula “development is the only truth that matters.” (Dobrescu and Durach 2022). The Chinese leader formulated a program that structured priorities around development, accounting for China’s spectacular progress.

The importance of having a strategic focus is inherently stressed in the policy recommendations section of the aforementioned policy brief on the technology race. For maintaining their dominance, democratic nations should work individually and collectively to take action under four themes: “1. boosting investment, driving commercialization and building talent pipelines; 2. global partnerships; 3. supercharging intelligence efforts; 4. moonshots (big ideas).” (Gaida et al. 2023: 44). In fact, upon closer analysis, the study we are referring to illuminates with extraordinary force the decisive importance of strategy in the rise of a country as a scientific and technological power. Not only the great powers in the field should focus on the strategic level; any nation, larger or smaller should set ambitious goals for its own development. Vision can be found at the upstream of research, technology, and innovation.

However, finding ways to cooperate is not an easy feat. As Azhar (2023) points out, breakthrough technologies face significant risks, among which the exacerbation of geopolitical frictions and the muddying of the definitions of who an ally or a rival is. It is an area of overlapping cooperation and competition that needs to be addressed at the strategic level in order to gain autonomy and competitive advantages. Nevertheless, the importance of breakthrough technologies as backbones of public goods urges governments to develop grounded strategies that reinforce non-zero-sum thinking around technology.

*Case study 2: rare earth elements.* When talking about development strategies to guide the progress in key areas, such as the technological one, one fundamental issue is to look at potential evolutions that might act as catalyzers or barriers in that field. It is the case of the rare earth elements. Rare earth elements are a group of 17 chemical elements essential to a number of fields, among which transportation, energy, defense, and aerospace industries. These metals are an essential element of modern industries and, as such, are important in the global supply chains.

What is the situation of rare earth elements? Although generally available across the globe, some of the largest reserves are concentrated in China, which “still dominates the entire vertical industry and can flood global markets with cheap material, as it has done before with steel and with solar panels. In 2022, it mined 58% of all rare earth elements, refined 89% of all raw ore, and manufactured 92% of rare earths-based components worldwide” (Mabuni 2023). This position of monopoly can be traced back to the 1990s. Since then, [Canada](https://www.canada.ca/en/prairies-economic-development/news/2022/09/minister-vandal-announces-investment-in-processing-of-rare-earth-elements-in-saskatchewan.html), [India](https://timesofindia.indiatimes.com/business/india-business/gmdc-plans-to-set-up-rare-earth-elements-processing-plant/articleshow/93935623.cms), and [UK](https://www.gov.uk/government/news/uks-first-magnet-refinery-given-huge-financial-boost-as-first-ever-strategy-for-supply-of-critical-minerals-published) have declared their intent to develop domestic refineries, and the US supports the buildout of processing facilities, and tax incentives for critical mineral businesses (Mabuni 2023). Despite these efforts, the overall picture shows that China's dominant position in this field is maintained.

It is necessary to make a clear distinction between the presence rare earth elements reserves, its mining and, then, its refining, the export being made especially with refined products. Processing rare elements is difficult and expensive (Science of Rare Earth Elements 2020). China's refining capacity ensures not only a monopoly position, but also dominance in the supply chains. More specifically, China refines 68% of the world’s nickel, 40% of cooper, 59% of lithium and 73% of cobalt. The case of cobalt is telling: „America views cobalt, which is used in batteries, as a cautionary tale. In Congo, the source of about 70% of global production, Chinese entities owned or had stakes in 15 of 19 cobalt producing mines as of 2020. America’s decision to allow a US firm to sell one of Congo s largest copper-cobalt mines to a Chinese one in 2020 is seen as an enormous act of stupidity. „We can not allow China to become an OPEC of one in critical minerals.” (How America plans to break China’s grip on African minerals 2023).

There are geopolitical implications, besides the economic ones. Europe had no reaction when China occupied important positions in Africa, a continent considered the backyard of the old continent. Recently, it was discovered that Greenland is the second largest holder of rare metals after China. As the ice cap retreats, mining companies that want to exploit these deposits make their way. The mining and processing costs are huge, 500 million for a mine. So far, two such companies have been announced, one of them being financed by the Chinese state (Gronholt-Pedersen and Onstad 2021).

Where is Europe in this endeavor taking place right on its territory? According to the European Commission, the EU relies almost exclusively on imports for many critical raw materials, with suppliers highly concentrated in a small number of third countries (Critical Raw Materials Act 2023). The EU is currently 100% dependent on foreign suppliers for 14 out of 27 critical raw materials and 95% dependent on three other critical raw materials (Menkhoff and Zeevaert 2022). The Critical Raw Materials Act, officially presented in March 2023, proposes a comprehensive set of actions to ensure the EU's access to a secure, diversified, affordable and sustainable supply of critical raw materials. President of the European Commission, Ursula von der Leyen declared that ”We're strengthening our cooperation with reliable trading partners globally to reduce the EU's current dependencies on just one or a few countries. It's in our mutual interest to ramp up production in a sustainable manner and at the same time ensure the highest level of diversification of supply chains for our European businesses.” (Press release: Critical Raw Materials 2023). The Regulation sets clear benchmarks for domestic capacities, by 2030: at least 10% of the EU's annual consumption for extraction, at least 40% of the EU's annual consumption for processing, at least 15% of the EU's annual consumption for recycling, and no more than 65% of the Union's annual consumption of each strategic raw material at any relevant stage of processing from a single third country.

The fundamental problem remains: EU’s vulnerability is delayed action, reactive action. From a strategic perspective, the block should take action directed towards the realities of tomorrow, instead of reacting to the dominant trends of today.

*Case study 3. A question of priorities: the parts or the whole?* One of the most delicate problems is the balance between disparate priorities and the whole. “Priorities” and “prioritization” have become buzzwords when talking about development and the future. Coming up with a list of priorities has an undeniable legitimacy, but only relative to the whole. When priorities arise from a vision, they contribute to the positive evolution of the structure within which it operates. When priorities are detached from an integral vision, they ignore the whole within which they should be considered. The way AI corporations have evolved illustrates the risks of single-minded focus. As revealed from the publication of internal research and analysis, Facebook and Instagram prioritized certain content and practices even though they knew they had negative effects (Lima 2021). One reproach to be made to the companies and corporations that are pioneering Artificial Intelligence is that they “pursue a single objective at the expense of all others” (Korinek 2021).

Today's world has received an extremely important warning in this regard from the area of ​​emerging technologies. Society was late to realize the societal risks posed by these technologies. Thus, it was late in offering a response to guide the evolution in this extremely dynamic field. Today’s technological revolution proves to be by far the essential factor not only in economic and social modernization, but even in the remodeling of social evolution, in the redistribution of power at the global level (Schwab 2016). The rapid developments in the digital technologies triggered crises in other fields as well, such as, for example, the public sphere. The core elements of this crisis of the public sphere, as noted by scholars in the field, are the intense exploitation of citizens’ private data and experiences by private businesses, increased polarization, proliferation of online disinformation, and the increased weaponization of the new digital technologies by state and non-state actors (Arora et al 2022; Bârgăoanu and Durach 2020; Singer and Brooking 2018; Zuboff 2019).

In time, evidence on the social harm brought by the misuse of the digital platforms started to accumulate. Furthermore, revelations on how the structural deficiencies of the digital platforms can trigger a crisis of the public sphere took policy makers by storm. Despite vivid debates, including hearings of the Big Tech CEOs in the US senate or in the EU institutions, response measures have been almost exclusively reactive. The EU adoption, in 2022, of the Digital Services Act package, which is the most comprehensive regulatory framework of the digital space in the world, is an attempt to address some of the unwanted impact of the digital superpowers in key areas (Digital Services Act 2022; Digital Markets Act 2022). However, the package comes as a response to the documented negative effects of digital services and technologies that are prevalent today, with limited capacity to foresee future challenges. Its relevance and adaptability in one, two or three decades from now remains to be seen. In the US, where the majority of Big Tech companies are based, there is even less progress in coming up with a strategy to curb the monopolistic power of the largest digital technology companies and its unwanted consequences (Morar and Riley 2021).

Overall, the rapid positive and negative developments triggered by the digital revolution prompted political leaders and policy-makers to accelerate the process of strategy elaboration and, thus, gained prominence at the forefront of contemporary developments. While the technological revolution poses significant challenges, and brings great promise for development, the prioritization of this field must be integrated into the bigger picture. It is a risky practice to set priorities insufficiently correlated with the interests of the whole. We found the position of the French Minister of Finance, Bruno Le Maire, formulated in Davos to be particularly significant for this type of one-sided vision: “The key question is not China first, or United States first, or Europe first. The key question for all of us, and for all the nations in the world, is climate first” (Javed 2023). No one can deny the importance of fighting climate change. But such an issue cannot be considered more important than the development and exploitation of emerging technologies, for example. One argument for this: „PricewaterhouseCoopers estimates AI deployment will add $15,7 trillion to global GDP by 2030.” (Lee 2018: 18). The contemporary digital revolution will not only add a great deal of wealth, but will provide the technological and financial means without which climate change cannot be achieved. In the present example, addressing climate change should not be placed not above the technological revolution, but shoulder to shoulder with it.

**Focusing on isolated priorities might suggest a goal-oriented approach, when it is in fact a substitute for a comprehensive strategy that is missing. Priorities should be integrated into a broader vision, which implies highlighting the interconnections between different priorities serving the whole.**

**Conclusions**

If economists talk about the importance of critical raw materials, social scientists should talk about critical social areas, and one of them - the most important - is the worrying decline of strategy elaboration, the little-used capacity for strategic projection, for anticipating developments, for preventing imbalances. The more the complexity of society increases, the more the need for strategy increases. A certain misunderstanding persists. Strategic thinking focuses on correlations, on their role, on the cost of underestimating or neglecting the multiple interconnections within modern society. Overwhelmed by all kinds of challenges, signals, pressures, we failed to grasp the significance of our main task: the construction of unitary, coherent visions to guide the evolution of the whole. It is the only solution for society to be at the forefront of contemporary development and not just to follow uncoordinated developments experienced in various fields. Contemporary society has been taken by surprise by the rapid technological evolution, by the energy crisis, by climate change. In this way, policy-makers acted in the wake of the changes and not proactively; they simply followed change, instead of bringing change.

The paradigm shift in the field of development that we are experiencing stresses the need for long-term vision. A first element of the paradigm shift is represented by the changes in the globalization infrastructure. In other words, the reorientation of commercial flows, those which dominated yesterday's world and are experiencing a structural transformation, designed to avoid the risks of dependence and ensure additional security of supply. Yesterday's world benefited from cheap money, which stimulated economic activity; in today's world, money is more and more expensive. Yesterday's world was dominated by cooperation, today's world increasingly by division; in yesterday's world the low price and the profit margins were leading values; in today's world, these values ​​do not disappear, but are outweighed by other goals related to security, the observance of overall balances, etc.

The warning coming from Kristalina Georgieva, general director of the IMF is telling: „First and foremost, it means that we need to change our mindset towards more resilience, more precautionary actions... We cannot just concentrate on what is cheaper. We have to think of the security of supplies and that means diversify the sources of products that make the economy function well, lifting up the level of cost. That economic logic is not only appropriate, it is a must to follow.” (Georgieva 2023).

Nothing calls for a paradigm shift more than a collapse of trust. In most developed countries, trust in the government has visibly decreased, if not collapsed. Trust does not have the precision of an economic indicator, but it sets two fundamental things: the quality of government and the way in which the common good is served. The decline in confidence clearly shows that governance is no longer so much guided by the values of the common good. It is the responsibility of the elites to rehabilitate the idea of ​​anticipation and preparation for future evolutions, to ensure social macro-equilibrium (inequality has increased everywhere in the developed world) and, above all, to regain the trust of the population. Without trust, democracies malfunction. We need a fundamental tradeoff between policies that seek to maximize economic growth with those that seek a more equitable distribution of income, between short-term and long-term views.

It is, we believe, not just the priority that stands out, but an imperative one. The crisis looming at the horizon – only 15 years have passed since the last great recession – with all the signals it sends us (the overlapping current crises, stubborn inflation and market chaos) – requires “reordering society’s priorities” (Khanna 2022). The political and even economic value of trust far exceeds the value of various economic indicators, no matter how important they might be. And trust cannot arise in the absence of a strategy facing tomorrow’s challenges, to give cause for optimism and public support. In a visit to Bucharest, Jeffrey Sachs pointed out that „Every governement should have an institution to look 20 years forward” (Sachs 2018, apud Pâslaru 2018*)* This was a valid suggestion for any historical era. Now it has become pressing.

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