



The European Union between strategic autonomy and technological sovereignty: impasses and opportunities

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The European Union between strategic autonomy and technological sovereignty: impasses and opportunities

Introduction

The Covid-19 crisis has produced an inflation of speeches on the need for Europe to increase control over its production, its sovereignty but also to increase its weight and autonomy in relation to the great world powers (China and the United States) in order to assert its own position. We can see an increase in the number of declarations by EU officials in this direction, from representatives of Member State governments to European institutions¹. Remarkably, as soon as she was appointed in 2019, the President of the European Commission, Ursula von der Leyen, announced her vision of a "geopolitical" Commission, thus expressing the project of reinforcing the role and legitimacy of the Union as a global actor².

The multiplication of this type of reference underlining a desire for affirmation of the European Union stems from an awareness influenced by several factors. The question of sovereignty has been a recurring theme for several years, and the Union must formulate responses to those who want to "take back control", which often rhymes with the desire to re-nationalize Member States' policies.

The Trump presidency confirmed the many divergences between Europe and the United States on a series of key issues, and raised questions about the strength of the transatlantic link. The issue of data sovereignty and control in the context of transatlantic trade has produced a series of disputes, both with regard to corporate activity and the protection of individual rights. These differences do not call into question the military alliance, but rather outline a rivalry at another, extremely competitive level, that of mastery of information technologies, which requires radical adaptation on the part of democracies, as it draws complex triangulations where tech giants are inserted alongside states³.

¹ Anne de Guigné, "Le Maire et Breton veulent favoriser l'autonomie européenne", *Le Figaro*, 16 February 2021.

² Derek Perrotte, Gabriel Gresillon, "Von der Leyen veut redonner à l'Europe les moyens de sa puissance", *Les Echos*, 10 September 2019.

³ Jean-Dominique Merchet, interview with Pascal Boniface, "Les Gafam représentent une menace pour la pérennité des Etats", *L'Opinion*, 15 February 2021.

In addition, the technological competition between the United States and China places Europe in a position of having to make choices, which sometimes leads to a plea for greater autonomy, over and above the strength of the transatlantic relationship⁴.

Finally, and perhaps most importantly, the Covid crisis provoked a disruption in supply chains and highlighted Europe's dependence on China for certain supplies. This factor, combined with the image of a "Chinese virus", first pointed to trade relations with China as a weak spot that should lead to repatriation of certain types of production to Europe⁵. More recently, we have seen the emergence of a desire for European autonomy in the field of vaccines, while the continuity of supplies between the Union and third country suppliers such as the United Kingdom or the United States could be called into question by national priorities⁶. The climate of crisis reinforces the idea of the need for European independence both to assert its own global projection and to strengthen resilience, i.e. to be less dependent on other world powers.

It is in this context that we have seen the emergence of two concepts that are becoming politically performative at the European level: technological sovereignty and strategic autonomy. The ins and outs of these proposals need to be analyzed in order to define perspectives that will enable the Union to emerge from the entropy linked to the multiplication of declarations and to reach a forward-looking vision that can bring together a lasting consensus.

1. European strategic autonomy, a contradictory concept?

The concept of strategic autonomy originates from the French debate, a specific origin that may constitute an obstacle to its adoption at the European level. This concept stems from what some authors have called "autonomous strategic culture"⁷, an expression of French defence policy. France has always defended its strategic autonomy, an aspect that is very present in French doctrine. The 1994 White Paper on defence already mentions an extension of the concept of strategic autonomy from nuclear deterrence to include related sectors⁸. The 2017 "Strategic Review of Defence and National Security" takes up a concept of national strategic autonomy which insists on the technical and human capacities of such autonomy, of which nuclear deterrence represents the ultimate guarantee⁹. But this same document boldly extends the concept of strategic autonomy to Europe, by inserting the "pragmatic strengthening of the CSDP" (Common Security and Defence Policy) in a March towards a

⁴ See for example Jean-Pierre Chevènement, "L'Europe et le piège de la bipolarité", in [La Chine dans le monde, actes du colloque du 17 novembre 2020](#), Fondation Res Publica, February 2021, pp. 51-53.

⁵ Olivier Le Bussy, "Le Covid-19 oblige l'Europe à repenser son rapport au monde", *La Libre Belgique*, 30 July 2020.

⁶ "L'Instrument d'urgence du Marché unique devrait être un peu plus détaillé en avril, annonce Thierry Breton", *Bulletin Quotidien Europe*, 26 February 2021.

⁷ Patrice Buffotot, "Défense européenne. Quel avenir ?", *Études*, tome 395, n° 10, 2001, pp. 297-307.

⁸ Cf. [Livre blanc sur la Défense](#), 1994.

⁹ [Revue stratégique de la défense et de la sécurité nationale](#), 2017.

concept of autonomy parallel to the national one. One can understand the French will to work toward a European policy that can enhance its visions, an extension of the paradigm of “Europe-power” that had already flourished during the Chirac presidency in 1997¹⁰. In 2018, Emmanuel Macron put forward this concept at the annual conference of ambassadors¹¹.

On the European side, it is worth noting the appearance of this theme in the Union’s Global Strategy in 2016¹², a statement that was then taken up by European officials, such as Commissioner Elżbieta Bieńkowska, who, in 2019, associates it with her vision of European space policy¹³. The EU foreign ministers introduce this concept when adopting the conclusions on the global strategy and CSDP in June 2019, without, however, dwelling on a real definition of the contents of such a “strategic autonomy”¹⁴. This statement was strongly emphasised in the report presented by MEP Arnaud Danjean on the Common Security and Defence Policy to be adopted by the European Parliament in January 2020¹⁵. Finally, in May 2020, the Croatian Presidency put strategic autonomy on the agenda of the European Council¹⁶. However, the rise in importance of the issue within the various European institutions conceals a series of problems. There is certainly a considerable difference between the French version of strategic autonomy and the very broad interpretation, extending to the industrial and commercial sector, which is emerging within the European Council and which is becoming so all-encompassing that it no longer corresponds to the classic strategic vision linked to defence, but also fails to provide the necessary instruments to increase the political management capabilities of the Union’s interactions with third countries¹⁷. Thus, the theme is imposed but the interpretations are different, if not contradictory. And the inclusion of the theme of autonomy on the agenda of the institutions does not represent a progression of the French strategic vision, but rather corresponds to the installation of a broad expression that brings the industrial, technological and commercial domains into the strategic category¹⁸. French strategic culture is therefore largely overtaken by this semantic extension, while the classic French strategic vision remains relevant. The inflation of the use of the term strategic can therefore be synonymous with a certain degree of confusion.

¹⁰ “Jacques Chirac définit sa conception d’une Europe-puissance”, *Les Echos*, 12 May 1997.

¹¹ “Avenir de l’UE : Emmanuel Macron entend redonner des couleurs à une Europe ‘affadie’”, *Bulletin Quotidien Europe*, 28 August 2018.

¹² [Une stratégie globale pour la politique étrangère et de sécurité de l’Union européenne](#), Conseil de l’Union européenne, 28 June 2016.

¹³ “Espace : l’UE manque d’une ‘vision collective claire’ en matière spatiale, selon Elżbieta Bieńkowska”, *Bulletin Quotidien Europe*, 23 January 2019.

¹⁴ “Sécurité/Défense : il faut maintenir la dynamique concernant la PSDC, plaident les ministres européens”, *Bulletin Quotidien Europe*, 18 June 2019.

¹⁵ “Défense : l’UE a besoin d’une autonomie stratégique, estiment les députés européens”, *Bulletin Quotidien Europe*, 17 January 2020.

¹⁶ “Compétitivité : la question de l’autonomie stratégique de l’Union au menu des ministres de l’UE, vendredi 15 mai”, *Bulletin Quotidien Europe*, 15 May 2020.

¹⁷ See for example, Giovanna De Maio, who describes European strategic autonomy as a “fuzzy concept” (“[L’autonomie stratégique européenne et la présidence Biden](#)”, *Le Grand Continent*, 8 February 2021).

¹⁸ The contradictory nature of the concept of European strategic autonomy has been underlined by Rosa Balfour (*Ibid.*).

At the centre of French strategic doctrine, we find nuclear deterrence. It is a fundamental element, which summarises and justifies the posture of national autonomy. This deterrence is absolute in nature and can be considered as a fundamental difference between France and the other EU member states, as since Brexit France is the sole holder of nuclear weapons within the Union. For a long time, in most member states, this question of the nuclear umbrella in Europe was delegated, or even discreetly relegated, to NATO, which avoided taking awkward positions with opinions that were generally hostile to nuclear weapons. The question of the European sharing of the deterrent was however sometimes raised, but it must be recognised that this was done by a France that extended its notion of vital interest to its European neighbourhood¹⁹. On the side of the neighbours, there is little eagerness to raise the question of the relationship with the French nuclear deterrent, which could logically lead to reflections on decision-making as well as the financing of the system, all of which appear so thorny that they should be closed as soon as they are mentioned.

In February 2020, during a speech delivered to the Ecole de Guerre, the French President declared his willingness to open a 'strategic dialogue' with European partners who so wish, proposing to examine the role of the French nuclear deterrent in collective security²⁰. This proposal by President Emmanuel Macron was a concrete sign of the French will to break the silence on this issue and foster a discussion²¹. In Germany, one could note declarations of personalities in favour of opening this debate²², which was taken up by the Minister of Defence, Annegret Kramp-Karrenbauer²³. But for the moment this attempt does not seem to have allowed the formation of a German position that is truly compatible with the French one, while pacifism and the general opposition to nuclear, both civil and military, remain strong trends in Germany. Moreover, it is often the question of NATO's nuclear umbrella that is examined, and not that of an extension of the French deterrent²⁴. Similar reactions can be found elsewhere, for example in Italy, where the issue of deterrence posed by the French president is rather well accepted without, however, a "French solution" being accepted²⁵. This debate remains confined to limited circles and does not give rise to any real mobilization within the government.

It should also be recalled that the strategic situation in Europe requires a cautious approach. The dismantling of the arrangements inherited from the Cold War is not on the agenda, while Russia remains a potentially aggressive power. This factor is far from secondary and confirms that, even in the search for a European position open to dialogue with Russia, the alliance with the United States remains fundamental²⁶.

¹⁹ Bruno Tertrais, "La dissuasion partagée ?", *Revue Défense Nationale*, vol. 819, n° 4, 2019, pp. 29-33.

²⁰ ["Discours du Président Emmanuel Macron sur la stratégie de défense et de dissuasion devant les stagiaires de la 27^{ème} promotion de l'école de guerre"](#), Elysée, 7 February 2020.

²¹ Jean-Dominique Merchet, "Dissuasion : les Allemands ne ferment pas la porte à un dialogue avec la France", *L'Opinion*, 14 February 2020.

²² Tom Enders, "Lass Mich Ausreden; Wir müssen über Nuklearwaffen reden", *Die Zeit*, 5 March 2020.

²³ "Perspektiven", *Sächsische Zeitung*, 23 January 2021.

²⁴ On this matter, see Emmanuelle Maitre, ["Dissuasion nucléaire en Europe : convergences, singularités et perspectives de coopération"](#), *Recherches & Documents*, FRS, n° 03/2021, 28 January 2021.

²⁵ Carlo Trezza, ["L'offerta nucleare di Macron all'Unione europea"](#), *Affarinternazionali*, 18 February 2020.

²⁶ Zachary Paikin, ["EU-Russia Relations and the Crisis in Belarus: toward a more "Geopolitical" Europe?"](#),

Emmanuel Macron's move in 2020 had the merit of making this issue explicit, and it seems logical if one wants to promote a "European strategic autonomy" based on what was commonly defined as "strategic culture"²⁷. However, the reactions may not be what was expected, with criticism emerging in Germany about the presence of US nuclear weapons, although this is not linked to a desire to Europeanise deterrence²⁸. This is a significant indication of the extent to which the deployment of "strategic autonomy" in the classical sense of the term remains problematic. The growing presence of the reference to European strategic autonomy seems to indicate that nuclear deterrence is marginal, if not non-existent, in the use of the concept, which reveals at the very least a variable geometry in the perimeter of autonomy.

It should also be noted that this concept gave rise to divergent interpretations in 2020 between Emmanuel Macron and Annegret Kramp-Karrenbauer, while very different positions on the autonomy of a European defence caused a stir between Paris and Berlin²⁹. In Germany, as for many member states, the need for continuity in transatlantic relations within NATO was raised, which did not correspond to the perimeter of a French vision that insisted on autonomy in defence matters. Even if the angles were then rounded off, these differences illustrate how delicate this concept is to handle. The German vision insists on industrial and technological questions without necessarily integrating them into a "global" French vision by associating defence³⁰. We note a certain vagueness in the interpretation of the concept which, while it may have ensured the success of the political statement of a "strategic autonomy" in a first phase, could perpetuate a series of misunderstandings between the different member states and constitute a barrier for the deployment of concrete operational measures.

It should be noted that the year 2020 represented a special moment for the desire for autonomy vis-à-vis the United States. The Trump presidency's adverse effect on almost all EU member states was such that it supported the idea of transatlantic decoupling. The election of Joe Biden to the presidency of the United States renewed the topicality of the Atlantic Alliance and brought back the traditionally Atlanticist countries to consider that the framework of collaboration with the American partner in the field of defence should be privileged, and not the rupture³¹. At the Munich Security Conference in February 2021, President Joe Biden announced the return of the United States and the fundamental character of NATO,

Notes de la FRS, n° 66/2020, 10 November 2020.

²⁷ For an example of this classical "strategic culture", which puts nuclear deterrence at the center of its thinking, see Corentin Brustlein, "[La réduction des risques stratégiques entre puissances nucléaires](#)", *IFRI Proliferation Papers*, n° 63, January 2021.

²⁸ Łukasz Kulesa, "[German Debate on Nuclear Weapons: Implications for NATO](#)", *PISM Bulletin*, 14 July 2020.

²⁹ Louise Rozès Moscovenko, "Il y a des différences d'approche quasi systématiques entre la France et l'Allemagne", *EurActiv.Fr*, 21 December 2020.

³⁰ The presence of the CDU in the current coalition in Germany is synonymous with maintaining a strong Atlantic link. This element could change if the 2021 elections result in a different majority (see Lidia Gibadło, "[Hoping for a Change: Germany and the U.S. after Biden's Victory](#)", *PISM Bulletin*, 16 December 2020).

³¹ Stefano Stefanini, "Gli Usa tornano guida mondiale", *La Stampa*, 21 January 2021. See also Juan Sanhermelando, "La UE y la OTAN esperan a Biden para resucitar la alianza militar transatlántica", *El Español*, 26 February 2021.

which confirms this revival of the Atlantic security dimension³². If this does not mean a pure and simple return to the past that would not take into account international changes, it brings the question of dialogue between democracies to the forefront³³.

The arrival of Mario Draghi at the head of the Italian government also implies a return to a form of Atlanticist orthodoxy, parallel to the European dimension. This has led to an evolution in Italy's international projection, which has repercussions on the concept of strategic autonomy: in Rome, it is now a question of avoiding that this concept appears, in a way, to be in conflict with NATO, a position that was reaffirmed during a recent meeting between the German and Italian Defence Ministers³⁴.

The situation has therefore changed, which can only have repercussions on the "strategic autonomy" project in European defence. This set of reasons has led some analysts to underline the toxic nature of this concept for the European debate³⁵.

But beyond the limits of a concept, it is necessary to recall the historical reading that is often associated with these developments, that of integration in the field of European defence. For several decades, the European institutions have been trying to define, with many difficulties, a strategic rationale for building further steps of integration in this field³⁶. To reinforce this process, the European Commission has set up a "strategic compass". This structuring approach aims to impose itself both through work on common strategic objectives and through a roadmap that can then lead to the growth of common military instruments and missions³⁷. The idea of a common strategic culture also corresponds to a trend observed in the French debate following the 2017 Strategic Review, which advocated concrete achievements, cooperation using the instruments and provisions already available, without fundamentally opposing NATO and CSDP³⁸. The aim is to try to accommodate the strategic culture of countries like France, which must first develop a vision and then define means, with that of many member states, which rather express strategic anchors that are accompanied by partial capabilities, without this being part of a truly global vision. Thus, the "strategic compass" would allow for a work of orientation that could both appear to be at the origin of certain processes while pragmatically encompassing the already existing common defence se-

³² "Le nouveau président américain Joe Biden réitère sa détermination à engager une coopération sans faille avec ses alliés", *Bulletin Quotidien*, 22 February 2021.

³³ Stefano Silvestri, "[Il momento "Riccioli d'oro" di Joe Biden e la politica USA](#)", *Affarinternazionali*, 22 February 2021.

³⁴ Jean-Pierre Darnis, "[Draghi et le monde : le retour de l'Italie hors de ses frontières](#)", *Le Grand Continent*, 27 March 2021.

³⁵ Claudia Major, Christian Mölling, "[Autonomie stratégique européenne : arrêtons de nous enliser dans les débats toxiques](#)", *Editoriaux de l'IFRI*, December 2020.

³⁶ Claudia Major, Christian Mölling, "[Europe, Germany and Defence: Priorities and Challenges of the German EU Presidency and the Way ahead for European Defence](#)", *Notes de la FRS*, n° 63/2020, 13 October 2020.

³⁷ See for example the reflection developed by Arnout Molenaar, from the European External Action Service. Even if he underlines the indefinite character of the concept of European strategic autonomy, he presents a plea for a European Union that can acquire the attributes of a power by following the roadmap established by the "strategic compass" (Arnout Molenaar, "[Unlocking European Defence. In Search of the Long Overdue Paradigm Shift](#)", *IAI Paper*, January 2021).

³⁸ Jean-Baptiste Blandenet, "Plaidoyer pour une culture stratégique européenne", *Revue Défense Nationale*, vol. 836, n° 1, 2021, pp. 82-87.

quences. It is worth noting that, during a recent meeting between Josep Borrell and the Italian Minister of Defence, Lorenzo Guerini, the latter praised the “strategic compass” exercise, insisting on complementarity with NATO, which in a way brings us back to the CSDP version of European defence integration³⁹.

The reaffirmation of the CSDP follows the consensual path of the efforts already made, and makes it possible to reconcile the different nuances of European defence integration. However, one may think that it has a rather limited margin for progress, especially if one measures the results against the intensity of the political and administrative effort made.

It must be said that the integration of defence in Europe is often difficult, for fundamental reasons. Member States have a national and exclusive conception of sovereignty with regard to defence. It is quite logical and legitimate to organize the protection of a territory and a population while at the same time protecting oneself from foreign intrusions, or even projecting one’s forces abroad. Defence systems are therefore organized around visions of “national security”, which do not allow for the pooling of what could be called “European security”. In other words, national security, which corresponds to the sovereignty of democracies, is a concept that is particularly difficult to hybridize, even within the framework of objective political convergences in Europe. Moreover, defence personnel are the guardians of this national security, and it may therefore be paradoxical to ask them to become the spearheads of an integration when they have all sworn loyalty to their respective flags. We have here a functional collision between the eminently national character of the defence systems in the member states and the wills displayed within the CSDP and its institutions, which explains the slow progress.

At the heart of this matter is the monopoly of legitimate violence, the use of force, which for the moment can only be defined by the member states as a democratic place for the exercise of the rule of law. Of course, we could think that in the future this monopoly of legitimate violence could be exercised at the European level, but this would require a level of federal integration that we are far from at the moment. And even if some authors call for a European sovereignty based on a concept of autonomy in defence matters, underlining the impossibility of achieving this objective with the current structure of nation-states, and therefore express the will to make a federal leap, we must measure the difficulties of such a federalist roadmap for defence⁴⁰.

Moreover, functionalist integration does not work for defence, because the monopoly of violence is not shared, or only marginally. And it is in the name of this monopoly of legitimate violence exercised in a democracy that the member states have different cultures and practices of use of force, with, for example, an interventionist France, while many other member states are distinguished by their relative pacifism. Both types of positions are legitimate, and the Union’s fortune probably comes from a panoply of diverse possibilities among member states rather than from uniformity. In concrete terms, France is legitimate when it intervenes by projecting forces into external theaters, and member states that do

³⁹ “Difesa: incontro ministro Lorenzo Guerini con Alto Rappresentante dell’Unione per gli Affari esteri e la Politica di sicurezza, Josep Borrell”, *Report Difesa*, 19 March 2021.

⁴⁰ Voir Eckhard Lübckemeier, “[Standing on Our Own Feet? Opportunities and Risks of European Self-Defence](#)”, *SWP Research Paper*, February 2021.

not do so are equally legitimate. This question of force projection is not insignificant because it represents the scenarios evoked for the use of the military instrument, operations that also obey democratic decision-making and authorization procedures that vary from one member state to another.

This specificity of defence should make us particularly cautious about our expectations regarding possible progress in the integration of defence in Europe. This represents a brake on strategic autonomy, if this concept is used as a global and inclusive vision that does not allow the natural breathing space for the differentiation of defence and security policies in Europe. And it is important not to allow too strong a political statement to hinder the path of the CSDP, a necessary process that must be pursued. It is also important to note that the statement of European strategic autonomy has been commonly adopted as the new inclusive concept of the CSDP/CFSP of the European Union without any critical reflection not only on the effects of the “strategic” reference for the defence sector, but also on a consensus that essentially revolves around the issues of technological and industrial autonomy, a difficult issue to deal with within the CFSP⁴¹.

However, even if we note these blockages, the debate on European strategic autonomy reflects the increase in convergence on fundamental issues. Defence could be more of a problem than a solution if deterrence is included. And it should be borne in mind that, in order to get around the pitfalls represented by the national impermeability of defence systems, we often turn to equipment, i.e. industry and technology, to fuel common projects and thus nourish European functionalism in this area, with the step forward taken by the European Commission in creating the European Defence Fund. Would a “strategic autonomy” excluding defence be possible? This retreat to the industrial and technological side indicates, however, that one of the key themes for the positioning and growth of the European Union is that of attention to the global challenges of technology, namely European technological sovereignty, a theme that is developing strongly and indicates the opportunity for a paradigm shift.

It is worth noting that a recent study by the Center for Digital Economy (CED) of Rome’s LUISS University identifies technological sovereignty as a fundamental element of European strategic autonomy, which illustrates both the convergence of Italian industrial circles on the theme of technological sovereignty, but also a different scaling of priorities. Here, the authors defend an economic vision of the system’s competitiveness⁴². The question of the link between strategic autonomy and technological sovereignty is therefore raised, with the latter concept appearing to be particularly interesting because it is likely to be widely convergent, which makes it politically performative.

⁴¹ For an example of analysis including CSDP within European strategic autonomy, see Ester Sabatino, Daniel Fiott, Dick Zandee, Christian Mölling, Claudia Major, Jean-Pierre Maulny, Daniel Keohane, Domenico Moro, “[The Quest for European Strategic Autonomy – A Collective Reflection](#)”, *Documenti IAI*, December 2020.

⁴² Rosario Cerra, Francesco Crespi, “[Sovranità tecnologica elementi per una strategia italiana ed europea](#)”, *Centro Economia Digitale*, March 2021.

2. European technological sovereignty, between accelerating convergence and the creation of new sovereignties

European technological sovereignty is a concept that has seen a remarkable acceleration in the context of the Covid-19 crisis⁴³. This political proposal, which appeared in France in the early 2000s, remained a dead letter at the European level for a long time, since it seemed so isolated, corresponding, as it does, to a particular perception on the part of France of the challenges of controlling technological production. The French vision has a technological and industrial matrix: it considers that sovereignty cannot be truly exercised if there is dependence on foreign countries. It is therefore necessary to ensure both the continuity of the production of certain technologies, through an industrial policy, but also to regulate production so as to maintain control of technological chains, in a vision of autonomy that has historically been fueled by the desire to organize the credibility and continuity of nuclear deterrence.

A European convergence took place from 2013, when the Snowden case marked a threshold, in the German context, in terms of attention on the control and production of digital data. Based on this political requirement, Germany formulated technological and industrial policies that led, for example, to the launch of a sovereign European cloud, with the GAIA-X project, quickly supported by France.

At the same time, the opening of a procedure by Max Schrems before the Irish courts to obtain the protection of individual rights in digital platforms also represented a remarkable evolution: from a jurisprudence point of view, we have since witnessed in Europe a constant movement that reflects citizen pressure to broaden the guarantees of individual rights in the digital context⁴⁴. This evolution is fundamental because it brings important changes in digital jurisprudence, such as the recent questioning of the “safe harbor” agreement regulating digital data exchanges between the European Union and the United States. It also contributes to the rise of the Commission’s regulatory action in this area, of which the GDPR represents one of the most important moments. Finally, it reflects the growth of a political agenda of rights protection, particularly followed by the European Parliament.

The notion of technological sovereignty is therefore expressed and reinforced by the convergence of three strands: a “French-style” vision, which takes into account the need for mastery and control of technological and industrial tools with a view to independence from third-party powers; a “German-style” vision, which takes a close look at data control and intends to guarantee independence from third-party countries; and a “citizen-style” vision, which wants to defend the protection of individual rights in the face of the problems of data harvesting and use by information technology giants. These three logics find many points of convergence that make it possible to define a broad consensus between the member states on all these subjects, an aspect that is also found in the work of the European Parliament.

⁴³ Jean-Pierre Darnis, “[La souveraineté technologique européenne, une réponse à la crise de la Covid-19 ?](#)”, *Notes de la FRS*, n° 41/2020, 19 May 2020.

⁴⁴ Jean-Pierre Darnis, “[Le relazioni transatlantiche al tempo del digitale: la questione del trasferimento di dati](#)”, *IAI papers*, January 2021.

The European Commission is at the forefront of digital regulation. If the RGPD is now a global reference, we must emphasize the recent progress and acceleration in this area: the presentation of a legislative text on digital services, the Digital Act of December 2020, lays the groundwork for a subsequent directive that raises the bar in terms of democratic control of digital platform content, but also in terms of regulating competition in the market, reflecting a vision of fighting against non-European monopolies on the internal market⁴⁵. This is a remarkable initiative, which confirms the strengthening of European sovereignty in digital matters, a sovereignty developed at the level of the Commission and widely supported by the Member States. This is a clear example of the creation of sovereignty at the level of the European Union in a new field, which does not compete with the prerogatives of the Member States, but creates a positive-sum game in which the political guardianship progresses.

Beyond this question of regulation, we should also note the European Commission's specific decisions in the field of industrial policy, which represent milestones in a very concrete technological policy. The launch of a feasibility study for the creation of a European satellite constellation for high-speed communications⁴⁶, the desire to federate a "European alliance" for space launches⁴⁷, the promotion of a "European cloud" based on the GAIA-X project⁴⁸, and the announcement of an industrial project of common interest to produce future generations of microprocessors⁴⁹ illustrate a remarkable acceleration of the European Commission's agenda in recent months. These initiatives are all presented in the context of the desire to assert technological and digital sovereignty. The European Commission's announcement on February 22, 2021 of an action plan to improve synergies between the civil, space and defence industries illustrates the rise of its industrial and technological policy capabilities around DG DEFIS⁵⁰. During this presentation, three flagship programs were also announced concerning UAVs, space traffic management and satellite connectivity.

These different initiatives touch on essential points, as they seek to enable Europe to maintain or acquire technological and industrial control over technological nodes that are strategic in the context of global competition. Indeed, the growth in the capacities of American technological integrators creates a potential monopoly situation on information management that could completely suffocate the European Union. But on the other hand, the growth of Chinese capabilities also creates pressure on the entire technological spectrum. The control of information technologies, and the maintenance of sovereignty over as many segments as possible, as shown by the initiative on microprocessors, is a question of paramount importance, pertaining to the ability of the European Union and its member states to

⁴⁵ Jean-Pierre Darnis, "[Un digital act per l'Europa](#)", *Affarinternazionali*, 17 December 2020.

⁴⁶ "Souveraineté numérique : la Commission européenne lance un projet de constellation satellite", AFP, 23 décembre 2020. See also Jean-Pierre Darnis, "[Space as a Key Element of Europe's Digital Sovereignty](#)", *Notes de l'Ifri*, December 2020.

⁴⁷ "Space. Thierry Breton Advocates a 'European Alliance of Space Launcher'", *Bulletin Quotidien Europe*, 13 January 2021.

⁴⁸ "La présidente de la Commission européenne Ursula von der Leyen mise sur les données, l'IA et les infrastructures pour consolider l'avenir numérique de l'UE", *La Correspondance de la Publicité*, 17 September 2020.

⁴⁹ Derek Perrotte, Florian Deves, "L'Europe à la relance pour les puces électroniques", *Les Echos*, 22 January 2021.

⁵⁰ "Industrie européenne : la Commission prend des mesures pour améliorer les synergies entre les industries civile, spatiale et de la défense", *News Press*, 24 February 2021.

exist as a democracy. This question of technological sovereignty is all the more of a priority because it has repercussions on the strategic nature of technological control, which is also a problem for European security. It should be noted that, in parallel with European developments, the Biden administration is in the process of drawing up a report and initiatives comparable to those of the Europeans in terms of reviewing the capabilities of the American technological production chain⁵¹. The American vision of a public policy of industrial reinforcement opens up the possibility of collaboration with allied countries, which could also provide renewed common ground between the European Union and the United States.

The question of maintaining technological autonomy is fundamental for European security, but it appears secondary to technological sovereignty in the broad sense. This aspect also represents the translation of a technological development which, since the end of the 20th century, has been driven by civilian industry and within which the defence and security industries have long since lost their primacy.

This element is also reflected in the inclusion of defence within a much broader portfolio of Thierry Breton's responsibilities at the European Commission's DG DEFIS, which includes industry, services, digital, tourism, audiovisual, space and defence. This broad mandate given to the French Commissioner contributes to the priority given to technological sovereignty, a vision to which President Ursula von der Leyen and Vice-President Margrethe Vestager contribute. The Covid-19 crisis has also seen the Commission position itself in a remarkable way, both with the announcement of a colossal economic recovery plan, but also with the common vaccine procurement strategy and the attention paid to the continuity of the internal market, and lastly, and perhaps most importantly, with a coordinating role for industrial policy on vaccines, elements that have not only allowed the European Union to maintain the essential functioning of its economy during the crisis, but have also allowed Europe to register real progress.

It is particularly significant that the issues of vaccine production and continuity of supply are now included in the concept of strategic autonomy⁵². This illustrates once again the broadening of the spectrum attributed to "strategic". During the Cold War, vaccines for armed forces and state representatives would have been put in place to ensure continuity of their functions in case of conflict. Today, vaccines are part of overall strategic autonomy, which confirms how far we are from the "strategic culture" mentioned at the beginning of this text. The question of the European internal market is another aspect of European technological sovereignty that is too often neglected. It is impossible to conceive and project a European sovereignty in this area that would be nothing more than the juxtaposition of national sovereignties folded into an autarkic form of industrial policy. The maintenance and development of the internal market are fundamental to ensure the durability and success of such a policy. Maintaining the market requires industries that comply with EU rules, and do not mention the exceptions granted to defence, but it also means that if we strengthen the protection mechanisms against potentially problematic extra-European investments in terms of technology control, we preserve and promote intra-European investments. This aspect is

⁵¹ "Biden to Issue Supply Chain Executive Order with Reviews Focused on Risk, Resiliency", *Inside Cybersecurity*, 24 February 2021.

⁵² "Après la Covid-19, le plan d'action de l'UE pour la propriété intellectuelle", *Usine nouvelle*, 4 February 2021.

fundamental and it is necessary to take into account a pan-European concept of investment control, but also of guarantees, which require strengthened bilateral relations. Only in this framework will it be possible to allow private companies to grow across the borders of several member states.

Finally, there is also the problem of critical mass provided by public demand. The American case shows us how fundamental orders placed by the federal government are for the development and supremacy of American technology producers. And it is worth noting how the national security administrations are nowadays the preferred customers for technology giants: in the field of cloud, data transmission, and space services, the comfortable public contracts received by large technology companies represent a profitable counter-cyclical market that strengthens competitiveness. The emergence of forms of European public orders for technological services, which can also come from the defence and security sectors, is another condition for maintaining European technology in a situation of relative competitiveness compared to that of the United States or China.

Conclusion

The Covid-19 crisis is producing an acceleration of geopolitical redefinitions that confirms the need for European affirmation⁵³. Integration in the field of defence remains a necessary but difficult path, full of obstacles, which can make us doubt the effectiveness of the proposal of “European strategic autonomy” and should lead us to conceptually go beyond the desire to reproduce the instruments of national power (diplomacy or defence) at the level of the Union. On the other hand, the use of the expression “strategic autonomy” with a very broad spectrum, including trade relations as was practiced during the German presidency of the Union⁵⁴, creates further confusion because it does not allow for differentiation between the strategic element in the historical sense of the term, linked to defence policy, and the requirement for an autonomous political strategy for a whole series of civilian sectors, factors of interaction with third countries⁵⁵. For all these reasons, European strategic autonomy remains a problematic concept, because if it is interpreted in its classical sense, it can also represent a potential blocking factor in the re-launch of transatlantic relations, which has been on the agenda since the election of Joe Biden.

⁵³ Florence Gaub, Lotje Boswinkel, “[How Covid-19 Changed the Future](#)”, *Chaillot Papers*, n° 162, December 2020.

⁵⁴ Delphine Nerbollier, “Le quasi sans-faute de la présidence allemande”, *La Libre Belgique*, 31 December 2020.

⁵⁵ Emmanuel Macron’s speech at the Ecole de Guerre on February 7, 2020, contained injunctions to develop both European strategic autonomy and technological sovereignty, which clearly illustrates the political priority given to these themes but also a certain confusion, which then constitutes a handicap for the operational implementation of policies. This element can also be observed in the interview given by President Emmanuel Macron to the “Grand Continent” when he states that “it is a question of thinking in terms of European sovereignty and strategic autonomy” (see “[Discours du Président Emmanuel Macron sur la stratégie de défense et de dissuasion devant les stagiaires de la 27^{ème} promotion de l’école de guerre](#)”, *op. cit.* ; and “[La doctrine Macron, une conversation avec le Président français](#)”, *Le Grand Continent*, 16 November 2020).

On the other hand, technological and digital sovereignty seems much more promising as a concept and may allow the EU to emerge from this moment of political acceleration⁵⁶. Issues of technological and digital sovereignty are at the center of current geopolitical shifts: they determine a large part of the interests and power positions of world powers, and they therefore impose a “techno-centric” reading of international relations. Technology has the fundamental advantage of being able to bring about consensual operations for the creation of new sovereignties at the level of the European Union, within a framework managed by the Commission, which is not the case for defence.

Following this logic, we can see both a growth in European sovereignty in the field of technology and data regulation, but also the prominent role played by technology and technological initiatives in the projection of the European Union in the world. The Galileo program already represented a remarkable affirmation of the European Union with respect to the United States, when the Union imposed itself in the negotiation of the frequencies of the positioning satellite constellation dealing with American GPS⁵⁷. This example shows us how much European technological growth makes it possible to raise both the level of demand and the political profile of the Union, but also the quality of the transatlantic relation⁵⁸. Thus, the growth of European technological sovereignty must also benefit the renewal of transatlantic relations in order to avoid a double trap: that of an equidistance of Europe between the United States and China⁵⁹, which would deny both the history of the transatlantic alliance but also the opportunity of a “techno-political” dialectic between democracies, and that of a position so ancillary to the United States that it would lead to a reaction of rejection, immediately exploited by a China that acts as a very realistic actor in the context of international relations⁶⁰. The question of defending the values of democracy by and through technology is at stake, as demonstrated by the evolution of Chinese policy on artificial intelligence⁶¹. This is a narrow path, but it is possible to place the European Union’s technological assertion at the center of a strengthening of transatlantic ties, between the progression of a European-style regulation and a well-understood American antitrust policy that allows European technology to exist. The Biden administration’s opening regarding the taxation of digital platforms is going in this direction⁶². This is a potential positive-sum game that needs to be further structured, but which must seize the opportunity represented by the parallel af-

⁵⁶ In a recent article, Thomas Gomart underlined the German preference for the theme of “European sovereignty” (“L’Allemagne, carrefour de la mondialisation”, *Études*, 2021/2 (February), pp. 31-32).

⁵⁷ “L’UE et les Etats-Unis sont arrivés à un accord sur la coexistence des systèmes satellites GPS et Galileo”, *Agence Europe*, 27 February 2004.

⁵⁸ It is also significant to note that Galileo is today presented as a decisive contribution to European strategic autonomy, whereas the implementation of this system largely preceded the concept (Daniel Fiott, “[The European Space Sector as an Enabler of EU Strategic Autonomy](#)”, *EU ISS Report*, 16 December 2020).

⁵⁹ On the European position towards China, see Philippe Le Corre, “Europe et Asie : la porte étroite”, *Ouest France*, 17 February 2021. Also noteworthy is the analysis of Elvire Fabry who argues for an increase in European coordination and negotiation capacities in this area (see Elvire Fabry, “[Après le Brexit, appliquer la ‘méthode Barnier’ avec la Chine](#)”, *Blog Institut Jacques Delors*, 16 February 2021).

⁶⁰ On this point and on the desirability of strengthening the transatlantic link on China issues, see Antoine Bondaz, “L’Amérique face à la Chine”, in [La Chine dans le monde, actes du colloque du 17 novembre 2020](#), *op. cit.*, pp. 13-21.

⁶¹ Melissa Heikkila, Steven Overly, “[China Wants to Dominate AI. The US and Europe Need each other to Tame it](#)”, *Politico*, 2 March 2021.

⁶² Fabrice Nodé-Langlois, “Taxe numérique : Washington ouvre la voie à un accord”, *Le Figaro*, 27 February 2021.

firmation of a vision of technological sovereignty relatively open to allies on the part of the new American presidency⁶³.

Each technological brick added by the European Union therefore has a series of positive consequences in terms of political affirmation and negotiating capacity in the global context. Certainly, the leading role played by DG DEFIS within the European Commission calls for a strengthening of political and strategic development capacities around technology, and for support from Member States, which must involve aligning national agendas with the European agenda, and not vice versa, an element to be kept in mind in the context of the future French presidency of the European Union. The recent proposal to create a Technology Competitiveness Council in the United States as part of a national technology strategy confirms the importance of raising the profile of these capabilities as well at the European Union level⁶⁴.

The path to the growth of European technological and digital sovereignty must be built by constantly maintaining the combination of technological investment and regulation. In this context, we must emphasize the urgency of strengthening European public capacities for the analysis and evaluation of algorithms, the technology at the heart of artificial intelligence⁶⁵, which could involve the creation of a new European algorithmic authority. And we must absolutely avoid the logical trap of projecting onto the European Union an overly classical analysis, which would consider that if the Union does not acquire all the attributes of power, then it is not progressing. Empirical observation shows us that this is not the case. The European economy and the euro currency area are far from perfect in the eyes of many theorists, but they have demonstrated remarkable resilience to crises and growth.

Integration and progress in sovereignty are not linear at the level of the Union. We can therefore imagine a situation in which the European Union could experience an acceleration in technological sovereignty, while integration at the level of defence remains limited. Indeed, the Union has been progressing for a long time while being a “non-power” in the classical sense of the term, although the two proposals may not be directly correlated. On the other hand, in the context of the twenty-first century, technology is such a fundamental factor that it alone can determine a “techno-sovereign” Europe that rhymes with a remarkable affirmation of power.

The dynamics of technological sovereignty, accelerated by the Covid-19 crisis, which in many respects constitutes a leap forward in technological modernization, may be a promising future for a Europe that can revise its priorities and instruments in order to project itself definitively as a pole of technological democracy with global reach.

This positive dynamic should not make us forget the problematic character of the theme of “strategic autonomy”. From now on, we could easily replace the expression “European stra-

⁶³ See, on this aspect, the reflection of Elena Lazarou in “L’autonomie stratégique européenne et la présidence Biden”, *op. cit.*

⁶⁴ Megan Lamberth, Martinjn Rasser, “[A Solid Plan to Compete with China in Artificial Intelligence The NSCAI's New Report should also be Taken as the First Plank in a National Technology Strategy](#)”, *Defenceone.com*, 1 March 2021.

⁶⁵ See Paolo Benanti, “Algor-ethics: Artificial Intelligence and Ethical Reflection”, *Revue d'éthique et de théologie morale*, vol. 307, n° 3, 2020, pp. 93-110.

tegic autonomy” with “European autonomy”, as is the case, for example, for the crucial issue of the industrialization of vaccines, without altering its meaning. But then, what to do with the term “strategic”? We have shown the problematic nature of the divergences between concepts inherited from “strategic culture” and their current uses⁶⁶. However, this expression seems to be reinforced in the different “elements of language” at the European level⁶⁷. In order to balance the two, it might be necessary to differentiate the concepts. For example, we could specify a “European strategic autonomy for defence and external action” which would take up the CSDP/CFSP and develop it, leaving aside the problematic issue of nuclear deterrence. This sub-category would also allow for the development of relations between CSDP and NATO by limiting the side effects linked to other issues⁶⁸ and would also have the advantage of ensuring the continuity of the institutional perimeter of CSDP/CFSP at a time when the creation of new institutions, such as a “European Security Council”, is being discussed⁶⁹.

At the same time, it would be appropriate to set up a “European strategic technological and industrial autonomy” that would allow the agenda of technological sovereignty to be unfolded, the key aspect of the current sequence in which the issue of vaccines is at the forefront, and to confirm the leadership role exercised by the European Commission’s DG DEFIS in this area. It is within this perimeter, which includes questions of technology, industry and trade, as well as the dimension of relations with third countries, that the current acceleration of European convergences must be expressed.

This is an adaptation that will probably provoke a certain rejection on the part of the advocates of strategic studies, but which may represent the terms of a compromise that could accompany not only the convergence of national political agendas with regard to European autonomy, but also the reinforcement of the investment policies conducted by the European Union.

⁶⁶ The broad spectrum of strategic autonomy is reflected in the statements of the High Representative of the European Union for Foreign Affairs and Security Policy Josep Borrell (see for example Josep Borrell, “[Pourquoi l'Europe doit-elle être stratégiquement autonome ?](#)”, *Editoriaux de l'Ifri*, December 2020).

⁶⁷ Nathalie Tocci, “[European Strategic Autonomy: What it is, why we Need it, how to Achieve it](#)”, *IAI altri papers*, February 2021.

⁶⁸ For the continuing division of labor between the EU and NATO, see Thierry Tardy, “[For a New NATO-EU Bargain](#)”, *Egmont Security Policy Briefs*, 25 February 2021 ; See also Sophia Becker, Christian Mölling, Victoria Nuland, “[Transatlantic Action Plan](#)”, *DGAP Online Commentary*, 15 February 2021.

⁶⁹ Frédéric Mauro, “[Pour un nouveau cadre institutionnel de la politique de sécurité et de défense commune : la mise en place d'un Conseil de sécurité européen](#)”, *Analyse Programme Europe, Stratégie, Sécurité, IRIS*, 6 January 2021.

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