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Bachelor's Thesis

National Strategic Autonomy within the European Context: The Case of French Weapons Programs

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Declaración de Uso de Herramientas de IA Generativa en Trabajos Fin de Grado en Relaciones Internacionales.

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1. Introduction

In recent years, the concept of strategic autonomy has re-emerged as a central theme in both academic and policy debates—particularly in the field of European defense. Traditionally linked to the idea of self-reliance in military affairs, strategic autonomy now encompasses broader concerns about the ability of states or regions to act independently in an increasingly volatile and interdependent global environment. Within the European Union, this debate has taken on new urgency amid growing uncertainties regarding transatlantic defense guarantees and the limitations of multilateral frameworks.

While the EU has launched a range of initiatives to foster joint capabilities and reduce external dependencies, the core of Europe's defense potential still lies in national programs. Among member states, France stands out for its long-standing tradition of defense sovereignty and its continued investment in domestically developed, high-end military systems.

This thesis investigates the French approach to strategic autonomy by analyzing three emblematic national weapons programs: the Dassault Rafale fighter jet (air domain), the *Charles de Gaulle* aircraft carrier (naval domain), and the Leclerc main battle tank (land domain). These platforms serve as case studies to evaluate how national defense initiatives contribute to strategic autonomy and how they interact with collective efforts toward a more integrated European defense. The objective is, first, to assess the level of autonomy each program provides in terms of design, production, and operational independence; and second, to explore the broader implications of this model for European defense cooperation.

1.2. Background and context

In recent years, the strategic landscape of European security has undergone a profound shift. The return of great power competition (White House, 2017, p. 27), the destabilizing effects of regional conflicts, and the growing volatility of transatlantic relations (Ewing, 2025) have brought renewed urgency to the question of how Europe can secure its defense and foreign policy autonomy. While strategic autonomy has long figured in EU rhetoric—particularly since the 2016 EU Global

Strategy (European External Action Service, 2016)—it is only amid recent disruptions that the concept has acquired a concrete and operational dimension. The war in Ukraine, increased assertiveness by China (Fravel, 2020), increasing conflict in the global South—such as the renewed war in Gaza, the civil war in Sudan, violent instability in the Sahel region, and growing insecurity in the eastern Democratic Republic of the Congo—and the unpredictability of U.S. foreign policy (Ewing, 2025) have created a perception among European leaders that external guarantees can no longer be assumed as stable or permanent.

Specifically, the return of Donald Trump to the presidency of the United States has only deepened this perception. His transactional approach to alliances, repeated criticism of NATO burden-sharing, and suggestion that U.S. support might be conditional on defense spending targets (Ewing, 2025) have challenged the credibility of collective defense in the transatlantic context. As a result, several European governments have begun to reconsider the degree to which their national security should rely on external actors—especially in core areas such as procurement, technology, and operational readiness. The idea of "strategic autonomy" has thus moved from abstract goal to political imperative, particularly in defense policy.

However, despite this growing consensus around the need for greater autonomy, the practical realization of this objective remains uneven across the EU. Most member states still rely on foreign suppliers for critical defense systems and few possess the industrial base necessary to independently design and sustain complex weapons platforms. Moreover, European defense cooperation continues to be hindered by institutional fragmentation, political divergences, and budgetary constraints (Rough & Kasapoğlu, 2025).

In this context, France emerges as an exceptional case within the EU. It is the only member state with nuclear capabilities, a permanent seat on the UN Security Council, and a fully integrated military-industrial complex. Historically committed to the principle of strategic independence, France has consistently invested in domestically developed weapons systems. Rather than align with the prevalent European model of multinational development or plain and simple procurement

from allies like the United States, France has sought to maintain its capabilities under national control.

This distinctive trajectory makes France an ideal case study to explore how strategic autonomy is constructed and sustained through defense industrial policy. By focusing on emblematic national programs that span air, sea, and land domains, this thesis engages with the core mechanisms through which a European state attempts to preserve operational sovereignty while remaining embedded in multilateral frameworks such as NATO and the EU. The selected platforms—the Dassault Rafale, the *Charles de Gaulle* aircraft carrier, and the Leclerc main battle tank—are not only technologically advanced, but also symbolically central to France's self-perception as an autonomous military power.

The French case also offers critical insights into the structural tensions that shape the pursuit of strategic autonomy within a collective European context. While many EU initiatives encourage joint procurement, standardization and industrial interoperability (European Commission & High Representative, 2025, pp. 5, 7), France's emphasis on national development highlights the trade-offs between sovereignty and efficiency.

Finally, the French model allows for an exploration of how strategic autonomy functions not only as a material capability but also as a discursive and political strategy. France has actively promoted the concept of "Europe puissance" (Élysée, 2017) and positioned itself as a leader in defining the terms of European defense cooperation. Analyzing its national programs offers a concrete window into how this discourse is operationalized and how it interacts with institutional efforts at the EU level.

For all these reasons, the French case represents a prime example for studying the pursuit of strategic autonomy in contemporary Europe.

1.3. Methodology

This thesis adopts a qualitative and practical research approach aimed at analyzing the relationship between national defense programs and strategic autonomy in the European context. The objective is to examine how the design, development, and

maintenance of domestically produced weapon systems contribute to different levels of strategic autonomy, as conceptualized in the academic literature.

The idea for this research emerged during a professional internship in a Spanish defense company tasked with the development of a fully national armament program. Within that context, considerable emphasis was placed on how domestic defense production contributes to national and European strategic autonomy. Drawing on prior knowledge of the Rafale fighter jet—one of the few European alternatives to the U.S.-built F-35—this initial interest expanded into a broader examination of France's approach to defense procurement. France stood out within the European Union for its consistent pursuit of fully sovereign defense programs, prompting the decision to focus on this case in depth.

To ensure a comprehensive analysis, it was decided that the research would focus on three emblematic French defense programs, each corresponding to a different military domain: the Dassault Rafale (air), the *Charles de Gaulle* aircraft carrier (naval), and the Leclerc main battle tank (land). These programs were selected based on their strategic relevance, technological sophistication, and continued visibility in contemporary defense debates. Initially, the study considered examining the Le Triomphant-class nuclear submarine as the representative case for the naval domain. However, it was ultimately excluded due to the limited availability of publicly accessible literature and the classified nature of many of its technical features. The *Charles de Gaulle* aircraft carrier was selected instead, given its symbolic and operational prominence in French defense strategy and its relatively greater coverage in diverse sources.

While this research does not test a specific hypothesis, it is guided by an implicit causal logic: national defense programs are considered the independent variable, while the degree of strategic autonomy achieved in each case functions as the dependent variable. This structure enables a comparative analysis of how sovereign defense initiatives shape a country's ability to act independently in different military domains.

Once the independent variable was decided, it was time for the theoretical framework to be developed. The dependent variable—that is, the concept of strategic autonomy— was operationalized using the spectrum proposed by Vu, Ngo, and Nguyen (2024), which defines autonomy as a continuum—from "no autonomy" to "full strategic autonomy"—rather than a binary condition. This model serves as the primary analytical tool for positioning each program according to its degree of independence. To complement this approach, the thesis also integrates three additional perspectives that were brought up by guidance from the academic supervisor: (1) the political economy framework proposed by Becker (2020), which emphasizes the role of industrial capacity, technological investment, and structural constraints in shaping autonomy; (2) the collective action problem, which reflects the tensions between national autonomy and multilateral cooperation in the European defense environment; and (3) discursive institutionalism, which explores how states—particularly France—frame and promote strategic autonomy as part of their geopolitical narrative (Juncos & Vanhoonacker, 2024; Młynarski, 2024).

Accordingly, the empirical analysis is structured in four sections for each program. First, each is assessed through Vu et al.'s strategic autonomy spectrum, examining the degree of domestic control over its life cycle. Second, Becker's political economy lens is applied to understand the industrial, financial, and institutional conditions that shape the program's development. Third, each case is situated within the broader European defense framework to analyze how unilateral armament strategies interact with collective European initiatives. Finally, the study explores whether and how each program contributes to France's discursive leadership in shaping the meaning and direction of European strategic autonomy.

The research question guiding this thesis is the following:
To what extent do national weapons programs enable France to achieve higher levels of strategic autonomy, and what structural tensions arise from this pursuit within the European defense framework?

This question will be addressed in the concluding section, where the findings from each case will be synthesized to assess France's overall approach and its implications for the future of European defense cooperation.

Finally, it is worth noting that AI tools were used to translate French-language sources—DeepL translator—and to improve the language fluency of certain passages in English—ChatGPT. All content, ideas, and analysis presented in this thesis are entirely the student's original work.

2. Theoretical framework

Strategic autonomy has become a central concept in contemporary security and defense debates, particularly within European and transatlantic policymaking. However, its meaning remains contested, with interpretations varying significantly. While some perspectives emphasize the military and defense spheres, others adopt a broader approach that incorporates economic and trade-related elements. This conceptual plurality has led to ongoing debates regarding the conditions necessary for achieving strategic autonomy and the extent to which states or regional organizations can realistically pursue it in an interconnected world. Given the complexity of the topic, this theoretical framework is structured to provide a comprehensive review of strategic autonomy, integrating different academic perspectives.

The first section presents the concept as a spectrum, drawing on a framework that challenges the binary notion of dependence versus independence. The second section introduces the notion of Open Strategic Autonomy (OSA), which has emerged in EU policy discussions, highlighting the tension between maintaining economic openness and reducing strategic dependencies. This perspective expands the concept beyond military considerations, incorporating several other factors.

The third and fourth sections introduce a political economy approach to strategic autonomy. This perspective, drawn from Becker (2020), underscores how economic constraints and structural factors shape a state's ability to develop self-sufficient defense capabilities. In addition, strategic autonomy is examined as a collective action problem, illustrating the paradox faced by states that seek greater independence while remaining embedded in multilateral security frameworks.

These sections provide a critical foundation for analyzing how national and regional efforts interact in shaping security policies.

Beyond material capabilities, the fifth section explores strategic autonomy as a discursive construct, focusing on how states—particularly France—engage in discursive leadership within multilateral forums to frame and legitimize specific interpretations of the concept.

Finally, to bridge the gap between theoretical insights and real-world policymaking, the sixth section examines how strategic autonomy is operationalized in the policy domain by analyzing a policy document and then comparing it with academic conceptualizations.

By structuring the theoretical framework in this way, this thesis provides an exhaustive foundation for analyzing France's approach to strategic autonomy. It clarifies the conceptual boundaries of the term, identifies the key factors shaping its development, and establishes an analytical basis for assessing how national defense programs contribute to a state's position within the strategic autonomy spectrum.

2.1. The spectrum of strategic autonomy

This thesis will be partially based on Vu, Ngo, and Nguyen's (2024) work. They propose a nuanced approach to understanding strategic autonomy, arguing that it exists on a continuum rather than as an absolute condition. Their framework introduces a five-level spectrum of autonomy, which ranges from complete dependence to full strategic autonomy (p. 240):

1. No autonomy: A state or actor is under direct control of another power and has no ability to make independent decisions.
2. Symbolic autonomy: A state retains nominal independence but is effectively constrained in critical decision-making, often requiring external approval for significant actions.

3. Limited autonomy: A state has some ability to make independent decisions but remains highly influenced by external actors, particularly in security and economic policies.

4. Robust autonomy: A state exercises significant control over its policies but relies on alliances and external partnerships in certain domains, balancing self-sufficiency with cooperative engagements.

5. Strategic autonomy: The highest level, where a state can independently execute strategic decisions in key areas without external constraints, ensuring full self-reliance in national security, economy, and critical industries (p. 236).

Therefore, their key contribution—i.e. the one that will be considered the most for this thesis—is their challenge to the binary perception of autonomy, which has traditionally framed states as either dependent or independent. Instead, they argue that autonomy is best understood as a dynamic and evolving process.

Furthermore, they highlight that true strategic autonomy requires strong national capacities, a diversified network of partnerships, and the ability to sustain independent policy decisions in an increasingly interconnected global system.

Another significant aspect of this framework is its applicability beyond the traditional state-centric model. Vu et al. suggest that international organizations and regional alliances can also exhibit varying degrees of strategic autonomy, depending on their institutional structures and policy mandates.

2.2. Open strategic autonomy (OSA)

Moreover, while the primary focus of this research is on strategic autonomy in defense, it is necessary to acknowledge that the concept has been applied to other policy domains, particularly in the areas of trade and economic policy.

In recent years, the European Union has embraced the notion of “open strategic autonomy” (OSA) as a central principle guiding its economic and industrial strategies. Schmitz and Seidl (2022) describe OSA as an approach that seeks to maintain economic openness while simultaneously reducing external

dependencies in critical industries and supply chains. This principle is summarized in the sentence “As open as possible, as autonomous as necessary” (p. 848), showing a pragmatic balance between economic interdependence and strategic resilience.

Unlike traditional security-driven strategic autonomy, which is primarily concerned with the ability to operate independently in military and defense matters, OSA focuses on ensuring access to essential goods, technological sovereignty, and the diversification of supply chains to reduce vulnerabilities. This conceptual expansion of autonomy reflects a broader trend in policymaking, where autonomy is no longer viewed exclusively in terms of military self-sufficiency but is increasingly linked to economic security and technological competitiveness.

Despite the growing relevance of OSA in European policy discussions, it is important to distinguish it from the more security-focused interpretation of strategic autonomy that forms the basis of this thesis. The economic and trade-oriented aspects of OSA introduce different mechanisms for achieving autonomy, such as regulatory instruments and trade diversification strategies. While these factors surely play a role in shaping broader strategic considerations, they fall outside the scope of this research.

These elements do not equate to military self-sufficiency, which remains the primary concern of security-driven strategic autonomy. For this reason, this thesis acknowledges the existence of alternative interpretations of autonomy but deliberately focuses on its application in defense policy, where the ability to maintain and develop independent military capabilities is paramount.

2.3. The Political Economy approach

To further justify this focus, this thesis relies on Becker’s (2020) political economy approach to strategic autonomy, which provides a framework for understanding autonomy in defense as a function of industrial capacity, technological development, and defense investment (p. 28).

Becker challenges the notion that strategic autonomy can be fully realized at the national level (p. 32), arguing that the ability to sustain independent defense

capabilities is inherently constrained by economic and industrial factors. His analysis suggests that military autonomy is not simply a matter of political will but is deeply influenced by structural conditions, including defense spending, industrial policy, and fiscal regulations. Unlike broader interpretations of autonomy, Becker's framework focuses specifically on the defense sector, examining how states develop self-sufficient military industries to reduce reliance on external suppliers. This perspective aligns closely with the objectives of this research paper, as it emphasizes the importance of technological sovereignty and domestic defense industries in building and enhancing national strategic autonomy.

2.4. Collective action

Another key contribution of Becker's work is his argument that strategic autonomy must be understood as a collective action problem within multilateral security frameworks (p. 27).

He argues that no individual state can achieve complete autonomy in isolation, as modern defense industries are increasingly dependent on international supply chains, joint defense projects, and cooperative security agreements. This presents a paradox for states seeking strategic autonomy: while national defense programs can enhance self-sufficiency in certain areas, full independence is often unattainable due to economic constraints and the necessity of burden-sharing in defense investments.

This thesis does not refute the importance of multilateral cooperation in strengthening strategic autonomy; rather, it situates national defense programs within Vu et al.'s continuum, recognizing that even in a collective security environment, national initiatives play a crucial role in increasing a state's level of autonomy. Since strategic autonomy is not an absolute condition but a spectrum, national policies and defense programs can contribute to higher levels of self-sufficiency without requiring complete detachment from international alliances.

Becker highlights that states that invest heavily in domestic weapons programs, advanced defense technologies, and independent procurement strategies can move closer to robust or strategic autonomy—if analyzed through the spectrum of

Vu et al.—, even if they remain engaged in cooperative defense frameworks. His analysis suggests that, while full autonomy may be unrealistic for most states, increasing national capabilities in key defense sectors enhances strategic flexibility and reduces dependence on external suppliers.

2.5. Discursive leadership in multilateral forums

Building on these perspectives, it is essential to consider strategic autonomy not merely as a material objective but as an ideational construct that shapes security and defense policies. Strategic autonomy operates both as a practical goal and as a discursive tool, influenced by institutional structures and the ability of actors to frame and promote specific interpretations. This dual nature highlights how strategic autonomy contributes to the construction of security narratives and the formulation of broader defense strategies.

Juncos and Vanhoonacker (2024) emphasize the significance of discursive institutionalism in understanding how strategic autonomy is framed, contested, and institutionalized within various security and defense contexts. They identify three forms of ideational power: (1) *power in*, referring to how strategic autonomy is embedded in institutional structures and policy paradigms; (2) *power through*, illustrating how actors strategically promote and legitimize the concept; and (3) *power over*, demonstrating how dominant actors resist or impose specific interpretations (p. 957). This framework underscores that security policies are shaped not only by material conditions but also by the discursive capacity of actors to define and control the meaning of strategic autonomy.

While traditionally associated with defense policy, the institutionalization of strategic autonomy has evolved differently depending on geopolitical and institutional constraints. Juncos and Vanhoonacker note that strategic autonomy remains a contested concept within European security, as actors advance competing visions (p. 961). Some states advocate for an independent European defense posture, while others view strategic autonomy as complementary to NATO. These divergent approaches reflect enduring tensions between Europeanist and

Atlanticist security paradigms, with the former promoting greater European self-reliance and the latter emphasizing transatlantic cooperation (p. 958).

Expanding on this, Młynarski (2024) analyzes France's role in advancing European strategic autonomy to consolidate its leadership within regional security frameworks. He argues that France has strategically framed the concept to align with its national interests, embedding its security priorities into broader European defense policies. France leverages its historical commitment to military independence and its advanced defense industry to position itself as the principal architect of a "Europe of Defence" (p. 226). This strategy not only enhances France's influence within the EU but also benefits its defense sector through initiatives like the European Defence Fund (EDF) and the Permanent Structured Cooperation (PESCO). Młynarski further highlights how France employs strategic autonomy as a mechanism to shape collective security policies, reinforcing its geopolitical standing while maintaining operational independence from NATO.

This dynamic aligns with Juncos and Vanhoonacker's concept of discursive entrepreneurship, where states and institutions actively frame strategic autonomy to serve their geopolitical and economic interests (p. 960). These insights contribute to a comprehensive understanding of strategic autonomy, showing that it extends beyond defense capabilities and industrial self-sufficiency.

The ability to frame and institutionalize strategic autonomy within security frameworks significantly influences policy outcomes.

2.6. Policy documents' view on strategic autonomy

In contrast with academic literature, policy documents reveal how these ideas are operationalized in practice. They present the concept not as an abstract principle but as a set of priorities and implementation strategies aimed at enhancing the EU's capacity for independent action. This section analyzes three key policy documents—the 2016 EU Global Strategy (EUGS), a publication of the European Policy Centre (EPC), and the 2022 EU Strategic Compass—to illustrate how the EU's applied vision of strategic autonomy aligns with, and at times diverges from, the academic perspectives discussed earlier.

The 2016 EUGS, titled *Shared Vision, Common Action: A Stronger Europe*, marks a milestone in EU foreign and security policy by explicitly introducing strategic autonomy as a central objective. The document frames autonomy not as a break from multilateralism, but as a necessary condition for the Union's credibility and effectiveness in a volatile global environment. According to the strategy, "an appropriate level of ambition and strategic autonomy is important for Europe's ability to promote peace and security within and beyond its borders" (European External Action Service, 2016, p. 9). Moreover, the EUGS presents strategic autonomy as a multidimensional goal grounded in practical capabilities—ranging from defense readiness and resilience to cybersecurity, counterterrorism, and external border management. It emphasizes the development of a European defense industry and stronger defense cooperation while maintaining NATO as the cornerstone of collective defense. However, it affirms the EU's responsibility to act autonomously "if and when necessary" (p. 19), thereby embedding the concept within a multilateral logic rather than framing it in opposition to alliances. The EUGS is linked to the theoretical perspectives by outlining the material, institutional, and political conditions for autonomy, positioning it as both a strategic objective and a tool for effective multilateralism.

Complementing this institutional vision, the 2020 EPC policy paper by Giovanni Grevi, titled *Fostering Europe's Strategic Autonomy – A Question of Purpose and Action*, offers a more explicitly policy-driven interpretation. Grevi defines strategic autonomy as the capacity to manage interdependence rather than escape from it: "strategic autonomy is not an alternative to globalisation or an escape into isolation but the precondition to manage interdependence" (Grevi, 2020, p. 7). He organizes his proposal around three pillars—brace, empower, and engage—highlighting resilience to external shocks, internal capability-building, and global cooperation. This structure mirrors the spectrum-based models in academic literature, particularly in its rejection of binary framings and its emphasis on strategic agency. Importantly, Grevi situates autonomy as a political imperative central to the EU's credibility and cohesion in a context of geopolitical competition and systemic vulnerability. He also rejects the notion that autonomy undermines alliances,

stating that “the opposite of autonomy is not partnership, but sheer dependence” (p. 8). His paper reframes strategic autonomy as an enabling condition for effective alliances and global engagement, thus reinforcing rather than contradicting cooperative multilateralism. Grevi’s approach stresses the normative and institutional dimensions of autonomy while retaining a strong focus on actionable policy objectives, thereby complementing both the EUGS and academic analyses.

Thirdly, the 2022 *Strategic Compass for Security and Defence* further deepens the EU’s strategic autonomy agenda by offering a detailed implementation roadmap. Responding to an increasingly hostile geopolitical environment, the Compass frames strategic autonomy as a “quantum leap forward” (European External Action Service, 2022, pp. 7, 10, 15 and 62) in EU security and defense policy, more necessary than ever due to the return of power politics, transnational threats, and external dependencies. It outlines specific objectives—such as the creation of an EU Rapid Deployment Capacity of up to 5,000 troops—and calls for investments in advanced technologies and the reduction of technological dependencies. These commitments operationalize autonomy in a manner consistent with Becker’s political economy framework, reinforcing the idea that autonomy is conditioned by industrial capacity and institutional readiness. The Compass also highlights the importance of NATO cooperation, stating that “a stronger and more capable EU [...] will contribute positively to global and transatlantic security” (p. 10), reflecting Grevi’s rejection of the zero-sum approach to alliances. However, its tone is more oriented to implementation than previous documents, prioritizing agility, deterrence, and response mechanisms over theoretical debates that discuss the definition of the concept. In doing so, the Compass distinguishes itself through its emphasis on actionable benchmarks, timelines, and defense integration.

In sum, these policy documents converge with academic literature in conceptualizing strategic autonomy as dynamic, multidimensional, and compatible with cooperation. However, they diverge in their emphasis on implementation, institutional planning, and concrete operationalization. While academic frameworks explore the structural, discursive, and collective action dimensions,

policy documents translate these into pragmatic agendas focused on capability development, industrial resilience, and strategic preparedness.

2.7. Final remarks on the theoretical framework

The theoretical framework presented in this thesis offers a comprehensive foundation for understanding strategic autonomy through a multidimensional lens. By combining academic theories with insight from the policy domain, it becomes clear that strategic autonomy is not a fixed or binary condition, but a dynamic process shaped by material capabilities, institutional contexts, and discursive practices. While academic literature emphasizes structural factors such as defense capabilities, industrial capacity, and technological development, the policy document highlights the practical application of these concepts in real-world scenarios, focusing on resilience, crisis management, and strategic partnerships.

This combined perspective reveals that strategic autonomy operates both as a conceptual framework and as a policy objective, influenced by evolving geopolitical realities. The academic emphasis on collective action, discursive leadership, and political economy is complemented by the pragmatic approach found in policy documents, which frame strategic autonomy as a platform for managing interdependence, fostering technological sovereignty, and enhancing the EU's capacity to act independently when necessary.

However, this thesis deliberately limits its scope to the defense and security dimensions of strategic autonomy, focusing on how national defense programs contribute to a state's ability to act independently within a broader multilateral context. While economic, technological, and institutional factors are acknowledged, the analysis centers on the military-industrial aspects of autonomy, as these are most directly linked to national security and defense capabilities. This focus allows for a more detailed examination of the specific mechanisms through which strategic autonomy is pursued at the national level, particularly in the case of France.

Building on the theoretical foundations outlined, the following analysis will assess how France’s national defense programs contribute to its position on the strategic

autonomy spectrum. By applying the conceptual frameworks discussed, the research will evaluate the extent to which key French weapons programs enhance the country's ability to act independently in defense matters. Additionally, while the primary focus remains on national policies, the analysis will also consider how these efforts position France as a key actor in shaping the broader European discourse on strategic autonomy.

3. Analysis

3.1. French weapons programs

3.1.1. Dassault Rafale

The Dassault Rafale is a 4.5 generation, twin-engine, multirole fighter aircraft designed and manufactured by Dassault Aviation. It is one of the most advanced and versatile combat aircraft in service today, capable of conducting air superiority, deep strike, reconnaissance, nuclear deterrence, and close air support missions. The aircraft features cutting-edge avionics, an advanced radar system, and an integrated electronic warfare suite, making it highly adaptable to a variety of operational environments, including the operation from both land bases and aircraft carriers. It has been progressively integrated into the French Air and Space Force and the French Navy, replacing older aircraft and ensuring that France maintains a technologically sophisticated and independent air combat capability (Ministère des Armées, n.d.).

The Rafale follows a long lineage of French combat aircraft programs, succeeding the Mirage family, which was at the forefront of France's air defense strategy for decades. Developed as a multirole fighter to replace the Mirage 2000 and complement the carrier-based Super Étendard, the Rafale integrates lessons from its predecessors while incorporating next-generation technologies to ensure operational superiority.

The selection of the Rafale for this thesis is grounded in two elements: (1) its condition as one of the most advanced and versatile fighter-jets of modern warfare;

and (2) its ability to provide the French Armed Forces with significant strategic and tactical flexibility in the aerial domain.

Unlike many European nations that have opted to acquire the American F-35 fighter jet, France has sought independence in its combat aircraft capabilities by developing and maintaining the Rafale program. This decision allows France to avoid reliance on U.S. defense procurement policies, ensuring full sovereignty over its air combat operations. Many European allies that have integrated the F-35 into their fleets are subject to operational restrictions and technology transfer limitations imposed by the United States, whereas France retains complete control over the Rafale's deployment, upgrades, and mission planning.

Beyond military independence, the Rafale program succeeds overseas as well. The aircraft's export success—having been acquired by Greece, India, Egypt, Croatia, Serbia, Indonesia, Qatar, and the United Arab Emirates (Dassault Aviation, n.d.)—further strengthens France's position as a leading global defense supplier.

3.1.1.1. Placement of the Rafale within the Strategic Autonomy Spectrum (Vu et al.)

France's degree of independence in combat aircraft production compared to other nations can be assessed with Vu et al.'s five-level framework.

France is characterized by its pursuit of an independent path by developing its own fighter jet, unlike other European countries such as Belgium, the Netherlands, or Norway, which are entirely reliant on foreign-built combat aircraft—primarily the U.S.-manufactured F-35 (Lockheed Martin, n.d.).

This decision has allowed France to avoid many of the external constraints that come with foreign procurement, placing it above the levels of "no autonomy" and "symbolic autonomy" in Vu et al.'s spectrum.

The Rafale is designed and manufactured domestically by Dassault Aviation, ensuring that France retains control over its fighter jet program. Unlike countries operating the F-35, the Rafale program is not subject to foreign vetoes or technology transfer restrictions, allowing France to exercise unilateral operational freedom.

Additionally, the entire life cycle of the aircraft, including its development, upgrades, deployment, and maintenance, remains under the control of French authorities.

The Rafale's success in international markets further reinforces this autonomy; unlike the F-35, whose exports require U.S. approval (Defense Security Cooperation Agency, n.d.), France is able to sell the Rafale without external authorization, as has happened with the aforementioned deals with countries such as India, Egypt, and the United Arab Emirates.

Nevertheless, as this program continues to rely on key international suppliers for certain components of the aircraft, it has certain constraints that prevent France from achieving full strategic autonomy in this domain. These foreign-sourced parts illustrate the challenges of achieving full self-sufficiency in modern military aviation.

One of the most significant areas of foreign dependency is found in the Rafale's electronic and sensor systems. While Thales—a French company—is responsible for much of the radar and avionics, Aaron Spray (2024) highlights that the aircraft incorporates components from American and European suppliers. For instance, Collins Aerospace supplies pitot probes, ice detectors, and air data sensors, or HiRel Connectors provides electrical and electronic connectors.

Additionally, the Martin-Baker ejection seat, a British design, means that the United Kingdom retains an indirect say over potential Rafale exports. This influence was evident in past instances where British authorities exercised veto power over arms deals involving aircraft fitted with their ejection systems—for instance, with Argentina (Niebieskikwiat, 2023).

The vulnerability was further exposed in 2015, when France attempted to export Scalp cruise missiles to Egypt as part of a broader Rafale package. The deal was obstructed by the United States, which refused to authorize the export of critical American-built components embedded in the missile system. The French Armed Forces Minister Florence Parly directly acknowledged this limitation, emphasizing that France was "at the mercy of the Americans when our equipment is concerned" (Tran, 2018).

Moreover, Military Watch Magazine (2021) also identifies a wide range of American-built parts used in the Rafale, including auxiliary power units, lighting systems, fuel nozzles, wheel brakes, brake controls, electro-optical components, transducers, and electrical power systems. These are not peripheral elements; they directly impact the aircraft's operational effectiveness, demonstrating that even a domestically produced fighter cannot completely avoid foreign supply chains.

These dependencies highlight the broader reality that, while France has achieved an impressive level of industrial autonomy in military aviation, full strategic independence remains elusive. The integration of foreign-built components into the Rafale demonstrates the inherent complexities of modern aerospace supply chains. While France retains control over critical aspects of the aircraft's production and decision-making, certain limitations persist due to economic, technological, and geopolitical factors. These constraints position the Rafale within Vu et al.'s "robust autonomy" category rather than full strategic autonomy, illustrating that even the most independent European fighter jets remain partially embedded in global supply networks.

3.1.1.2. The Rafale within Becker's political economy framework

From the standpoint of Becker's political economy approach, the Rafale program offers a specific case of how industrial structure, technological specialization, and procurement strategy enable a state to maintain a high degree of defense independence in the aerial domain. Becker argues that strategic autonomy is not achieved merely through political will but must be supported by structural conditions—such as a strong industrial base, sustained public investment, and domestic control over key technologies. In the case of the Rafale, these elements converge to illustrate how France's material capacities consolidate its autonomy in the aerospace defense sector.

The Rafale is designed, assembled, and supported in France by Dassault Aviation, with major subsystems developed by other national defense champions such as Safran (engine) and Thales (avionics and electronic warfare systems). This integration of core technological capabilities within the French industrial base means that the country retains sovereignty over the aircraft's development,

deployment, maintenance, and future modernization. Such vertical integration is a central pillar of strategic autonomy in Becker's framework, as it reduces reliance on foreign supply chains for critical technologies (Becker, 2020).

However, sustaining such a level of domestic capability entails a significant economic burden. The Rafale's development and production costs have been notably high, particularly in comparison to multinational projects like the Eurofighter Typhoon—which allows to divide costs between several countries—or foreign acquisitions such as the F-35—whose procurement is cheaper than developing a whole weapons program.

It is estimated that the total development cost of the Rafale surpasses €45 billion, including expenditures on research and development (R&D), prototyping, flight testing, certification, and industrial adaptation. For instance, flight control systems alone required over €500 million in testing and development, while the AESA radar system mobilized nearly €1 billion. The certification process, infrastructure modernization, and establishment of specialized test facilities added further financial weight, bringing the total cost over time to possibly more than €50 billion when upgrades and successive modernizations are considered (Vol en Avion de Chasse, 2025).

Nonetheless, this considerable long-term investment has preserved France's capacity to produce a cutting-edge combat aircraft independent of external vetoes or export restrictions. Moreover, the Rafale's self-contained supply chain facilitates operational flexibility. France is able to implement upgrades, export the aircraft, and employ it in missions without requiring foreign authorization, which contrasts sharply with the experience of F-35 users—who strongly depend on the U.S. government's willingness to allow them to use their weapons (Desmarais, 2025).

Still, Becker's approach also highlights the importance of economic sustainability. The viability of the Rafale program over the long term has depended heavily on export success. The procurement by foreign governments has helped amortize development costs and secure production continuity (Dassault Aviation, 2025). The French state has often supported these export efforts through diplomatic

engagement and offset agreements. This dual reliance—on domestic public investment and foreign sales—evidences one of the key tensions in Becker's framework: while strategic autonomy demands strong internal capacity, it often depends on external demand to remain economically viable (Becker, 2020).

Therefore, in the context of France's defense industrial policy, the Rafale represents a sophisticated expression of strategic autonomy shaped by the political economy of armament production. Its survival and success demonstrate Becker's point that autonomy is materially embedded: it is sustained not only by defense doctrine, but also by the industrial infrastructure and financial architecture that support national capability development. France's willingness to bear the economic costs of preserving independent aerospace expertise—when many European allies opted to integrate into American or multinational programs—reflects a strategic decision to safeguard its sovereign defense capacity in one of the most technologically demanding domains.

3.1.1.3. The Rafale and the Collective Action Problem in the European Security Framework

Although the Rafale program is a clear example of France's pursuit of national defense autonomy, its development must be interpreted within the broader context of European collective security arrangements. Becker (2020) emphasizes that strategic autonomy is often constrained by structural realities, particularly within multilateral security frameworks. In Europe, these constraints take the shape of institutional commitments, defense cooperation mechanisms, and shared economic limitations. As such, autonomy becomes a collective action problem: states seek to maximize control over their own defense capabilities while also participating in cooperative arrangements that demand coordination, burden-sharing, and often, compromise.

The Rafale highlights this tension in different ways. First, it illustrates the cost of pursuing national autonomy in an environment that increasingly encourages joint development and interoperability. Unlike many European countries that chose to participate in multinational combat aircraft programs—namely the Eurofighter Typhoon (UK, Germany, Italy, and Spain)—France opted to sustain its own national

platform. This decision ensured sovereignty over industrial processes, operational doctrine, and technological capabilities, but it entailed a duplication of efforts, a significative increase of costs, and contributed to fragmentation within the European defense market as well. From Becker's point of view, this exemplifies the paradox of strategic autonomy in multilateral forums: efforts to achieve independence may, at the same time, reduce the efficiency and cohesion of collective security strategies (Becker, 2020, p. 27).

France's position has been further complicated by the institutional frameworks that promote defense cooperation within the EU. The Common Security and Defence Policy (CSDP), along with initiatives such as the European Defence Fund (EDF) and Permanent Structured Cooperation (PESCO), seek to foster greater integration and reduce duplication in defense procurement. However, the Rafale remains largely outside these structures. Its development seems to prevail over them—at least for now—and its continuity is rather tied to national budgetary decisions and bilateral export agreements, instead of EU-led procurement or funding mechanisms. This detachment reflects France's insistence on maintaining strategic leadership in the aerospace sector, even at the cost of limiting deeper industrial integration with other EU member states.

Nonetheless, France does not completely desist from participating in joint European efforts in the aerospace domain. It is actively involved in the Future Combat Air System (FCAS), a next-generation air combat initiative developed in partnership with Germany and Spain (Embassy of France in Spain, 2023). FCAS is envisioned as a multinational program that will eventually succeed current-generation platforms like the Rafale and Eurofighter. France's leadership in FCAS demonstrates that, while it has maintained the Rafale as a national asset, it remains committed to shaping the future of European airpower within a cooperative framework. At the same time, however, France is upgrading its national fleet through the development of the Rafale F5-standard, expected to be operational by 2030 (Perry, 2025). This parallel commitment illustrates France's dual strategy: on the one hand, engaging in ambitious European collaborations; on the other, reinforcing its national capabilities through independent platforms. This tendency to "play both

ways”—simultaneously pushing for European cooperation while preserving domestic strategic autonomy—reveals a comprehensive approach to the collective action dilemma.

In parallel, the Rafale has contributed to collective security objectives in operational terms. France has consistently presented the aircraft as an asset for Europe’s defense capacity and has deployed it in a number of multinational missions under both NATO and EU umbrellas, including operations in Libya, the Sahel, and the Levant (Dassault Aviation, n.d.). Its performance in these contexts has reinforced France’s image as a credible security provider within the European and transatlantic arenas. Moreover, the sale of Rafale jets to fellow EU and NATO members—such as Greece and Croatia—has contributed to the convergence of defense capabilities across the continent. These sales not only strengthen bilateral ties but also contribute indirectly to European security by equipping allied states with interoperable and high-performance systems.

Still, these benefits do not negate the structural limitations identified by Becker. France’s insistence on maintaining a separate combat aircraft platform limits the potential for economies of scale, joint maintenance, and harmonized training across Europe. While other states opted to share development costs and production capacities, France chose to internalize the entire program—an approach that required greater financial effort and exposed the country to higher risks. This choice has allowed France to move closer to “robust autonomy” in the spectrum developed by Vu et al., but it has also reduced its potential contribution to a collective European defense-industrial strategy.

Becker’s analysis suggests that such dynamics are inevitable in a fragmented defense market where national interests continue to outweigh supranational objectives. Even within multilateral organizations, states retain primary responsibility for their own security and are often reluctant to surrender industrial or operational sovereignty. The Rafale exemplifies this dilemma: it enhances France’s strategic position and reinforces its role as a leading European power, but it also illustrates the difficulties of aligning national defense priorities with broader collective frameworks. In this sense, the Rafale is both a symbol of strategic

ambition and a symptom of Europe's long-lasting struggle to reconcile autonomy with cooperation.

3.1.1.4. The Rafale in France's Discursive Leadership

Beyond its material capabilities, the Rafale serves as a discursive tool through which France constructs and promotes a particular vision of strategic autonomy in European and other international forums. Drawing from Juncos and Vanhoonacker's framework of ideational power, it becomes clear that France leverages the Rafale not only as a military asset but also as a symbol of its geopolitical positioning and narrative authority. Remembering these authors' theory, ideational power operates in three dimensions: *power in* (embedding ideas in institutional structures), *power through* (strategically promoting ideas to shape discourse), and *power over* (imposing or resisting specific interpretations). France's discursive leadership in the aerial defense domain is mainly based on the Rafale and involves all three dimensions.

At the level of *power in*, the integration of the Rafale into European institutional structures appears to be limited. Although France presents itself as a leader in promoting a "Europe of Defence", no evidence of institutional declarations that explicitly define the Rafale as a shared European capability has been found. Its status remains essentially national in both governance and operational scope.

This absence of formal institutional anchoring suggests that the European dimension of the Rafale remains largely rhetorical. France may aim to position the Rafale within a European strategic culture, but in practice, the aircraft's development, procurement, and deployment remain under full national control. Thus, in the context of *power in*, the Rafale serves more as an instrument of national strategic ambition than as a structurally embedded European asset.

In terms of *power through*, though, the Rafale is certainly mobilized as a key element in France's rhetorical strategies in multilateral settings. French leaders often cite the program as evidence of the country's commitment to European sovereignty and technological independence. For instance, Macron himself has issued the following statement: "My intention is to go and convince European states that have become

accustomed to buying American. [...] Those who buy the F-35 should be offered the Rafale" (Leali, 2025). With this rhetoric, France explicitly frames the F-35 as a symbol of dependency and transatlantic asymmetry and simultaneously promotes the Rafale as a successful alternative for European states. France therefore exercises discursive entrepreneurship: it seeks to shape the terms of debate around European security, placing autonomy at the center of the agenda and legitimizing its own defense-industrial model.

In the dimension of *power over*, France has also sought to resist interpretations of European strategic autonomy that are limited to operational or soft-power capabilities. Through both formal discourse and institutional action, it promotes a more ambitious vision that includes high-end defense technologies, nuclear deterrence, and industrial sovereignty. The Rafale becomes central in this contestation. A clear illustration of this is President Macron's recent announcement that France would increase its orders of Rafale aircraft to strengthen its nuclear deterrent. This declaration came only a few days after he proposed extending French-led nuclear protection to other European nations—an offer that reinforces France's ambition to position itself not only as a sovereign military power but also as a guarantor of European security (Rose, 2025). Through such statements, France seeks to assert its ability to independently develop, maintain, and export a multirole combat aircraft with nuclear capabilities, thereby challenging narratives that depict the EU as inherently dependent on external partners for its defense posture—especially on the nuclear domain, where it has been traditionally more dependent on the U.S.

Moreover, the inclusion of the Rafale in multilateral operations—such as Operation Harmattan in Libya or Barkhane in the Sahel (Dassault Aviation, n.d.)—reinforces this argument, showing its operational credibility in collective missions.

These discursive strategies align with broader patterns of French geopolitical behavior, as analyzed by Młynarski. Although he does not mention the Rafale specifically, his examination of France's long-standing ambition to shape the European defense agenda reveals that Paris consistently seeks to inscribe its national strategic autonomy into the broader framework of "European strategic

autonomy". As Młynarski explains, "the concept of a 'Europe of defence' is a 'multiplier' of France's national interest of maintaining its superpower status on the global stage and French leadership in Europe" (Młynarski, 2024, p. 235). This aspiration is not merely rhetorical: it manifests through initiatives such as the European Intervention Initiative (EI2) and France's push for industrial sovereignty through the European Defence Fund (EDF) and PESCO. These instruments allow France to advance its own strategic priorities while appearing to act within the collective interest of European security.

In this light, national defense programs like the Rafale gain symbolic weight beyond their technical capabilities. As Młynarski notes, France's leadership strategy involves simultaneously promoting European integration and safeguarding its dominant position within it. The Rafale, as a domestically developed, exported, and modernized fighter aircraft, becomes emblematic of this dual strategy. It is not only a tool of national defense and industrial policy, but also a vehicle for asserting influence over the conceptual development of European defense autonomy. Thus, even without being institutionally European, the Rafale can be mobilized discursively to support France's broader strategic narrative.

3.1.2. *Charles de Gaulle* aircraft carrier

The *Charles de Gaulle* is a nuclear-powered aircraft carrier and the flagship of the French Navy—*Marine Nationale in French*. Commissioned in 2001, it is currently the only aircraft carrier built and operated by a European country that is powered by nuclear propulsion. Designed and constructed by French defense contractors, the vessel is a symbol of France's commitment to preserving independent power projection capabilities in maritime domains. With a displacement of 42,000 tons, a length of 261.5 meters, and the capacity to carry approximately 30 to 40 aircraft, including Rafale M fighter jets, E-2C Hawkeye surveillance planes, and various helicopters, the *Charles de Gaulle* is capable of conducting a wide range of missions: from air superiority and reconnaissance to nuclear deterrence and humanitarian operations (Ministère des Armées, n.d.).

The ship's nuclear propulsion grants it virtually unlimited range and autonomy, allowing it to remain deployed for extended periods without the need for refueling—

an advantage that enhances strategic flexibility. It also integrates advanced command and control systems (Ministère des Armées, n.d.), a Catapult Assisted Take-Off But Arrested Recovery (CATOBAR) configuration (IHEDN, n.d.), and robust protection systems, making it one of the most capable warships currently in service among European navies. In recent decades, it has played a central role in multiple operations, including *Mission Héraclès* (2001) in Afghanistan, *Opération Harmattan* in Libya (2011), and *Chammal* against ISIS in Iraq and Syria (2015–2016) (Confédération Amicale des Ingénieurs de l'Armament, n.d.).

The *Charles de Gaulle* has been selected for analysis in this thesis for several reasons. Firstly, it represents the epitome of France's naval strategic autonomy, being fully developed, operated, and maintained under national command. Secondly, its development and operational use demonstrate the long-term strategic investment that France has made to sustain high-end capabilities independently of alliances such as NATO or the European Union. Finally, as a unique case in the European context—with no equivalent among EU member states—the *Charles de Gaulle* illustrates France's particular approach to sovereignty, technological specialization, and discursive leadership in the maritime domain.

As Alfred Mahan (1890) argued, sea power is essential to national greatness and global influence. In this context, analyzing the French case in this particular domain allows us to understand how strategic autonomy is exercised not only in the air, but also at sea, where the ability to project power globally is crucial for a state aspiring to retain influence in a multipolar world.

3.1.2.1. Placement of the *Charles de Gaulle* within the Strategic Autonomy Spectrum (Vu et al.)

France's level of independence in naval power projection must be also assessed using Vu et al.'s framework of strategic autonomy. In this context, the *Charles de Gaulle* aircraft carrier constitutes one of the most autonomous defense assets currently operated by any European state. Unlike other EU countries, which either lack aircraft carriers altogether or depend on foreign procurement and technology—such as Italy's acquisition of the U.S.-built F-35B for its Cavour carrier (Infodefensa, 2021)—France has developed and maintained its own nuclear-powered carrier

entirely under national control. This positions France well above the levels of “no autonomy” and “symbolic autonomy” in Vu et al.’s spectrum.

The *Charles de Gaulle* is designed, built, operated, and modernized domestically, with core systems provided by French defense companies and with no foreign approval required for its deployment or use. The carrier’s nuclear propulsion system, its CATOBAR configuration, and its ability to launch Rafale M fighters give France a strategic tool for global power projection that remains fully sovereign. From a lifecycle perspective, France maintains control over its development, maintenance, and upgrades, ensuring long-term strategic independence in naval operations.

Nevertheless, while the *Charles de Gaulle* remains a largely sovereign platform, it incorporates certain systems that are used by other nations—such as NATO-compatible data links like Link 16 (Satam, 2025)—that ensure interoperability with allied forces. These integrations, however, should not be interpreted as dependencies. Rather, they reflect France’s strategic choice to enable coordination in multinational operations and uphold commitments to collective defense frameworks such as NATO. The use of interoperable systems is an additive feature that enhances operational flexibility without compromising national command authority or sovereignty over the platform.

Therefore, these elements of interoperability do not undermine France’s strategic autonomy. They are implemented by design to facilitate joint missions and are not structurally required for the carrier’s independent functioning. Unlike other naval programs that depend on external suppliers for core operational capabilities, the *Charles de Gaulle* remains fundamentally under national control. This situates the program firmly within Vu et al.’s category of “robust autonomy,” where high levels of sovereign capability are maintained while allowing selective integration with allies for operational effectiveness.

However, one could also argue that the *Charles de Gaulle* surpasses even the “robust autonomy” level and qualifies as an example of “full strategic autonomy” under Vu et al.’s framework. The vessel is not only fully designed and produced

domestically, but also operated and maintained without requiring any foreign consent or support for its core functionalities. France possesses sovereign control over its propulsion, air wing, armament systems, and modernization cycles. The inclusion of interoperable elements does not compromise this control but rather complements it strategically. In this light, the *Charles de Gaulle* may be seen as one of the rare European defense programs that meet the criteria for full strategic autonomy.

3.1.2.2. The *Charles de Gaulle* aircraft carrier within Becker's political economy framework

Aircraft carriers represent one of the most complex and resource-intensive defense platforms a country can produce. Their development requires not only advanced technological capabilities and industrial expertise but also a long-term political and financial commitment. In this sense, the *Charles de Gaulle* aircraft carrier offers a compelling case study for Becker's political economy approach to strategic autonomy. Rather than relying on multilateral procurement or foreign suppliers, France chose to maintain a sovereign capacity in high-end naval power projection.

Becker (2020) argues that strategic autonomy is structurally dependent on a country's industrial base, its control over key technologies, and its capacity to sustain large-scale defense investments over time. The *Charles de Gaulle* aligns with these conditions. The platform was designed and built by French defense firms such as Naval Group, TechnicAtome, and Thales, ensuring national control over its propulsion, weapons, sensors, and command systems. Its nuclear propulsion—entirely developed in France—is a strategic asset that allows the vessel to remain at sea for extended periods without refueling, maximizing endurance and operational independence.

However, this degree of independence has come at a considerable financial cost. The cost of the *Charles de Gaulle* program was officially estimated at 20 billion French francs at the time. Two-thirds of this amount corresponded to the ship's construction, while the remaining third covered development and logistics infrastructure. The program exceeded the initial 1985 estimate by 18%, a figure largely attributed to three factors: delays in budget allocation, the evolution of

nuclear safety standards, and it being the first nuclear-powered aircraft carrier designed by France. Notably, 16 of those 18 percentage points in overrun occurred before 1995, with further costs stemming from adjustments deemed necessary after sea and land trials (Boyer, 2000). It should be noted that this figure has likely increased, as the carrier remains operational and over 25 years have passed since the original assessment.

Regardless of this, the figures show the economic commitment required to sustain sovereign naval capabilities, particularly in a domain as technologically demanding and resource-intensive as nuclear-powered naval aviation. Therefore, the *Charles de Gaulle* program demonstrates how France has been willing to bear the economic burden of independently developing a highly complex and sovereign naval platform.

Despite the cost overruns, this investment enabled France to retain sovereign control over one of the most strategic assets in maritime defense. Unlike multinational programs or foreign acquisitions, the *Charles de Gaulle* is fully independent from external vetoes or operational constraints. France can refit, modernize, and deploy the ship without foreign authorization, reinforcing national flexibility and long-term autonomy.

Yet, Becker also warns that autonomy must be economically viable over time. Unlike the Rafale, the *Charles de Gaulle* is not currently an exportable platform and therefore does not benefit from offsetting development costs through foreign procurement. Its sustainability relies solely on public investment and political commitment. This highlights another conflict in Becker's framework: while strategic autonomy demands strong national capabilities, it may also face constraints due to the absence of external revenue streams. Nonetheless, France's continued commitment to this model, including plans for the future PANG—meaning "Porte-Avions Nouvelle Génération" (IHEDN, n.d.)—demonstrates a long-term strategic vision anchored in national control of high-end defense technologies.

Ultimately, the *Charles de Gaulle* reflects not just a defense doctrine, but a deliberate and sustained industrial strategy aimed at preserving France's capacity to act independently in the maritime domain.

3.1.2.3. The *Charles de Gaulle* aircraft carrier and the Collective Action Problem in the European Security Framework

While the *Charles de Gaulle* represents one of the most sovereign and advanced defense assets in Europe, its very autonomy raises challenges in the context of collective European defense. As Becker explains, strategic autonomy is constrained by the structural realities of multilateral security cooperation. In Europe, these constraints are particularly evident in the maritime domain, where most EU countries rely either on NATO standards or on multinational procurement strategies to optimize costs and interoperability.

Unlike other naval programs developed through European cooperation—such as the FREMM frigates co-produced by France and Italy (Fincantieri, n.d.)—the *Charles de Gaulle* was conceived and executed entirely as a national endeavor. This choice allowed France to preserve full sovereignty over its naval aviation capabilities, but it once again exemplifies the collective action dilemma identified by Becker (2020, p. 27): acting alone strengthens national autonomy but may reduce the cohesion and efficiency of shared European defense efforts.

The aircraft carrier does not participate in EU joint procurement frameworks, and its technological and operational architecture remains disconnected from ongoing integration initiatives. This limits opportunities for shared maintenance, joint training, or coordinated modernization, which are increasingly promoted through the various joint European programs on defense. Consequently, while the *Charles de Gaulle* enhances France's individual strategic reach, it contributes little to the institutional consolidation of European naval power.

At the same time, France mitigates this fragmentation by regularly deploying the carrier within NATO or EU-led operations, demonstrating operational solidarity and a willingness to contribute to regional security. This dual posture—sovereign development combined with selective engagement—represents the frequent tension in Europe's defense landscape: the ambition for greater integration, and the enduring pull of national sovereignty and autonomy.

3.1.2.4. The *Charles de Gaulle* aircraft carrier in France's Discursive Leadership

In addition to its operational role and industrial significance, the *Charles de Gaulle* aircraft carrier serves as a powerful symbol in France's discursive construction of strategic autonomy. Drawing on Juncos and Vanhoonacker's framework of ideational power, it becomes evident that France leverages the *Charles de Gaulle* not only as a military platform but also as a rhetorical asset to project national sovereignty and leadership within the European and transatlantic security arenas. The carrier embodies all three dimensions of ideational power: *power in*, *power through*, and *power over*.

Regarding *power in*, the *Charles de Gaulle* is not embedded in any European institutional framework as a shared capability. It remains a purely national asset, fully funded, operated, and governed by the French state. There are no formal mechanisms that bind its use or development to EU structures, nor has it been institutionalized within cooperative frameworks such as PESCO. In this respect, and similarly to the case of the Rafale, France has opted to maintain full national ownership of one of its most strategic military platforms. This absence of institutional embedding evidences France's preference to define strategic autonomy through sovereign capabilities rather than shared European governance.

When it comes to *power through*, the carrier is presented in official discourse as a demonstration of France's capacity to act independently on the global stage. For instance, it has been noted by French senators: "with nuclear deterrence, [the *Charles de Gaulle*] is a symbol of France's exercise of sovereignty" (Cigolotti & Roger, 2020, p. 9). Through this discursive framing, the ship becomes more than a defense asset: it functions as a tool of soft power that legitimizes France's leadership role in shaping the European security agenda.

In the dimension of *power over*, France uses the *Charles de Gaulle* to resist narrower definitions of European strategic autonomy that exclude hard power capabilities. By emphasizing that "possessing an aircraft carrier is an essential factor in France's standing within NATO" and simultaneously downplaying the feasibility of a "European aircraft carrier" (Cigolotti & Roger, 2020, p. 7), French officials assert a vision of autonomy rooted in sovereign force projection. This discourse implicitly

challenges alternative European approaches that prioritize integrated or lighter forces, reaffirming France's interpretation of strategic autonomy as inseparable from high-end national capabilities.

These rhetorical strategies are consistent with Młynarski's ideas as well: although the *Charles de Gaulle* is not institutionally European, it is deployed discursively to support France's argument that real autonomy requires sovereign capabilities and long-term national investments. In this sense, the carrier becomes not only a maritime instrument of power, but also a symbolic anchor for France's geopolitical vision.

3.1.3. Leclerc Main Battle Tank

The AMX-56 Leclerc is a third-generation main battle tank (MBT) developed by the French defense company GIAT Industries—later Nexter Systems, and currently KNDS France. Introduced in the early 1990s, the Leclerc remains one of the most advanced and mobile armored vehicles in service in Europe. It was conceived to provide the French Army with a high-end, domestically produced platform capable of meeting the demands of modern, high-intensity warfare.

Originally designed around the concept of "fire-on-the-move", the Leclerc was one of the first MBTs to fully integrate an automatic loading system and an advanced fire control architecture. These features, already present in the baseline model, allow the tank to operate with a reduced crew while maintaining high rates of fire and precision under dynamic battlefield conditions. These core capabilities have been retained and further enhanced in the Leclerc XLR variant through modernized digital systems and upgraded stabilization mechanisms. As part of the Scorpion program, the XLR integrates enhanced sensor systems, modular armor, and counter-IED technologies to ensure survivability and interoperability within network-centric land operations (KNDS Group, n.d.).

The Leclerc has been selected for analysis in this thesis for three main reasons. First, it is one of the only main battle tanks still in service within the EU that has been entirely developed and manufactured domestically—alongside Germany's Leopard—, making it a key symbol of France's defense industrial autonomy in the

land domain. Second, its development history—marked by France's decision to pursue an independent program—illustrates the trade-offs involved in preserving sovereignty over core defense capabilities. Finally, the ongoing investment in the Leclerc XLR modernization shows France's long-term commitment to sustaining national leadership in the armored warfare sector —despite also engaging in forward-looking joint initiatives such as the Franco-German Main Ground Combat System (MGCS), envisioned as a next-generation platform to replace both the Leclerc and the Leopard 2 by 2040–2045 (Ministère des Armées, 2023).

In this sense, the Leclerc offers a valuable case through which to explore how strategic autonomy is constructed and maintained in the domain of ground-based military capabilities.

3.1.3.1. Placement of the Leclerc within the Strategic Autonomy spectrum (Vu et al.)

The Leclerc main battle tank exemplifies a high level of defense industrial autonomy in the land warfare domain. Developed primarily within France, the tank is designed, produced, operated, and modernized with a significant degree of national control and without reliance on foreign platforms or procurement frameworks. This certainly positions the Leclerc above the categories of "no autonomy" or "symbolic autonomy" in Vu et al.'s strategic autonomy spectrum.

Unlike other European countries that have opted to acquire foreign main battle tanks—such as Poland's procurement of the American M1 Abrams (Ptak, 2023) or Spain's acquisition of the German Leopard (González, 1995)—the French Army has retained its own domestically developed platform. The Leclerc's life-cycle management remains largely under national authority, from manufacturing to upgrades, including the most recent modernization under the Scorpion program. This effort—embodied in the Leclerc XLR variant—has been led by KNDS France and integrates cutting-edge technologies developed by national suppliers, further reinforcing sovereignty over the platform.

Despite the relatively small production scale of the Leclerc compared to other European tanks, such as the Leopard 2, its level of autonomy remains substantial. Most of the tank's core subsystems—including its autoloader, fire control system,

protection suite, and digital combat architecture—have been developed and are maintained by the French defense industry. However, it should be noted that the Leclerc is equipped with the ESM 500 automatic transmission, produced by RENK, a German company (RENK, n.d.). This constitutes a relevant dependency on a foreign supplier for a critical component in the propulsion chain, somewhat tempering the overall perception of full strategic autonomy.

While the Leclerc has not achieved the same export success as the Rafale, it was notably acquired by the United Arab Emirates, which purchased 436 units in the 1990s (KNDS, 2025). These tanks were equipped with a different propulsion configuration—the EuroPowerPack—also including RENK transmission components (Army Technology, 2021).

In any case, export performance is not a determining factor in Vu et al.'s model; what matters is the extent of national control over a capability's development and operational use. In this respect, the Leclerc aligns with the conditions for "robust autonomy," albeit falling short of "full strategic autonomy" due to its reliance on foreign transmission technology.

Therefore, under Vu et al.'s framework, the Leclerc MBT should be placed at the high end of the autonomy spectrum. It remains a case of a domestically developed main battle tank that has preserved a high level of national stewardship throughout its life cycle. This makes it a compelling example of how France has prioritized strategic autonomy in land warfare, even in a landscape increasingly marked by multinational procurement and interdependence.

3.1.3.2. The Leclerc within Becker's political economy framework

The Leclerc represents a paradigmatic case of how France has sought to preserve strategic autonomy in the land domain through sustained national investment and domestic industrial capability. Although developed in a post-Cold War context—around the late 80s and early 90s—of budgetary constraints and shifting defense priorities, the program was maintained as a sovereign endeavor, enabling France to

retain core competencies in main battle tank production at a time when many allies opted for multinational procurement.

From the outset, the French state assumed the political and financial burden of developing the platform, without the cost-sharing benefits typical of collaborative European programs. The relatively limited production run—fewer than 900 units (Forecast International, 2009)—meant that unit costs remained high, and the absence of large-scale exports further limited returns on investment. Nevertheless, France remained committed to sustaining an independent land combat capability, prioritizing autonomy over economies of scale. This choice—shared with the other two weapons programs that have been analyzed—reflects again the logic identified by Becker: strategic autonomy often entails long-term economic trade-offs that only states with strong industrial foundations and political will are able to absorb.

The Leclerc's modernization under the Scorpion program reinforces this point. The upgrade to the XLR standard is not only a technological enhancement but also an act of industrial and strategic continuity. By relying on French defense firms to lead the modernization—rather than procuring a new foreign platform—France ensures the retention of know-how and the continuous development of its domestic supply chain. While the transmission remains sourced from the German company RENK, most critical systems are domestically produced and sustained, limiting foreign leverage over the tank's operational availability.

Becker's framework also highlights the importance of long-term viability. In this regard, the Leclerc benefits from its integration into France's broader land systems architecture, including the Scorpion network, which ensures its continued relevance in future combat scenarios (Ministère des Armées, n.d.). However, its economic sustainability remains dependent on consistent state support, as no new export contracts have been signed since the UAE deal in the 1990s. This places the burden of upkeep and innovation squarely on national defense planning and procurement cycles.

Ultimately, the Leclerc illustrates the structural tensions Becker identifies: France has successfully maintained autonomy in land warfare by investing in a

domestically developed platform, but this autonomy comes at a considerable financial cost. The program's continuity depends not on international demand but on political commitment to national defense sovereignty—an approach that France has consistently pursued despite broader European trends toward industrial pooling and shared development.

3.1.3.3. The Leclerc and the Collective Action Problem in the European Security Framework

The Leclerc MBT embodies the trade-offs between national sovereignty and European defense integration. Its unilateral development, outside any multinational framework, reflects France's deliberate prioritization of strategic autonomy over shared capability planning. While this approach has preserved a high degree of domestic control, it also reinforces the fragmentation of Europe's armored forces—a clear manifestation of the collective action problem in defense cooperation.

Unlike the Leopard 2, which is used by several EU and NATO members—as well as produced under license in some European countries such as Spain—the Leclerc remains exclusive to France within Europe. This limits opportunities for harmonized logistics, joint training, or integrated maintenance structures. Furthermore, its modernization under the Scorpion program—although technologically advanced—has proceeded along purely national lines, without leveraging existing EU instruments. As Becker argues, such patterns reflect how national strategies for autonomy can reduce collective efficiency and constrain broader efforts to build a coherent European defense architecture.

This institutional detachment has operational consequences as well. The Leclerc does not form part of any shared European capability or battlegroup structure, and no multinational procurement mechanism supports its sustainment. While the tank has been deployed in NATO exercises, its lack of standardization with other European MBTs complicates integration in joint missions or contingency planning.

Looking ahead, France's participation in the MGCS project suggests a potential shift toward greater alignment in the land domain. However, the Leclerc's continued service—and its exclusive role in France's heavy armor force—maintains a status quo in which national platforms coexist with fragmented procurement landscapes

across Europe. In this sense, the Leclerc also reinforces the structural dilemma that underpins the EU's defense posture: the pursuit of strategic autonomy by individual states can hinder the consolidation of shared capabilities, despite converging security objectives.

3.1.3.4. The Leclerc in France's Discursive Leadership

While the Leclerc is not as frequently referenced in strategic discourse as the Rafale or the *Charles de Gaulle*, it still plays a role in France's broader narrative of strategic autonomy—particularly in the land warfare domain. Applying Juncos and Vanhoonacker's framework, the Leclerc reflects elements of ideational power, yet to a more restrained degree than other flagship platforms.

In terms of *power in*, the Leclerc has not been embedded within any formal European institutional framework. As with the Rafale and the *Charles de Gaulle*, there is no official recognition of the tank as a shared European asset, and it has remained fully under national governance. France has neither attempted to institutionalize the Leclerc in PESCO nor promoted it through joint European procurement initiatives. In this regard, the Leclerc illustrates once again France's preference to operationalize strategic autonomy through sovereign capabilities, rather than through embedded institutional cooperation.

When it comes to *power through*, the Leclerc has been less prominently mobilized in public speeches or international forums. However, it still supports France's narrative of national military excellence and defense independence. The Scorpion modernization program, for instance, is presented in official defense documents as a symbol of France's leadership in modernizing land warfare: "The future increments will expand and strengthen the capabilities of frontline land forces by relying on game-changing technologies likely to redefine the battlefield" (Ministère des Armées, n.d.). Through this lens, the Leclerc is used implicitly as part of a broader ecosystem of sovereign capabilities that reflect France's industrial maturity and technological ambition. Moreover, its presence in international defense exhibitions—such as IDEX 2023 and 2025—alongside upgraded versions developed in collaboration with the UAE, further reinforces its symbolic value as an exportable, high-performance product of French engineering.

In the dimension of *power over*, France's continued reliance on the Leclerc also serves to resist certain prevailing narratives within Europe that favor pooling and sharing models for land forces. The decision to maintain and modernize a nationally developed MBT—rather than replace it through a jointly acquired European platform—implicitly challenges assumptions that autonomy must be sacrificed for integration. While France now participates in the MGCS program, the Leclerc's ongoing service life and its modernization trajectory convey a clear message: France does not intend to abandon its national capacity to field independent, high-end armored systems. This discursive stance contributes to France's broader ambition to shape the European defense agenda around the notion that sovereignty and integration are not mutually exclusive—but must be carefully balanced.

4. Findings and conclusions

4.1. A systemic view of France's defense strategy

The analysis of these three programs reveals a coherent model of how France has pursued strategic autonomy in defense. While these platforms belong to different operational domains—air, sea, and land—they share core characteristics that point to a broader national strategy rather than isolated procurement decisions. Each program reflects a long-term political commitment to maintaining sovereign capabilities, an industrial policy centered on domestic control, and a discursive effort to shape the meaning of strategic autonomy at the European level.

Across all three cases, France demonstrates a consistent position on Vu et al.'s spectrum: the programs reach the level of "robust autonomy," with the *Charles de Gaulle* even approaching "full strategic autonomy." France retains significant control over each platform's life cycle—from design and production to deployment and modernization. These choices enable national freedom of action, including the capacity to operate without external approval and to export defense systems without foreign constraints. However, each case also illustrates the structural limitations of complete self-sufficiency in a globalized defense industry. Some foreign components in these systems remind that even the most sovereign programs nowadays operate within complex international supply chains.

Becker's political economy framework helps explain how this model is sustained. Strategic autonomy, in the French case, is made possible not only by political will, but by a strong defense industrial base and the state's willingness to absorb the high financial costs of independent capability development. The Rafale and Leclerc programs rely on a combination of domestic investment and, in the Rafale's case, export success to remain viable. The *Charles de Gaulle*, by contrast, depends entirely on national funding, reflecting a clear prioritization of sovereignty over economic efficiency. In all cases, autonomy is embedded in material infrastructure and long-term institutional support.

At the same time, the programs reflect the persistent tension between national autonomy and European defense integration. France's preference for nationally controlled platforms has often led to fragmentation, duplication, and a missed opportunity for standardization across EU member states. The Rafale competes with the Eurofighter and F-35; the Leclerc is operated only by France within the EU; and the *Charles de Gaulle*, while it contributes to multinational missions, remains predominantly a national asset, with no formal integration into EU naval structures. This fragmentation illustrates the collective action problem identified by Becker: when states prioritize autonomy, they may weaken the cohesion of broader security frameworks. Yet France also contributes to collective defense through joint operations, involvement in programs like FCAS and MGCS, and leadership in European strategic debates. Rather than a rejection of cooperation, France's model suggests a conditional approach in which autonomy is preserved where necessary and collaboration pursued where possible.

Beyond industrial and institutional dimensions, the three programs also function as tools of discursive leadership. France uses the Rafale, the *Charles de Gaulle*, and to a lesser extent the Leclerc to promote a vision of European defense that prioritizes sovereignty, technological leadership, and high-end capabilities. These platforms are not just military assets—they are symbols of a geopolitical narrative in which France seeks to redefine strategic autonomy as both a national and European objective. Through speeches, export strategies, and military deployments, France

positions its programs as evidence of what European states can and should do to avoid overreliance on external actors.

In sum, the case of France provides a systemic view of strategic autonomy not as a theoretical ambition, but as an operationalized strategy rooted in national capabilities, economic investment, and ideational influence. The country's defense programs reflect a model in which national autonomy and multilateral engagement coexist in a careful balance. This model is not without its contradictions or limitations, but it offers an instructive example of how a European state can pursue independence while remaining a key player in cooperative frameworks. Whether other EU members can or should replicate this model remains open to debate, but France's experience reveals the strategic logic, the structural demands, and the political consequences of taking autonomy seriously.

4.2. Lessons and broader implications

Reflecting in broader terms, the theoretical framework developed in this thesis could help other countries, particularly in Europe, to build their own defense strategies in order to enhance their strategic autonomy. It offers a set of insights into how national capabilities, industrial policies, cooperative structures, and discursive strategies should be balanced to achieve greater autonomy without isolating from collective security frameworks.

The theoretical framework suggests that an effective defense strategy cannot be based solely on the pursuit of complete independence or the blind acceptance of interdependence. Instead, strategic autonomy must be understood as a continuum, where the goal is to progressively enhance national capacities in key areas while managing inevitable dependencies through selective cooperation.

Vu et al.'s concept of strategic autonomy demonstrates that national defense strategies must be flexible and domain-specific. Absolute self-sufficiency is often unattainable, but robust autonomy—achieved through domestic control over critical technologies and platforms—can substantially strengthen national freedom of action. Consequently, a defense strategy inspired by this framework would prioritize autonomy in sectors deemed vital for national security, such as nuclear

deterrence, aerospace, and command systems, while allowing for collaboration in areas where collective efficiency is more beneficial, such as logistics, training, or maintenance.

Becker's political economy perspective reinforces the idea that defense autonomy requires sustained industrial and financial investment. Strategic autonomy is not achieved by political discourse alone; it demands the cultivation of domestic industrial ecosystems capable of producing and maintaining high-end military systems. Defense strategy, therefore, must be intertwined with industrial policy, technological innovation, and long-term budgetary commitments to ensure that autonomy is not only achieved but also maintained.

The collective action dimension warns that excessive national focus can generate fragmentation in regional defense frameworks. Thus, a balanced defense strategy must seek to enhance national capabilities without isolating them. Cooperation frameworks like NATO or EU defense initiatives should not be seen as contradictions to autonomy but as platforms that, if used strategically, can support national resilience while fostering shared security.

Finally, the discursive approach underscores that strategic autonomy is not merely a technical or operational achievement but also a political narrative. States must actively shape perceptions of autonomy at both national and international levels, framing sovereign capabilities as contributions to collective security rather than expressions of unilateralism. In this sense, defense strategies must not only build capabilities but also construct narratives that legitimize national choices within multilateral environments.

In sum, the theoretical framework indicates that a successful defense strategy must combine material independence with strategic cooperation, invest in industrial and technological sovereignty, and actively shape the discourse on autonomy. France's model illustrates both the opportunities and the tensions inherent in this approach, offering valuable lessons for other states. However, this does not mean that the French experience must be viewed as a one-size-fits-all model. Rather, it can serve as an inspiration for other European countries seeking to strengthen their defense

autonomy, provided that it is adapted to each country's specific strategic, industrial, and political conditions. The framework presented in this thesis encourages a flexible and pragmatic approach, recognizing that the path to greater autonomy will inevitably vary depending on national capabilities, threat perceptions, and regional dynamics.

4.3. Suggestions for further research

Regarding potential research related to the subject of this thesis, a comparative study between France and other European states—such as Germany, Italy, or Spain—could offer deeper insights into the diversity of national strategies and the challenges of building a more integrated European defense. Additionally, a more detailed analysis of the French case itself could be undertaken, expanding the focus to a broader range of military capabilities across land, air, sea, cyber, and space domains, in order to provide a more comprehensive assessment of France's position on the strategic autonomy spectrum.

Similar studies could also be conducted focusing on other European countries or even at the EU level as a collective actor, evaluating how different frameworks of cooperation and sovereignty interact. Finally, applying this model to other regions of the world—where the degree of interconnection between states is lower than in Europe—could offer insight on how collective action problems manifest under different geopolitical conditions, and how states pursue strategic autonomy in more fragmented regional environments.

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