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**THE RIGHT FREQUENCY: WHY SOME SHOCKS
RESTORE COMBAT CAPABILITIES WHILE OTHERS DO NOT
EVIDENCE FROM THE ITALIAN NAVY 2014–2024**

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ABSTRACT

This thesis asks under what circumstances an external security shock induces an armed service to restore high-intensity combat capabilities. Existing accounts hold that such shocks rarely produce wholesale transformation, more often generating layering – paradigmatic continuity alongside incremental adjustment beneath it. The thesis argues that one form layering can take is restoration: the recovery of a previously abandoned capability, here the capacity to fight in high-intensity contexts. It specifies the conditions under which this occurs – not a shock's magnitude, but its alignment with the service's vital area of interest and its exposure of a high-intensity warfighting gap in the context of the service's mission. Tested through theory-testing process tracing centred on the Marina Militare, the 2014 annexation of Crimea did not trigger restoration, satisfying neither condition, whereas the 2023–2024 Red Sea crisis did, satisfying both. The Italian Army's response to the 2022 invasion of Ukraine and the Japanese maritime response to the 2010–2012 Senkaku crisis serve as a scope-condition case and a shadow case, respectively. Restoration thus operates as a mechanism of layering: a previously abandoned capability is recovered beneath an unchanged defence paradigm, but only when a shock is both interest-aligned and capability-exposing.

TABLE OF CONTENTS

ABSTRACT	i
TABLE OF CONTENTS	ii
LIST OF ACRONYMS	iii
INTRODUCTION	1
MILITARY CHANGE: THE STATE OF THE ART	3
LITERATURE REVIEW ON MILITARY CHANGE	3
<i>Defining Military Change</i>	3
<i>Defining Military Innovation</i>	5
Grissom’s Four Schools of Military Innovation Studies – Strengths and Flaws	5
Innovation as a Process.....	9
Peacetime Innovation and Harmful Change	11
<i>Defining Military Adaptation, Emulation, and Restoration</i>	13
MILITARY CHANGE IN ITALY.....	19
<i>Military Change and the Italian Case Study</i>	19
<i>The post-Cold War Italian Armed Forces</i>	21
<i>The Navy</i>	28
FRAMEWORK AND ANALYSIS.....	34
THEORETICAL FRAMEWORK AND RESEARCH DESIGN	34
<i>Theoretical Framework</i>	35
Neoclassical Realism: The Triggering Architecture	36
Organisational-Cultural Resonance as Causal Mechanism.....	39
Non-State Actor Problem	40
Theoretical Expectations	41
<i>Research Design</i>	42
The Italian Navy	44
Scope-Condition Test and Shadow Case	45
Method: Theory-Testing Process Tracing	45
Operationalisation.....	47
Data Sources and Timeframe.....	48
EMPIRICAL ANALYSIS	51
<i>Navy’s Responses to Shocks</i>	52
Crimea 2014	52
Red Sea 2023-2024.....	59
<i>Scope Condition and Confirming Extension</i>	68
Italian Army’s Rearmament After the 2022 Invasion of Ukraine.....	68
The JMSDF’s Restoration After the 2012 Senkaku Crisis	70
CONCLUSIONS.....	73
REFERENCE LIST.....	75

LIST OF ACRONYMS

A2/AD – Anti-Access/Area-Denial

ASBM – Anti-Ship Ballistic Missiles

ASCM – Anti-Ship Cruise Missiles

ASW – Anti-Submarine Warfare

C2 – Command and Control

CM – Crisis Management

CME – Capo di Stato Maggiore dell'Esercito (Chief of the Army Staff)

CSMM – Capo di Stato Maggiore della Marina (Chief of Naval Staff)

CSMD – Capo di Stato Maggiore della Difesa (Chief of the defence Staff)

DDX – Destroyer

DPP – Documento Programmatico Pluriennale

DV – Dependent Variable

EM – Enlarged Mediterranean

EPC – European Patrol Corvette

FREMM-EVO – Fregate Europee Multi-Missione - Evolution

IDF – Israel Defence Forces

IR – International Relations

ISR – Intelligence, Surveillance, and Reconnaissance

ISTAR – Intelligence, Surveillance, Target Acquisition, and Reconnaissance

IV – Independent Variable

IVV – Intervening Variable

JMSDF –Japan Maritime Self-Defense Force

LHD – Landing Helicopter Dock

LSS – Logistic Support Ship

MCM – Mine Countermeasures

MIS – Military Innovation Studies

MM – Marina Militare

MoD – Ministry of Defence

NATO – North Atlantic Treaty Organization

NCR – Neoclassical Realism

NDPG – National Defense Program Guidelines

OCCAR – Organisation Conjointe de Coopération en matière d'Armement

PPA – Pattugliatore Polivalente d'Altura

RMA – Revolution in Military Affairs

SLOC – Sea Lines Of Communications

SNMCMG2 – Standing NATO Mine Counter-Measures Group 2

SNMG2 – Standing NATO Maritime Group 2

SOPs – Standard Operating Procedures

SSW – Subsea and Seabed Warfare

TD – Territorial Defence

TTPs – Tactics Techniques and Procedures

UAV – Unmanned Aerial Vehicle

UNPAV – Unità Polivalente Alta Velocità

USV – Unmanned Surface Vehicle

UUV – Unmanned Underwater Vehicle

INTRODUCTION

Why do some external security shocks lead an armed service to rebuild high-intensity combat capabilities, while others of similar magnitude leave its force structure unchanged? Studies of military change show that exogenous shocks rarely produce wholesale transformation. However, they can create layering—where an established defence paradigm endures as incremental adjustments accumulate beneath it. The Italian case fits this pattern: neither the 2014 annexation of Crimea nor, apparently, the 2022 invasion of Ukraine displaced the crisis-management paradigm that has shaped Italian defence policy since the end of the Cold War. Interestingly, layering under a persistent paradigm is not uniform. A service may recover a capability it had once set aside or forgotten, but the conditions for such recovery are not specified.

This thesis addresses that gap. It argues that one form layering can take is restoration—the recovery of a previously abandoned or forgotten capability. Restoration differs from innovation, adaptation, and emulation, focusing on relearning rather than novelty. In this case, restoration means reacquiring the ability to fight in high-intensity contexts, added to an otherwise unchanged defence paradigm. The thesis claims that restoration depends not on the shock's size, but on how well it fits the affected service. Restoration occurs when a shock affects the service's vital interests and exposes a gap in its ability to fight high-intensity wars, blocking mission success. When both conditions are present, the shock resonates within the culture and restoration follows. Otherwise, the shock may cause political, alliance, or budgetary effects, but does not lead to capability recovery within the service.

The argument uses a neoclassical realist framework, which holds that systemic pressures do not automatically produce policy responses but are filtered through unit-level variables. In this study, the framework is specifically applied to a single armed service—a domestic institution with its own organisational culture—which serves as the filter. The intervening variable, organisational-cultural resonance, includes two inseparable dimensions: vital-interest alignment and threat-type alignment, both of which must be present for restoration to occur. By positioning the filter at the service level, the

framework explains why services within the same state and strategic culture may respond differently to the same shock.

The empirical strategy is a structured comparison through a theory-testing process tracing. The Italian Navy is examined under two contrasting shocks, selected to vary the intervening variable while keeping domestic institutions and paradigms constant. The 2014 annexation of Crimea, which satisfied neither resonance dimension, occurred at the margins of the Enlarged Mediterranean in a land-centric, hybrid form and exposed no gaps in naval high-intensity capability. In contrast, the 2023-2024 Red Sea crisis satisfied both dimensions: it threatened the Suez-Bab el-Mandeb sea lines, crucial to Italian trade, and brought kinetic attacks that the Navy was not prepared to withstand. Accordingly, the framework predicts non-restoration for the first case and restoration for the second. Two further cases explore the argument's boundaries: the Italian Army after the 2022 invasion of Ukraine serves as a scope-condition case—here, restoration occurred even without resonance, showing the variable's limits—while the Japan Maritime Self-Defense Force after the 2010-2012 Senkaku crisis acts as a shadow case, testing whether the framework applies beyond Italy.

The thesis unfolds in five parts. First, the literature on military change is reviewed, situating restoration in context. Second, the Italian case is examined, tracing the post-Cold War emergence of the crisis-management paradigm and the Navy's position in it. Third, the theoretical framework and research design are developed. Fourth, this framework is applied to each case. Finally, the conclusion synthesizes the findings and considers implications for the framework's broader reach. The contribution is to specify, rather than simply assert, the conditions whereby shocks short of paradigm rupture reshape a service's capability profile.

MILITARY CHANGE: THE STATE OF THE ART

Literature Review on Military Change

Defining Military Change

This chapter reviews how the existing literature conceives *military change*. Posen in *The Sources of Military Doctrine* describes military doctrine as a “subcomponent of grand strategy that deals explicitly with military means and its conceptualizations” (1984, p. 13) that “may harm the security interests of the state if it is not integrated with the political objectives of the state's grand strategy” or “if it fails to respond to changes in political circumstances, adversary capabilities, or available military technology” (1984, p. 16). Many scholars focus on changes in doctrine (Avant, 1994), yet some militaries may not have a doctrinal tradition. This varies by national context, and despite doctrinal change, major aspects of the military organization may remain unchanged (Farrell, 1996a). Rosen, in *Winning the Next War*, defines military change as major innovation “defined as a change in one of the primary combat arms of a service in the way it fights or alternatively, as the creation of a new combat arm” (1991, pp. 7-8). This innovation, according to Rosen, should involve changes to the combat arms’ operational concepts and a renunciation, or curtailment, of older means and tools of fighting, with the persistence of the sole goal of “winning the war” (1991, p. 35). Rosen also notes that large bureaucracies “are hard to change, but that they are *designed not to change*”; militaries, as such bureaucracies, are particularly resistant, even when change occurs (1991, pp. 2-3).

A broader definition is provided by Farrell. He defines military change as a “change in goals, actual strategies, and/or structure of a military organization” (Farrell, 1996b; as cited in Farrell & Terriff, 2002, p. 5). In *The Sources of Military Change*, only major changes – those affecting doctrine, combat arms, and aspects of militaries with impact on primary mission, strategy, and possibly structure – are considered relevant (Farrell & Terriff, 2002, p. 5). Many equate military change with military innovation, but another view organizes military change into three pathways: *innovation*, *adaptation*, and *emulation* (Farrell & Terriff, 2002, p. 6). These focus on varying levels of novelty.

Innovation is the implementation of something new – technologies, tactics, strategies, and structures – the other two refer, respectively, to the adjustment of what already exists and to the import of new technologies, tactics, strategies, and structures from other military organizations. Whenever these three pathways culminate in new organisational structures, strategies, and goals, only then is possible to speak of major military change (Farrell & Terriff, 2002, p. 6) or innovation, as it is commonly accepted that adaptation can gradually lead to innovation (Farrell & Terriff, 2002, p. 6; Russell, 2010, p. 8; Farrell, 2013, p. 6). Additionally, innovation generally entails greater novelty and produces major organisational changes compared to adaptation (Russell, 2010, p. 8). It also provides to the innovator, generally a great power, an advantage in armament or technique, reducing the costs of domination and granting advantage over opponents (Gilpin, 1981, p. 60; Mearsheimer, 2001, p. 166). Furthermore, a fourth type of military change, recently introduced and unlike the previous ones, which are not interested in novelty, is *military restoration*, which focuses not on novelty but on “recovering older capabilities neglected or deliberately discarded in peacetime” to recover from battlefield surprise (Kuo, 2025).

Understanding how military change occurs requires recognizing it as a process of organisational and interorganisational learning or relearning¹.

The four types of change – innovation, adaptation, emulation, and restoration – are all efforts by military organizations to sustain effectiveness, even though clear lessons from experience do not always translate into straightforward guidance for change (Farrell & Terriff, 2002; Coticchia & Moro, 2016; Haaland, 2016; Griffin, 2017; Kuo, 2025). While these changes are separated by their focus on novelty or older means – adaptation, emulation, and restoration – they are united by their being comparatively understudied, underdeveloped, or undertheorized, compared to innovation (Farrell, 2013, p. 6; Resende-Santos, 2007, pp. 8, 14; Kuo, 2025). The following subsections first examine the main body of literature on *military innovation* and then turn to adaptation, emulation, and restoration.

¹ Learning can occur at two levels: low and high; the former leads to adaptation, while the latter leads to innovation (Haaland, 2016).

Defining Military Innovation

Grissom's Four Schools of Military Innovation Studies – Strengths and Flaws

During the last twenty years, the debate on *military innovation* has been widely influenced by Grissom's review of the field, *The Future of Military Innovation Studies* (2006), where he notes that, despite an apparent divergence in the definitions, scholars converge on a tacit definition of military innovation as “a change in operational praxis that produces a significant increase in military effectiveness” (Barnett, 1963, p. 11). This definition has three components. First, innovation must change how field formations fight². Second, such change must be significant in scope and impact, therefore excluding minor or ambiguous reforms. Finally, innovation is implicitly equated with performance-enhancing change³ (Grissom, 2006).

From this concept, Grissom develops four main schools of thought on military innovation – civil-military relations, inter-service politics, intra-service politics, and strategic and organisational culture.

First, in the *civil-military relations model*, spurred from Posen's *The Sources of Military Doctrine*, the nature and degree of innovation is the product of the relationship between statesmen and “mavericks”⁴ within the military service. Mavericks' relevance is given by the conservative bureaucratic character of military organizations, structurally inclined toward doctrinal stability (Posen, 1984, pp. 29; Grissom, 2006). As military organizations tend to resist change, a new alignment between military doctrine and national grand strategy requires either a sharp defeat in war, or active civilian intervention (Posen, 1984, pp. 222-226⁵). Following this tradition, later works emphasized how divergences in the civil-military relations of different states can produce different results

² Administrative and bureaucratic measures are excluded from what is considered innovation unless they clearly reshape operational practice (Grissom, 2006).

³ “Only reforms that produce greater military effectiveness are studied as innovations” (Grissom, 2006).

⁴ “Mavericks” are officers with original ideas who are prone to act with the civilian leadership to change the military.

⁵ Posen uses as main example the changes made by Germany after World War I. Rather than innovating, the German Army went back to the prewar offensive doctrine while introducing new tactics and technologies both thanks to reformers within the military and external contribution by the political leadership.

either hindering or enabling doctrinal change or its adaptation to changes from the adversaries (Avant, 1993; Zisk, 1993).

Second, the *inter-service politics model* focus rests on a state's military services relationships between each other, where competition for scarce resources drives innovation (Grissom, 2006). Many scholars of the inter-service model studied the rivalry between services of the US Armed Forces during the nuclear era, concluding that such competition produced innovations in systems and tactics when competition was high, especially in the 1950s, and that subsequent less competitive environments can mitigate innovation (Armacost, 1969; Sapolsky, 1972; Bacevich, 1986; Cote, 1996). Rivalry can then shape both the nature of the innovation and how war is imagined (Bacevich, 1986, pp. 103-128).

Third, the *intra-service politics model* is also focused on competition, specifically on that happening between branches of the same military service (Grissom, 2006). Centred on Rosen's *Winning the Next War*, peacetime innovation is treated as an ideological struggle within a service – that is both a political community and a military organization itself – and as a process that starts when senior officers generate “new theory of victory, an explanation of what the next war will look like and how officers must fight if it is to be won” (Rosen, 1991, pp. 19-20). While this struggle ensues, senior officers look for like-minded mid-level officers with excellent credentials that will side with this new theory of victory, and that must be rewarded with career incentives – “promotions pathways” to positions of senior command – usually after a new branch of the service is created (Rosen, 1991, pp. 20-23; Jungdahl & Macdonald, 2015).

Fourth and final, the *strategic and organisational culture model* gained traction during the 1990s and argues that cultural norms⁶ enable meaningful action and “define the purpose and possibilities of military change”, as they favour the persistence of behaviours through their institutionalization in an organisational community (Farrell & Terriff, 2002, p. 7). Military change can be fuelled by changes in military culture that may happen as a result of three processes – planned change, external shock, and

⁶ “Cultural norms are intersubjective beliefs about the social and natural world that define actors, their situations, and the possibilities of action” and “they are beliefs rooted in, and reproduced through, social practice.” (Farrell & Terriff, 2002, p. 7).

emulation. On the one hand, planned change, that is coherent with the intra-service politics model, entails a change in culture by military and political elites that is slow and difficult, and can be both aligned or not with the real beliefs of these elites, resulting in honest changes; on the other hand, an external shock can thwart the legitimacy of certain norms within a cultural system or, in conjunction with a planned change, can produce emulation and a relative cultural shift for the emulator (Farrell & Terriff, 2002, pp. 8-9).

In his review, Grissom does not consider literature on the Revolution in Military Affairs (RMA), defined by Krepinevich (1994) as the fundamental alteration of how a conflict is conducted resulting from the application of new technologies by military systems in conjunction with new operational concepts and organisational adaptation. However, a relevant contribution to the cultural model focuses precisely on culture's influence on the RMA. Dima Adamsky's *The Culture of Military Innovation* (2010, p. 1) conceptualizes RMA as a "radical military innovation" that fundamentally changes the conduct of warfare thanks to new organisational structures and methods, often along with the emergence of new technologies. Adamsky shows how different strategic cultures caused different, or even opposite, interpretations of the same technological breakthroughs⁷ (2010, pp. 58-59).

Grissom then argues that military innovation happens because military organizations, as large bureaucracies that will hardly change, are induced to do so by an external authority, therefore going through a top-down process (Posen, 1984, p. 226; Rosen, 1991, p. 2; Grissom, 2006). That is true for all four models, as central to their reasonings are senior officers or civilian decision-makers that will impose or coordinate innovation with mavericks within the military organization or its services – acting based on an interpretation of the international context, for the well-being of the service, based on a new "new theory of victory", or on a set of implicit beliefs (Rosen, 1991, pp. 8-21; Avant, 1993; Farrell & Terriff, 2002, p. 8; Grissom, 2006). Grissom notes that, despite several possible examples, the four major models do not explain bottom-up innovation, as they all are top-down approaches, which is generally developed by lower level officers

⁷ To demonstrate this, Adamsky uses as example US technological superiority in deep strike capabilities through precision guided missiles, which was not fully grasped by them as an RMA. It was the Soviets who first understood the revolutionary potential of this innovation.

and needs to be accepted by the senior leadership (Bickel, 2001, pp. 1-26, 205-209). These models also do not address horizontal innovation, which is defined by Foley (2012) as the spread of ideas between units – neither from the top-down or from the bottom-up. Grissom then identifies two challenges for the field of military innovation studies (MIS). First, the need for a more complete empirical understanding of bottom-up innovation to develop new models. Second, the need for new models to identify the causal conditions for bottom-up innovation, suggesting also the possible utility of the existing top-down models (Grissom, 2006).

In a more recent review paper, Griffin (2017) argues that, since Grissom's survey, MIS has grown as a richer and effective field, with cultural approaches addressing particularly well key gaps about bottom-up innovation and other forms of military change, such as adaptation and emulation by smaller states. Yet he claims that cultural lacks independent causality, and cultural approaches conform to a theoretical conservatism that treats culture as a "valued added" factor that is secondary subordinate to positivist IR theories (Griffin, 2017). From this, he sketches four characterisations of the field – conservative, confused, non-existent, and evolving. As a *conservative field*, it is dominated by a scholar-practitioner community that revolves around a conflict-averse theoretical middle-ground, discouraging overly theoretical scholarship and limiting the ambition of the research agenda. As a *confused field*, its selective use of multidisciplinary tools leads to the adoption of concepts and frameworks from other disciplines without the necessary reflection about their suitability in the field. This causes the misapplication of these tools as it happens, for example, with organisational learning theory, worsened by less selectivity in the application of case studies – "the more case studies, the less selectivity when applying them" – and by "selectivity biases in appropriation of conceptual tools from other disciplines". Shortly, what Griffin claims is that much of what is labelled innovation is in fact routine learning and that the field's focus on recognisable episodes of change blurs conceptual boundaries. As a *non-existent field*, MIS can be read not as a field of its own, rather as part of the broader discourse on organisational culture and learning. However, despite this possible interpretation, Griffin recognizes that the field has its own relevance and identity, since military organizations are unique due to their nature and the consequences of their failure. Finally, as an *evolving field*, MIS has become

richer also thanks to its multidisciplinary nature. It still needs to address some gaps, as the lack of research on bottom-up learning during peacetime. Additionally, Griffin recommends a more robust debate among the competing schools to test their compatibility; encouraging cultural scholars to aim for greater explanatory power; and engaging with scholars from the involved disciplines to establish a truly multidisciplinary foundation.

Innovation as a Process

Grissom's contribution to the field is thus twofold, as it crystallises a widely shared but implicit definition of innovation, and it organizes the field's causal explanations into a relatively simple typology; however, Grissom's tacit definition is "outcome oriented" (Terhorst, 2025). In a recent article, Horowitz and Pindyck (2023) tried to re-define military innovation as a process, as well as the outcome of said process. Starting from the review contributions by Grissom (2006) and Griffin (2017), they found a significant variation across definitions, with general coherence on certain components of military innovation – it involves change and this change requires organisational realignments – and widespread disagreement on other components of military innovation – the role of technology, the political purpose, the direction of innovation, whether innovation is a process or not, and if it must be successful (Horowitz & Pindyck, 2023). Focusing specifically on military innovation as a process in which technologies, doctrines, and tactics are researched, developed, employed, and finally diffused during a process of three phases – speculation, experimentation, and implementation (Armacost, 1969; Mahnken, 2011). First, the *speculation phase* consists in the identification of "novel ways to solve existing operational problems or exploit the potential of emerging technology"; second, the *experimentation phase* is delegated to a specific organization, therefore following a top-down approach that carries out exercises and wargaming; third, the *implementation phase* concerns the adoption of new doctrines and branches of the military organization and the adaptation of professional military education (Cheung et al., 2014, pp. 26-29).

The definition that Horowitz and Pindyck provide for military innovation is "changes in the conduct of warfare designed to increase the ability of a military community to generate power" (2023). In this definition it is not mandatory for a change

to be successful to be considered innovation, given that it just needs to be intended to enhance military power, even if it results in a counterproductive or harmful change (Horowitz & Pindyck, 2023; Kuo, 2022). Moreover, this definition considers military innovation both as a process and an outcome. Said process is composed, as in Mahnken's differentiation, of three phases – invention, incubation, and implementation – (Horowitz & Pindyck, 2023).

However, this conceptualization does not provide tangible concept of the causal effects of the various variables acting on the three stages of innovation, as proposed by Terhorst (2025). First, the *invention phase* consists in the emergence of new technologies and tactics, or in the modification of those already existing (Horowitz & Pindyck, 2023). The invention phase is affected by variables that have a causal relationship on innovation such as critical thinking within the military organization, organisational culture, incentives for career pathways, and the existence of a risk-taking environment. Critical thinking is fundamental in identifying potential innovations. Organisational culture exerts influence on the willingness to accept new ideas. Incentives are motivations for individuals to look for and report innovative ideas. Finally, a risk-taking environment determines the likelihood of new ideas being proposed and listened to (Terhorst, 2025).

Second, during the *incubation phase* the novelty acquires influence, both in a top-down or bottom-up process, thanks on advocacy and experimentation through the first-mover⁸ (Horowitz & Pindyck, 2023). In this second phase, the causal variables are the support from relevant administrative and political stakeholders, political coherence, the industrial structure, and cost and scalability of the innovation's technology. Stakeholders' support influences the feasibility of progressing from ideas to practical applications and the degree to which it influences the process results from lobbying activity by those within the military organization that have stakes in the innovation. The industrial structure affects how fast and how efficiently innovative technologies are created and produced, favoured by cost and scalability and by a coherent political environment (Terhorst, 2025).

⁸ A first mover is intended as the first to develop and adopt a new military hardware or organisational change (Weiss, 2017; Horowitz, 2010, pp. 48-50).

Third, the *implementation phase* consists in the top-down adoption by the community of interest and is often followed by the diffusion to other communities of interest (Horowitz & Pindyck, 2023). In this final phase, the causal relationship on innovation is influenced by ministerial and political support, which is determined by a society's strategic culture, its political culture, and risk appetite. Ministerial support influences resources' allocation and policy support. Strategic culture constructs the strategic priorities and the political environment in which implementation occurs. Political culture shapes the risk appetite of decision makers – Parties and politicians –, who will be more reluctant in taking risks if they are to blame for failed innovations. (Terhorst, 2025). Moreover, variables can be further differentiated in those being direct drivers of innovation – critical thinking during invention, stakeholders' support during incubation, and ministerial and political support during implementation – and those influencing their effect (Terhorst, 2025). This characterization is therefore intended to help clarify the various roles in the three phases of the process, to facilitate structured interventions by policymakers during the process, and to reinforce the model's predictive power about what permits or hampers military transformation.

Peacetime Innovation and Harmful Change

In MIS, innovation is often intended as a peacetime phenomenon that aims to acquire more military effectiveness despite happening under great uncertainty, both about the nature and the context of the next war, which will most certainly lead to wrong choices and insufficient investments, which will be difficult to correct (Murray & Millett, 2010, p. xiii). Such uncertainty is better addressed by organizations that maintain realistic combat experience and invest in experimentation (Murray & Watts, 1995). It is noteworthy that, according to Murray and Millett (2010, p. xiv), “peacetime innovation moved along only as fast as organisational concerns influenced the process” and that such process can be sped up by external political intervention. They also dissent that any miscalculation in political judgement cannot be corrected by operational or tactical mastery and may have long-lasting effects, thus underscoring the relevance of political decisions (Millett & Murray, 1988).

Drawing on this, Kuo (2022) argues that, as innovation promises greater mission effectiveness and resource efficiency, certain risks cannot be ruled out – namely the absence of experience and skills when resorting to a new capability, and the destruction of old capabilities that can be recovered with impacting costs. His proposition for a theory of *harmful innovation* posits that the higher the security commitments while resources are shrinking, the higher are the possibilities of gambles by desperation that will harm a military service. Security commitments are intended as a service's mission burdens that may be either written down or declared orally. These are used to set the criterion for how to size and shape the forces to which resources are allocated, expanded, preserved or reduced, contributing in generating a commitment-resource gap and stimulating greater interservice competition over funding (Cote, 1996, p. 339-342; Kuo, 2022). Such gap then affects mission burdens and their scope, intensity and time. The first consist in new tasks, commitments to allies, or the enlargement of territory to defend (Patterson, 2014, p. 3). The second depends on the competitors' relative military strength or changes in its strategy or technological capabilities (Rosen, 1991, p. 76). The third varies in required readiness as war becomes likelier (Posen, 1984, p. 59, 74-75).

Therefore, to address this commitment-resource gap that affects a service's capabilities and its military effectiveness, a state can either retrench by withdrawing, appeasing, or increasing reliance on allies – risking weakening itself or to embolden competitors –, or undergo a military buildup allocating more resources (Kuo, 2022). It is possible that rejecting both these alternatives may incentivize innovation and as argued by Kuo, that a considerable gap, widened by increasing commitments in the face of diminishing resources, can shape military innovation into a desperate gamble. In Kuo's framework the innovation process appears flawed by radical proposals to substitute a traditional capability considered obsolete, by wishful thinking that downplays the risks of innovation and dismiss reasonable criticisms, and by a less qualitative vetting and debate. Consequently, the interplay of these three factors may negatively affect a service's combat effectiveness and prevent it from achieving its objectives or from doing so at acceptable costs, resulting over time in the restoration of the unlearned traditional capability (Kuo, 2022). Finally, Kuo goes further and proposes alternative explanations for harmful innovation, suggesting a role for the misinterpretation of new and disruptive technologies

and for the organisational culture of the service, which can hinder a proper innovation process and favour innovations consistent with the objectives and favoured means.

Defining Military Adaptation, Emulation, and Restoration

Delving into *military adaptation*, this type of change corresponds to what Grissom calls “bottom-up innovation” and originates from field formations (2006) it can be defined as “change to tactics, techniques or existing technologies to improve operational performance” with the aim of winning the “current war” (Farrell, 2010) or as “change to strategy, force generation⁹, and/or military plans and operations, undertaken in response to operational challenges and campaign pressures” (Farrell, 2013, p. 2). Since Grissom’s review, there has been a surge in studies on bottom-up and horizontal innovation, mainly thanks to an extraordinary level of openness, especially by Western militaries (Griffin, 2017). Many of these studies focused on the lessons learned and on field-level adaptation during the wars in Afghanistan and Iraq after 9/11 (Farrell, 2010; Russell, 2010; Farrell et al., 2013). Relevant contributions on adaptation have been provided by Marcus, who addressed battlefield learning and adaptation by the IDF to hybrid non-state actors such as Hezbollah and Hamas (2015; 2017). His proposition built on the role of organisational culture and forms a hybrid model made of top-down, horizontal, and bottom-up innovation. In his studies, he highlighted the case of the Israeli Defence Forces (IDF) and their development, starting with the Unit 101 in 1953, of specialized units charged with finding solutions to overcome battlefield friction¹⁰ (Marcus, 2015). Units that enjoyed room for creativity, autonomy, and that had tactical audacity, shaped Israeli strategic thinking into developing and institutionalizing knowledge management mechanisms to redirect innovative field solutions, received from the bottom-up, to other units from the top-down or even among units horizontally (Marcus, 2015). This has been reinforced especially during the 2006 Lebanese War against Hezbollah (Marcus, 2015) and proved again to be effective in recent times – during the 2014 Gaza War against Hamas (Marcus, 2017). This Israeli organisational culture made the IDF evolve into an army of “doers”

⁹ As stated by Farrell, Osinga, and Russell in *Military Adaptation in Afghanistan* (2013, p. 2), “force generation includes force levels, equipment, training, and doctrine”.

¹⁰ Friction has been defined by Carl von Clausewitz as the sum of the unforeseen factors happening contextual to war and as the “only conception which in a general way corresponds to that which distinguishes real War from War on paper” (Clausewitz, 1832/1968, p. 164).

rather than “thinkers” (Marcus, 2015). A distinction exists between adaptation at the strategic level, which refers to a change in strategy, force levels, and resources to increment the effort – to accomplish strategic success or to reduce such effort in the face of a failing campaign – and operational level, meaning that adaptation comes when militaries change how they “prepare for, plan, and/or conduct operations”, leading to higher or lower acceptance of risk, higher or lower use of firepower, stricter or milder rules of engagement, and so on (Farrell, 2013, p. 3). On learning, adaptation, as a change that is not innovation yet¹¹, and being a bottom-up change, is led by battlefield insights (Farrell, 2010) and “lessons learned from the best practices” (Adamsky & Bjerga, 2012, p. 188). As noted by Haaland (2016), military organisations can learn and adapt even if the two processes are not forthright, or if the military organisation concerned by this change does not have the means to adapt properly. According to Murray (2011, p. 6), adaptation by effective military organisations consists of adjusting “prewar assumptions and concepts to reality”, whereas for most military organisations this occurs only after suffering substantial losses in lives and national funds. Moreover, military history is replete with cases in which combat forces have adapted under battlefield pressure (Murray, 2011); difficulties on the battlefield can then incentivize adaptation, if acknowledged and fostered by higher-ups, thus underscoring the relevance of effective organisational leadership (Farrell, 2018). Also according to Farrell (2013, p. 3), the most important and prevailing driver is represented by operational challenges¹², as it is nearly impossible for states and militaries to forecast every complication that will come up during war; or, using words by Imlay and Toft (2006, pp. 1-2), “if the task of military planning is indispensable, it is also fraught with an uncertainty” and “uncertainty remains one of the few certainties for contemporary military planners”. It is therefore possible to misunderstand the nature of the conflict due to “unfamiliarity with the political or battlefield terrain, one’s allies, or one’s own new technology” and being in need of adaptation (Farrell, 2013, p. 4). Concerning the two main levels of adaptation, strategic and operational levels, Farrell (2013, p. 5) conclude, that adapting strategies remains difficult due to them being “underpinned by considerable political and material

¹¹ Intended as battlefield tactics and techniques not yet institutionalised.

¹² Other factors that shape military adaptation are domestic politics, alliance politics, strategic culture, and civil-military relations.

investment”; while change at the operational level, though apparently easier to deal with due to its smaller change needed, it is still difficult for militaries as they are not inclined to change. Nevertheless, militaries do change and adapt during war (Farrell, 2013, p. 7); moreover, despite the assumption that adaptation concerns a less meaningful change compared to innovation, adaptation can lead to innovation if it “involves doctrinal or structural change, or the acquisition of a brand new technology” (Farrell, 2010). A third strand of adaptation consists in the tactical level which concerns the local modification of how units fight, solutions to immediate battlefield problems, and, when successful, evolve in new standard operating procedures (SOPs) that can spread horizontally across units (Russell, 2010, p. 8, pp. 191-192). This aligns with Dyson’s argument about the existence of “advanced adaptation” as a time-limited, non-institutionalised considerable change (2020). According to Dyson and Pashchuk (2022), tactical adaptation and changes in tactics, techniques and procedures (TTPs) are integral to wartime organisational learning, though they are not always translated into lessons-learned¹³. More recently, Dyson et al. (2025) showed that, at the tactical level, and also at the operational one, military activity is technical and it involves routines and procedures; learning is therefore largely produced by everyday practices, often outside of the formal channels¹⁴. This may explain why battlefield learning may not be smoothly institutionalized.

Military emulation, intended as the diffusion of innovations between states, can be defined as the “deliberate imitation by one state of any aspect of another state’s military system that bears upon its own military system” with a cross-national nature (Resende-Santos, 2007, pp. 2, 9). According to Farrell and Terriff (2002, p. 5) it involves the importation and adoption of a new foreign military tool or way of war in whole or in part. Emulation adds social and cultural layers to the emphasis on international drivers of military change given by International Relations (IR) scholars such as Posen (1993), who stated that “successful practices will be imitated”, building on Waltz’s idea that contending states will likely replicate the more powerful countries’ military capabilities and innovations (1979). Two are the theoretical schools mainly used to describe why states adopt foreign innovations, neorealism and neo-institutionalism (Goldman, 2002, p.

¹³ Their 2022 study focused on failures by the Armed Forces of Ukraine to successfully adapt during the Donbas War due to bureaucratic politics and organisational culture.

¹⁴ Generally oral culture is the main mean for informal diffusion of knowledge.

41). For *neorealists* as Posen and Waltz, the main stimulus to emulate is provided by competition and the search for the highest possible effectiveness, favoured by the urgency to adopt the most advantageous tools and practices in a self-help system as a form of internal balancing¹⁵ in response to external threats to enhance security (Goldman, 2002, p. 42; Resende-Santos, 2007, pp. 65-66). Contrary to innovation, deemed risky for the need for testing in a competitive environment, emulation offers a lower-risk alternative, as states resort to tools and practices of proven effectiveness, especially considering the inherent states' risk-aversion in security matters (Resende-Santos, 2007, pp. 73-75). The neorealist theory on emulation is also well-suited to answer about the variations of how fast and extensively states emulate, by looking at pressures and opportunities in their external security environment and at their timing, intensity, and scale (Resende-Santos, 2007, pp. 85-86). Conversely, *neo-institutionalists* emphasize the role of institutional pressures and the importance that organizations assign to attain legitimacy as much as they do to increasing efficiency, highlighting great variation in cross-national emulation than suggested by conventional IR theories (Goldman, 2002, p. 43; Eliason & Goldman, 2003, p. 8). Through the concept of isomorphism, which states that the units of a population will likely mirror one another if facing the same environmental conditions, DiMaggio and Powell (1983) argue that two components exist, competitive and institutional isomorphism. The latter is relevant to neo-institutionalism, as it advances in adopting the "appropriate" behaviour even without evidence that innovation increases internal organisational efficiency while chasing socially defined legitimacy (DiMaggio & Powell, 1983, Coticchia & Moro, 2016). Two mechanisms are relevant in this process. First, due to environmental uncertainty and ambiguity modelling on other organizations allows an easy adoption of successful practices and provides legitimacy enhancing the prestige to external audiences, therefore cross-national diffusion will happen regardless of a direct strategic necessity (Goldman, 2002, pp. 43-44). Second, professional networks allow for the diffusion of knowledge and practices, resulting also in common norms, therefore favouring isomorphism (Farrell, 2001; Terriff, 2002, p. 107). In military emulation, as in all types of military change, the concept of learning is central. Learning

¹⁵ An internal mobilization strategy, which involves the states' human, material, organisational, and technological resources; it can happen under various forms (Resende-Santos, 2007, p. 67).

from others to emulate, however, does not only happen with competitors but also within alliances. As formal alliances are a form of external balancing, deeply intertwined with internal balancing as emulation is, less resourceful members of an alliance engage in interorganisational learning, to respond to field pressures for change (Resende-Santos, 2007, p. 68; Coticchia & Moro, 2016). Learning is conditioned by the availability of solutions that others have adopted; these solutions, however, need to be changed to fit the new environment (Coticchia & Moro, 2016). Factors influencing this process are the “infectiousness” of an innovation¹⁶, the social proximity between the learner and the original organization¹⁷, the susceptibility of the emulator¹⁸, and its absorption capabilities¹⁹ (Coticchia & Moro, 2016). Organizations are often incentivized to learn following poor performances or inactivity in a particular field (Coticchia & Moro, 2016). Additionally, emulators benefit from late-modernizer advantages, as successful emulation generates a demonstrative effect, particularly important for the second wave of emulators that will learn from both the first emulators and the original organization (Resende-Santos, 2007, p. 75).

The literature on military change has, according to Kuo (2025), suffered from a bias towards novelty in all its three types previously described, as the dominant model assumes that wartime performance gaps occur because military organizations are focused on refighting the last war, therefore needing to implement novel solutions. This came at the expense of a fourth type that is not concerned by novelty, which is *military restoration*. Kuo defines it as the recovery of old ways of war – technology, organization, and doctrine. Old technology gain again space on the field, traditional structures to organize units are used again, and units are again trained to execute old tactics, techniques, and procedures; this happens as a response to battlefield surprise (Kuo, 2025). Restoration can happen in different ways, as refocusing on an overlooked mission area and doing so using new technologies, or employing old technologies and tactics in new types of

¹⁶ An innovation needs to be seen as a potential solution to a perceived problem; it is easier if it is perceived as successful and the original organization is perceived more legitimate.

¹⁷ Social proximity is defined by social ties that enable trust and favour willingness to adopt solutions designed by others.

¹⁸ Susceptibility of the learner is defined by the motivations to learn, by size, age, availability of resources.

¹⁹ Absorption capabilities are prior knowledge and structures of communication between the learner and the environment, and among its units

missions (Kuo, 2025). A further possibility is the restoration of previous capabilities after an innovation harmed the organization's effectiveness (Kuo, 2022; Kuo, 2025). As in the previous types of military change, learning is central even if requires doing it again on something that was already known. Relearning something, therefore, means that some knowledge was lost or forgotten (Kuo, 2025). This loss can be explained first with an "unthinking behaviour", meaning that a wartime adaptation may not subsequently be institutionalized in the organization or, in the postwar period the transformation of the military organization can either fail to implement such knowledge as an explicit practice or can dismantle structures causing the knowledge to be lost during demobilization (Serena, 2011; Kuo 2025). A second explanation is that competence can simply deteriorate during peacetime due to neglect (Kuo, 2025). A third explanation is that learning, as it has been previously said, is not straightforward and military organizations can even learn the wrong lessons during combat (Haaland, 2016). A fourth possibility is the eventuality of a military organization too much focused on development to undermine itself (Kuo, 2022). A fifth possibility is that a military organization specifically focuses on a mission or type of war and ends up being in a type of war that was thought to belong to the past (Kuo, 2025). The enablers for restoration are likely different from those for novelty, as organisational culture, the lack of leadership turnover, and the lack of institutionalization for lessons learned, may actually favour the emergence of old solutions for recurrent problems, contrary to innovation, adaptation, and emulation (Kuo, 2025). Kuo concludes that "preserving traditional capabilities can be a source of strength" as even if warfare continues to evolve, its character can remain stable for long (Kuo, 2025).

Military Change in Italy

Military Change and the Italian Case Study

As reviewed in Chapter I, military change should not be simply treated as a synonym for innovation; rather, it may occur through different pathways, namely innovation, adaptation, emulation, and restoration. Each of these describes a different level of novelty and its interaction with learning or re-learning, from own experience or from others. The strategic and organisational culture model can be of use analysing the literature on military change and the Italian Armed Forces, as change may result from planned change, external shock, and emulation acting on cultural norms which, generally, favour the persistence of behaviours through their institutionalization.

In the case of Italy, this happened in the post-Cold War era. An external shock such as the end of the bipolar competition created room for manoeuvre for Italy, which transformed itself from a “security-consumer” to a “security-provider” (Crocì, 2003). The rapid shift from a territorial defence (TD) paradigm to one of crisis management (CM), however, consolidated to the point that successive external shocks have not been able to revert it due to domestic constraints²⁰ and strong institutionalisation (Coticchia, 2024). Despite radical shift from TD to CM, the post-Cold War transformation of the Italian Armed Forces was not a linear or purely top-down process. It combined doctrinal reorientation, operational adaptation, and emulation (Coticchia & Moro, 2014; Coticchia & Moro, 2016). Coticchia and Moro (2014) argue that Italian military change must be scrutinized, as doctrine, force deployment, and resource allocation interacted over time, and because past choices shaped the direction of change.

A first dimension of this change was doctrinal and political reorientation from the top-down. The environment resulting from the end of the Cold War created the conditions for abandoning TD as central defence paradigm and for the transformation of the Italian military instrument in an expeditionary force based on deployability and professionalism, well-suited for a CM paradigm which quickly emerged in the 1990s in the form of the *Nuovo Modello di Difesa* (Coticchia & Di Giulio, 2024).

²⁰ Mainly cultural norms both within the public opinion and the elites, and to fixed costs and planning.

A second dimension was that of operational adaptation. The doctrinal shift was reinforced by repeated deployments abroad that made Italy one of the most active European contributors to post-Cold War and post-9/11 military operations, which provided the field feedback and experience that helped to adjust and consolidate the new defence model (Coticchia & Moro, 2014). As argued in Chapter I, change is not just exhausted by a doctrinal formulation, as it depends also on how new assumptions are tested, adapted, and absorbed through practice. This process has been driven by Italy's own operational experience, whereby the lessons learned from the ground have been examined by knowledge management centres, such as the Ce.Si.VA (Coticchia & Di Giulio, 2024).

A third dimension was emulation. As Coticchia and Moro (2016) argued, for a middle power with scarce cognitive and material resources, as Italy is, change may occur through learning from others. After 2001, change for the Italian Armed Forces often occurred adopting and adapting external practices, especially in multilateral operational environments, mainly NATO (Coticchia & Moro, 2016). Digitalisation, interoperability, and the comprehensive approach have been central in transformation, highlighting how interaction within alliance settings and learning contributed to the institutionalization of the CM model (Coticchia & Moro, 2016). Unlike operational adaptation, which draws on own field experience, emulation draws on practices developed by others and absorbed through alliance interaction (Coticchia & Moro, 2016). In light of these analyses, it is clear that the concept of restoration should be used with caution when referring to the Italian case. If restoration refers to the recovery or relearning of capabilities or doctrines previously neglected or abandoned, the literature disincentivizes the assumption that such process has occurred yet. Rather, scholarship suggests that the degree of institutionalisation of the CM paradigm, fixed costs, and domestic constraints made it hegemonic and have set the conditions for it to not be put into discussion by policy and military elites (Coticchia & Di Giulio, 2024). What is supported by recent scholarship is that a radical shift back to TD, after the most recent external shocks²¹ in the European security space, did not occur, while a readjustment process did occur (Coticchia, 2024).

²¹ Namely the Russian annexation of Crimea in 2014 and the full-scale Russian invasion of Ukraine in 2022.

Conventional TD have gained salience, yet it appears not to have been able to displace CM, which suits the Italian pre-existing strategic priorities in the Mediterranean area (Coticchia, 2024; Coticchia & Mazziotti di Celso, 2025).

The post-Cold War Italian Armed Forces

The evolution of the Italian Armed Forces in the post-Cold War era is usually regarded in the literature as a case of major military change, though not linear (Coticchia & Moro, 2014). Italy, which is conventionally recognised as a middle power²², a condition that has long shaped its foreign and defence policy (Santoro, 1991; Andreatta, 2001; Verbeek & Giacomello, 2011; Gilli et al., 2015). The end of bipolarism allowed Italy to reassess its strategic posture, which had been based on a “security-consuming attitude” and had delegated external security to the United States and NATO (Crocì, 2003; Coticchia et al., 2023).

As Croci suggested (2003), Italy shifted from a "security-consuming" position to a more active role as a "security-producer." Recent scholarship makes it clear that this shift is rooted in the Cold War legacies of Italian defence policy, including alliance dependence, a low international profile, limited public debate on military affairs, and a strategic culture based on values such as multilateralism, pacifism, and humanitarianism (Coticchia et al., 2023, pp. 25-26, 29).

The end of the Cold War caused the Italian defence establishment to recognise that new threats were less likely to take the form of large-scale territorial defence and were more likely to involve regional crises, low-intensity conflicts, stabilisation operations, and multidimensional security challenges such as organised crime, terrorism, and humanitarian emergencies (Crocì, 2003; Coticchia & Moro, 2014; Ceccorulli &

²² A middle power is state which is larger and more capable than small states, yet it is structurally unable to match the strategic weight of the great powers. For more on middle powers, see: Abbondanza, G. (2019). The historical determination of the middle power concept. In T. Struye de Swielande, D. Vandamme, D. Walton, & T. Wilkins (Eds.), *Rethinking middle powers: New frameworks, new cases* (pp. 32–44). Routledge.; Abbondanza, G. (2020). Middle powers and great powers through history: The concept from ancient times to the present day. *History of Political Thought*, 41(3), 397–418; Abbondanza, G. (2022). Whither the Indo-Pacific? Middle power strategies from Australia, South Korea, and Indonesia. *International Affairs*, 98(2), 403–421; Giacomello, G., & Verbeek, B. (2024). Foreign policy of middle powers. In J. Kaarbo & C. Thies (Eds.), *Oxford handbook of foreign policy analysis* (pp. 519–537). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780198843061.013.29>.

Coticchia, 2015; Coticchia & Di Giulio, 2024). Such a shift towards a new way to tackle challenges is well captured by Caruso and Locatelli's analysis of post-Cold War reforms to the Italian military-industrial complex, which aimed to transform the Italian Armed Forces into expeditionary, joint, and technologically suited forces (Caruso & Locatelli, 2012). Similarly, Coticchia and Moro stressed that the post-bipolar environment and the new operational demands forced Italy to reinvent its force structure, doctrine, and organisation under dual pressure from changing threats and shrinking resources (Coticchia & Moro, 2014).

Generally, the 1990s are considered central to the transformation of Italian defence policy in the literature, with the Iraq War (1991) serving as a turning point. Not only was it the first post-Cold War major deployment, but it was also crucial in shaping Italy's new trajectory centred on out-of-area operations, deployability, and power projection (Coticchia et al., 2023, pp. 130-131).

The main reference for this change is the 1991 *Nuovo Modello di Difesa*, which makes protecting political and economic interests abroad central to the country's defence and foreign policy. It emphasizes projecting power and taking a more active role in the Mediterranean and nearby regions (Coticchia, 2009, pp. 185-186). Building on this, the new model highlighted the need to deploy troops abroad to address new threats, keep the peace, and stabilize crisis areas (Coticchia & Moro, 2014, p. 136). It also underscored the necessity to reduce personnel while boosting readiness, cooperation between branches, and flexibility (Coticchia & Moro, 2014). This new CM paradigm was quickly adopted by political and military leaders, with little pushback to return to a TD model, setting off a pattern in which this approach became self-reinforcing (Coticchia et al., 2023, p. 132; Coticchia & Di Giulio, 2024).

This transformation was gradually institutionalised in the late 1990s and early 2000s, with three recurring elements: jointness, professionalisation, and doctrinal reform.

To achieve *jointness*, crucial steps were then undertaken to strengthen the role of the Chief of Staff and to enhance inter-service coordination, despite relevant aspects²³ remaining within individual services (Coticchia & Moro, 2014).

In the early 2000s, Italy shifted from a conscription-based²⁴ to an all-volunteer force, therefore shifting to a *professional model* (Coticchia, 2009, p. 194; Coticchia & Moro, 2014; Coticchia et al., 2023, 147). However, this effort did not fully reduce personnel numbers, as a disproportionate share of the defence budget still goes to it (Coticchia & Moro, 2014; Coticchia et al., 2023, 147). Still, the reduction supported Italy's shift to a CM model and expeditionary operations, meeting the need for a more projectable military (Coticchia & Di Giulio, 2024).

Finally, regarding *doctrinal reform*, the *Nuovo Modello di Difesa* paved the way for later transformations, but full institutionalisation occurred only with the 2002 White Book, released just after 9/11. This strategic document provided the conceptual framework to adapt the defence model to new threats (Libro Bianco, 2002, pp. 14-15; Coticchia et al., 2023, p. 137). The White Book set out key objectives: defending "vital interests" from external aggression, protecting the Euro-Atlantic area²⁵, preserving international peace and stability through CM, and safeguarding national institutions (Coticchia & Moro, 2014).

The document outlined key elements for future operations readiness and quick deployability, including standardisation of equipment, interoperability, joint coordination, and logistical flexibility. Each of these should be supported by naval and aerial mobility, maritime surveillance, intelligence, surveillance, and reconnaissance (ISR) capabilities, precision munitions, and other enablers (Coticchia & Moro, 2014). More recent literature confirms these points, while also stressing that the reform process remains incomplete: although professionalisation advanced decisively, jointness and budgetary equilibrium lagged behind (Coticchia et al., 2023, p. 140).

²³ Such as personnel management.

²⁴ Conscription was suspended in 2005.

²⁵ Here the contribution to NATO's collective defence remains central.

The 2002 White Book is approached with caution by some scholars, who recognize its acknowledgment of the need to strengthen expeditionary capabilities to counter asymmetrical threats, though it falls short in its implementation (Coticchia et al., 2016, pp. 5-6). Some literature suggests that the 2002 document should be framed as part of a doctrinal trajectory that prioritized deployability, multilateral interventions, and CM for Italian defence (Coticchia et al., 2023, pp. 146-147).

It is also worth noting that transformation was driven not only by top-down doctrinal reform but also by operational experience; deployments in the 1990s in Iraq, Somalia, and the Balkans shaped successive reforms. Specialised centres managed lessons learned on the ground, which enabled bottom-up adaptation and helped diffuse new TTPs (Coticchia & Di Giulio, 2024).

At the same time, jointness was intended not only within the Italian Armed Forces but also among Allied forces (Stato Maggiore della Difesa, 2005, p. 38). Interorganisational learning played a relevant role in Italian military change (Coticchia & Moro, 2016). Joint operations, especially US-led and within NATO, encouraged learning from allied practices in three main areas: interoperability, digitalisation and net-centric capabilities (Nones & Marrone, 2012), and the adoption of a comprehensive approach to operations (Coticchia & Moro, 2016). However, this drive for efficiency fostered a path-dependent trajectory of activism, justified through a “peace and humanitarian” domestic narrative. This narrative helped fit international commitments and address public scepticism (Coticchia et al., 2023, pp. 131-132). Ultimately, it allowed for transformation in the military with little-to-no institutional resistance (Coticchia et al., 2023, pp. 146-147).

In line with the “peace and humanitarian” narrative, the literature highlights the evolving role of the armed forces in non-traditional security tasks such as instability, migration, organised crime, terrorism, and humanitarian emergencies (Ceccorulli & Coticchia, 2015). Such a change is well-exemplified by the intervention in Libya, where the Italian CM encompassed many functions beyond conventional warfighting (Ceccorulli & Coticchia, 2015). The expanding roles of the Italian Armed Forces have been noteworthy especially in the Mediterranean, where activism began in the bipolar era

and became central after 1991 due to rising instability (Crocì, 2003; Coticchia et al., 2023, pp. 25-27).

A persistent constraint to successful change is represented by limited resources. Italian defence chronically suffered from high personnel costs that hindered training, investment, and operations, which also suffered from a small effectively deployable force (Coticchia & Moro, 2014). These persistent problems – resource scarcity and cultural inertia – led to a coexistence of change and continuity (Coticchia et al., 2016). Institutional legacies played a role in this coexistence, with the Italian forces being used both abroad and domestically (Libro Bianco, 2002, pp. 65-66), personnel still being managed by each service, and procurement commitments from past strategies that did not favour innovation (Coticchia & Moro, 2014). Further constraints to innovation have long been represented by a weak public debate on national security strategy and a weak parliamentary scrutiny (Coticchia et al., 2023, pp. 132-147).

During this period of transformation for the Italian military, the CM paradigm emerged as well-suited for the post-9/11 activism. Its early emergence allowed for a broad elite consensus on its relevance and, successively, to its strong institutionalisation from the early 2000s to the mid-2010s (Coticchia & Di Giulio, 2024). Italy's repeated participation in multilateral interventions in Afghanistan, Iraq, Lebanon, Libya, and Kosovo, among the others, highlights the shifting priorities for Italian involvement. This vibrant activism made Italy the only major European country to contribute militarily to all post-9/11 major operations, in continuity with the post-Cold War trajectory emerged in the 1990s (Crocì, 2003; Coticchia & Moro, 2014; Coticchia et al., 2023, pp. 146-147).

In 2015, the Italian Ministry of Defence (MoD) published a new White Paper, which currently is the last Italian strategic document as such. According to some literature, the document is significant as it fills a thirty-year void in strategic thinking at the highest political-institutional level, and that it attempts – unusually for Italian defence documents – to link objectives with the means to achieve them (Marrone et al., 2015, pp. 2–3). The document aimed at formally codifying, at the doctrinal level, changes that were already assimilated through experience in the previous decades of expeditionary commitments in Kosovo, Afghanistan, Iraq, and Libya (Coticchia et al., 2016). When

compared to its 2002 predecessor, the 2015 White Paper highlights a meaningful shift in emphasis on hybrid and asymmetric threats over conventional ones, on the relevance of stabilisation operations, and the principles of effectiveness and economy of use as main criteria for force development (Coticchia et al., 2016). Of equal significance is the persistent centrality of the Mediterranean area, the reliance on NATO and EU frameworks, and the CM paradigm and its expeditionary focus (Libro Bianco, 2015, pp. 15-18; Coticchia et al., 2016). This suggests more doctrinal updating, rather than a genuine transformation (Gilli et al., 2015; Coticchia et al., 2016). However, the document's reformist ambitions would have required consistent and coherent political support to be translated into concrete legislative acts (Camporini, 2015, pp. 7, 9-10).

Despite the ambition, many innovations prescribed by the 2015 White Paper were only partially realised, resulting in a fragmented innovation system hampered by a constant gap between doctrinal ambition and institutional delivery (Marrone & Gilli, 2020). The defence innovation system remained concentrated on service-specific procurement programmes and chronically underfunded in research and technology – a condition compounded by the structural difficulty of reducing personnel costs, which consistently absorbed the largest share of the defence budget (Marrone & Gilli, 2020). Such gap is worsened by a structural weakness that runs deeper than any document. Indeed, the White Paper's essentially national frame of reference results in an inadequate treatment of the international security dimension and of the civil-military link rather than an effective defence strategy, risking becoming a "book of dreams" if Italy proves unable to act on the broader strategic vision the document implicitly requires (Silvestri, 2015, pp. 19–21). This structural shortcoming is further compounded by the absence of a National Security Strategy (Termine et al., 2026) and the persistent underdevelopment of domestic strategic thinking, both of which ultimately constrained the document's capacity to drive substantive change in the organisation and posture of the Armed Forces (Coticchia et al., 2023, pp. 152–153).

More broadly, the post-Cold War effort to achieve a balanced equilibrium between force size, composition and financial resources remained incomplete: whilst overall troop numbers declined significantly, officers were reduced far less than other ranks,

perpetuating a structural imbalance rooted in the Cold War legacy (Coticchia et al., 2023, pp. 138, 141).

The CM's hegemony in Italian defence policy recently sparked a question about the eventuality of a return to a TD approach, especially after recent external shocks in European security (Coticchia, 2024). As the literature on external shocks and policy change states, exogenous shocks rarely result in dramatic ruptures (Hermann, 1990; Nohrstedt, 2005; Gordell & Volgy, 2022; Coticchia, 2024).

The changes in the Italian military after the Russian invasions of Ukraine in 2014 and 2022 do not amount to a full paradigm shift or transformation but rather constitute a readjustment or layering adaptation process²⁶ (Massie & Munier, 2024; Coticchia & Di Giulio, 2024; Coticchia, 2024). This is evident in the continued prioritization of the Mediterranean area in both planning and politics even after 2022. Italy remains active in the Mediterranean area (Coticchia, 2024; Coticchia & Mazziotti di Celso, 2025), despite expanded engagement in Eastern Europe (Brighi & Giusti, 2023, Cladi, 2026) and the Indo-Pacific (Abbondanza, 2024, 2026; Termine, 2025; Termine & Natalizia, 2025), as well as the war in Ukraine.

In short, the literature presents the Italian Armed Forces as a case of significant, even if non-linear, military change. There is a broad consensus on the shift towards a more active role, characterised by a smaller, more professional, deployable, more joint, and expeditionary force, hardly oriented towards a CM model (Crocì, 2003; Coticchia et al., 2016; Coticchia et al., 2023). However, this transition remained incomplete, marked by a persistent duality between reform ambitions and enduring institutional legacies that resist change. Recurring structural limitations – budget imbalances, disproportionate personnel costs, fragmented defence innovation – have consistently constrained both pace and depth of change. Ultimately, the trajectory of the Italian defence policy is characterised by the overlapping of reform, continuity, and path dependency of long-lasting defence paradigms which result in slow readjustments, rather than broad changes (Coticchia et al., 2023; Coticchia & Di Giulio, 2024; Coticchia, 2024).

²⁶ The addition of new elements to existing institutions without abandoning the previous ones, with conventional approach overlaying on a CM model.

Within the broader context of Italian military change, the Marina Militare plays a central role in this thesis. As a single armed service with a clear strategic focus and institutional identity, it provides an effective lens for examining Italian service-level military change. The following section narrows the discussion from the entire Italian Armed Forces to the MM, tracing its post-Cold War transformation and the consolidation of its doctrinal orientation during the years relevant to this analysis.

The Navy

With the end of the Cold War and the subsequent transformation in the Italian defence posture, also the Navy, the *Marina Militare* (MM), was involved. During the Cold War, the MM was centred on sea control in the Central Mediterranean within the NATO framework and that, in the final phase of the bipolar confrontation, had expanded to encompass the broader EM²⁷ (Ramoino, 2018). Indeed, the very concept of the EM had originated within the MM itself in the early 1980s and had later become the dominant paradigm of Italian naval strategy and, eventually, of the country's broader foreign and defence policy (De Ninno & Cavo, 2024, p. 45; Zampieri, 2024, p. 159). It has consistently been the MM's primary area of strategic interest and operational deployment, as explicitly stated in some MM's strategic documents due to the relevance of sea-borne commerce and energy imports (Marina Militare, 2019; Marrone & Calcagno, 2023).

Such transformation towards expeditionary commitments, which persisted through the decades, was never formally codified in a high-level strategic document until the 2015 White Paper (Gilli et al., 2015). The document adopted a pragmatic tone, previously absent in the Italian strategic culture, and assigned a central role to national interests, acknowledging the utility of the use force and reorienting Italy to the EM (Gilli et al., 2015).

The EM's centrality in the Italian security has been consistent among all governments without exceptions, something that has been confirmed by all strategic documents from the 2015 White Paper onwards (Coticchia & Mazziotti di Celso, 2025). Yet, this centrality has paradoxically coexisted with a persistent deficit of strategic

²⁷ The EM is a macro-region including the Middle East and North Africa, the Sahel, and the Horn of Africa.

coherence as Italy acted in the EM without a consistent strategic framework, a structural limitation compounded by resource scarcity, domestic constraints, and the enduring absence of a mature strategic culture (Carati, 2024, p. 120).

The Navy's post-Cold War operational record reflects this strategic orientation, as the MM played a central role in humanitarian and CM missions throughout the 1990s and the 2000s, having acquired experience in managing migratory flows from contexts of instability²⁸ and therefore having shaped an institutional culture for addressing multidimensional, non-traditional threats (Ceccorulli & Coticchia, 2015). During the 2011 Libyan crisis, naval units were deployed under the dual mandate of enforcing the UN-sanctioned arms embargo and conducting humanitarian operations in the Central Mediterranean, deterring transnational organised crime engaged in human trafficking (Ceccorulli & Coticchia, 2015). This flexibility of employment, from constabulary duties to warfighting has remained a defining feature of the Navy's approach. Operation *Mare Nostrum*, launched in 2013 and managed by the Navy's Chief of Staff, demonstrated the Navy's dual-use posture and the service's capacity in large-scale humanitarian operations while maintaining naval proficiency (Gilli et al., 2015).

The recent intensification of threats in the EM has prompted the Italian governments to extend the operational reach of its naval commitments. Operation *Mediterraneo Sicuro*, which started as *Mare Sicuro*, has ensured a continued naval presence across the area (Coticchia & Mazziotti di Celso, 2025). Beyond the Mediterranean proper, Italy was drawn into a new engagement after the emergence of Houthi attacks on commercial shipping in the Red Sea from October 2023 (Paes et al., 2024). Italy therefore contributed to EUNAVFOR Aspides, an EU-led defensive naval mission tasked with escorting civilian vessels and ensuring maritime awareness through the Bab el-Mandeb Strait (Calcagno et al., 2025).

Along with France and Greece, Italy was the main contributor to the operation, maintaining continuous ship deployments even as other EU member states withdrew after a few months, highlighting Italy's leading role in naval power within the European framework (Calcagno et al., 2025). From the Italian perspective, the crisis exposed

²⁸ From the Balkan crises in 1990s, to the intervention in Libya in 2011.

NATO's structural limitations for addressing the southern flank's security challenges, suggesting that future Italian maritime security operations may increasingly require minilateral or unilateral formats to safeguard stability in the EM (Calcagno et al., 2025).

This sustained operational commitment in the EM is also reflected in the MM's own strategic guidelines for 2026-2027, which explicitly foresee a maintained naval presence in the Mediterranean's surroundings – the Red Sea, the Indian Ocean, the Indo-Pacific, the Arctic, and the Gulf of Guinea – operating to anticipate crises rather than reacting to them (Marina Militare, 2026).

The Navy's procurement in the post-Cold War has not been less significant than the deployment. Italy's fleet contracted substantially after the end of the Cold War²⁹, in line with a general European trend that prioritised low-intensity operations at the expense of conventional warfighting capabilities (Mazziotti di Celso, 2022). To reverse such decline, Italy embarked in 2014 on a sustained effort to renew its surface and subsurface combatants with the “*Navy Act*” (Gilli et al., 2015).

The program originated from a 2013 fleet-renewal request formulated by the Chief of Naval Staff, Admiral Giuseppe De Giorgi. He envisioned an ambitious programme made of sixteen multipurpose offshore patrol vessels (*Pattugliatori Polivalenti d'Altura* – PPA), two landing helicopter dock ships (LHD) capable of embarking F-35B aircrafts, two logistic support ships (LSS), and two special operations vessels, for a total estimated cost of €10 billion (Gilli et al., 2015; Po, 2015; Mazziotti di Celso, 2025). Despite advancing the request in an adverse domestic climate, both fiscally and politically, the Navy secured its approval by framing the new vessels' dual-use, civilian-applicable capabilities (De Giorgi, 2014) and by stressing the positive effects on the national shipbuilding industry (Binelli Mantelli, 2014).

The PPA programme, managed through Organisation for Joint Armament Co-operation (*Organisation Conjointe de Coopération en matière d'Armement* – OCCAR) represents a significant qualitative leap in Italy's naval capabilities, reflecting a broader

²⁹ Italy had 30 major surface units and 10 submarines in 1990, while in 2020 the numbers shrunk to 19 and 10, respectively. For more, consult: The International Institute for Strategic Studies. «Chapter Four: Europe», *The Military Balance*, 122(1), 2021, pp. 64-163.

shift in the MM's procurement orientation towards more versatile and higher-end warfighting platforms (Marrone & Calcagno, 2023). The MoD's multi-year planning documents (*Documento Programmatico Pluriennale – DPP*) subsequently defined the development of next-generation destroyers (DDX) to replace the ageing classes, new generation minehunters and new amphibious landing ships (Ministero della Difesa, 2025a).

Marrone and Calcagno (2023) argue that this trajectory highlights a move away from the low-intensity and constabulary-oriented force structure that had dominated naval planning in post-Cold War Italy and marks the need to shift focus towards high-end capabilities. This renewed emphasis on conventional warfighting, more pressing after the Russian invasion of Ukraine in 2022, is reflected by the DDX programme (Fischbach, 2023), along with the FREMM EVO (*Fregate Europee Multi-Missione - Evolution*) programme, which should be equipped with long-range deep-strike capabilities (Marrone & Calcagno, 2023).

Indeed, Mazziotti di Celso (2022) situates this Italian investment within a broader European trend: Russia's invasion of Ukraine accelerated a collective reckoning among European navies, which remained primarily configured for low-intensity operations, creating a significant capability gap in the face of adversaries equipped with modern conventional weapons and Anti-Access/Area-Denial (A2/AD) systems.

Italy has also been, and continues to be, a lead nation in European naval industrial cooperation. Most recently, the country is the coordinator for the European Patrol Corvette (EPC) programme³⁰ (Marrone & Calcagno, 2023). This project spurred from earlier bilateral cooperations such as the Horizon class destroyer and the FREMM programmes between Italy and France, despite they both have highlighted that achieving a genuine commonality of requirements and combat systems across national variants is an enduring challenge for European naval industrial cooperation (Calcagno et al., 2022).

³⁰ A PESCO project developed in collaboration with France, Greece, and Spain. See: Calcagno, E., Juncos, A. E., & Vanhoonacker, S. (2022). *Naval defence cooperation in the EU: Potential and hurdles* (IAI Papers No. 22|31). Istituto Affari Internazionali.

Calcagno et al. (2022) suggested that the degree to which Italy and its partners can overcome such political and industrial limitations will be a meaningful determinant of the MM's future capability trajectory. The Italian defence technological and industrial base³¹ is structurally capable of satisfying the MM's needs in procurement all-across the full range of vessel classes (Marrone & Calcagno, 2023). Moreover, the MM is actively investing in unmanned maritime systems, regarded as critical enablers for anti-submarine warfare (ASW), mine countermeasures (MCM), subsea and seabed warfare (SSW), and intelligence, surveillance, target acquisition, and reconnaissance (ISTAR) tasks (Marrone & Calcagno, 2023).

Notwithstanding these significant investments, the key challenge for the MM, is the attempt to avoid delaying critical procurement at scale (Marrone & Calcagno, 2023). The broader environment, characterised by an approach of incremental adjustment (Coticchia, 2024) without a systemic doctrinal renewal, means that while the strategic rationale for the recovery of high-end capabilities for the Navy is clearly articulated in official documents, budgetary, and institutional inertia may continue to slow the pace of capability development.

The mismatch between Italy's defence resources and its military ambitions means that, despite spending significantly less per soldier than comparable European powers, Italy maintains large and heavily deployed forces by tilting the expenditure towards personnel, sacrificing training, maintenance, and operational readiness – something that hinders the Navy's capacity to sustain high-tempo naval commitments (Mazziotti di Celso, 2024).

The strategic pre-eminence of the EM, contested by neither government of the left nor the right, provides a durable foundation for sustained naval investment. Yet, caution should be applied to the predominance of the “peace-narrative” within the Italian political culture (Mazziotti di Celso, 2022). Built on decades of low-intensity operations, this narrative represents a societal obstacle to the full embrace of high-intensity naval warfighting ambitions (Mazziotti di Celso, 2022). Two recent developments clearly illustrate this tension.

³¹ Anchored by Fincantieri in shipbuilding and Leonardo in naval combat systems, sensors, and weapons.

Italy's participation in EUNAVFOR Aspides – the EU naval operation launched in February 2024 in response to the Houthi campaign in the Red Sea – exposed a widening disconnect between the political framing of Italian naval deployments and the new operational challenges on the ground. Although officials present ASPIDES as a mission centred on maritime security, freedom of navigation, and the protection of commercial shipping, the operation placed navies in a far more demanding environment than previous low-intensity European naval missions. This difference underscored a tension between political messaging and the complex realities faced during the EU's most challenging naval operation to date (Leccese, 2026).

The same tension is visible in the design and procurement of Italy's two largest naval platforms. The aircraft carrier *Cavour* was designed as a multi-role vessel – simultaneously an aircraft carrier, an amphibious platform, a command ship, and a humanitarian asset – reflecting the political necessity of framing a high-end power projection platform within the peace narrative (Mazziotti di Celso, 2022). The LHD *Trieste* follows the same logic. The dual-use approach meant it was contracted to serve both military and civilian roles, and was delivered fitted with, but not including certain combat systems – a choice that subordinates military capability to political palatability (Marrone & Calcagno, 2023). Both cases illustrate how the peace narrative shapes not only the public justification of naval procurement but also the material configuration of the platforms themselves.

FRAMEWORK AND ANALYSIS

Theoretical Framework and Research Design

The following chapter develops the theoretical framework and research design through which the thesis analyses under what conditions external security shocks – which are our independent variable (IV) – induce the restoration of high-end combat capabilities. It proceeds in two parts.

First, it proceeds developing the theoretical framework drawing on the military change literature reviewed in the I Chapter and on the studies on military change in post-Cold War Italy, reviewed in the II Chapter. The dependent variable (DV) is situated within the MIS tradition, and military restoration is defined as a specific pathway for military change that allows for a layering of changes without resulting in ruptures in the defence policy paradigm. Neoclassical Realism is then introduced as the theoretical lens, using organisational-cultural resonance as single intervening variable (IVV) – constituted by the match between the exogenous shock and the primary area of national interest, and by a threat type that exposes the need for restoration.

Second, it presents the research design. The thesis examines two exogenous shocks, both external to Italy and both consequential for several states but registering very differently when viewed from the Italian perspective and its crisis-management paradigm. Both occurred within the Enlarged Mediterranean (EM) – Italy's primary area of vital interest in its widest sense (Coticchia & Mazziotti di Celso, 2025) – but at very different points within that space, and they differed in both the actor and the type of threat involved.

Although a major shock for the Euro-Atlantic system, the Russian annexation of Crimea did not carry for Italy the weight it held for the Eastern European states most directly exposed. It fell at the periphery of the Enlarged Mediterranean, and as a hybrid, state-driven action it was not the type of threat Italy had been preparing for.

By contrast, the Red Sea crisis 2023-2024 struck at a critical node of the Enlarged Mediterranean – the Suez–Bab el-Mandeb sea lines of communication on which Italian maritime trade depends – and its salience for Italy is evidenced by the country's leading

role in the EUNAVFOR Aspides mission. It took the form of kinetic attacks on commercial shipping, generated by a quasi-state actor contesting freedom of navigation.

The research design then presents a secondary analysis. This examines the Italian Army's response to the 2022 full-scale Russian invasion of Ukraine – a case where the framework predicts no restoration, but where it occurred, identifying the limits of the organisational-cultural resonance variable and pointing to the existence of complementary mechanisms. Finally, a shadow case examines the Japanese Navy's response after the 2010-2012 Senkaku Islands crisis in the East China Sea, testing the framework's generalisability beyond the Italian context. Theory-testing process tracing is adopted as the primary qualitative method. The operationalisation of the DV, the empirical anchors for each case, and the data sources and limitations of the study are subsequently presented.

Theoretical Framework

The study of military change is central to security studies. MIS literature identifies four key pathways for change: innovation, adaptation, emulation, and restoration (Farrell & Terriff, 2002; Kuo, 2025). Restoration, unlike the others, involves recovering previously abandoned capabilities or doctrines (Kuo, 2025). Following the Cold War, Western militaries faced new expeditionary commitments amid shrinking budgets, leading them to deprioritise traditional high-intensity warfighting (Kuo, 2022).

This transition is evident in the Italian case. Since the early 1990s, Italy shifted focus to CM operations – peacekeeping, stabilisation, humanitarian interventions, and counter-piracy – over territorial defence and high-intensity warfighting (Coticchia & Moro, 2014, 2016). The MM recalibrated doctrines, platforms, and weapon systems for expeditionary and constabulary missions aligned with Italy's post-Cold War military identity (Mazziotti di Celso, 2022; Coticchia & Di Giulio, 2024). This dual narrative of peace and humanitarianism shaped operational priorities and procurement decisions (Coticchia et al., 2023). The CM paradigm is the baseline for any restoration.

Building on this, academic literature highlights two key concepts: exogenous security shocks rarely cause major defence policy changes, and, in the Italian case, neither the 2014 annexation of Crimea nor the 2022 invasion of Ukraine resulted in paradigm-

level shifts. Instead, these events prompted minor adjustments and layering, preserving CM's dominance (Hermann, 1990; Nohrstedt, 2005; Gordell & Volgy, 2022; Coticchia, 2024; Coticchia & Di Giulio, 2024; Massie & Munier, 2024).

However, as Coticchia (2024) shows, focusing solely on the binary between paradigm rupture and continuity misses a crucial outcome: layering. Rather than displacing the CM paradigm, external security shocks can augment a persisting framework with high-intensity warfighting capabilities without altering its logic. This thesis argues that identifying when such restoration layering occurs is critical. It fully accepts the rarity of paradigm ruptures and the prevalence of layering but seeks to specify the conditions under which shocks prompt restoration of platforms and weapon systems for high-intensity warfighting.

Against this backdrop, the central puzzle is clear: what determines the varying effects of shocks that fall short of paradigm rupture on institutional layering? The annexation of Crimea in 2014, a major security shock, did not produce capability-level layering in the Italian Navy's high-intensity warfighting. In contrast, the Red Sea crisis in 2023-2024 led to observable layering through new platforms and weapon systems, while the CM remained unchanged. This contrast leads to the thesis's key question: why do some shocks trigger restoration, while others do not? The thesis's original contribution is specifying the conditions – through the IVV – that determine whether a shock activates restoration or leaves the institution's capability profile unchanged.

Neoclassical Realism: The Triggering Architecture

The conditional explanation is developed from Neoclassical Realism (NCR), introduced by Rose (1998) and subsequently expanded by Schweller (2004) and Ripsman, Taliaferro, and Lobell (2016). Unlike structural realism, which derives foreign policy outputs from the distribution of power in the international system (Waltz, 1979), NCR argues that systemic pressures – including external security shocks – do not automatically translate into policy responses. They are instead filtered through unit-level IVVs before generating a response (Rose, 1998; Ripsman et al., 2016).

This filtering logic thus provides a direct conceptual bridge to the central research question – specifically, the issue of “under what conditions” change occurs. It aligns with

the literature's finding that exogenous shocks alone do not drive automatic change, a dynamic that NCR is uniquely positioned to explain.

This thesis applies NCR at the sub-state level, focusing on a single armed service. This approach requires a brief justification, as NCR was designed to analyse state-level foreign policy decisions. Analysing a single service requires minor adaptation.

The armed service – its senior leaders, cultural domain, and mission identity – is the main filter for assessing shocks before formal policy responses. This fits Rosen's (1991) intra-service politics model, showing that senior officers can independently shape how institutions respond to external events. Using NCR this way helps apply the framework across different services within a single military or across different countries, as IVVs vary by service and by shock.

Ripsman, Taliaferro, and Lobell (2016) group NCR's unit-level IVVs into four categories: leader images, strategic culture, state-society relations, and domestic institutions. Each category describes a way that domestic processes filter systemic pressures before creating policy. A brief review of these four provides the rationale for this thesis's focus on the armed service, treated as a domestic institution, and on its organisational culture as the key mediating variable.

Leader images refer to leaders'³² beliefs that shape how they see and respond to external events, sometimes in ways that structural pressures can't predict (Ripsman et al., 2016, p. 63). In this thesis, however, leader images do not fully explain the process, especially given the focus on service-level institutions. Even if individuals are important, a service's path cannot be reduced to one person's beliefs.

Second, *state-society relations* amount to the character of interactions between the central institutions of the state and societal groups³³ and the extent to which societal pressures enable or constrain foreign and defence policy choices (Ripsman et al., 2016, pp. 70-71). The limited relevance of this IVV lies in the low salience of capability restoration in public opinion.

³² President, Prime Ministers, Defence Ministers, and key advisers.

³³ Interest groups, public opinion, civil society organisations, and economic coalitions.

Third, *strategic culture*³⁴ is the set of beliefs, norms, and assumptions that guide how a state perceives threats, which responses are permitted, and which interests are to be defended (Ripsman et al., 2016, pp. 66–68). It is conventionally a national-level concept. This thesis retains national strategic culture as the outer frame within which armed services operate, but it does not treat the national level as the site where the relevant filtering occurs, since the same national environment can yield different responses across services facing the same shock.

Finally, *domestic institutions* – the formal rules, procedures, and structures through which foreign and defence policies are made (Ripsman et al., 2016, p. 75) – are the cluster on which this thesis draws. Domestic institutions in this sense include both a country's armed forces as a whole, which possess their own military culture, and the individual services that compose them, each with its own organisational culture. It is the single armed service that this thesis treats as the relevant domestic institution, and its organisational culture that the analysis examines.

These cultural concepts must be distinguished since each operates at a different level. *Strategic culture*, already introduced above, operates at the state's level. Below it sits *military culture*, which is the attitudes, values, and beliefs instilled into a country's armed forces collectively and transmitted across generations in uniform (Ruffa, 2018). Lower still is *organizational culture*, the single-service equivalent: the set of shared, largely implicit assumptions, values, norms, beliefs, and formal knowledge embedded in one armed force and distinct from those of its sister services (Kier, 1997, pp. 30-31).

Because this thesis explains why responses to the same shock differ across services, and treats that inter-service variation as central, the relevant level is the single service. Strategic culture and military culture would operate above that level and dissolve the very variation the thesis sets out to explain; the thesis therefore situates its analysis at the level of the service's organisational culture. This is also what sets the chosen variable apart from the other clusters: unlike leader images, it operates at the institutional rather than

³⁴ Strategic culture can be differentiated between organizational culture – the military as a bureaucratic organization – and a broader notion – such as entrenched beliefs, worldviews, and shared expectations of a society as a whole. For more, see: Goldstein, J., & Keohane, R. O. (Eds.). (1993). *Ideas and foreign policy: Beliefs, institutions, and political change*. Cornell University Press.

the individual level; unlike state-society relations, it bears on how threats are perceived within the institution rather than on what is politically possible; and unlike strategic culture, it works at the level of the single service rather than the nation. It remains, throughout, a property located within the domestic-institutions cluster: the culture of a service, which is itself one of the structures that cluster comprises.

Treating the armed service as the relevant domestic institution thus sets where the shock is filtered within Ripsman, Taliaferro, and Lobell's (2016) framework, while the service's organisational culture is how that filtering occurs. The descent to the service level is warranted by the intra-service politics literature, which shows that senior officers and the institutions they lead can independently shape how a military responds to external events (Rosen, 1991). Each service develops a distinct organisational culture, shaped by its mission and operational domain, so that the same national environment can yield different responses across services facing the same shock. Applying NCR in this way also allows the framework to travel across services within a single military and across countries, since the relevant organisational culture varies by service and by shock.

Organisational-Cultural Resonance as Causal Mechanism

The causal mechanism proposed in this thesis is as follows. An external security shock (IV) passes through a unit-level filter – *organisational-cultural resonance* (IVV) – before producing or failing to produce capability restoration within a persistent defence paradigm (DV). When the shock does carry organisational-cultural resonance for the service, it triggers a response within the defence paradigm that results in layering. When it does not, the shock either produces no layering or produces a different type. The shock's magnitude alone is therefore insufficient.

The decision is formally taken by the state's defence executive; this framework, however, locates the explanatory variation not in that executive but in the organisational culture of the service that interprets the shock and shapes the options available.

Organisational-cultural resonance is the degree to which an external security shock is perceived as threatening within an armed service's organisational culture, enabling the activation of the capability-restoration process. Consistent with its institutional rather than individual character, resonance is assessed not through officials' subjective views

but through the service's embedded map of priorities as it is recorded in doctrine, planning documents, and the public statements of its leadership. The single IVV comprises two inseparable dimensions: vital-interest alignment and threat-type alignment.

Vital-interest alignment, the first dimension, is the match between a shock and a service's primary interests and duties. A shock is aligned if it threatens what the service considers its responsibility; the threatened interest may be a geographic area, economic asset, or strategic assets. This connection is assessed by examining the service's embedded map of priorities. If a shock affects only the periphery of a broad area of interest, it does not meet this dimension.

Threat-type alignment refers to whether the shock involves capabilities that fall within – or exceed – the service's existing operational toolkit, thereby exposing capability gaps that generate institutional pressure toward restoration. A shock carries threat-type alignment when the actor generating it deploys capabilities that expose a gap between what the armed service can currently field and what the threat environment now requires. This dimension therefore concerns not only who generates the shock but what the shock reveals. A threat that the existing toolkit cannot adequately address creates pressure towards restoration.

Non-State Actor Problem

NCR, as developed by Ripsman, Taliaferro, and Lobell (2016, p. 35), is largely state-centric and sees territorial states as the primary units of the international system. When the external security shock that triggers an institutional response is generated by a non-state actor, an apparent theoretical tension arises. This tension, however, is less severe than it appears.

Ripsman, Taliaferro, and Lobell (2016, p. 46) acknowledge that a threat can also be posed by *quasi-state actors*. They are defined as actors that possess territorial control and military power and seek state capacity, making them plausible threats in the international system. More broadly, they have observed that non-state armed groups – therefore also quasi-state actors – can influence a state's foreign policy when they are capable of threatening the state's major interests – specifically, when the level of violence they can exert is comparable to the level generally associated with state capacity (2016, p. 97).

Moreover, non-state armed groups can also be used as force multipliers by external powers³⁵ (2016, p. 97).

This threshold logic is reinforced by a broader structural trend: capability convergence. This term describes the blurring of the material distinction between state and non-state threats. On one hand, falling costs and greater accessibility of militarily relevant technologies³⁶ make it easier for non-state armed groups to gain capabilities. These were previously associated only with state militaries (Horowitz et al., 2016). On the other hand, intentional state-sponsored technology transfer and operational training equip quasi-state armed groups to field and use advanced weapon systems³⁷. Without this support, such systems would remain out of reach (Samaan, 2020). Capability convergence, therefore, is not a case-specific anomaly. It is a structural condition and a generalisable element of the theoretical framework proposed here.

Theoretical Expectations

The theoretical framework developed above generates two explicit and falsifiable expectations. Stated at the level of theory rather than of any specific case, they describe what the framework predicts under defined conditions. Their application to the empirical cases examined in this thesis is presented in the research design.

Expectation 1 – No restoration without organisational-cultural resonance. If an external security shock lacks both the vital-interest alignment and the threat-type alignment for a given armed service, organisational-cultural resonance is absent, and the shock does not activate the restoration process at the service level. The framework predicts no procurement of platforms or weapon systems associated with high-intensity warfighting and the persistence of the existing defence paradigm. The shock may still produce effects – namely political reactions, alliance-level responses, or general defence spending increases – but these will not take the form of capability-level restoration within

³⁵ Examples of non-state armed groups used as force multipliers are Hezbollah, the Houthis, and Kata'ib Hezbollah. All of them are part of the Iranian proxy network known as the Axis of Resistance. For more: Byman, D. (2005). *Deadly connections: States that sponsor terrorism*. Cambridge University Press; and Juneau, T. (2015). *Squandered opportunity: Neoclassical realism and Iranian foreign policy*. Stanford University Press.

³⁶ These include commercially available platforms that can be adapted to military use.

³⁷ These may include ballistic missiles, anti-ship missiles, sea mines, and drone technology (independently of it being used on land, at sea, or in the air).

the affected service. The shock's magnitude alone is therefore insufficient to trigger restoration: a large shock that fails to satisfy either dimension of organisational-cultural resonance will leave the service's high intensity capability profile unchanged. This expectation is falsified if procurement of high-intensity warfare tools follows a shock that satisfies neither dimension of organisational-cultural resonance.

Expectation 2 – Restoration when organisational-cultural resonance is present.

When an external security shock satisfies both the vital-interest alignment and threat-type alignment, organisational-cultural resonance is established, and the restoration process is activated. The framework predicts observable procurement of platforms and weapon systems associated with high-intensity warfighting in the specific capability domain exposed by the shock, within a persisting defence paradigm. Restoration is induced by the shock's capability profile rather than by its magnitude, and it targets the specific gaps revealed by the shock rather than producing a general rearmament. The dominant paradigm is not displaced, and restoration constitutes a specific form of layering within that paradigm. This expectation is falsified if no procurement of a high-intensity toolkit follows a shock that satisfies both dimensions of organisational-cultural resonance.

Research Design

The research design, developed in this section, tests the theoretical framework presented in the previous section. The empirical analysis is structured in two sections.

The first – and primary – section examines the Italian Navy's responses to two external security shocks – namely the Russian annexation of Crimea in 2014, and the Red Sea crisis caused by the Houthis' actions since late 2023. In this section, the framework's predictions are expected to hold fully.

The second section presents two brief comparative cases. The Italian Army's response to the Russian invasion of Ukraine in 2022 is proposed as a scope-condition test, while the Japan Maritime Self-Defense Force's (JMSDF) response to the Senkaku Islands crisis of 2010-2012 is proposed as a shadow case. These observations are instrumental in identifying the limits of the theoretical framework and its generalisability, without constituting a full empirical analysis in either case.

The empirical analysis is designed as a structured focused comparison of two cases (George & Bennett, 2005). Rather than the two cases to be broadly similar across all background variables, this method asks standardised analytical questions of each case and compares the answers systematically. The questions derive directly from the theoretical framework: does the shock satisfy vital-interest alignment? Does it satisfy threat-type alignment? What procurement response followed the shock? By applying the same analytical lens across cases, the design allows for systematic comparison without requiring the cases to be instances of the same type of event.

The applied method, within each case, is theory-testing process tracing (Beach & Pedersen, 2019), which takes pre-specified theoretical expectations and assesses whether the hypothesised causal mechanism is observable at every step in the empirical record.

The two cases chosen to analyse the Italian Navy responses to crises are selected to vary deliberately on the IVV configuration. In one case, Crimea 2014, both dimensions of organisational-cultural resonance are absent, while in the other, Red Sea 2023-2024, both are fully satisfied. The unit of analysis remain constant – same institution and same defence paradigm. This deliberate variation isolates organisational-cultural resonance as the operative condition explaining the difference in the outcomes.

The analytical threshold is the distinction between restoration and generic force modernisation. Restoration means the “*relearning of prior ways of war*” (Kuo, 2025, p. 221), expressed through the re-acquisition of capabilities in technological, doctrinal, or organisational domains that were previously deprioritised or abandoned. Kuo (2025) explicitly states that restoration does not require the recovery of identical systems, therefore meaning that what is recovered is the willingness and organisational capacity to perform a type of warfare. New technologies can therefore serve as vehicle for the restoration of an old capability.

When it occurs without displacing the dominant paradigm, restoration constitutes layering in Coticchia’s (2024) sense. New elements are added to the force structure without substantially reorienting the institution’s overall doctrinal identity.

The challenge is therefore to distinguish restoration from generic force modernisation, which replaces ageing systems with broadly equivalent ones without

recovering previously abandoned capability orientations. This distinction rests on specificity: if the systems acquired directly target the gaps exposed by the shock within the institution's vital interest, and if the respective capabilities were previously deprioritised rather than simply due for routine upgrade, which is restoration in the sense defined here.

The Italian Navy

The primary analysis examines two cases involving the same institution – the Italian Navy – under different external security shocks, one where organisational-cultural resonance is absent and one where it is fully established.

The first case is the Russian annexation of Crimea in 2014 – a state-on-state shock involving land and hybrid warfare. The shock falls outside the Italian Navy's primary area of vital interest and threat types – land forces and information operations – that do not expose gaps in Italian naval high-intensity warfighting capability. Neither dimension of organisational-cultural resonance is satisfied. The expected outcome is therefore the absence of restoration of high-intensity combat capabilities, alongside the continuation of the established defence paradigm – that is crisis management. The 2014 *Legge Navale* should be framed in dual-use and industrial terms, producing platforms configured for patrol, presence, and crisis management rather than high-intensity combat. The observation window runs from early 2014 to 2019, extended beyond the immediate shock to capture the full procurement cycle.

The second case is the Red Sea crisis in 2023-2024, escalated by the Houthis with attacks on commercial shipping lanes. The campaign involves a quasi-state actor – the Houthis exercise territorial control over former North Yemen and the Red Sea coastline and are equipped through Iranian state-level technology transfer – deploying anti-ship ballistic missiles (ASBM), anti-ship cruise missiles (ASCM), naval drones, sea mines, and sea-denial tactics at the Bab el-Mandeb strait. The shock falls within the Italian Navy's primary area of vital interest and exposes gaps in precisely the high-intensity naval warfare capabilities – both dimensions of organisational-cultural resonance are satisfied. The expected outcome is observable restoration of high-intensity naval warfare capabilities through the procurement of platforms and weapon systems associated with it,

within a persisting CM paradigm. Given the recency of the crisis, this case is treated as a plausibility probe³⁸ (Eckstein, 1975; Levy, 2008) with an observation window running from October 2023 to mid-2026.

Scope-Condition Test and Shadow Case

This section presents two brief comparative observations, each of approximately one to two pages, which are not intended as full empirical analyses but as theoretical reference points that help define the scope conditions and generalisability of the framework.

The Italian Army after Ukraine 2022 serves as a scope-condition test. Under the framework, the Italian Army should not have restored high-intensity capabilities after Ukraine 2022, because neither shock satisfies vital-interest alignment for the service: the eastern flank is not within the Italian Army's primary area of vital interest and responsibility as defined by its organisational culture. However, after Ukraine 2022, the Italian Army did begin procurement of main battle tanks, infantry fighting vehicles, armoured personnel carriers, and other territorial defence-oriented systems – a result the organisational-cultural resonance framework cannot explain.

The JMSDF response to the Senkaku Islands crisis of 2010-2012 is a shadow case. After the rise in Chinese assertiveness in the East China Sea, the JMSDF restored higher-intensity capabilities as guided by the theoretical framework. The security shock in Japan's primary area of interest exposed gaps in the JMSDF's operational toolkit. As a result, littoral defence systems accelerated in the years after the crisis. This restoration of combat capabilities occurred while the Exclusively Defence-Oriented Policy (*Senshu Bouei*) remained in place, and the peace narrative on Japanese procurement and deployment remained unchanged.

Method: Theory-Testing Process Tracing

The primary qualitative method in this thesis is theory-testing process tracing (Beach & Pedersen, 2019). This within-case method traces the causal mechanism linking

³⁸ A plausibility probe assesses whether the observable evidence is consistent with what the theory predicts, without claiming definitive causal proof.

the IV to the DV via the steps predicted by the theoretical framework. The theory-testing variant uses pre-specified expectations to check if the hypothesised mechanism appears step by step in the empirical record (Beach & Pedersen, 2019). This method fits cases in which the framework is developed before analysis, and the aim is to evaluate its fit rather than to generate new theory.

In each case, the causal chain is traced through three steps. The first step establishes the pre-shock baseline against which the shock and the subsequent response are to be judged. Drawing on documents predating the shock, it asks two questions: whether the area in which the shock occurred had already been framed as a primary zone of vital interest and how the service was equipped to operate at the time, so that the threat type revealed by the shock can be assessed as a meaningful capability gap relative to the established defence paradigm rather than inferred retrospectively from the procurement response. Establishing this baseline independently is essential: without a documented account of the prevailing paradigm and the service's prior posture, any claim that the shock "revealed a gap" or demanded materiel "beyond the existing toolkit" would be circular, treating the eventual procurement as both the outcome to be explained and the evidence that there was something to explain. The relevant evidence consists of defence and naval planning documents predating the shock, together with earlier parliamentary testimony of the chiefs of naval staff.

The second step assesses organisational-cultural resonance: the degree to which the shock registers as threatening within the service's organisational culture, evaluated across its two constituent dimensions. The first, vital-interest alignment, asks whether the area or asset affected by the shock falls within what the service institutionally regards as its primary interests and responsibilities, as captured in the embedded map of priorities established in the pre-shock baseline; a shock touching only the periphery of a broad area of interest does not satisfy it. The second, threat-type alignment, asks whether the shock involves capabilities that exceed the service's existing operational toolkit, thereby exposing a gap between what it can currently field and what the threat environment now requires. The two are assessed against the baseline of the first step and are jointly necessary: resonance obtains only where both hold, and the shock's magnitude alone does not establish it. The relevant evidence consists of defence and naval planning documents,

ministerial statements and policy-direction acts, official press releases, and transcripts of chiefs of staff hearings.

The third step traces the procurement response. It asks which platform and weapons acquisitions followed the shock, and over what timeframe. Here, analysis distinguishes two procurement types: strict restoration – the recovery of discarded materiel categories; and new high-end acquisition – procurement driven by novel threats revealed by the shock. Both outcomes indicate the DV. Determining which procurement type best fits the DV is part of this step, not a separate step. Relevant evidence includes procurement contract announcements, programme funding lines, defence-industrial press releases, and parliamentary budget debates.

Operationalisation

Where the DV – capability restoration – occurs, it takes the form of layering within a persisting defence paradigm; in the Italian case that paradigm is CM. Said paradigm remains dominant throughout both the analysed cases. Following the two theoretical expectations, the framework predicts opposite outcomes across the two cases.

Where the IVV – organisational-cultural resonance – is absent, as it should be in Expectation 1, the predicted observation is the absence of restoration. Procurement continues along already established programmes, and no high-intensity capability is layered onto the existing defence paradigm. Therefore, the IV – external security shock – does not redirect procurement. The decisive indicators are therefore procurement decisions planned internally to the service that predated the shock: platforms configurations remain devoid of high-intensity capabilities even if the platforms could physically accommodate them – “fitted for but not with”.

Where the IVV is present, as it should be in Expectation 2, the predicted observation is restoration in the specific capability domain exposed by the shock, layered onto a still-persisting defence paradigm. Restoration may materialise through the refitting of existing units, the procurement of new units, or the acquisition of weapon systems oriented to high-intensity warfare. This is captured empirically through three distinct category-level indicators.

First, the reorientation of platforms toward warfighting configurations rather than presence or patrol – configuration or reconfiguration decisions that equip units for a contested high-intensity environment rather than for permissive CM constabulary tasks.

Second, an increase in unit self-protection – weapon systems whose function is to allow the platform to survive and operate under attack, including layered air and missile defence and counter-threat systems directed at the capability classes the shock made operationally vivid.

Third, an increase in offensive firepower – greater munition load, additional launch capacity, longer-range strike, and the activation or reversal of design choices that had previously constrained these capabilities.

An item matters for the DV when it adds high-intensity warfighting capability in response to a gap the shock exposed within the service's zone of vital interest. What restoration recovers is high-intensity warfighting as an overall posture. Whether a given instrument is itself old or new is therefore beside the point: each contributes to rebuilding the broader capability the service had discarded.

Data Sources and Timeframe

The selection of sources aligns with the case structure above. The two MM cases constitute the core explanatory cases, central to developing the analysis, and thus draw on the fullest evidentiary base, using both primary and secondary sources. In contrast, the scope-condition case (the Italian Army) probes the argument's boundaries, while the shadow case (the Japanese Navy) tests its external validity. Because the role of these latter cases is to test the transferability of the argument rather than to explain the outcome, they are treated more briefly and rely on a more limited set of primary sources, drawn from the official record alone.

For each case, documents are classified by their position relative to the shock – those produced before it and those produced after – so that the two sets can be compared directly. This comparison reveals change or continuity in tasks, procurement, and capability. Because the classification depends on each document's date relative to the

triggering event, the same instrument may fall on either side of the divide across different cases.

The two Navy cases – the first, the response to the annexation of Crimea in 2014, and the second, the response to the Red Sea crisis of 2023–2024 – form the core of the analysis. Each case is supported by the fullest combination of primary and secondary material.

For Crimea, the *pre-shock* baseline is the 2013-2015 *Documento Programmatico Pluriennale* and the 2002 White Paper, which outline Italian naval planning before 2014. The *post-shock* record includes the 2015 White Paper, DPP editions 2016-2018 and 2018-2020, and the *Linee di Indirizzo Strategico della Marina Militare 2019-2034*. These documents reveal changes in tasks and programs after the annexation.

For the Red Sea case, the *pre-shock* baseline consists of the DPP editions for 2020-2022, 2021-2023, 2022-2024, and 2023-2025. It also draws on the *Linee di Indirizzo strategico 2019-2034* and the 2015 White Paper. The *post-shock* record uses the DPP editions for 2024-2026 and 2025-2027, as well as the *Linee d'Indirizzo del Capo di Stato Maggiore della Marina* for 2026-2027. These documents capture the Navy's articulation of its priorities after the crisis.

These official documents are complemented by two further bodies of primary material, common to both cases. One is the press releases from the principal defence-industrial firms involved in Italian procurement, which document the progression of specific programs from the suppliers' standpoint. The other is communications from the EUNAVFOR Aspides mission, offering a first-hand record of operational deployment in the Red Sea theatre.

The secondary base for the two Navy cases includes academic articles, analyses from defence and security think tanks, and reports from specialist naval sources. These provide independent interpretation, assessment, and context. They enable triangulation of the institutional statements made in the primary sources with external analysis. Specialist naval reporting gives program-level detail that surpasses current scholarship and is checked against both official and academic sources.

As the scope-condition case, the Italian Army's response to the Russian invasion of Ukraine in 2022 is examined only with primary sources. The *pre*-shock baseline includes the 2015 White Paper and the *Rapporto Esercito* edition for 2020. The *post*-shock record is traced through the *Rapporto Esercito* edition 2022 and the *DPP 2022-2024*.

As a shadow case, the Japanese case – the response to the East China Sea crisis of 2012 – also rests on a limited primary base. The *pre*-shock baseline is the 2004 National Defense Program Guidelines (NDPG). The *post*-shock record is established with the 2010 NDPG, the 2013 NDPG and the 2013 National Security Strategy.

Empirical Analysis

The preceding chapter explained how external security shocks influence the restoration of high-end combat capabilities and identified the analytical tools used to analyse them. This chapter applies those tools. Its aim is to see, case by case, whether the anticipated pattern is visible in the documents. This is done through a structured comparison, in which each case undergoes a theory-testing process tracing using the same method.

The analysis is organised in two unequal parts. The first and principal part examines the Italian Navy under two contrasting shocks: first, the Russian annexation of Crimea in 2014, and second, the Red Sea crisis caused by Houthi action from late 2023. These two cases were chosen because they differ in the intervening condition while holding the institution and its prevailing paradigm constant. Where that condition is lacking, the framework predicts continuity with the established posture and procurement before the shock. Where it exists, it predicts a recovery of high-intensity capability layered onto, rather than replacing, the same posture. These opposing expectations serve as the benchmark for reading each case.

The second part briefly notes two further cases: the Italian Army after the 2022 invasion of Ukraine and the JMSDF after the 2012 Senkaku crisis. These cases serve to probe the argument's boundaries and test its reach beyond Italy. They are reference points rather than full analyses and are treated as such.

The inquiry follows the same sequence for each case. First, it establishes a pre-shock baseline to establish what was the Navy's primary area of interest and what threats was the Navy equipped to counter. Then it assesses whether the shock matched the two conditions of organisational-cultural resonance; in other words, whether the shock occurred within the Navy's primary area of interest – vital-interest alignment – and whether the threat that emerged from the shock revealed a gap in high-intensity capabilities – threat-type alignment. Finally, once organisational-cultural resonance is, or is not, established, it traces the procurement response. The analysis asks what was acquired and when, and whether this recovers high-intensity capabilities or simply renews an ageing one.

Navy's Responses to Shocks

Crimea 2014

Establishing a Baseline

In the decade before Russia annexed Crimea in February 2014, the Italian defence establishment came to see the Mediterranean as a main area of interest (Ministero della Difesa, 2002). The Marina Militare also highlighted the Enlarged Mediterranean, described in 2006 by then Chief of Naval Staff (CSMM), Vice Admiral Paolo La Rosa as the Mediterranean basin and nearby areas: the Black Sea, the Persian Gulf, and the Arabian Sea (La Rosa, 2006).

Right before the event, the *Documento Programmatico Pluriennale per la Difesa 2013–2015* listed as its main task the defence of the State and the protection of sea lines of communication (SLOC) and of their aerial counterpart (Ministero della Difesa, 2013, p. I - 20). The document also noted rising instability in the Enlarged Mediterranean and set the regional scope of naval operations for anti-piracy and protection of merchant shipping, stretching from the Red Sea to the Gulf of Aden and the Indian Ocean (Ministero della Difesa, 2013, p. I-20; I-B/14-15).

In early 2013, then CSMM Vice Admiral Giuseppe De Giorgi said the economic crisis gave the Navy a chance to rebuild for better reliability, deployability, and capability (De Giorgi, 2013a, p. 3). He said Italy's maritime role demands a Navy capable of protecting national interests wherever needed, especially in the Mediterranean (De Giorgi, 2013a, p. 3). For De Giorgi, the once-peaceful Mediterranean had become more important for security and could turn dangerous, requiring command and control, presence, and a force focused more on law enforcement than on high-level combat (De Giorgi, 2013a, p. 3).

Even as the Navy defined a broad Mediterranean area of interest, its focus on sea routes to Italy underscores the importance of the corridor from Italian waters through the Suez Canal, the Red Sea, the Bab el-Mandeb, and the Gulf of Aden chokepoints. Until 2013, the Marina Militare had participated in many operations in this enlarged area. The

Navy led the maritime forces in multinational operations like Enduring Freedom³⁹ and, in 2006, in Lebanon for Operation Leonte⁴⁰ (NATO Stability Policing Centre of Excellence, n.d.). It also took part in naval missions like Active Endeavour⁴¹ in the Mediterranean and *Operation Atalanta*, an anti-piracy mission near the Horn of Africa and the Gulf of Aden to protect maritime traffic and freedom of navigation (NATO Stability Policing Centre of Excellence, n.d.).

This sustained pattern of expeditionary, constabulary, and crisis-management deployments confirms that the Navy's commitments converged along the corridor running south and east. De Giorgi further highlighted this orientation in his speech at the Navy's handover of command in early 2013. He saluted the sailors deployed in the Mediterranean, the Red Sea, the Arabian Sea, and in the Indian Ocean. They were tasked with protecting commercial shipping and SLOC and safeguarding the principle of freedom of navigation (Busonero, 2013, pp. 6-7).

De Giorgi reiterated this logic some months later. Heard by the parliamentary defence committee, he stressed the economic link between the Mediterranean and the Indian Ocean. He emphasized its relevance for Italian shipping and energy imports (De Giorgi, 2013b). Moreover, he went on to affirm that the Enlarged Mediterranean is a Navy's own concept. This further supports its centrality (De Giorgi, 2013b).

The Navy was institutionally equipped and tasked to handle constabulary and expeditionary threats, not high-intensity ones. Its doctrinal basis is the 2002 White Paper, which made defending the country's vital interests its main mission. This includes safeguarding SLOCs (Ministero della Difesa, 2002). The White Paper also highlighted the need to counter terrorism and confirmed crisis management as the defence paradigm (Ministero della Difesa, 2002).

In the following decade, the Italian Navy tackled piracy and illicit trafficking, ensured surveillance of migratory flows – such as in *Operation Mare Nostrum* (2013) (Marina Militare, 2014a) – and maintained maritime security through presence and

³⁹ US-led coalition operation in the Persian Gulf and the Indian Ocean.

⁴⁰ Italy's contribution to the UN-mandated UNIFIL.

⁴¹ NATO counter-terrorism mission.

surveillance. De Giorgi placed these capabilities at the centre of national maritime security (De Giorgi, 2013b).

In the same parliamentary hearing, De Giorgi described a rapidly ageing fleet, warning it risked “extinction as a fighting force” within a decade (De Giorgi, 2013b). He proposed a procurement programme focused on rationalisation and dual-use. For example, he noted the Navy was considering a multirole offshore patrol vessel intended to replace six hulls with one and serve both disaster relief and anti-migration roles (Marina Militare, 2014c; De Giorgi, 2013b). Choosing a patrol vessel as the example, rather than a combat ship, reflects a Navy focused on constabulary and crisis-management tasks.

Although the *DPP 2013–2015* acknowledged that crisis-response operations might have required harsher engagements (Ministero della Difesa, 2013, p. I-27), the Navy’s expeditionary, projection-oriented structure and the debate around it remain distant from the required toolkit for high-intensity warfighting.

To summarize, on the eve of the Russian annexation of Crimea, the Italian Navy’s vital area of interest was the Enlarged Mediterranean, particularly the SLOCs to the Suez Canal, the Red Sea, and the Indian Ocean, as well as areas affected by migration, trafficking, and piracy. The Navy handled these threats through constabulary and presence missions below the high-intensity threshold.

Establishing the Presence of Organisational-Cultural Resonance

To establish *organisational-cultural resonance*, we assess two matches: first, whether the Navy’s vital area of interest aligns with the location of the shock; second, whether the Navy was equipped to counter the threats posed, or if the actual threat exposed a gap in high-intensity warfighting capabilities.

On the dimension of *vital-interest alignment*, the shock appears, at first, to have occurred within the Enlarged Mediterranean’s frontiers, in the Black Sea and its surroundings. Despite the fact that the EM has been repeatedly stated as the main Italian

and the Navy's area of interest, the Black Sea falls outside the main SLOCs⁴² that are vital to Italian interests and have been subject to numerous missions and operations in the decade preceding the shock. The event has been framed within a Black Sea, eastern Ukraine, and Donbas context, and Italy's military-level responses were limited and all framed within NATO's eastern flank ("Venti di Guerra," 2014).

After the shock, the Italian response was framed within the NATO Response Force. The focus was on creating the Very High Readiness Joint Task Force and enhancing support from the Standing Naval Forces for assurance operations around NATO's periphery (NATO, 2014b). The Italian Navy contributed to such operations in the Black Sea as part of Standing NATO Mine Counter-Measures Group 2 (SNMCMG2) and Standing NATO Maritime Group 2 (SNMG2) (NATO, 2014a, 2015; Marina Militare, 2014b). Italian deployments involved frigates and mine countermeasure vessels but were never undertaken independently. Notably, references to Italian maritime interests – such as SLOCs, freedom of navigation, and the Mediterranean-to-Indian Ocean corridor – were missing.

Turning to the other dimension, *threat-type alignment*, the Russian annexation of Crimea was characterised as hybrid warfare: a coordinated employment of subversion, deception, unmarked troops, disinformation, and economic and energy pressures designed to remain below the threshold of open war (Popescu, 2015a; Debenedictis, 2019). The salience of these practices can be found in the efficiency with which familiar tools were combined, and in the adoption by a major state, below the NATO Article 5 threshold of methods previously associated with non-state actors (Popescu, 2015b; Debenedictis, 2019). The conditions for this crisis to occur were judged unlikely to be reproduced elsewhere (Popescu, 2015a), and where a maritime dimension was present, it did not interfere with the SLOCs under Italian attention. Moreover, the Italian Navy's focus remained on *Operation Mare Nostrum* (Marina Militare, 2014a), and NATO operations in the Black Sea consisted only of naval exercises and maritime situational awareness (NATO, 2014b, 2015).

⁴² The corridor that spans from the proper Mediterranean, the Suez Canal, the Red Sea, and all the way down to the Indian Ocean, passing through the Bab el-Mandeb Strait.

The shock consisted of land-centric and sub-threshold threats that failed to draw Italian attention. Furthermore, it did not reveal shortcomings in high-intensity warfighting. Afterward, the Italian Navy continued the constabulary profile it was accustomed to during post-shock operations.

The Russian annexation of Crimea did not align with either vital interests or threat type. Because of this complete mismatch, *organizational-cultural resonance* is absent.

Procurement Analysis

The third step analyses the procurement record after the Crimean shock. It assesses whether, consistent with the established absence of organisational-cultural resonance, the Italian Navy did not restore high-intensity capabilities in response. The evidence includes the naval programme A/R n. SMD 01/2014 and its parliamentary trajectory: the Minister's presentation of June 2014, the November 2014 hearings of the CSMM De Giorgi and the Chief of the Defence Staff (CSMD) – Admiral Luigi Binelli Mantelli –, and the subsequent DPP editions.

The naval program A/R n. SMD 01/2014 is the central act of this analysis. It was transmitted to the Parliament for its opinion on October 21st, 2014, and examined as Atto del Governo 116 (Camera dei Deputati, 2014). Its essential contents predate the shock. The budget for the naval programme was established with Law 147/2013, the Legge di Stabilità 2014 (Pinotti, 2014). This budget financed the procurement of ten PPAs – four of which were options – one offshore logistic-support unit (LSS), one multirole amphibious unit (LHD), and two high-speed multipurpose units for special-forces support (UNPAV), in line with the Navy's technical-operational requirements (Pinotti, 2014; De Giorgi, 2014).

During the presentation of the *DPP 2014-2016* by the Defence Minister Roberta Pinotti on June 24th, 2014, four months after the Crimean shock, the contents of the programme were illustrated to the joint defence committees. The rationale for the programme was framed within the operational line's obsolescence, Italy's structural dependence on secure access to the sea, and the preservation of the industrial and technological base, while the Crimean issue was mentioned during the hearing – as an

Eastern European crisis – but not included in the reasons for the program to be enacted (Pinotti, 2014).

In November 2014, the CSMM De Giorgi presented the programme to the Senate Defence Committee. He described it as a response to the grave condition of the fleet – some sixty units with an average availability of twenty. He also framed the programme within the needs of the national maritime economy (De Giorgi, 2014). De Giorgi emphasised the dual military-civil capabilities of the new platforms. These platforms were equipped with modular loads, including hospital functions, anti-pollution capacity, and anti-piracy, among others (De Giorgi, 2014). When asked if the program would guarantee the conservation of national naval power, De Giorgi answered in industrial terms. He compared the built tonnage of Italy with the superior procurement by other countries with traditional shipbuilding industries – Germany, Spain, and Turkey. He did not frame the programme as a threat-based response (De Giorgi, 2014).

Nine months after the annexation, the head of the Navy appeared before the committee charged with the programme's scrutiny. He made no reference to Russia or to the changed European security environment. The same hearing documents the design philosophy on which the null coding partly rests. De Giorgi noted the units' configurations present minimum and maximum armament limits, with marked interchangeability of equipment (De Giorgi, 2014). This reflects the fitted-for-but-not-with principle stated in the service's own voice, after the shock, with no indication of movement toward the upper bound.

A few days later, CSMD Binelli Mantelli appeared before the Chamber of Deputies' Defence Committee. He reproduced the pattern one level above the service (Binelli Mantelli, 2014). He mentioned the deteriorating environment in Eastern Europe. However, he clearly anchored the programme to the protection of SLOCs, the general surveillance of maritime areas, Operation Mare Nostrum, and the financial sustainability of the programme itself (Binelli Mantelli, 2014).

The subsequent planning record extends the invariance beyond the immediate post-shock window. The following DPPs continued procuring the naval units, including the PPAs, LHD, LSS, and two UNPAVs (Ministero della Difesa, 2016; 2018). The PPAs

were to be delivered in three configurations: Light (2 ships), Light Plus (3 ships), and Full (2 ships). This made seven ships in total, with an option to add three more (OCCAR, n.d.). Only the Full configuration was studied for use in contested spaces. The Light and Light Plus configurations took a “fitted-for” approach. They could be rapidly upgraded to Full configuration if needed (OCCAR, n.d.).

On the side of combat systems, restoring high-intensity capabilities would have meant enhanced protection for the ships. In reality, the existing air-defence programmes were neither newly initiated nor increased after the shock (Ministero della Difesa, 2016; 2018). No new programmes or increases in existing procurement are evident in the following DPPs. Instead, procurement continued around migration, counter-terrorism, freedom of navigation, and maritime security (Ministero della Difesa, 2016; 2018).

The case unfolds exactly as the framework predicts when organisational-cultural resonance is absent. The Legge Navale was not a single authorising act, but a process. The CSMM proposed and pressed for the programme, supported by higher levels of the chain, and it was not interrupted by the shock.

The hearings and documents that follow February 2014 show the same thinking carried on unchanged. The Navy still held that a leaner, dual-use fleet was what it needed; that reading, advanced by the CSMM De Giorgi, continued to carry the higher levels with it, so that the CSMD Binelli Mantelli and the Defence Ministers Di Paola, Mauro, and Pinotti remained aligned behind the programme and it went on being discussed and planned on its original terms. The continuity originated at the service level and was ratified above it, not imposed from the top. What restoration would have looked like is clear, and it did not occur: new high-intensity warfighting capability, added after the shock in response to the changed environment. None appeared. That the Legge Navale was a substantial procurement programme does not make it restoration. Restoration, as defined here, is the recovery of a capability the service had previously set aside, taken up again because the environment now demands it; the Legge Navale was nothing of the kind, modernising the existing fleet for the purposes it was already serving and replacing ageing constabulary and dual-use platforms with newer ones of the same type. On the framework's terms, this absence of deviation is sufficient for null coding: at the service

level, the threat was registered without prompting any change of course. The crisis-management paradigm held, as the literature confirms (Coticchia & Di Giulio, 2024).

Red Sea 2023-2024

Establishing a Baseline

Just after the Crimean shock, Italy emitted the White Paper 2015 (Ministero della Difesa, 2015), its most recent strategic document, which upgraded its predecessor, the White Paper 2002. Unlike in previous documents, which maintained a certain ambiguity or vagueness, the 2015 White Paper made clear that the *area of vital interest* for Italy was the Enlarged Mediterranean, especially its most adjacent areas of North Africa, Sahel, Horn of Africa, and the Persian Gulf (Ministero della Difesa, 2015). Exactly within this perimeter, are located both shores of the Red Sea.

Planning documents following to the 2015 White Paper and from the years leading to the Red Sea crisis confirmed this framing. The *DPP 2020-2022* identified Italy's main defence interests within the Enlarged Mediterranean (Ministero della Difesa, 2020, p. IV), and the *DPP 2021-2023* described the EM as the preeminent area of interest (Ministero della Difesa, 2021, p. 2). The *DPP 2022-2024*, while repeating the same formula, better defined the EM as comprising the Black Sea, the Middle East, goes through the Suez Canal into the Red Sea and on to the Horn of Africa, the Indian Ocean and the Persian Gulf (Ministero della Difesa, 2022, p. 2). The *DPP 2023-2025*, the last to have been presented before the Houthis started targeting commercial shipping in the Red Sea, still reiterated the central place that the EM had in Italian interests and increasingly subject to assertive behaviour by several international actors (Ministero della Difesa, 2023, p. 1). On the reasons that drive the centrality of the EM, the economic dependence on the traffic of good passing through the EM's main SLOCs and energy infrastructures (Ministero della Difesa, 2020, p. 6; 2021, p. 3; 2023, p. 5)

At the service level, the Navy's own *Linee di Indirizzo Strategico 2019-2034* (Marina Militare, 2019) highlight the relevance that the EM has for it. The area is presented as a long-held institutional conviction of an area that is closed only geographically, while it is wide open from the strategic point of view; it is also indicated as including from the near Atlantic to the Guinea Gulf West, and the Red Sea, Middle

East, and Arabian Sea going East (Marina Militare, 2019, p. 15). Within this broad area, the operative centre of gravity remained – as it had been a decade earlier – the SLOCs, now framed with increasing explicitness in economic-security terms. The *Linee di Indirizzo Strategico* made it foundational: a country dependant on a constant flow of supplies, travelling by sea and a maritime cluster generating three per cent of GDP (Marina Militare, 2019, p. 16). The same document placed SLOCs' security within national interest and framed it within the *First Mission* – the defence of the state itself (Marina Militare, 2019, p. 17).

The Navy's deployments matched this focus. The EU counter-piracy *Operation Atalanta* in the Gulf of Aden and Indian Ocean (Ministero della Difesa, 2022, p. 23) and the adhesion to the European-led Maritime Awareness in the Strait of Hormuz, justified by the strait's relevance for national energy imports (Ministero della Difesa, 2020, p. 22).

In contrast with the Crimean baseline, therefore, the segment of the EM running from the Red Sea through Bab el-Mandeb to the Indian Ocean was not a periphery of the Navy's map but one of its named arteries, patrolled continuously and tied directly to the national economic interest.

The Navy's *threat-type baseline*, however, was not innocent of high-intensity warfare. Well before the Red Sea crisis, the Navy was already aspiring to harder capabilities, as set out in the *Linee di Indirizzo Strategico 2019-2034*, aiming to possess deep-strike capabilities, air defence, local air superiority, and Ballistic Missile Defence (BMD) for the “outer defence” of the SLOCs (Marina Militare, 2019, pp. 38-39). Yet the document itself recognised its unlikelihood if calibrated on the resources foreseeably available over the fifteen-year period (Marina Militare, 2019, p. 40).

This is not to say the Navy stood still. It already had begun a maintenance process in the planning cycles before the Red Sea crisis, with plans to modernise the destroyer and frigate classes, advancing new submarine and mine-countermeasures acquisitions, and renewing air-defence systems (Ministero della Difesa, 2022; 2023). Where the procurement documents pointed toward the higher end they did so as investment directions rather than fielded capabilities (Ministero della Difesa, 2023, p. 52). Therefore,

it can be noticed that procurement was all but static, but that it also was just ordinary business of incremental upgrade, modernisation, and maintenance.

The Navy's posture still was presence-oriented, dual-use, and operating within the CM paradigm. The *Linee di Indirizzo Strategico* organised the service's activity around four functional domains: *Maritime Defence and Security*, *Capacitive Development*⁴³, *Support to the Country System*⁴⁴, and *International Cooperation*⁴⁵. Specifically, Maritime Defence and Security was intended to be achieved through duties that span from presence and surveillance to power projection operations (Marina Militare, 2019, p. 20). The same document framed Italy's role not as warfighting but as that of a security provider, rather than a consumer, and stressed the need for prevent rather than react to what happens in the Enlarged Mediterranean (Marina Militare, 2019, pp. 57-58). The catalogued dangers that can be encountered in those waters aligned with the familiar spectrum of constabulary contingencies: jihadist terrorism, migratory flows as infiltration vectors, submarine proliferation, and threats spanning from the conventional and asymmetric ones to the hybrid and cyber ones (Marina Militare, 2019, pp. 58-60).

In sum, on the eve of the Red Sea crisis the Navy's vital interest demonstrably encompassed the Suez Canal-Red Sea-Bab el-Mandeb corridor as a named primary artery. The Navy's declared ambitions since 2019 had readmitted high-intensity warfare in principle but the capabilities it could actually field existed in the planning record as fifteen-year aspirations, programmes in development, or stated intentions, not as restored operational capacity. It is against this baseline that the resonance of the Houthi campaign, and the procurement that followed it, must be assessed.

Establishing the Presence of Organisational-Cultural Resonance

To establish *organisational-cultural resonance*, we assess two matches: first, whether the Navy's vital area of interest aligns with the location of the shock; second,

⁴³ Both operational, to renovate and modernise the fleet, and technical, to innovate integrating Defence, Industry, Universities, and research centres.

⁴⁴ Promotion of national goods through dual-use by Navy personnel and units.

⁴⁵ Connected to naval instrument and the "naval diplomacy".

whether the Navy was equipped to counter the threats posed, or if the actual threat exposed a gap in high-intensity warfighting capabilities.

On the dimension of *vital interest alignment*, the shock occurred exactly within the area of main interest for both Italy and its Navy, the Red Sea, the Bab el-Mandeb Strait and the Gulf of Aden. That the shock struck Italian interests it is something that can be inferred by how the shock was registered by the defence establishment. Heard by the joint Defence Committees in early February 2024, Defence Minister Guido Crosetto located the shock on the vital artery for maritime trade, central for Italian economy; its defence is the defence of national interests in the EM, as Crosetto said, and it explains the unusual quickness in decision-making (Crosetto, 2024, pp. 5, 8). Crosetto's reasoning matched that of the CSMM, Enrico Credendino, who linked the Italian industry to the imports and exports passing through Suez and the Red Sea and advocated in favour of the Navy's employment in the area (Credendino, 2024a).

The behavioural record corroborates the verbal one and is in some respects stronger evidence. Italy did not wait for the EU to react to the crisis: it did send the frigate *Virgilio Fasan* in the Red Sea in late December 2023 – one month after the Houthi campaign had started (Ciriaco, 2023). The Fasan was tasked with maritime situational awareness duties, and extended self-defence in favour of national-flagged and national-interested shipping, while Italy itself demanded the EU a common initiative (Crosetto, 2024, pp. 3-4).

On February 19th, 2024, the Council of the European Union launched *Operation EUNAVFOR Aspides*, and the force commander was Rear Admiral Costantino, on the Italian destroyer *Caio Duilio* (Council of the European Union, 2024). Parliamentary authorisation arrived unusually fast, on March 5th (Camera dei Deputati, 2024), and during 2024 the Italian Navy held simultaneously on command roles in operations such as *Operation Atalanta* and of the *Combined Task Force 153*⁴⁶ (Crosetto, 2024, p. 6; Rossi, 2024). Overall, the rapid unilateral deployment in the area in late 2023, the institutional push for an *ad-hoc* EU mission, and the simultaneous command of three operations in the

⁴⁶ A US-led multinational task force to responsible for the protection of the Red Sea and the western Gulf of Aden.

area – while also contributing to EMASoH Agenor⁴⁷ – are revealing indicators of where the Red Sea-Bab el-Mandeb-Gulf of Aden corridor sits in the hierarchy of interests.

On the second condition, *threat-type alignment*, the operational record of EUNAVFOR Aspides was one of repeated combat engagements against multiple drones, both in the air (UAVs), on the sea (USVs), and under the surface (UUVs) (Paes et al., 2024). The engagements concerned numerous units, from different countries in just a few months; some examples are the Italian Navy's vessels *Caio Duilio* and *Virgilio Fasan* (EUNAVFOR Aspides, 2024a; 2024c) but also for other countries' vessels such as the German frigate *Hessen* and Greek frigate *Psara* (EUNAVFOR Aspides, 2024b; 2024d; 2024e), and even the American destroyer *USS Thomas Hudner* and the British destroyer *HMS Diamond* (U.S. Central Command, 2023; Royal Navy, 2024). A retrospective assessment confirms Aspides as a highly demanding operation, the most demanding in EU's history, which moved away from the usual low-intensity context (Pricopi, 2025; Leccese, 2026).

The operation exposed clear limitations, as the engagements consumed dozens of expensive Aster interceptor missiles⁴⁸ against the cheaper drones launched by the Houthis; this is attributable to shallow magazine depth that is incompatible with a high-intensity environment and a production base that is strained by the consumption rate of a single operation (Leccese, 2026). About the few missiles at disposal, the Italian Defence Minister Crosetto allegedly expressed worry for the inventory the Navy had at its disposal, quantified in 63 missiles (Canettieri & Gambardella, 2024), but later denied the claim (Ministero della Difesa, 2024a).

Further evidence of the great impact the shock had on the Navy can be inferred from the institution's self-description. In March 2024, just days after *Caio Duilio*'s first engagement the CSMM Credendino projected readiness, claiming that the ship was ready for engagement with the Houthis' arsenal, and that it was hardly trained (Credendino, 2024a). By December of the same year, before Parliament, Credendino's register had

⁴⁷ A European-led Maritime Awareness operation in the Strait of Hormuz.

⁴⁸ The Aster missiles are designed to ensure area protection. The Aster 15 is employed for short-to-medium-range interceptions. The Aster 30 and its evolutions – Aster 30-B1 and Aster B1NT cover short-to-long-range interceptions. For more: <https://www.mbda-systems.com/products/area-protection/aster-family/aster>

completely changed and he stated that the Houthis retained complete control over the Bab el-Mandeb Strait (Credendino, 2024b, p. 5). He affirmed that in the Red Sea the Navy was subject to attacks by ballistic and cruise missiles, UAVs, USVs, and UUVs, he stated that it was necessary to change the training procedures to perform well under the required high-intensity, “cosa che mentalmente non eravamo più abituati a fare” – something that the Navy was not used to anymore (Credendino, 2024b, pp. 12-16).

The *Rapporto Marina 2024*, the Navy’s annual account of the year, corroborates this reading by describing the Red Sea as a theatre where crews repeatedly faced delicate situations, and used air-defence systems and naval guns to neutralise threats (Marina Militare, 2025, p. 6). The same document frames the entire year’s operational posture around the changes needed to face high-intensity hostilities across all the domains (Marina Militare, 2025, p. 2). Such acknowledgement, in the Navy’s own publication, links the higher demand for high-intensity warfighting capabilities to the Red Sea crisis.

Credendino further itemised the gap exposing the staggering difference between the cheap drones that were used to target Aspides’ ships, and the expansive missiles used to counter them (Credendino, 2024b, p. 6). This issue was partially mitigated by the Navy’s retained naval-gun tradition; however, little can it do against fast-moving targets such as ballistic or cruise missiles or against long-range targets (Credendino, 2024b, p. 16). The CSMM also highlighted the limitations in the production of munitions, as the needed quantity cannot be met by the industry, to which now is asked to deliver ships already fully equipped, so that they are not unprepared to the Red Sea’s threats (Credendino, 2024b, p. 16).

It is worth noting that the Navy did not assimilate the Red Sea campaign to the usual constabulary repertoire. Credendino treated the simultaneous resurgence of Somali piracy as a separate, secondary effect to the Houthis targeting campaign (Credendino, 2024b, p. 5). This is clearly backed by the crisis’ numbers, which saw hundreds of targeted ships, large use of swarms of UAVs, USVs, UUVs, and anti-ship cruise and ballistic missiles (Paes et al., 2024).

On the framework’s terms, both conditions of *vital-interest alignment* and *threat-type alignment* are met. The shock severed an explicitly mentioned SLOC, central to the

Navy's organisational culture, and exposed a gap in high-intensity warfighting. Though the Navy aspired to develop such capabilities even before the shock, it was still lacking them when the shock occurred, as demonstrated also by the need to rethink training procedures. Therefore, *organisational-cultural resonance* is registered, and the response predicted by the framework is restoration.

Procurement Analysis

Having assessed the presence of organisational-cultural resonance, the framework expects the procurement analysis to find that the shock was followed by the restoration of high-intensity combat capabilities. To establish whether restoration did or did not occur, the trajectories of anti-drone defence for naval units, the depth of air- and missile-defence interceptor stock, and naval munitions are considered. In each, a programme that was discussed before the shock only as an intention becomes, after the shock, a funded line of activity which acquisition decree dated to the crisis itself.

The clearest instance is shipborne counter-drone defence. The pre-shock planning record named this capability only as a modernisation folded into general air-defence in the *DPP 2023-2025* (Ministero della Difesa, 2023, p. 52). The *DPP 2024-2026*, drafted while operations in the Red Sea were ongoing, converted this into a distinct program for the protection of naval units (Ministero della Difesa, 2024b, p. 25). The same *DPP 2024-2026*, in its strategic preamble, explicitly referred to the situation in the Red Sea and to the Houthis' front made of drones and missiles and to EUNAVFOR Aspides and its defensive mandate (Ministero della Difesa, 2024b, p. II). By 2025, the *DPP 2025-2027* hardened the intention into a dedicated programme line, the "Sistema Anti-Droni Unità Navali" to equip naval units with fully integrated counter-UAV systems (Ministero della Difesa, 2025b, p. 46). The programme, acquired with the decree SMD 05/2024 – when the crisis was in its fullest intensity – signals the shift from an undefined intention (Ministero della Difesa, 2023) to a structured program justified through the Red Sea (Ministero della Difesa, 2025b).

The interceptor stock, shows the same pattern at greater scale and with external corroboration. The baseline recorded programmes to adapt air-defence systems to a ballistic-missile defence role (Ministero della Difesa, 2022, p. 49). What the shock caused

here was not a new programme, rather than a change in volume and tempo of production, precisely the two industrial dimensions the EUNAVFOR Aspides engagements had exposed as deficient when vessels consumed interceptors faster than they could get them replaced. The demand for that change had been generated within the Navy itself, which had pressed industry for an immediate acceleration in munitions production and for the incorporation of operational lessons into production cycles at the shortest possible turnaround (Marina Militare, 2025, p. 5).

In February 2025, Italy, together with France and the United Kingdom, ordered a further 218 Aster missiles through OCCAR and, contracted the acceleration of the already placed orders (Naval News Staff, 2025). The manufacturer, MBDA, confirmed the acceleration as delivered, releasing the first batch from accelerated production by July 2025; it also committed to halve the production time of Aster missiles in 2026 relative to 2022 and to deliver five times more in 2025 than originally planned (MBDA, 2025).

The DPP 2025–2027 carries this into the Navy's own munitions stock. The air-defence missile stock is renewed and deepened under the PAAMS programme (Ministero della Difesa, 2024c) and a dedicated programme to replenish naval missile holdings, “Munizionamento Componente Navale” (Ministero della Difesa, 2025b, p. 49). This came after one year of operations and falls precisely on the consumable category Credendino had told the parliament about when referring to shallow magazines.

Further evidence is provided by Credendino’s request that ships arrive already fully equipped (Credendino, 2024b) being followed by the signing of a contract, in April 2026, between OCCAR and the Fincantieri-Leonardo consortium. The contract, worth approximately €392 million, amended the PPA programme and formalised the upgrade for all the PPA units in Light and Light Plus configurations, to the Full Combat Standard (OCCAR, 2026; Fincantieri, 2026). The significance for the argument lies platform’s design. The PPA was conceived as a flexible, dual-use vessel built fitted-for three configurations, with the lighter versions deliberately leaving combat systems to be installed later. The post-shock decision to bring the lighter hulls up to Full Combat Standard is a recognition that the presence-oriented, lightly armed end of the fleet required a high-intensity fit-out the original concept had deliberately deferred.

By the time the PPA's upgrade was contracted, the Navy had also reframed its own guiding intent in terms that make the restoration explicit in its own voice. The CSMM's *Linee di Indirizzo 2026-2027* organise the whole manoeuvre around a transition from low-end to high-end, and place as a priority the development of deep-strike capabilities from both surface and submarine units, and the restoration of strategic stocks of munitions decisive to sustain high-intensity operations (Marina Militare, 2026). In this document the Navy names the restoration of munitions depth required for high-intensity engagement and explicates the Red Sea as a theatre of continuous presence (Marina Militare, 2026).

What the Red Sea crisis produced was a restoration within a persisting crisis management paradigm, as high-intensity warfighting was layered onto a force still organised around presence, constabulary tasking, and dual-use. The service own *Linee di Indirizzo 2026-2027* are the clearest illustration of this layering, as it proclaims a move from low-end to high-end and the restoration of high-intensity munitions stocks (Marina Militare, 2026). Critical mass is to be obtained through the combination of conventional assets, uncrewed platforms, and cheap systems (Marina Militare, 2026). The Navy's aim, stated in the document, is to guarantee the continuous influx of energy, resources, and data, through the Suez Canal-Bab el-Mandeb-Hormuz chokepoints (Marina Militare, 2026). High-end is therefore added to the character of the usual constabulary missions.

This pattern is that identified by Coticchia for the Italian defence policy's trajectory after the Russian invasion of Ukraine in 2022: not a paradigm shift, but a slight readjustment (Coticchia, 2024). This addition of new elements to what already exists is called layering and it is consistent with Coticchia and Mazziotti di Celso's finding that the EM is seeing a growing commitment by Italy and still is the main area where to protect national interests (Coticchia & Mazziotti di Celso, 2025). The durability of the CM paradigm in Italy is what makes the Red Sea response take the form of layering rather than rupture (Coticchia & Di Giulio, 2024; Coticchia, 2024): the shock resonated, within the institution, which then restored the specific high-intensity capabilities the threat demanded, but it did so remaining true to the organisational culture in which those capabilities were located.

Scope Condition and Confirming Extension

Italian Army's Rearmament After the 2022 Invasion of Ukraine

The Italian Army constitutes a scope-condition case for the *organisational-cultural resonance* framework. As the shock – the Russian invasion of Ukraine in 2022 – falls outside the Army's sanctioned area of vital interest and exposes no gaps in the toolkit applied to its stated missions, the framework predicts the absence of *organisational-cultural resonance* and, consequently, no service-level restoration. However, restoration occurred, constituting an anomaly that challenges the theory's explanatory scope and demands further analysis.

In establishing the Italian Army's baseline, the *area of vital interest* for the service is located by the 2015 White Paper in the Enlarged Mediterranean due to its economic relevance and its instability, which can have relevant effects on Italian national interests (Ministero della Difesa, 2015). For the land component specifically, this means an operational posture oriented southward and eastward; this is confirmed by the *Rapporto Esercito 2020* which confirmed the Army's active external deployments in the Balkans (Kosovo), in the Sahel (Mali and Niger), in the Horn of Africa (Djibouti and Somalia), in Libya, Lebanon and Iraq (Stato Maggiore dell'Esercito, 2021, p. 62). The only deployment in Eastern Europe was that in Latvia, which constituted the Italian NATO eastern-flank presence (Stato Maggiore dell'Esercito, 2021, p. 62). Therefore, Eastern Europe as a primary area of interest is absent from the Army's own pre-shock understanding.

In regard to the *threat-type toolkit*, the 2015 White Paper describes the Army's force structure as requiring a diversified force, including light, medium, and heavy elements that are deployable, modernly equipped, and structured to express different capabilities (Ministero della Difesa, 2015). The same document frames the operational environment as one made primarily of hybrid and asymmetric threats, but also places emphasis on crisis management, stabilisation, and post-conflict reconstruction; the same framing is provided by the *Rapporto Esercito 2020* (Ministero della Difesa, 2015; Stato Maggiore dell'Esercito, 2021, p. 62). The heavy-armour component had been progressively de-emphasised as part of the broader professionalisation and expeditionary reorientation of

the previous decades. The Army's threat-type toolkit was, therefore, sub-threshold, expeditionary, and asymmetric.

In identifying whether *organisational-cultural resonance* is present or not, whether the shock occurs within the vital area of interest is looked at. Eastern Europe – and Ukraine in particular – was remote in respect to the Army's area of interest, that of the "crisis arc" highlighted by Italian deployments abroad. The *DPP 2022-2024*, published after the invasion, acknowledged the return of symmetric inter-state conflict to Europe and that this requires a fundamental reassessment of the force's posture (Ministero della Difesa, 2022, p. II), suggesting that the event was registered as external to prior assumptions.

It is worth noting that the Chief of the Army Staff (CSME), Lieutenant General Pietro Serino, does not frame the invasion as irrelevant to the Army's concerns. He described the crisis as a catalyst for an Army-wide transformation aimed at responding to the heterogeneous challenges of the Enlarged Mediterranean, while simultaneously meeting NATO requirements (Stato Maggiore dell'Esercito, 2023, pp. 4-5).

In regard to *threat-type* toolkit, the baseline for the Army's missions points to expeditionary, sub-threshold, and asymmetric capabilities, which are matched by the deployments abroad – stabilisation in Lebanon, peace-support in Kosovo, capacity-building in Mali and Niger (Stato Maggiore dell'Esercito, 2021, p. 62). Training annual cycles were structured to prepare for expeditionary deployments and for contributions to collective crisis management rather than peer-adversary warfighting (Stato Maggiore dell'Esercito, 2021, p. 62).

For these missions, the Army's force structure – based on modular light-to-medium infantry, special forces, and asymmetric threat countermeasures – constituted an adequate toolkit. The invasion of Ukraine did expose a deficit in high-intensity warfighting; however, these capabilities' absence would be consequential in a peer-adversary state-on-state conflict, not for the expeditionary crisis-management tasks that define the Army's mission set (Ministero della Difesa, 2015; Stato Maggiore dell'Esercito, 2021, p. 62). Since a gap was revealed in a different mission-set compared to the Army's, threat-type alignment is also absent.

The absence of both *vital-interest alignment*, and of *threat-type alignment*, means the absence of *organisational-cultural resonance* and therefore, the absence of restoration.

Post shock procurement evidence, however, records the opposite. The *Rapporto Esercito 2022* frames the invasion explicitly as having demonstrated the need for a different military instrument, capable of operating in continuously evolving environments (Stato Maggiore dell'Esercito, 2023, p. 67). The document proceeds in noting that the new conflicts recall the TTPs of high-intensity warfare, for which the Army has identified the following development priorities: close combat manoeuvre, stand-off manoeuvre, third-dimension manoeuvre, air- and missile-defence, and distributed logistics, all oriented towards high-intensity scenarios (Stato Maggiore dell'Esercito, 2023, p. 67).

The Army proceeded in advancing procurement programmes such as new armoured infantry fighting vehicles, main battle tanks, the acquisition of HIMARS-type long-range precision fire systems, artillery and other systems generally associated with high-intensity warfare (Stato Maggiore dell'Esercito, 2023, pp. 67-68).

These are not marginal adjustments to the expeditionary toolkit, but a structural shift toward symmetric warfighting capabilities that was previously de-emphasised after the Cold War. The scope-condition case therefore fulfils its methodological function by demonstrating the limit of the framework's explanatory reach, pointing towards factors that the model as constructed does not capture.

The JMSDF's Restoration After the 2012 Senkaku Crisis

The JMSDF serves as a shadow-case to confirm the framework's generalisability. The shock taken into account is the sustained escalation in the East China Sea over the Senkaku Islands between 2010 and 2012. The shock fell within the JMSDF's area of vital interest and exposed a recognised gap in the service's toolkit to meet its duties.

A small caveat applies: Japan does not produce service-level strategic documents, so *organisational-cultural resonance* is inferred from national-level guidelines and reviews that the JMSDF demonstrably shaped and implemented. These documents explicit maritime force as defined by persistent intelligence, surveillance, and

reconnaissance (ISR), ASW, and the protection of SLOCs and surrounding seas (Government of Japan, 2010; Ministry of Defense of Japan, 2014).

In establishing the baseline, the *area of vital interest* was defined earlier on by the 2004 NDPG acknowledged the emergence of “new threats” – proliferation of weapons of mass destruction, ballistic missiles, and terrorism – and set two goals: preventing these from reaching Japan and improving international security (Ministry of Defense of Japan, 2014). The JMSDF space remained the surrounding seas, SLOC, and offshore-island defence, but the document’s animating concern was missile defence and expeditionary contribution rather than a peer maritime competitor.

Shifting to the threat-type, the 2004 NDPG introduced the “multifunctional, flexible, effective”, with great emphasis on ballistic-missile defence; the JMSDF toolkit was instead configured for surveillance, SLOCs security, offshore-island defence, and BMD. High-intensity surface-combat was therefore not present in the JMSDF’s own mindset.

The escalation in the East China Sea fell directly within the JMSDF’s *area of vital interest*, as it occurred within Japanese surrounding waters and concerned some offshore islands. The 2010 NDPG, issued just months after the crisis began, designates the southwestern region for priority reinforcement of ISR, maritime patrol, and air-defence and identifies offshore-islands defence and SLOCs security as core JMSDF missions, naming China’s activities as driver (Government of Japan, 2010, p. III-V). A Defense Posture Review Commission’s was established to draft a report on how to review the defence posture in light of China’s increasing assertiveness in Japan’s vicinity and it prioritises maritime security and response to attacks on remote islands (Ministry of Defense of Japan, 2013). The *National Security Strategy* developed in response to the crisis and published in late 2013 – the first in the country’s history – named China’s coerciveness on the status quo around the Senkakus as a central concern, highlighting how the shock was registered as occurring within the Navy’s *area of vital interest* (Government of Japan, 2013a, pp. II-III).

On the *threat-type*, instead, the escalation exposed a gap in the toolkit used for the JMSDF’s own missions. The 2010 NDPG and the 2013 NDPG register a “grey zone” of

sustained coercion short of armed attack over territorial and maritime interests; this reframed surrounding-seas defence as requiring maritime supremacy, rather than mere presence (Government of Japan, 2010, p. III; 2013b, p. I-III). The 2013 NDPG directly affirmed that destroyer and submarine units must be strengthened by increasing their equipment, including new vessels, to sustain persistent ISR and ASW operations in the surrounding seas (Government of Japan, 2013b, p. IV). The exposed gap is located precisely within the mission set the JMSDF was already performing. This confirms the presence of *threat-type alignment*.

As both dimensions are present, and therefore *organisational-cultural resonance* is, the framework predicts restoration. The 2010 NDPG first programmed an increase in submarines, destroyers, and Aegis systems, then incremented by the 2013 NDPG (Government of Japan, 2010, p. 10; Government of Japan, 2013b, Attached Table). This is explicit, quantified movement toward greater combat mass and higher-end air-defence and subsurface capabilities, and it marks a departure from a posture previously sized for routine surveillance and sea-lane presence.

In conclusion, restoration occurred: the JMSDF rebuilt the higher-end naval instruments it relied on to secure the surrounding seas, expanding its destroyer, Aegis, and submarine forces in response to mounting Chinese maritime pressure. The service's underlying mission held constant throughout – the safeguarding of maritime security remained its enduring purpose. With *organisational-cultural resonance* present on both dimensions and procurement moving accordingly, the case confirms the framework's prediction.

CONCLUSIONS

This thesis explains why some external security shocks restore high-intensity combat capabilities while others do not. The answer lies in the shock's resonance: restoration occurs only when a shock strikes the service's vital interest and exposes a gap in its high-intensity toolkit that hinders its mission. When both conditions are met, organisational-cultural resonance – here meaning alignment between the shock's implications and the service's self-perception – leads to restoration; if either is absent, the service's capabilities remain unchanged, regardless of the shock's broader impact. The Italian Navy's experience with two shocks illustrates this. The 2014 annexation of Crimea, a major shock for the Euro-Atlantic system, satisfied neither resonance condition and caused no restoration: the Navy's procurement followed existing plans, modernising a constabulary and dual-use fleet for ongoing tasks. By contrast, the 2023-2024 Red Sea crisis satisfied both dimensions and was followed by the recovery of high-intensity capabilities – in counter-drone defence, interceptor stocks, naval munitions, and upgrades of lightly armed platforms to full combat standard – directed at the gaps exposed by the shock.

Both outcomes confirm the framework's expectations. The crisis-management paradigm guiding Italian defence since the 1990s endured. The Red Sea response added high-intensity warfighting to a force still focused on presence, surveillance, and dual-use roles, supplementing rather than replacing the paradigm. This supports the broader finding that exogenous shocks rarely upend entrenched paradigms and refines it by showing what causes layering within a stable paradigm.

The two comparative cases limit the argument's reach in opposite directions. The Japan Maritime Self-Defense Force after the 2010-2012 Senkaku crisis behaves as the framework predicts. A shock within the service's vital area of interest exposed a gap in the toolkit for its own missions. The JMSDF restored higher-end submarine, surface, and air- and missile-defence capabilities while its exclusively defence-oriented posture endured. That the framework holds in a different national setting and a different organisational culture suggests its logic is not an artefact of the Italian case. The Italian Army after the 2022 invasion of Ukraine, by contrast, marks the framework's limit.

Neither dimension of resonance was satisfied, since the eastern flank lay outside the Army's sanctioned area of interest and the exposed gap concerned a mission set the service was not configured to perform. Yet the Army nonetheless began procuring main battle tanks, infantry fighting vehicles, and long-range precision fires systems oriented toward symmetric warfighting. Organisational-cultural resonance, as constructed here, cannot account for this outcome.

Two limitations qualify these findings. The Red Sea case serves as a plausibility probe rather than a settled outcome, and further evidence may alter this view. The comparative cases use intentionally narrow evidence, enough to assess transferability but not to serve as complete analyses.

These observations suggest several avenues for future research. The most promising line of inquiry would treat organisational-cultural resonance as a sufficient rather than a necessary condition for restoration, and ask which complementary mechanisms, both above and at the service level, can drive capability. The most plausible candidates lie in alliance commitments and in the role of individual decision-makers. Future work could examine whether NATO capability targets pulled the Army toward restoration, or whether a particular figure – a defence minister, a CSMM, or a CSMD – shaped the service's response through its own convictions, much as De Giorgi appeared to do in the Crimea case. Specifying those mechanisms and establishing how they interact with the service-level filter developed here is the natural extension of this work. A further step would be to test the framework against a wider set of services and shocks, to determine whether the residual it isolates behaves consistently across cases. This is where the framework proves useful: predicting cleanly where it should and failing cleanly where it should not, it isolates what remains to be explained.

With these caveats, the thesis shows that the difference between a shock that reshapes a service and one that passes through it lies not in its size, but in whether it strikes where the service lives and demands what the service cannot do.

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