COMPATIBILITY AND STRATEGIC CONVERGENCE: MILITARY AND ENVIRONMENTAL APPROACHES TOWARDS SOUTH ATLANTIC BRAZILIAN OCEANIC ISLANDS

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ABSTRACT

Several Marine Protected Areas have been created in the world, in part to fulfill one of the United Nations Convention on Biodiversity goals as to preserve at least 10% of each country's coastal and marine areas. This study aims at analyzing military presence in the Brazilian oceanic islands of Fernando de Noronha, Trindade & Martin Vaz and São Pedro & São Paulo and how it interacts with the environmental approach, since the three encompass Large Scale Marine Protected Areas. A brief overview about the importance of the islands to Brazilian geopolitical thinkers is shown, as well as the theoretical issues regarding the military presence in preserved environmental areas. Those results are then applied to the three Large Scale Marine Protected Areas' present situation, with the conclusion pointing to a positive feedback loop, with significant and favorable results on environmental and military approaches, as well as regarding geopolitical goals.

Keywords: Military Presence in Marine Protected Areas. South Atlantic Brazilian oceanic islands.

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INTRODUCTION

The Atlantic Ocean has been fundamental for Brazil since its Colonial Period, as origin to migration fluxes, economic interchange or as one of the most important pillars in defending its territory. Such importance has grown with time, as UNCLOS (United Nations Convention on the Law of the Sea) has defined areas like EEZ (Economic Exclusive Zone), which grants exclusivity in the exploration of living and non-living resources, and the extension of the Continental Shelf, which also gives exclusivity, but only to non-living resources.³ In the Brazilian case, such definition originated the Blue Amazon concept⁴, that is, a marine area equivalent to more than 50% of its continental territory, as shown in Figure 2, in the second part of the text.

Brazil currently occupies three significant oceanic archipelagos in the Atlantic: Fernando de Noronha (FN), Trindade & Martim Vaz (TMV) and São Pedro & São Paulo (SPSP). The former shows tourism as its main economic activity, while the other two host scientific bases.

TMV is a volcanic formation, therefore it doesn't present oil or gas reserves. Nevertheless, near its westward Mounts, there are deposits between Mounts Victoria and Besnard (PINHEIRO, 2018, p.27-29). The same applies to FN and SPSP, which present nearby oil reserves in the Potiguar Basin and Pernambuco-Paraíba Basin (PORTELLA & FABIANOVICZ, 2017; BATISTA et al., 2019). It should also be mentioned the seabed mining potential in the three LSMPA or nearby areas (MILLER et al., 2018). Therefore, a rigid environmental assessment has to be made in order to prevent dangerous spillovers from an unrestricted exploration of those resources.

The United Kingdom has always emphasized the strategic impact of its so-called Atlantic "string of pearls" (Ascension Island, St. Helena, Tristan da Cunha, etc.), even going to war as in the case of the Malvinas/ Falklands Islands. As to Brazil, with a caveat regarding the great diplomatic effort to dislodge the United Kingdom after a brief irregular occupation of TMV, only during the twentieth century the geopolitical concerns started to crystallize in terms of a more robust State presence, first with Fernando de Noronha as a military base in World War II, then with a permanent

³ UNITED NATIONS (1982)

⁴ On the Blue Amazon concept, see BRASIL (2020, p. 19)

Oceanographic station in TMV (1957) and a scientific station in SPSP (1998).

Nevertheless, taking into account the importance of the three island formations as to their environmental impact (all are LSMPA, Large Scale Marine Protected Areas⁵), the increase of the military presence (defined as permanent outposts and respective garrisons), in quantitative or qualitative terms, , may raise negative assessments. The main contrarian argument would be that, although there might be gains in geopolitical terms, the environmental impact would be so negative that it would offset any positive results (even if we count in the increased surveillance, defense and preservation of the environmental resources).

This work's main goal is to analyze if the military and environment approaches are compatible, with emphasis in the case of the aforementioned Brazilian LSMPA, and if there's a positive feedback loop, with significant and favorable results on both and on the overall geopolitical net result.

The first part deals with the debate about conjugation of military and environmental approaches in MPA overall, examining the possibility of a positive convergence between both, in a synergic process. Based on Elizabeth De Santo's pioneer work (DE SANTO, 2020), it is shown that controversies regarding the compatibility of both approaches are not exclusive to Brazil. In fact, there are positive and negative interactions, and De Santo sums up some studies and research in order to better analyze the issue. In the second part, a review of the Brazilian ideas and concepts about its "string of pearls" is made, showing the line of reasoning which has tried, through time, to show the importance of the islands' strategic role for Brazil. In the third part, the Brazilian LSMPA case is analyzed through the elements which had been exposed in the first part, displaying how military and environmental approaches can be compatible as well as factors which can imperil this positive trend. Finally, the Conclusion wraps up the research results.

The authors wish that this work can contribute to the debate about the full use of the Brazilian oceanic islands, with any initiative towards them expressly taking into account the guidelines regarding Marine

⁵ In Brazil, the official term, according to the Environment Ministry, is Area de Proteção Ambiental (Environmental Protection Area), be it terrestrial or marine. In some states' environmental agencies, like São Paulo's, there has been a growing use of the concept of Marine Environmental Protected Areas (Áreas de Proteção Ambiental Marinhas). Throughout this work, the term MPA will be used, due to its international compatibility. According to DE SANTO (2020, p.1) LSMPA would be those MPA with an area of 100.000 km² or more.

Spatial Planning (MSP)⁶. That way, it will be achieved the harmonious and intergenerational utilization of the several resources involved, which are so dear to the so-called Blue Economy.⁷ After all, the search for securing our national endowments, while we defend and explore them rationally and in a sustainable manner is in our society's best interest.⁸

Nevertheless, it should be stressed that MSP, as any process related to a public policy discussion and implementation, can raise many questions and controversies about resources allocation and management priorities among public agencies. Brazil is not an exception to this, as it will be mentioned throughout the text. For example, Alcatrazes Archipelago, distant 35 km (less than 20 nautical Miles) from the continental shore, presently seems to be the apex of controversy between environmental and military views. There is a Wildlife Refugee, encompassing aproximately 65 km². At the same time, a nearby island (Sapata) is deemed by the Navy as the only feasible spot, in Brazilian maritime territory, to be a shooting lane for cannon training. A compromise was reached, with the Navy exercises being made once a year, but there is still pression by the environmentalists in order to cease those activities.⁹

MARRONI et al (2019b, p.4) sum up the situation: MSP "configures the instrument that executes and materializes territorially the strategic objectives of the maritime policy which, in turn, is closely related to (maritime) security". So, we can point that the best performance of any MSP, in order to to effectively protect the environment, is to be reached only if its military dimension is completely taken into account. This issue will be further analyzed in the next part of this text.

⁶ On the Marine Spatial Planning concept, see UNESCO (2022). On the importance of the Marine Spatial Planning regarding the South Atlantic, MARRONI *et al* (2019a).

⁷ On Brazilian Blue Economy, BEIRÃO et al (2020)

⁸ The authors also would like to thank two anonymous reviewers who gave very insightful suggestions which improved the overall text

⁹ On Alcatrazes, see Ministério do Meio Ambiente – ICMBIO (2022). Details about the controversy are shown in ESCOBAR (2016), but with an approach highlighting the environmentalist view. Alcatrazes doesn't fit with the scope set for this text (it's not a LSMPA); nevertheless, it should be considered for further studies, especially regarding the obstacles in devising and implementing a full and sound Brazilian Marine Spatial Planning.

MILITARY AND ENVIRONMENTAL COMPATIBILITY

Any (present or potential) territorial occupation inevitably gives rise to geopolitical issues; after all, Geopolitics' focus is essentially the relationship between Power and Territory. In the last decades, Environment became surely one of the major planetary issues, dealing with elements such as the finitude and asymmetry of the natural resources' spatial distribution as well as long-term sustainability (or not) of current economic and social processes. Therefore, it would be only a matter of time before geopolitical causal factors and further developments should get included in the environmental macro analysis (DALBY, 2014; HARRIS, 2014; HODGETTS et al, 2019). It's worth mentioning that most of those studies dealt with the terrestrial geopolitical approach and its influence on environmental conservation.

In terms of the occupation of oceanic islands and/or establishing of MPA¹⁰, there has been an expressive growth as to its quantity, in some measure stimulated by one of the goals of the United Nations Convention on Biodiversity, that is, that by 2020 each country should have preserved at least 10% of its coastal and marine areas as biodiversity and ecosystem protected areas (DE SANTO, 2020).

Nevertheless, specific studies about MPA and their relationship with geopolitical goals are relatively few, as compared to studies regarding terrestrial conservation areas.¹¹ And, in the case of comparing environmental and military simultaneous approach on MPA, it's almost a pristine area in terms of studies. As stated by De Santo (2020, p. 3), her text would be the first "to examine conflicting objectives of conservation and geopolitics within marine contexts". In fact, her study is to be considered a really significant trail opener, either on its robust empirical research as well as the incentives in fostering a theoretical debate about how the military approach stands in relation to the environmental one, in the case of MPA. Her emphasis on the so-called LSMPA (Large Scale Marine Protected Areas), with more than 100 thousand square kilometers, also allowed a sharper focus towards the most significant cases, in terms of geopolitical implications.¹²

¹⁰ On the definition, issues and guidelines towards Marine Protected Areas, see DAY (2019).

¹¹ For example, LEEHARDT et al (2013) points that the clear growth in the number of MPAs should be credited to several drivers and not only to an environmental conservation urge.

¹² The approach in MACKELWORTH et al (2019), with a focus in several territorial disputes in Europe, most of them in the Mediterranean Sea, emphasizes the need of cooperation

Any human activity causes some kind of environmental impact; the most fundamental goal should be pursuing that those activities are compatible with the long-term sustainability of the whole ecosystem (including human beings). In the case of military activity, what would be its impact in a MPA? Obviously, the term military activity *per se* comprises a series of subactivities, ranging from the use of weapons to incapacitate enemies (which could lead to a high level of destruction of the ecosystem) until the dissuasion of agents looking for the exploitation of any area and possible harmful activities as to the environment. The impact of fuel residues should also be assessed, as well as any litter of other kind. In the case of naval activities, the delicate ecological balance in the marine areas should also be taken into account. But it should be stressed that military activities are not intrinsically a threat to the environment; after all, human activities' overall results depend on the way they are conducted.

The effort made by De Santo (2020) towards analyzing military and environmental approaches starts by taking into account studies of that compatibility (or not) in terrestrial sites, and expanding them to marine situations.¹³

A first embryonic tipology, built upon De Santo's findings (p.2), can be made up as to the types of MPA. The main types would be:

a) Military legacy – Military issue not well-documented or explored and/or not explicitly mentioned in the MPA's designation; it may usually refer to battle or bombing sites.

b) Geopolitical presence – Geopolitical power projection given by the MPA;

c) Possible future research extraction – Potential exploration of living and non-living resources;

d) "De facto" MPA - "Sanctuaries" formed by restraints for

among many governments and also highlights, *en passant*, the application of a geopolitical rationale to fortify the position of some players. Nevertheless, that type of approach wouldn't seem to be the most adequate for analyzing the Brazilian case, since the three island formations are not in dispute with any other country and are LSMPA. All the cases analyzed in MACKELWORTH et al (2019) are not LSMPA

¹³ DE SANTO (2020, p. 3) states that her study "builds on insights from terrestrial experiences with "militarized" protected areas to examine conflicting objectives of conservation and geopolitics within marine contexts". Therefore, it's constantly warned, through her analysis, and rightly so, in our opinion, that not all concepts would be automatically valid in both realms. Although not in the scope of this present study, an Oceanopolitical approach would certainly add insightful remarks to such an analysis. On Oceanpolitics, see BARBOSA Jr. (2012), MORE (2012).

resources exploration, although not by environmentalist reasons (for example, shipping lanes, military bases, etc.). Therefore, it is not a "de jure" MPA, although it performs as one.

A second tipology could be drawn regarding major environmental concerns/results of militarized presence in MPA (ibidem, pp. 6-7):

a) Exemption from the environmental rules – When environmental rules are not applied to the military;

b) Prolonged military occupation or battle sites – When the MPA area is threatened by harmful residues of military occupation or battles (for example, shipwrecks);

c) Memorial role not explicit – When the MPA is also a battle site, although this is not clearly stated.

A third tipology gathers selected theoretical approaches on militarized conservation, summed up by De Santo (2020, pp. 7-8):

a) "Khaki conservation" (WOODWARD, 2001):

- Crater as habitat – military training and presence reinforcing the link between the military and preserving environment in areas generally out of bounds for public in general;

- Paternalistic land management – military would play the role of "benign occupant", while managing and providing protection;

- Administrative rationalism – military as experts in managing and protecting environment.

b) Double erasure (COATES et al. (2011), HARRIS (2015)) – Erasure of the social and historic issues related to the preserved area and the effects of military presence;

c) Biodiverse security (DUFFY (2016), LUNSTRUM (2015))– Conservation as a key issue in global security;

d) Ocean grabbing (BARBESGAARD (2018))– Exclusion of parts of the population in exploring natural resources, due to debatable environmental reasons.

As it can easily be concluded, the cases shown in each of the three typologies may overlap. The following Tables summarize the typologies,

which will be looked with more detail in the third part of this work, while applying them to the Brazilian LSMPA.

Type	Basic feature
~ 1	
Α	"Military legacy"
B	Geopolitical presence Possible future resource extraction
С	Possible future resource extraction
D	"De facto" MPA

Source: Own elaboration, based on DE SANTO (2020, p.2)

Table 2: Major environmental concerns/results regarding militarized

presence in thirt				
Туре	Feature	Concerns/Results		
A	Exemption from the	Area would become less		
В	environmental rules Prolonged military	"pristine" Toxic harmful residues		
	occupation or battle sites Memorial role not explicit	Need of a full disclosure		

presence in MPA

Source: Own elaboration, based on DE SANTO (2020, pp. 6-7)

Table 3: Selected theoretical approaches on militarized conservation

Туре	Subtype	Characterization	View*	Does it apply to
				MPA analysis?
A		"Khaki		Yes/
		conservation" Crater as habitat		Questionable Yes, with some
	A1	Crater as habitat	Positive	Yès, with some
				caveats Yes
	A2	Paternalistic	Positive	Yes
		land		
		management		
	A3	management Administrative rationalism	Positive	Questionable
В		Double Erasure	Negative	Yes
C		Biodiversity	Positive	Yes
		security		
D		Ocean grabbing	Negative	Yes

Source: Own elaboration, based on DE SANTO (2020, pp. 7-8)

Obs: (*) Positive and Negative are used in the sense if the approach's basic premise goes towards legitimizing (or delegitimizing) the military presence;

According to Table 3, there are theoretical approaches with positive and negative views, although it should be noted that "khaki conservation" is itself built on military own discourse. In fact, Coates et. al (apud De Santo, 2020, p. 7), "argue that most scholarship in the field of militarized conservation either uncritically claims that military activity is ecologically harmless (or even beneficial), or labels military environmentalism as greenwash."

As an example of an at least partial positive view, and an unbiased one taking into account its origin, Kelleher (1999, p. 25) mentions that "In other cases, the military have proved good guardians of natural environments (...) There are welcome signs in some countries that the military is aware of the great ecological value of many areas it controls and is prepared to work with conservation groups to prevent environmental damage". Indeed, there are several cases of positive military approaches to environment, as well as negative¹⁴, even under the same country project framework¹⁵.

In this sense, Bueger (2015) is very useful in pointing that, while debating the concept of Maritime Security, one of the approaches would be to face it as a part of a mosaic in which several issues interact, as shown in Figure 1. In fact, any conceptualization of Maritime Security should take into account many other concepts. The same logic could be applied to Marine Environment, also in the Figure. To exclude National Security and Seapower, for example, in the establishment of a Marine Environment public policy, would be not only questionable, according to Bueger's line of reasoning, but ineffective in the long run, as each of the mosaic's pieces have their own dynamics, although interconnected.

For example, almost all of the minor elements in the Figure (Accidents, Pollution, Smuggling, etc.) are directly linked to the military, in the Brazilian case. To think of a LSMPA without the resources to protect it is very questionable, at least.

¹⁴ DE SANTO (2020, passim)

¹⁵ For example, UNITED KINGDOM (2019) emphasizes the success of Blue Belt Programme, encompassing seven oceanic MPA in British foreign territories. Nevertheless, as shown by DE SANTO (2020), especially in pages 10-11, there is well-reasoned criticism towards the overall situation of one of them, the British Indian Ocean Territory, regarding either the conservation or the political approaches.

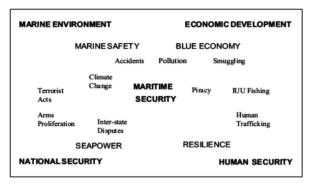


Figure 1: Maritime Security Matrix

Source: BUEGER (2015, p, 161)

Therefore, applying the previous concepts, it would be impossible, in the case of a MPA, to dissociate the environmental approach from the military (and also from others as the economic and geopolitical). The need for compatibility among those major approaches and respective minor approaches (which are not marked in bold in the matrix) points that the previous exclusion of any of them, in a debate, would reduce the overall effectiveness of the analysis towards Maritime Security.

So, the question to be posed is not a reductionist choice between military presence or military non-presence in MPA, but **how** that presence is implemented. Besides positive cases mentioned in De Santo (2020)¹⁶, focusing on USA¹⁷, UK and France's territories, an interesting example comes from a small but dynamic country, Malaysia.

Pulau Layang Layang (also known as Swallow Reef), in the South China Sea, is an oceanic atoll, disputed among many countries in the region. Although not a MPA¹⁸, it is one of the most traditional and envied scuba diving sites in the world. Originally occupied by Navy Special

¹⁶ As well as negative ones, reinforcing our point regarding the importance of **how** the military presence is applied.

¹⁷ In should be highlighted the experience of successful military conservation programs, such as the Readiness and Environmental Protection Integration (REPI), by the United States Department of Defense, which protects wildlife and endangered species, standing out towards conservation of water resources and natural spaces, while contributing to military readiness. On REPI, see MESSER et al. (2016).

¹⁸ It was listed as a proposed MPA in 2002, according to ASEAN (2002, p. 12). Nevertheless, it is not mentioned as an existing MPA in MASUD (2019, especially chapter 2) or MARINE CONSERVATION INSTITUTE (2021). Most of the countries with disputed territories in the South China Sea worry about the political repercussions of establishing its own or accepting a MPA (under foreign control), according to TOMACRUZ (2021).

Forces in 1983, its development included a naval base (1986), a resort (1991) and a marine research station (2004)¹⁹. According to Balakrishnam, (2002, p. 77, apud SARAVANAMUTTU, 2012, p. 76), "The Royal Malaysian Navy protects the islands with its vessels, anti-aircraft guns and other military facilities".

In order to study the effects of military occupation in some sites of the South China Sea and its impact on respective reefs, Asner et al (2017, p.3) ascertain the special environmental qualities of Swallow Reef, which is "administered by Malaysia, and is protected as a marine sanctuary by the Royal Malaysian Navy. We selected this site because the **benthic communities are relatively intact and accessible in diving operations**". (emphasis ours)

Therefore, an atoll with a small airstrip and airport, which has harbored a naval base for almost 40 years, with full capacity of defending itself, still has maintained the environmental qualities for what it's famous throughout the world. Obviously Layang Layang is an extreme case, since it's in the middle of one of the most disputed areas in the world. But it clearly shows the possibility of convergence of military and environmental approaches, even in extreme situations.

One point to be stressed is the synergy between the military and the environmental approaches, if managed successfully, with a positive feedback loop. Military surveillance and dissuasion enhances the chance of environmental protection. In turn, environmental protection strengthens the legitimization of the military occupation or any claim to a territory, in the eyes of most of the other nations and/or the world public opinion. For example, Japan is planning to produce an elaborated vegetation guide regarding the islands denominated as The Northern Territories, occupied since August 1945 by Russian troops (JAPAN TO CREATE, 2021). Also, Japan has accused foreign ships of repeated coral poaching²⁰, which stimulates a stronger Japanese military presence in some oceanic areas (ARREST SPARKS, 2019).

In the next part of this study, we will present the Brazilian Naval Strategic Thinking regarding its Oceanic Islands.

¹⁹ BASIRON (2012, p. 74)

²⁰ On coral legal and illegal trade and possible coral exploitation, SHIRAISHI (2018)

THE BRAZILIAN NAVAL STRATEGIC THINKING REGARDING ITS OCEANIC ISLANDS

Figure 2: Brazilian Blue Amazon and Oceanic Islands



Source: PACHECO (2019)

Note: Blue Amazon is considered as the sum of EEZ and Continental Shelf Extension

Brazilian naval strategists share a long tradition. For example, Vidigal (2018, p. 312) is very clear while stating that "the objective of the armed forces of any country is to combine an effective capacity for political action in peace - dissuasive or otherwise - with the ability to wage war effectively when it is to occur".²¹

In this sense, a Naval Power, to produce the deterrent effects must, among other tasks "(...) develop an effective capacity (...), especially regarding the establishment of defensive fields in the areas of greatest strategic value throughout its coastline (...) (VIDIGAL, 2018, pp. 313-314).²²

However, even though armaments and technological capacity represent a large part of a nation's military power, it is useless to have the most advanced arsenal, if there is no indigenous strategic conception that adheres to national objectives and interests and combine them with the resources which the State has at its disposal. The lack of this strategic conception can be aggravated by reality, which, in many cases, ends up imposing itself on the strategically myopic countries, embarrassing them in a painful and bitter way.

Brazil shows a genuine naval strategic thinking. In this part, in addition to Admiral Vidigal, it is appropriate to bring to light the position of Admiral Maximiano Eduardo da Silva Fonseca (1919-1998), Minister of the Navy (1979-1984), notably on the military use of Brazilian oceanic islands, especially Trindade Island.²³ This line of thought stands out, because since then there has been scarce discussion on the topic, which is extremely important and strategically relevant to Brazil. After all, it can't dismiss the presence, in its geostrategic surroundings, of extra-regional countries with capability to project power through their overseas territories as the United Kingdom, or from strategic bases in other countries and departments, such as the French case in Sub-Saharan Africa and French Guyana, respectively.

²¹ Tradução dos autores

²² Tradução dos autores

²³ FONSECA (1985); to our knowledge, there's not such an extensive naval geopolitical study about FN or SPSP, by other other authors, although they are mentioned as part of larger essays. As to FN, it was the site of a prison, for centuries and increased its military garrison in WWI and WWII, fearing an invasion by Germany (BRASIL, 2006). Afterwards, its main role, up to now, has been as a tourist attraction. For a brief, although very informative geopolitical analysis on FN, see NEVES (2015). SPSP hosts a Scientific Station since 1998 (idem, ibidem) in order to reinforce the concept of "permanent and sustainable occupation" and its consequences in terms of the rights to Exclusive Economic Zone, according to UNCLOS. For more information on SPSP, see FRANCINI FILHO (2018).

In a historical overview, Trindade Island was occupied by the British, for the last time, in 1895-1896, in a context of "disputes for the delimitation of the northern border of Brazil with former that time English Guyana, among other strategic tensions between Brazil and the then hegemonic power of the 19th century" (DE OLIVEIRA; CEPIK; BRITES, 2016, p. 145) and its recovery for Brazilian sovereignty took place after complex diplomatic negotiations, as Kämpf (2016) explains. The importance of the military occupation of oceanic islands, especially Trindade, can also be traced back to more than a hundred years ago. The Maritime News section of Revista Marítima Brasileira (july/august 1918) highlights a conference, held on August 3 of that year, by Doctor Bruno Lobo, National Museum Director, who had headed a scientific commission to the Island, under the management of the Ministry of the Navy. The following excerpt comes from the conference summary:

(...) the importance of Trindade Island, not as a land of culture, for what is not useful neither as a source of mineral wealth, but as an excellent marine base, fuel warehouse and submarine station. Trindade Island, concludes Professor Bruno Lobo, is a watchtower, a lookout point in the Atlantic area, a first-rate defense of a vast extension of our coast. Although it is necessary to fortify it, perhaps spending a large amount of money, we must not forget Heligoland²⁴, a rock transformed by Germany into a fortress (...). Its value is all military. Moreover, it is a piece of Brazil (REVISTA MARÍTIMA, 1918, apud NOTICIÁRIO MARÍTIMO, 2018).

After this historical review, the focus is on the geoestrategic thought of Admiral Maximiano da Fonseca, former Navy Minister, in whose tenure there were made several decisions that still have an impact on the Brazilian Navy. The former Minister wrote a book-report entitled "Cinco anos na Pasta da Marinha" (FONSECA, 1985), in which he gives

²⁴ Heligoland is a German island in the North Sea. After 1890, and mainly during the period of the First World War (1914-1918), Germany transformed it into a "North Sea Gibraltar". MacMillan (2014, p. 102) points its usefulness in defending access to German ports in the North Sea in the case of an attack by the English Navy.

an account of his tenure; one of the most insightful comments deals with the military use of Trindade Island, in its fullness, in a section entitled "Aerodrome in Trindade Island".

That issue is approached by Fonseca (1985) starting with the argument that Brazil, due to its territorial dimension, population and development, associated with stable diplomatic relations with our neighbors, with which there are no border disputes could, from a military perspective, not need to worry about threats coming from the continent, despite the deficiencies in this field. However, the same reasoning would not be applicable regarding possible threats from the sea, outside the continent. At that time, it was already relevant that Brazil has a coastline of about eight thousand kilometers, with its EEZ of two hundred nautical miles, from the coastline, and in some specific cases of UNCLOS, it might extend up to three hundred and fifty nautical miles²⁵. These figures, according to Fonseca, represented the enormous dimension of the resources needed by the Brazilian Naval Power to provide security against threats from the sea, as well to exercise surveillance in the jurisdictional waters in favor of Brazilian oceanic interests, in which the environmental issues gained more and more prominence.

Fonseca keeps up his argument, emphasizing that although the Navy could be considered satisfactory as to its quality, the same would not hold regarding the quantitative side. This would be reason for great concern not only by those directly involved in its preparation and employment but by all Brazilian citizens conscious about of the importance of Naval Power.

Despite the skepticism on the part of some, regarding the threats coming from the sea, Fonseca reaffirms its possibilities and veracity, explaining that they can be classified in two categories:

(1) attempts to exploit Brazilian natural resources at sea. Fonseca then refers to the Lobster War (1963). About this episode, Abreu (2007, p.29) points out that what had happened, in fact, was a crisis arising from conflict of interests regarding an environmental issue, probably the first of its kind in which Brazil got involved²⁶;

²⁵ Brazil presented several submissions to the United Nations Commission on the Limits of the Continental Shelf, being highly successful.

²⁶ The so-called Lobster War was a dispute between Brazil and France about French fishing vessels catching lobsters 160 km from the Brazilian coast. Although it didn't come to a real armed conflict, several of its issues would later stimulate Brazil's unilateral decision of extending its EEZ to 200 miles and further debates which would contribute to UNCLOS' final text. LONGO (2014) brings a detailed analysis about those debates.

(2) the occurrence of a conflagration of great proportions, inevitably affecting Brazilian trade, which is carried out almost entirely by sea. Fonseca asserts that, if Brazil had had a Naval Power congruent with Brazilian defense needs during World War II (1939-1945), it would not have been forced to give in the establishment, in its territory, of several United States air and naval bases, as this happened long before Brazil was the target of hostilities towards our traffic and maritime communication lines. Fonseca reiterates that we could then have maintained our maritime security, without giving up our neutrality, since it would not be appropriate, on the part of the Axis powers, notably III Reich Germany, to attack a country whose Navy ships would undoubtedly contribute for the Allied war effort, especially in the Atlantic. In this sense, Paiva also states (2015, pp. 210-211):

The Northeastern Bulge (Saliente Nordestino) and Fernando de Noronha have strategic importance in case of conflict in the Atlantic, due to the bottleneck formed between that region and the West African coast (Dakar in Senegal) and by the military advantage of have an air base for the powers involved in the dispute. If Brazil wanted to remain neutral, it would only be successful if it possessed military power to deter or resist pressure, coercion or aggression from a contender to use the region or prevent it from being used by the opponent. So it was in World War II. If Brazil had not declared war on the Axis in 1942, it would be difficult to maintain neutrality and to deter or prevent an intervention by the allies to obtain a base in Natal, which became the so-called "Victory Trampoline", supporting the invasion of North Africa in the end of 1942.

Fonseca then goes deeper into the theme, after this introduction, recognizing that the effort of continuous Naval Administrations until then had been significant, in order to provide the Brazilian Navy with adequate means to provide Brazil's security at sea. Despite some progress, the goal was far from being achieved. In this sense, Fonseca sees possible causes for the weakness of the Brazilian Naval Power:

(1) the chronic economic and financial difficulties that Brazil was facing in the 1980s, and

(2) the lack of a solid maritime mentality²⁷ of the Brazilian people. In relation to that, Fonseca considers it a natural consequence of the geographical situation of Brazil, already exposed at the beginning of his argument. Finally, the former Minister starts to deal specifically with the military occupation of Trindade Island, expressing that:

> the use of Trindade Island can contribute in a very significant way to the strengthening of our naval power. Without exaggeration we can affirm that providing Trindade Island with adequate means will be equivalent to providing the Navy with a significant number of floating means of combat, at a price much lower than the cost of such means. In fact, we can think that to replace Trindade Island, in its potential role of monitoring and protecting the maritime area covered by it, we would need a naval force based on an aircraft carrier, operating permanently. Due to its geographical position in the South Atlantic and, particularly, due to its location in relation to our coast, Trindade Island can play a very important role not only for our own security in terms of threats from the sea, but also for the safety and guarantee of navigation lines in the Western world, with the condition that there are built adequate facilities to support naval aircraft (FONSECA, 1985, p. 110).

Fonseca goes further, inserting Brazil in the Western defense effort, against the then Union of Soviet Socialist Republics (USSR) although he does not mention it explicitly, since this was the most usual conflict hypothesis during the Cold War. Then he sees a role for Trindade Island: a surveillance complex monitoring ships in transit through the South Atlantic, together with the Island of Ascension, since there would be adequate means, due to

²⁷ In Till's view (2013, pp.88-108), a State's seapower is established by some fundamental elements, namely: people, society and government with a maritime mentality (socio-political attributes), maritime geography (physical attribute), maritime resources and existence of a maritime economy (economic attributes) and technology.

the distance and position that would separate them, as well to the distance from Trindade Island to the Brazilian coastline. This surveillance complex, in case of a general conflagration, would be of greater importance for the then Western bloc. Thus, an Air Base on Trindade Island would also, from the perspective of the international system, have immeasurable political value for Brazil. Still, regarding exclusively Brazilian national interests, Admiral Maximiano affirms that: (...) "the existence of an air base on that Island will allow, in the most economical and efficient way, permanent surveillance of vast extent of our sea, or in other words, an advanced sentinel from Brazil in the South Atlantic, more than 600 miles away from the Brazilian coastline" (FONSECA, 1985, p. 110).

Based on the aforementioned arguments, Fonseca states peremptorily that it would be of the utmost importance, from the international political perspective, as well as the strategic one, to endow Trindade Island with the proper means to support aircraft forces, an Air Force Base. Fonseca also addresses the operational aspects for the project execution; in his first year at the Ministry, he invited the then Air Force Minister, Lieutenant-Brigadier Délio Jardim de Matos to visit Trindade, along with other Air Force officers and technicians specialized in the construction of airports. Subsequently, engineers from two major construction companies at the time also visited the site in order to carry out a preliminary study on the feasibility of building an aerodrome on Trindade Island, in addition to other facilities. About this, Fonseca wrote:

> As a result, the companies submitted a Preliminary Study, demonstrating that it is perfectly viable to build a runway approximately 1,300 meters long and which could, without great difficulties, be extended to more than 2,000 meters; a berth for ships with up to 10 meters of draft, depending on a deeper feasibility study; and the necessary infrastructure for air operations (FONSECA, 1985, p.110).

The former Minister then mentions the process of obtaining financing, from the American government for the construction of military structures budgeted at the time around 200 million dollars. The US Navy was not receptive to supporting the loan with the US government, justifying that it had other problems of higher priority. Fonseca believed that the real reason for the non-support was that the North American authorities relegated the South Atlantic to a secondary position in their strategic security calculations, and that the sole use of Ascension Island would be enough for the defense of their interests in this ocean.

Throughout the text Fonseca presented only one argument against the construction of an aerodrome and support facilities on Trindade Island: the fact that, once this military facility existed, it could arouse greed in the enemy, with the possibility of it using the base against Brazil. However Fonseca was skeptical about the argument, from a military point of view, stating that it would be the same as a weapon not being used for self defense because of the risk of being taken and used against its bearer.

Fonseca also contextualized that the lack of an adequate defense would impair the Brazilian reaction in the case of a possible enemy attack that could easily occupy Trindade Island, using it as a support point to threaten the Brazilian mainland, even without the existence of an aerodrome, applying the example of the Falkland War. Fonseca mentions the use of the island of South Georgia which despite not having greater facilities at the time was of great value to the British Task Force, as personally reported to him the British First Sea Lord, Admiral Sir John David Elliott Fieldhouse, who had been Commander of Task Force 317, and whose mission was to recover the Falklands Islands. This strategic value of the British islands in the South Atlantic, and which could threaten Brazil, is also highlighted by Paiva (2015, p.221):

> The British Islands 'corridor' has a set of air and naval bases of high strategic value for the United States and its allies in any conflict in the Atlantic. (...) From these islands, the Brazilian coastline can be reached or targeted by aggressive forces and the navigation routes of the Atlantic can be monitored, controlled, compromised or blocked. Hence they are rewarding targets for national defense, in the event of armed conflict against those powers, in order to neutralize their facilities or limit their use by the opponent.

Concluding his thoughts, Fonseca confessed that he felt a certain frustration for not being able in implementing an aerodrome in Trindade Island, a basic step in enhancing its strategic role to Brazil. Therefore, he recognized that: (...) We consider the construction of an aerodrome in Trindade Island to be of the utmost importance, complemented by adequate defensive facilities, not only, as we have already explained, for what it will represent for the security of our continental territory, but also for the defense of the island itself, preventing it from being easily taken to be used as a support point for hostile actions against our coastline (FONSECA, 1985, p. 111).

The full use of its enormous potential as advanced geostrategic base for Brazil's national defense has not yet materialized. Removing the Cold War rationale from the writings of Former Navy Minister Maximiano Eduardo da Silva Fonseca, we can still easily verify the relevance of his strategic conception for the military use of the Brazilian oceanic islands, built upon a line of reason corroborated by British academic Geoffrey Till. On bases, in general, and its relevance for an efficient maritime strategy, Till (2013, p. 99) states that:

> Securing, exploiting and defending bases has also always been an important part of the maritime strategy, because they provided fleets with a secure and unharried refuge, the easy supply of stores and necessities, somewhere for the repair and refit of ships and the recuperation of personnel. They give navies extra reach and endurance.

In this sense, Albuquerque (2017, p.530) talks about the new strategic functions of the chokepoints, especially the oceanic islands, also recalling the presence of extra regional powers in the Atlantic, and the strategic advantages that they already have in the region, something that Brazil doesn't yet enjoy, although Fonseca's thoughts were expressed in the mid-1980s:

The extensive area of traffic of merchant ships hinders the prompt response of naval coverage in the South Atlantic, but technological developments with remote sensors installed on space platforms and patrol planes make the identification and interdiction of maritime space by airpower more feasible. Under these conditions, the choke points acquire new strategic functions, as evidenced by the military jet refueling operations during the Gulf War (Diego Garcia Island) and the Malvinas War (Ascension Island). In the South Atlantic, the British Ascension Islands (in consortium with the USAF), Saint Helena and Malvinas have extensive logistics for military purposes. And in a strategy that replicates the Natal - Dakar Axis, France maintains position advantages on both sides of the South Atlantic, projecting itself on the South American and African coasts of the Atlantic strangulation (closure of the Cayenne - Dakar Axis). The advantage of these extracontinental powers in the South Atlantic is also represented by military means. In addition to the strategic location of airstrips and troops, the United Kingdom, France (...) have aircraft carriers and nuclear submarine in operational conditions, which have already been deployed in military operations in the region (ALBUQUERQUE, 2017, p. 530)

Furthermore, the scenario diagnosed by the former Minister of the Navy several decades ago, consisting of threats to maritime security and the continental territory of coastal countries, has spread, evolving in complexity, intensity and frequency, transforming maritime threats into multidimensional, growing and increasingly recurrent. Likewise, economic contingencies and budgetary constraints on the defense sector of Brazil persist, demanding from policymakers innovative solutions, of which the geostrategy of military use of the Brazilian oceanic islands could be a paradigm to be explored, being it a possible military line of naval action to provide security and defense in the South Atlantic of Brazilian interests in this part of the ocean, composing "the great Brazilian challenge for this century: building an expansion path within and outside its strategic surroundings" (NEVES, 2015, p. 259). In fact, VIDIGAL et. al. (2006, p. 123) aptly summarizes this fundamental issue: Islands and rocks are very useful to society, because they can host maritime security base, lighthouses, scientific research stations about the sea and its potential, fortresses and military ports which give support to the Navy, as well as other important resources for maritime security.(...) Islands and rocks are, as well, important points as to logistics support, communication and sea protection. With the expressive growth in international trade, the islands and rocks within the Blue Amazon, with their strategic relevance, are vital to maritime security.

THE BRAZILIAN CASE ANALYSIS

In terms of the embryonic typologies shown in Tables 1, 2 and 3, each of the Brazilian oceanic LSMPA can be analyzed as the following:

Iable 4: Brazilian LSMPA in oceanic Islands (a)			
	Fernando de	São Pedro &	Trindade &
	Noronha	São Paulo	Martin Vaz
Date of	05/06/1986 (b)	19/03/2018	19/03/2018
Designation Present Area	(c)		
Present Area			
(thousand	140 700 (1)	402 277	407.052
km ²) Distance from	140,700 (d)	402,377	407,052
the nearer	270 01 (1)	(27	1000 (17)
Brazilian	379 (Natal)	627	1200 (Vitoria)
outpost (km)		(Fernando	
	~	de Noronha)	~
	Small Scale:	Small	Small
	Air Force	permanent	permanent
	garrison to	scientific	Naval
	manage the	station	Oceanographic
	airport, Navy		Post; Small
Military	garrison to		scientific
Presence	manage the		station.
	port. Naval		
	scientific base		
	is projected		

Table 4: Brazilian LSMPA in oceanic islands (a)

Explicit			
mention and/			
or waiver			
to military	No	Yes (e)	Yes (f)
presence and			
activities in			
Designation			
Act?			
Presence of			
Adjacent			
Sanctuary,	Yes (Marine National Park)	Yes (Natural Monument)	Yes (Natural Monument)
Monument			
and/or			
National Park?			

Source: Own elaboration

Obs: (a) All three LSMPA are under the management of the Brazilian Environment Ministry and permanently occupied;

(b) Federal Decree 92755, 05/06/1986;

(c) Previously part of the MPA also encompassing Fernando de Noronha and Rocas Atoll:

(d) Ministerio do Meio Ambiente. ICMBIO (2021)

(e) Federal Decree 9312, 19/03/2018, Art 1º paragraphs 2,3; Art. 6º paragraphs 3,4; Art 7º items VI, VII;

(f) Federal Decree 9313, 19/03/2018, Art 1º paragraphs 2,3; Art. 6º paragraphs 3,4; Art 7º items VI, VII

Fernando de Noronha (FN) is the only one of the three LSMPA in which the Designation Act didn't mention explicitly the military, although the Designation Act regarding Fernando de Noronha National Park, issued two years later, did it²⁸. In fact, military presence is limited to the Brazilian Air Force garrison, which looks for the infra-structure and management related to the island airport, and the Navy, which does the same regarding the port area. Therefore, of the four types in Table 1, FN could be labeled as type B, but yet only slightly, since its inception as MPA didn't strongly consider the geopolitical impact, but mostly the tourism and the environmental one. Nevertheless, the rising importance of the area named by Brazil as Blue Amazon (see Figure 2), with the need to protect its resources from being irregularly taken by foreign countries' agents,

²⁸ Federal Decree 96693, 14/09/1988, Art. 6^o.

may change this assessment. In fact, it shouldn't be seen as a surprise if Fernando de Noronha MPA eventually has its area increased to include its whole EEZ (which already happens with TMV and SPSP MPA). As to type A, although FN hosted a military base in WWII, it doesn't represent a "military legacy". Possible future extraction of resources in the area is also not mentioned in the planning guideline, except in the case of sustainable fishing²⁹, which eliminates type C. And since FN is "de jure" MPA, type D is also excluded.

As to Table 2, none of the types really apply to FN. The military activity is very focused and there is no complaining about military "exemption" as to the environment rules (ruling out type A). The previous battle sites didn't leave any harmful residues (therefore excluding type B) nor represent a significant "memorial role" (idem with type C).

The same applies to Table 3, at least until now, as the military impact in FN's society is very limited, with one potential exception. As tourism grows in the region³⁰ and can become a menace to the conservation of many natural resources³¹, the military could be called to enforce their protection, fulfilling what is shown in type C, "biodiversity security". Neither type B (double erasure, the "hiding" of military presence or negative effects on the society) or type D (ocean grabbing, the restriction of the native people to live or develop economic activities, due to environmental regulation) can be applied to FN. As to type A, with all three subtypes, due to the small presence of the military overall, it also can be ruled out

In sum, military presence in FN is limited up to now, and, to our knowledge, has not produced any significant negative reaction. In fact, local administration has heartily welcomed the construction of a scientific base, to be managed by the Navy (MARINHO, 2021).

Trindade & Martin Vaz (TMV) is the largest of the three LSMPA here analyzed. Designated in the same day as São Pedro & São Paulo MPA by decrees with exactly the same structure, TMV hosts since 1957 a Naval Oceanographic Post. In 2007, the Brazilian government approved PROTRINDADE, a program designed towards scientific research in TMV, with its Executive Committee coordinated by the Navy. TMV MPA designation Act explicitly mentions the military and PROTRINDADE, as

²⁹ BRASIL (2017)

³⁰ This had been already stressed by Vidigal et al. (2006, p.123): "The best example of such potentiality (tourism) is Fernando de Noronha, which has gone through a continuous process in enhancing its maritime tourism".

³¹See, for example, LOPES (2017).

shown in Table 4, highlighting the Navy presence. In the Act, a smaller part of the region, separated from the MPA, was preserved as "Natural Monument"³². It is worth mentioning that the military (especially the Navy) were essentially left out of the top management of the MPA, although they are the basic provider of practically all activities which embed that same management. This asymmetry, an issue sometimes linked to public policies implementation, should be analyzed in future research.³³

Analyzing TMV MPA through Table 1, it should be considered as type B, due to the explicit reference, in the Designation Act, of the Economic Exclusive Zone area³⁴, and also to the Brazilian effort to claim its continental shelf extension towards the islands, in fact turning the whole of Blue Amazon into a seamless structure³⁵. But it can also be considered type C³⁶, in terms of possible future resource extraction. In fact, this is made clear in the Designation Act, as it mentions that one of the MPA specific goals is "to contribute in assuring the sovereign rights, towards exploration, utilization, conservation and management of natural resources, living and non-living, alive and non-alive (...) towards the sustainable use of the EEZ..."³⁷.

As to Table 2, types B and C can be ruled out, since there is no significant battle site or respective residues. In the case of type A, some criticism has arisen regarding fishing activities by the military, as in Giglio et al. (2018, p. 16); taking into account that the activities are recreational and not an institutional practice, its banning, at least regarding endangered species protected by the environmental guidelines, seems a not so difficult procedure, in terms of decision-making³⁸.

Table 3 can point to some interesting points as to TMV MPA. Subtype A1 (crater as habitat) should be discarded, since there's no battle

³² The same happened with São Pedro & São Paulo MPA.

³³ The peculiar instances in the decision-making process of a public policy like the ones regarding LSMPA are not in the scope of the present text, although would bring to light additional information which could reinforce its conclusions.

 $^{^{34}}$ Federal Decree 9312, 19/03/2018, Art 2 $^{\rm o}$ Item I

³⁵ This feature is priceless, in terms of enhancing security capability. For example, parts of Japan's EEZ and continental shelf are not contiguous, with "holes" that bring several problems in terms of surveillance and dissuasion.

³⁶ DE SANTO (2020, p. 2) had already warned about the possibility of overlap between the types.

³⁷ Federal Decree 9312, 19/03/2018, Art. 4º Item II.

³⁸ This was the only critical observation regarding the military presence in TMV, in Giglio et al. (2018)

sites or military training activity. The same with subtype A2, as the archipelago is more than 1200 km of the Brazilian coast and only scientific researchers, besides the military, are granted access. But subtype A3 sheds light in an interesting issue: the Brazilian Navy has a renowned technical expertise in many fields, as Marine Biology, Hydrography and Oceanography, to name some closely related to this text's focus. Although the MPA management is formally within the hands of the Environment Ministry, some of the decisions go through the Navy too, as determined in the MPA Designation Act³⁹. Nevertheless, until now, no conflicts or overstepping by the military, as to that issue of implementation, has been noticed, to our knowledge. Types B and D can be ruled out, since there is no native population, while Type C definitely fits the mold.

So, military presence is essential for TMV MPA and, recreational fishing aside, it hasn't stirred up any other significant negative criticism, to our knowledge.

São Pedro & São Paulo (SPSP) MPA was originally included in the Fernando de Noronha MPA, also with Rocas Atoll. But in 2018 it was singled out, with a substantial adding of area, now encompassing more than 400 thousand square kilometers. In 1996, the Brazilian government approved PROARQUIPELAGO, a program with the goal of scientific research in the region; in 1998 a Scientific Station was established⁴⁰.

According to Table 1, SPSP can be considered as type C, as it shares with TMV the mention to future exploration of natural resources⁴¹. It can also be viewed as type B, and with even more emphasis, since one of the explicit reasons to make SPSP habitable was to definitely characterize it as an island, not a rock. UNCLOS specifies that a rock doesn't generate rights regarding EEZ or extension of the Continental Shelf, while an island does.⁴² Types A and D can be ruled out.

As to Table 2, none of the types apply, with a presence of only four researchers every two weeks. As to Table 3, only type C applies, regarding biodiversity security. Summarizing, SPSP, due to its peculiarities, shows a great geopolitical potential impact, in terms of securing a wide EEZ, while the military presence is very limited, as well as civilian.

³⁹ Federal Decree 9312, 19/03/2018, passim.

⁴⁰ BRASIL, Ministerio da Defesa, (2021)

 $^{^{41}}$ Federal Decree 9313, 19/03/2018, Art. $4^{\rm o}$ Item II. As already has been mentioned, Decrees 9312 and 9313 share the same structure.

⁴² UNITED NATIONS (1982)

The results of applying the embryonic typologies to the three LSMPA can be seen in Table 5:

presence				
	1B	1C	2A	3C
	Geopolitical Presence	Possible future resource extraction	Exemption from the environmental rules	Biodiversity security
Fernando de Noronha Trindade e	Yes*			Yes*
Trindade e <u>Martim Vaz</u> São Pedro e São Paulo	Yes Yes	Yes Yes	Yes*	Yes Yes

 Table 5: Brazilian LSMPA and respective types regarding military

Source: Own elaboration upon typologies shown in Tables 1, 2 and 3.

Obs: (*) Mitigated

Table 5 shows that military presence in the three LSMPA has been basically positive, with only a minor problem, the one about recreational fishing in TMV⁴³. Even the possibility of future resource extraction has been dealt with many safeguards emphasizing the environmental sustainability. For example, in the MPA Designation Acts regarding TMV and SPSP, two Natural Monuments were also created, adjacent to the MPA. Although sustainable resource exploration is mentioned in the case of MPA⁴⁴, it is NOT in the case of Natural Monument⁴⁵. Therefore, it seems there has been a well-succeeded harmonization towards preserving the environmental approach, without compromising the military (or economic) ones.

Up to this point, it has been shown that the military presence can be compatible with the environmental approach, in a broad sense or even

R. Esc. Guerra Nav., Rio de Janeiro, v. 27, n. 3, p. 629-668. setembro/dezembro. 2021.

⁴³ Minor since the solving of the problem is rather easy and doesn't compare with some institutional resource exploiting cases shown in DE SANTO (2020, passim)

⁴⁴ Art 4º, item II in both Decrees

⁴⁵ Art. 5º in both Decrees

in extreme cases⁴⁶. In the case of Brazilian LSMPA, the present situation is also positive, with a minor caveat. But can future improvement of the military presence be seen favorably, or even allowed by the present rules concerning the three LSMPA?

The first issue to be pointed is that there have been committed many environmental crimes regarding Brazilian oceanic areas, the gravest of them the oil spillover which contaminated a good part of the Brazilian shore, in 2019⁴⁷. The dissuasive component of an environmental policy, especially in the oceanic realm, would only be really put into effect with an increased military capacity; this is a worldwide worry, not a sole Brazilian one. One of the issues regarding the dissuasion enhancement would surely be the possibility of amplifying the operational scope, and in that case the use of the three LSMPA as pillars would solidify our position.

Another issue is that military improvements, in terms of presence and/or effectiveness, can be environmentally compatible, not bringing additional harm to the areas they were designed to protect. For example, a **reconnaissance** drone brings much less environmental impact than an airplane.

A third point is that Brazilian National Defense Strategy puts the South Atlantic as part of Brazil's Strategic Surroundings, that is, an area in which its interests are priority.⁴⁸

As to Fernando de Noronha (FN) MPA, its Management Plan (BRASIL, 2017) allows for changes in the military facilities, either in the Airport Zone (p. 88) and the Port Zone (p.91)⁴⁹. In fact, the military presence has been fostered by the local Administration, either by easing their air travelling to/from the continent (CLARA, 2018) or stimulating the

⁴⁶ As in Swallow Reef, seen in part 1

⁴⁷ The probable source of the spillover seems to be a foreign ship still not-identified, until the writing of this text; the oil is not of Brazilian origin, either in terms of extraction or production. Admiral Ilques Barbosa, Commandant-General of the Brazilian Navy, in an interview compared the spillover to a military attack, in terms of sovereignty. See COMANDANTE DA MARINHA (2019)

⁴⁸ It should be noted that an expansion of Brazilian military presence, in terms of **defensive** outposts and looking forward environmental preservation, would not clash with SAPCZ (South Atlantic Peace and Cooperation Zone) rationale. Since the Falklands War, Brazil has put forth a diplomatic push towards hampering any further **offensive** presence by an extraregional power, in the South Atlantic. For more details about SAPCZ, see RIZZI & BUENO (2021)

⁴⁹ On the possible expansion of military means in Fernando de Noronha, see CHIOZZO (2019, p. 88)

construction of a scientific station (CLARA, 2021)⁵⁰.

Trindade & Martim Vaz (TMV) LSMPA use has already been analyzed in part 2, with Admiral Maximiano da Fonseca strategic thought. TMV has also increased in importance due to the seabed exploration in the Atlantic, starting by Rio Grande Rise (which is nearer to TMV than from the Brazilian coast).

In the case of São Pedro e São Paulo (SPSP) MPA, the archipelago's smaller area will forcefully demand new and ingenious forms of occupation, besides the scientific base already there. Nevertheless, it is worth reminding that SPSP grants Brazil more than 400 thousand square kilometers in terms of economic sovereignty (bigger than Paraguay, for example); the geopolitical impact is too high to be overlooked.

Finally, it should be noted that an improvement in the military presence in the Brazilian LSMPA should also be reflected in a broader participation in the management of the areas, especially as to TMV and SPSP, where it is already flagrant. As shown in Figure 1, an enhanced approach to Maritime Security and Maritime Environment can't and must not exclude Seapower.

Therefore, the present Brazilian strategy towards LSMPA seems well-balanced and productive, although with some caveats. The environmental side is fulfilled, with Brazil accomplishing the United Nations Convention on Biodiversity goal of preserving 10% of its oceanic realm. The military side (present or potentially able to increase its presence) has also been at least partially satisfied. The coexistence between both has been fairly smooth, most of the time, and in fact enhances and legitimizes further deepening of the process; the environmental side feels more protected and the military proud to preserve our sovereign resources. And, as an extremely significant by-product, the Brazilian geopolitical position in the South Atlantic tends to be strengthened, in a time when the competition for resources (living and non-living), among all powerful countries, increases even more. A clear analogy can be made with Brazil's efforts to stop whale hunting in the South Atlantic, as shown in MARCONDES (2020), in which an environmental issue goes hand to hand with the Brazilian interest in diminishing the presence of foreign

 $^{^{50}}$ The expansion of military activities and facilities could eventually bring another benefit for the local society, since there isn't a maternity hospital in Fernando de Noronha. All women, when they reach 8 months of pregnancy, are forced by law to go the continent. See (GRÁVIDA É RETIRADA, 2020)

countries in the region. But, in the management of its own 'string of pearls", Brazil adds to the environmental push *per se* (that is, the designation of LSMPA) the fact that the United Kingdom, for example, had already done the same with Saint Helena, Ascension, Tristan da Cunha, South Georgia and South Sandwich Islands **before Brazil** (DE SANTO, 2020, pp. 2-3)⁵¹, thus taking this precedent as an example to enhance the legitimizing and improvement of its potential power projection.

CONCLUSION

This work had two major objectives; to analyze if the military and environment approaches are compatible, especially in the case of the Brazilian Oceanic LSMPA (Fernando de Noronha, Trindade & Martin Vaz, São Pedro & São Paulo), and if there's a positive feedback loop, with significant and favorable results on both and on the overall geopolitical net result.

Based on the original work by DE SANTO (2020), three embryonic typologies were made up to characterize military presence in MPA. The typologies and the mention of an example as Swallow Reef, in Malaysia, pointed the approaches to be compatible, but not always. Applying the typologies to the Brazilian case, the overall result is very positive, with only a slight remark regarding recreational fishing in Trindade and Martin Vaz, which can be easily solved, in our view. Additionally, it was shown that the three MPA are authorized, implicitly or explicitly, to increase their military presence, while keeping relevant safeguards regarding environment security. FN Local Administration is fostering an increasing military presence, looking for minimizing the perils of predatory tourism or stimulating scientific research. TMV and SPSP legal framework, as seen in Table 4, notes (e) and (f), also highlights military activities, if deemed necessary.

Therefore, until now favorable results have been obtained within the three LSMPA, with an overall positive geopolitical result. Further research is needed regarding specific issues on the implementation of the increase in military presence in the three LSMPA, as well as the possible geopolitical reaction of other countries. Additional research regarding the LSMPA decision-making process shall shed some light on some present imperfections of this public policy.

⁵¹ US and France show the same kind of strategy than UK, but basically in the Pacific.

COMPATIBILIDADE E CONVERGÊNCIA ESTRATÉGICA: ABORDAGENS MILITAR E AMBIENTAL EM RELAÇÃO ÀS ILHAS OCEÂNICAS BRASILEIRAS NO ATLÂNTICO SUL

RESUMO

Várias Áreas de Proteção Marinha têm sido criadas no mundo, em parte para atender a uma das metas da Convenção das Nações Unidas sobre a Biodiversidade, no sentido de preservar ao menos 10% das áreas costeira e marinha de cada país. Este estudo objetiva analisar a presença militar nas ilhas oceânicas brasileiras de Fernando de Noronha, Trindade & Martim Vaz e São Pedro & São Paulo e como ela interage com a abordagem ambiental, já que as três representam vastas Áreas de Proteção Marinha. Uma breve panorâmica sobre a importância das ilhas para os pensadores geopolíticos brasileiros é apresentada, assim como as questões teóricas relativas à presença militar em áreas de preservação ambiental. Tais resultados são aplicados à situação atual das três Áreas de Proteção Marinha, com a conclusão apontando para uma retroalimentação positiva contínua, com resultados favoráveis em ambas as abordagens, tal como para o resultado geopolítico como um todo. Palavras-chave: Presença Militar em Áreas de Proteção Marinha. Ilhas oceânicas brasileiras no Atlântico Sul.

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