Självständigt arbete (15 hp)

LITTORAL WARFARE: TWO PERSPECTIVES

ABSTRACT:

Littoral warfare implies a disproportionate advantage to the coastal navy or “defending” side. Small navies sometimes lean on larger navies in doctrinal production. A coastal navy’s goals, methods and capabilities can be considered different from that of a larger navy’s regarding littoral warfare. This paper answers the question “What does littoral warfare mean for different types of states? An ideal type analysis was used to answer the question, and the doctrines of Sweden (type A state), USA (type B), and the UK (type B) were analysed in the research question. This paper found that each type of state viewed littoral warfare in regards to themselves, from their own perspective; a type A state can be seen as a defender and a type B state as an aggressor. In the littoral warfare context, each type of states employed different goals, methods and means pertaining to littoral warfare.

Nyckelord: Littoral warfare, ideal type analysis, Sweden, USA, UK
Contents

1. INTRODUCTION 3
   1.1 BACKGROUND 3
   1.2 PROBLEM STATEMENT 3
   1.3 PURPOSE 4
   1.4 DELIMITATIONS 4
   1.5 OUTLINE 4
   1.6 LITERATURE REVIEW 5

2. THEORY 8

3. METHODOLOGY 11
   3.1 DESIGN 11
   3.2 CONSTRUCTING THE IDEAL TYPES 12
      3.2.1 OPERATIONAL ENVIRONMENT 13
      3.2.2 MARITIME AIM/GOAL 13
      3.2.3 METHOD 13
      3.2.4 MEANS 14
   3.3 MATERIAL 14
   3.4 ETHICAL CONSIDERATIONS 16

4. ANALYSIS 16
   4.1 SWEDEN 17
   4.2 UNITED KINGDOM 19
   4.3 UNITED STATES OF AMERICA 21
   4.4 DISCUSSION 24

5. CONCLUSIONS 28
   5.1 SUMMARY 28
   5.2 REVIEWING THE IDEAL-TYPES 28
   5.3 FUTURE RESEARCH 28
   5.4 CONTRIBUTION TO SWEDISH OFFICER-CORE 29

REFERENCES 30
1. Introduction

1.1 Background

There are exactly zero blue-water, surface-to-surface missile engagement between warships in recorded history. All such engagements have taken place in what is commonly known as the littorals\(^1\). Barring a high-intensity conventional war between two blue-water navies this trend is likely to continue. Eighty percent of the world’s capitals are found in the littorals.\(^2\) The littorals comprise 16 percent of the world’s oceans and seas and 100 percent of seaborne trade starts and ends here.\(^3\) In 1993, two years after the end of the cold war, the United States navy made the very conscious decision to shift strategic focus from open-water warfare \textit{on the sea} to littoral warfare \textit{from the sea}.\(^4\)

1.2 Problem statement

Some 26 years later the shift in focus has spurred on technological advancements to vessels and weapons for littoral operations. 1993, also marked the start of a niched field within maritime theory: littoral warfare. Many contend that littoral warfare is not significantly different from blue-water warfare.\(^5\) Others recognize it as lacking (and needing) a well-developed theoretical field.\(^6\) There seems to be agreement on a few points regarding littoral warfare however, it is difficult and unfair. The defending side seems to have a disproportionately large advantage against the attacking side, even when a coastal navy is pitted against a blue-water navy. This lead to the very natural question of whether a small navy views littoral warfare differently than a large navy; both answers to this question are interesting in their own right. If yes, then it can prove problematic in joint operations or exercises. If no, then this leads to the question: why not? It can be assumed that a large navy has different ambitions, methods and means than that of a small navy; why should littoral warfare by viewed in the same manner? Especially, if we consider the large navy as an “attacking” force and the small navy as a “defending” force. On a tactical and operational

\(^1\) Littoral, in its simplest form, means \textit{close to shore}.
\(^3\) \textit{ibid.}, p.31
\(^5\) \textit{ibid.}, p.66
\(^7\) Vego, M. (2015). On littoral warfare, p.50
level, the differences should be considerable. In 2009, however, Jens Nykvist tried to answer this question in his thesis LITTORAL WARFARE! Talar USA, Storbritannien och Sverige om samma sak. The results suggested that Sweden viewed littoral warfare differently than the USA and the UK, especially regarding the littoral environment. 10 years have passed since Nykvist’s study, littoral warfare is an ever developing field and new doctrine has been produced and published; it is therefore of interest to revisit littoral warfare, and how it is regarded by different types of states.

1.3 Purpose

The purpose of this thesis is to answer the question: What does littoral warfare mean for different types of states?

1.4 Delimitations

This thesis only concerns itself with types of states that have a navy in the military context of the word. States with a maritime police force or coast guard fall outside the limitations of this study.

1.5 Outline

The paper finishes by presenting a literature review to place littoral warfare in an academic context.

Chapter 2: Theory
The chosen theory and its purpose is presented in chapter 2.

Chapter 3: Methodology
The paper’s chosen methodology, ideal type analysis is presented in detail in chapter 3.

Chapter 4: Analysis
Chapter 4 contains a collection of the empirical evidence and an analysis. The chapter closes with a discussion of the results and offers some commentary on possible implications.

Chapter 5: Conclusions
The conclusions of this paper are presented in the following order: brief summary of the results, a review of the ideal types, suggestions for future research and possible implications for the Swedish officer corps.

---

1.6 Literature Review


Jørgensen claims that littoral combat is three-dimensional and very demanding, in some aspects more demanding than blue-water combat. He contends that coastal environments are partial to a defending and a weaker party. In his article, he describes ship types and weapon systems that have evolved due to proximity to the coast and how these give weight to his initial argument. These ships and weapon systems are, diesel submarines, mines, fast attack craft (FAC), coastal missile batteries and land-based air defenses. One of Jørgensen’s main arguments is the synergistic effects that a coastal fleet can achieve through coordinated attacks, which demand familiarity and expertise regarding the physical environment; an expertise that the open sea does not demand. The biggest threat that a coastal fleet faces is from the air; small, fast ship types often lack solid air defenses. Many of Jørgensen’s arguments lack theoretical or empirical references. A number of his conclusions, although logically sound, can sometimes seem obvious. However, Jørgensen provides some commentary about the future of littoral warfare that may be interesting. For example, that as long as the United States does not have a serious rival on the open oceans, they must continue to develop their littoral capabilities. Jørgensen’s conclusions on the advantages and disadvantages of a defending party in littoral warfare are also of interest.

Lundquist, E. (2014). The 'extreme littoral'.

Lundqvist claims that conventional definitions, such as "coastal waters" or "water within 12 nautical miles from the coastline", or "littoral waters" are no longer sufficient. To fully understand littoral combat, a deeper understanding of the sea and its environment is required, both above and below the surface. Lundqvist defines "the littoral" as the area where civilian industry, trade and fishing meet the military area of operations. The coastal environment also demands that naval forces interoperate and coordinate with land and air-based forces. He states that the unique nature of the Swedish archipelago has led to the Swedish navy

---

10 ibid., p. 21-24
11 ibid., p.24
12 ibid., p.27
13 Compare ibid., p.26
15 ibid., s.76
developing and adapting in a way to maximise and exploit the littoral regions. Precisely how this development and adaptation is progressed is left unsaid. Lundquist, highlights the challenges that the physical properties of the littoral region place on conducting littoral warfare.


Hughes writes that littoral operations (or warfare) occur due to one of two reasons. Either as a defense operation, where an often smaller naval force, for example Sweden, is endeavoring to protect its coastal businesses, fishing and industries while also wanting to deny an opponent the deliverance of the means of war into this same area. The second reason is when a maritime force proper, for example the USA, has secured world’s oceans they want to ensure that they remain secured by denying opponents access to the sea. Hughes states that the mission for a large navy in the world’s littorals is to project or deliver their combat power from the sea onto the land. This can be accomplished, Hughes claims, by a blue water navy at a safe distance from shore. However, war cannot solely be waged by airstrikes or missile launches. In the same way that a defending party wants to deny access to its own coasts or ports, a greater power wants to have this access, for example to stage a landing operation. It is then a larger navy must leave the security of the high seas and approach land; leading to the coastal fleet and the blue-water fleet meeting, in the archipelago. Hughes acknowledges that this is the “coastal navy’s home playing field” and claims that the defending party does not need very high-technological weapons or systems to significantly damage the stronger party.


Børresen’s main argument is that the navy of the coastal state or what is sometimes referred to as a “small navy” has or will have a greater influence in world politics. This is due to mainly three reasons. The first is the fall of the colonial powers and the Soviet Union, which introduced new sovereign coastal states; in 1990, there were 160 countries in the world with navies. The second is the 1982 UN Convention of the Sea (UNCLOS) which extended the territorial waters to 12 nautical miles from the coast. It lies in the interests of even smaller navies.

---

17 ibid.
18 ibid.
19 ibid.
nations to assert their maritime boundaries; the great powers could no longer enjoy exclusive rights to the seas. The last reason is that the technology has developed to such an extent that even the smallest vessels can pose a significant threat, boasting considerable fire-power.\footnote{Børresen, J. (1994). The seapower of the coastal state. \textit{Journal of Strategic Studies}, 17(1), p. 148-149}

Børresen suggests that in naval battles close to land, where smaller fleets want to operate, the defending side has a disproportionate advantage, especially in relation to warfare on the high seas, or blue-waters. Børresen also writes that coastal fleets usually operate in a geographical proximity to the army and the air force, which entails and demands a high degree of interoperability or “jointness”, sometimes to even a higher degree than a larger navy - "Coastal Navies should not be modeled on the Naval Powers. Instead, they should be tailor-made to fit the local environment.”\footnote{ibid., p.174} Therefore, it should not be a coastal fleet's ambition to shoulder the roles of a blue-water fleet. A refined definition and understanding of the coastal navy’s operating environment is required in order to be able to set appropriate tasks and objectives. Børresen makes one final comment on coastal navies; their goal should not be to beat their opponent in a decisive battle. Rather, they should seek to avoid that the same fate bestows themselves.\footnote{ibid., p.176}

\textit{Murphy, Frank J. (1993) Littoral warfare: Adapting to brown-water operations}

This article was written in the period immediately following the shift in strategic focus of the US Navy. Focus was moved from open-ocean warfare \textit{on the sea} to littoral warfare conducted \textit{from the sea}.\footnote{Murphy, F. (1993). Littoral warfare: Adapting to brown-water operations. \textit{Marine Corps Gazette (pre-1994)}, 77(9), p.65} Murphy contends that littoral warfare is not a new naval warfare function and many of the functions that are relevant to fighting a super power on the open-ocean are relevant in littoral warfare. Murphy claims that littoral warfare is comparable to blue-water warfare, the distinction “littoral” is simply a geographical one. He admits, though, that small changes in emphasis should be made, for example, anti-submarine warfare (ASW) in shallow waters should be prioritized over deep water ASW.\footnote{ibid., p.66} Murphy outlines how the traditional naval warfare functions (anti-air, anti-surface, anti-submarine) each have a clear role in littoral warfare and he highlights their shortcomings where necessary.\footnote{ibid., pp.67-69}
2. Theory

The theory presented here serves a specific purpose. As the methodology chapter will show this paper is primarily inductively driven. That is to say, rather than pondering on a unique perspective or theory on littoral warfare (which are scarce) and applying this to reality, this paper attempts to examine reality and present a suitable model for analysis.\(^{26}\) However, to add some academic weight and credibility to the model a contemporary theory on littoral warfare is presented below.

The theory chosen for this purpose is Milan Vego’s article *On Littoral Warfare*. Vego acknowledges that there is a lack of a coherent theory on littoral warfare. Classic naval thinkers, Alfred T. Mahan and Julian S. Corbett, for example, drew no distinctions between open water warfare and warfare in the littorals.\(^{27}\) Vego admits that there are similarities between the two but that they differ on some critical points. Vego outlines in his theory which these critical points are, and how they can help understand littoral warfare.

Vego defines the littorals as those regions that “*encompass areas bordering the waters of open peripheral seas, large archipelagoes, and enclosed and semi enclosed seas.*”\(^{28}\) When there is nothing separating the coastline from the open ocean (coasts of North and South America and Africa, for example) then the littoral region ends where the continental shelf ends, on average between 170 to 430 nautical miles from the coast. Enclosed seas offer the most challenging operational environment for navies. These seas are often referred to as “narrow seas” in the sense that they can be controlled from both (or more) sides. The Baltic Sea is an example of a narrow sea.\(^{29}\) Narrow seas, or the littorals in general, allow for both sides to maintain much of the area of operations under surveillance, making it exceedingly more difficult for larger ships to remain undetected, even when a high degree of sea control is

---

\(^{26}\) This is discussed in depth in chapter 3.


\(^{28}\) ibid., p.33

\(^{29}\) ibid., pp.33-34
maintained.\textsuperscript{30} Smaller ships can take advantage of their size to hide between islands or in the archipelago.\textsuperscript{31}

The confined nature of warfare in the littorals also make employment of small ships and submarines a possibility. Distance from the shore and harbor lowers demand for operational endurance, and units can be deployed and redeployed at short notice.\textsuperscript{32} It is in the littorals, and specifically the narrow seas, Vego notes, that blue-water navies have the most difficulty in projecting power. The littorals and specifically the archipelago offer both challenges and opportunities. A sprawling archipelago can be difficult to control for an attacker, and it often requires a higher number of fighting units from the defending side.\textsuperscript{33} It is the side that best can exploit the opportunities of the archipelago that wins an advantage.

The threat to a blue-water navy increases as the distance to shore decreases. The coastal state often possesses a cost-effective, multi-layered defense, which might catch their opponent off-guard.\textsuperscript{34} Vego denotes this multi-layered defense as anti-access/area-denial and writes that it consists primarily of diesel submarines, multipurpose corvettes, sophisticated mines, coastal missile batteries, etc.\textsuperscript{35} Vego also outlines how a blue-water navy loses some of its effectiveness in the littorals, particularly regarding their mobility. Shallow waters make draft a real problem for larger vessels, reducing their speed and range.\textsuperscript{36} In addition, as previously mentioned, large ships will be easy for an opponent to identify. Vego summarizes: \textit{“The physical environment in the littorals, in typical narrow seas particularly, requires a naval force differently composed from that employed on the open ocean.”}\textsuperscript{37}

Vego also comments on what sound doctrine for littoral combat should include. He identifies sea control as the key operational concept for the stronger side and sea denial for the weaker side.\textsuperscript{38} Complete control of a narrow sea cannot be obtained as long as the opponent is alive and active.\textsuperscript{39} In the littorals, the influence that can be projected from land

\begin{footnotesize}
\begin{enumerate}
\item ibid., p.42
\item ibid., p.42
\item ibid., p.34
\item ibid., p.38
\item ibid., pp.31-32
\item ibid., p.32
\item ibid., p.45
\item ibid., p.45
\item ibid., p.53
\item ibid., p.55
\end{enumerate}
\end{footnotesize}
onto the sea is much more pronounced than on the open ocean. Sea control cannot be
achieved unless the stronger side controls both the sea and the relevant land areas.\footnote{ibid., p.54}

Vego lists factors that he considers to be important for success in littoral warfare: robust
command organization, sound doctrine, interoperability among friendly forces, and
appropriate platforms and weapons systems.\footnote{ibid., p.45} Another aspect of littoral warfare is choke-point
control. A choke-point is simply an (often narrow) strait that maritime units must pass
through to reach an area of operations. Control of such a choke-point is an offensive objective
for the stronger side, and denying that control is a defensive objective. The defensive
objective pursued by the weaker side is often an easier task since it can be accomplished by
non-naval units.\footnote{ibid., p.56} Vego stresses throughout his article that interoperability and cooperation
between services is vital in the struggle for sea control and in denying that control.\footnote{ibid., pp54-56}

Vego, as shown, views littoral warfare from the perspective of the strong and the weak state
alike. This is appropriate and relevant to this study as will be shown in the next chapter. The
reader will recognize many of the ideas Vego presents from the literature review chapter. As
noted by Vego, littoral warfare theory is far and few between, much of the literature concerns
itself primarily, with ways to achieve success in the littorals.
3. Methodology

3.1 Design

To answer the question “what does littoral warfare mean for different types of states?” it is imperative to define what types of states are to be examined. Alternatively, which types would be thought to be helpful, both in a comparative and analytical sense, in order to understand the meaning of littoral warfare. This thesis concerns itself with the differences in the meaning of littoral warfare, rather than the similarities. The methodology chosen is therefore an ideal type analysis, which plays a central role in this paper and is therefore explained in detail below.

An ideal type analysis is in essence a simplification of the world.\(^45\) When gradual differences are of interest, it can be fruitful to characterize the defining elements of the phenomenon in question,\(^46\) in this case littoral warfare. It is not necessary that the types identified exist in the real world; extreme or exaggerated types often lead to a nuanced analysis.\(^47\) Since the types are not explicitly modelled on reality, it is difficult to reject them based on empirical data or findings. It simply becomes a case of ‘if the reality does not fit the ideal type, it is reality’s problem, not the type’s’.\(^48\) Ideal types as a vehicle for analysis should not be used to formulate hypothesis, but rather they should be used as a grid or a screen to be placed on a text.\(^49\) It is therefore important that the ideal types somewhat constitute the real world, since an ideal type otherwise could render itself useless in empirical analysis.\(^50\) Ultimately, the question that (expectantly) will be answered is, how does the observed reality correspond with the ideal type?

Often it is suitable to base the comparison on two polar ideal types. The ideal types then form the endpoints of a spectrum, and the real life example is placed somewhere along this axis. An advantage of ideal type analysis is that the conclusions are more easily motivated; it is easier to argue that a phenomenon falls closer to one of the two defined points than to argue just

\(^{46}\) ibid., p.140
\(^{47}\) ibid., p.140
\(^{48}\) ibid., p.141
\(^{50}\) Metodpraktikan : Konsten att studera samhälle, individ och marknad, p.141
A good starting point for constructing the ideal types is to examine previous research; what typically characterizes the chosen phenomenon? If previous research is missing or lacking, or indeed is deemed unsuitable or uninteresting in any way, then there is nothing to stop the author from constructing their own ideal types. The ideal types, as mentioned, will be primarily inductively constructed. The theory presented in chapter 2 serves to illustrate what is typical to littoral warfare; how is it different from contemporary maritime theory or blue-water warfare? The ideal types, however, are not “types of littoral warfare”.

Instead, they are types of states that can be thought to have the most extreme views in regard to littoral warfare. It is through the lens of these polar states that littoral warfare will be examined. The question that was asked was: “which types of states can be thought to have most dissimilar views on littoral warfare and what do these states look like?”.

This thesis, however, does not expect different types of states to treat littoral warfare as complete opposites to one another; it is difficult to imagine how such pairs could be constructed in the context of littoral warfare. However, extreme cases can still be constructed, and as was previously stated; extremes serve to make the analysis cohesive and nuanced. Meanwhile, maritime theory is a relatively narrow field from which many states build their doctrine and tactics. Even if smaller states (for example) do not directly produce doctrine from academia they often do so in-directly, by lending from bigger nations’ doctrines. The ideal types that this thesis will produce do not necessarily exist (though they might), rather they serve to highlight and clarify important elements and characteristics of littoral warfare. The ideal types act as a simplification of reality albeit not a forgery.

### 3.2 Constructing the ideal types

Below the ideal types will be presented and their characteristics defined. To make conclusions easier to draw and thereby enabling a coherent answer to the thesis question, the two types will act as opposites; or rather, as two ends of a spectrum. The ideal types that will be presented are Small Navy (Type A) and Superpower Navy (Type B). These types are defined below by four different factors: operational environment, maritime aim/goal, method and means.

---

51 ibid., pp.141-142  
52 ibid., p.142  
53 ibid., p.140
3.2.1 Operational environment

Central to the discussion of littoral warfare is of course the operational environment where a navy may operate. If the littoral is not included in a navy’s operational environment, then it cannot be expected to grasp the concept of littoral warfare. A type A navy therefore, as one end of the spectrum, is thought to operate only in the littoral, and particularly in the ‘extreme littoral’\(^{54}\). A type B navy operates globally and masters brown, green and blue water alike.

3.2.2 Maritime aim/goal

The maritime aim/goal of a navy includes overarching goals as well as the goals pertaining to littoral combat in particular. A small type A Navy has coastal defense as its goal in times of war, and deterrence in times of peace. They are limited to defending one area (possibly two) along their own coastline at any given time. A type B navy’s goal is global power projection, particularly in the littoral regions of the world. A type B navy is expeditionary in nature and employs a high readiness-level, they enjoy and uphold freedom of navigation and are limited only by their own mobility.

3.2.3 Method

A type A navy’s method in the littoral is sea denial – to deny or contest an enemy’s sea control. A type A navy will only have sea control when it is not contested by another part.\(^{55}\) A type A navy also views the littorals in a ‘seaward’ fashion, meaning that combat power will mainly be directed and projected from land onto the sea. A type A navy views the littorals as an operational advantage and seeks to exploit it in whatever fashion they can. A type B navy’s primary method in the littorals is to gain sea control and maintain it.\(^{56}\) Often the risks that come without own sea control are far too great to risk advancement. The type B navy concerns itself with how it can project power from the sea onto the land (landward).

\(^{54}\) See Lundquist, E. (2014). The ‘extreme littoral’. Countries that fit these descriptions are, for example, Sweden and Finland.


\(^{56}\) See ibid., p.52
navy seeks sea control in the littorals to enable operational maneuverability and power projection.

3.2.4 Means

The means of a type A navy are limited. Its navy is mostly comprised of small (although lethal) vessels with limited operational endurance. Since the type A navy is limited in resources it seeks a tactical advantage by employing cost-effective weapons such as land-based missile systems and sea mines to bolster their defenses.\(^57\) The type A navy, in a coastal defense operation, rarely operates alone since their own land and air forces are in close proximity; close cooperation between friendly units is of vital importance to success.\(^58\) The type B navy is an aircraft carrier navy. That is to say, all imaginable maritime means stand at her ready. Although preferable, the distance from own forces usually means that the type B navy cannot rely on other services to gain and maintain sea control. The type B navy is sizeable and technologically advanced but not invulnerable.

<table>
<thead>
<tr>
<th>Operational environment</th>
<th>Maritime aim/goal</th>
<th>Method</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Navy (Type A)</td>
<td>'Extreme littoral'</td>
<td>Coastal defense/deterrence</td>
<td>Sea denial, Combat power primarily from land onto the sea</td>
</tr>
<tr>
<td>Superpower Navy (Type B)</td>
<td>Brown, green and blue water</td>
<td>Global power projection</td>
<td>Sea control, Combat power mainly from sea onto land</td>
</tr>
</tbody>
</table>

Table 1. Matrix of the ideal types and their characteristics.

3.3 Material

\(^{57}\) ibid., p.47
\(^{58}\) ibid., p.43
Maritime doctrine from Sweden, the United Kingdom and the United States of America will be analysed. Sweden was chosen as a country most likely to resemble a Type A navy,\(^{59}\) while the USA, as the only global projection navy in the world\(^{60}\), was chosen to resemble a Type B navy. Readiness and access to UK doctrine as well as the UK being pro-active in developing their littoral capacity has led to the UK being the choice for the third navy. Although not as powerful as the US navy, the UK navy is ranked as a category 2 navy.\(^ {61}\) Another reason for selecting the UK is that it might shed some light on how the ideal types hold up in analyzing a state that is not necessarily an ideal fit for the type. One maritime doctrine from each country has been chosen, namely that which concerns the operational level; the tactical level was thought to be insufficient considering the “jointness” of littoral warfare. The maritime doctrines are *Operativ Doktrin 2014*, *UK Maritime Power* (2017), and *Naval Doctrine Publication 1* (2010). The doctrines will be assessed in regards to their authenticity, tendency and relevancy.

**Authenticity**

Authenticity ensures that the empirical material is not forged or altered in any way. This is mostly relevant in regards to historical documents but the authenticity of internet sources need also be considered and confirmed.\(^ {62}\) *Operativ Doktrin 2014* has been downloaded from the Swedish Armed Forces’ official website. *UK Maritime Power*, has been downloaded from official sources, namely the UK governments online publishing service website. *Naval Doctrine Publication 1* is a printed source, and the author does not expect tampering or forgery of any kind. All publications are in their original language.

**Tendency**

Tendency is when the author biases a publication or article.\(^ {63}\) Naturally, the empirical material (doctrine) can be perceived as biased, either to portray a nation in a stronger light, or simply biased by the author when patriotism and nationalism, for example, are considered. It is not uncommon for nations to glorify themselves or their abilities; this is something to be wary of.

\(^{59}\) The author kindly reminds the reader that a perfect fit is neither necessary nor desirable (see chapter 3).


\(^{61}\) ibid., p.13


\(^{63}\) ibid., p.289
when examining the documents as there is a risk that countries overestimate their own abilities. For example, the UK might portray themselves as more of a global force projection navy than what they actually are.

Relevancy
Relevancy pertains to the circumstances at the time of publication. Is there something that could have influenced the material? Has something happened in the time after publication that has made the material outdated or irrelevant? All doctrines are the latest published operational doctrines of each examined state. NDP 1 was published in 2010. The shift to littoral warfare for the US is not new, it commenced in 1993, and the US navy have more than likely developed their views on littoral warfare since 2010. This is simply something that must be accepted, and consideration to this will be taken, where relevant.

3.4 Ethical considerations
Ethical considerations are important from two perspectives. Firstly, when human beings are directly involved in the gathering of empirical evidence, for example surveys or interviews, which is not the case in this study. Secondly, considerations must be placed on the author’s intellectual honesty, to ensure that the study is performed systematically, in answering the research question, but also in the analyses of the chosen states. The states should, in as far as it is possible, be analysed in the same way under the same pretenses. Furthermore, transparency is important in constructing the ideal types. The ideal types serve as a way to analyse the empirical material, and they are partly inductively driven. This means that the analysis is based partly on the author’s discretion. It is therefore important that the ideal types are clearly and logically presented. The results of this paper, due to the methodology, will be partly dependent on the author’s previous choices, which makes it vital to exercise some analytical objectivity.

64 ibid., pp.290-291
65 ibid., pp.64-65
4. Analysis

4.1 Sweden

Operational environment
No explicit definition of littoral warfare exists in the latest doctrinal publication, Operativ Doktrin 2014. This is to be expected when one considers Sweden’s unique operational environment. The Baltic Sea, which is considered to be the Swedish naval forces main operational area, is in its entirety a littoral area and a narrow sea. The theory has shown that a narrow sea is characterized by some of the most challenges (and opportunities) of any littoral area. The Swedish archipelago is often referred to as the ‘extreme littoral ‘as well. It is therefore possible to assert that the operations and exercises conducted by Sweden today, and those that have been conducted in the past fall within the realm of “littoral warfare”. This has led to Sweden being regarded, by some, as ”the world champion in littoral operations”66.

Maritime goal/aim
The primary tactical and operational purpose of the Swedish Armed Forces is deterrence.67 The Swedish armed forces should by its actions deter an enemy or potential enemy from using violence. No matter the scale of the operation the overarching goal of the Swedish maritime forces is to deter an enemy from using violence or from violating Swedish territorial borders. To achieve this purpose 3 (three) secondary aims are identified: uphold territorial integrity, compel and defeat.68

To uphold territorial integrity is to secure Swedish sovereignty and interests. In a maritime context this means upholding the Swedish territorial waters, and to meet and reject nations that advertently or inadvertently seek to violate the border. To compel is, by means of threat or use of violence, forcing an actor to do something against their will or intention. To defeat is to achieve one’s own operational goals or to deny the opponent their own achievement.69 An enemy is defeated when it lacks the will or the means to armed combat. It is vital to

68 ibid., p.32
69 ibid., pp.32-33
remember that the three sub goals mentioned above all serve to attain the overarching purpose of the Swedish armed forces, which is deterrence, a goal that is defensive in nature.

**Method**

The purpose of Swedish maritime operations is to maintain control or contest an enemy’s control over the entire or parts of the area of operations.\(^\text{70}\) Control, in this sense, is defined as the ability to control or influence an enemy in the air, on or below the surface and on nearby land-areas. Maritime operational control is achieved when Swedish or allied land, air or sea-forces can operate with certain security and operational maneuverability. The doctrine notes that complete sea control is only achievable under extremely favorable conditions. It is interesting to observe that maritime control in the littorals is not an end state in itself, and certainly not for maritime forces; rather it is to enable other services (air or land) or indeed, other nations, to operate freely and to coordinate their efforts.\(^\text{71}\)

In an armed conflict, the Swedish maritime forces should continuously use the archipelago for regrouping and as a starting position for continued combat.\(^\text{72}\) Sweden identifies the archipelago, sometimes referred to as the ‘extreme littoral’ as something to be exploited or taken advantage of. To use it for regrouping intimates at the shielding nature of the archipelago, as vessels and troops in this area are harder to identify and strike than their counterparts on the open sea.\(^\text{73}\) The term “starting point” can also mean two things: either that the archipelago is to be exited before engaging the enemy, or that the enemy can be engaged from within the archipelago itself.

**Means**

Sweden possess multirole corvettes, mine-clearing and mine-laying capabilities, fast and mobile amphibious units with short-range, land based surface-to-surface missiles, and diesel-powered submarines. Coastal missile batteries are on their return to the Swedish navy, and are expected to be operational in mid-2020. *Operativ Doktrin* states that the navy should cooperate with other services whenever it is appropriate, and lists systems and capabilities that can be shared on an operational level.\(^\text{74}\)

---

\(^{70}\) ibid., p.43  
\(^{71}\) ibid., p.45  
\(^{72}\) ibid., p.35  
\(^{74}\) ibid., p.57
4.2 United Kingdom

Operational Environment

To understand fully the view that the United Kingdom has on littoral warfare (or the littoral region) this paper presents the old definition along with the reworked one. In the British Maritime Doctrine from 2004, the littoral region is defined as, “Coastal sea areas and that portion of the land which is susceptible to influence or support from the sea.” In UK Maritime Power from 2017 the updated definition is: “Those land areas (and their adjacent areas and associated air space) that are susceptible to engagement and influence from the sea.” There appears to be a clear shift in focus from “coastal sea areas” to “those land areas”. There is another lexical change, which is interesting, that being from “support” to “engagement”, the latter phrasing seems more aggressive and expeditionary in nature. The reason for these changes, including other aspects, will be explored in this analysis.

Maritime Goal/Aim

The United Kingdom, as an island nation, views the sea as the lifeblood of its economy. A safe, secure and reliable maritime environment is therefore of outmost importance. The doctrine identifies three key roles for the UK maritime forces; they are war fighting, maritime security and Defence Engagement, which are in line with the UK’s National Security Objectives. These roles, in turn, lead to the three main goals of the UK maritime forces: “protect national trade, project globally to support the UK Overseas Territories and, in cooperation with other like-minded nations, promote the free movement of global trade.” It is in regards to the second of these goals that littoral warfare will play a prominent role. To appreciate the utility of maritime forces fully, it is “necessary to understand the littoral, especially how maritime power can be projected onto land from the sea.” The littoral region, and furthermore, littoral operation’s main goal is power-projection.

---

76 ibid., p.11
77 ibid., p.22
78 ibid., p.22
79 Own emphasis.
80 ibid., p.5
Two thirds of the world’s population live within 100 nautical miles from the sea. The majority of the world’s factories, infrastructure and services are due to logistical reasons also located close to shore, and are susceptible to influences from the sea. Another area that the UK doctrine highlights is communications, mainly the internet, where 99 percent of global internet traffic is dependent on submarine communication cables, internet servers and hubs, which are predominantly found within the littoral zone.⁸¹

The control of littoral regions, and in particular maritime choke points, will lead to fulfilment of the third goal; promoting the free movement of global trade. UK doctrine recognizes that even minor maritime powers can pose a significant threat by using land-based missiles and sea mines; both which are relatively cheap when compared to their potential effect. The control of the littorals, in short, is important to the UK in mainly two ways; firstly, by power projection and secondly by securing free trade. The next section will analyse how the UK seeks to accomplish these goals, as well as the littoral region’s importance in war fighting.

**Method**

*UK Maritime Power* recognizes freedom of maneuver to be of singular importance in littoral operations. The doctrine coins the term “littoral manoeuvre” and defines it as “exploiting the access and freedom provided by the sea as a basis for operational manoeuvre from which a sea-based amphibious force can influence situations, decisions and events in the littoral regions of the world. The ability to deploy a land force from a sea base is a key capability of the maritime force.”⁸² Littoral manoeuvre is one way, alongside a carrier strike, of projecting maritime power, by enabling the capability of landing land-based forces ashore. Hydrographic and oceanographic survey vessels are also a vital prerequisite for theater entry and littoral manoeuvre.⁸³

The UK doctrine identifies several threats in the scope of littoral operations. These include: mines, shore-based missiles, cyber and electromagnetic activities, or cognitive methods such as targeting through social media. One way to counter these threats is to exploit the mobility and freedom of navigation of naval vessels. The threat of shore-based missiles in particular is

---

⁸¹ ibid., p.36  
⁸² ibid., p.60  
⁸³ ibid., p.82
not to be taken lightly: “This poses an unacceptable level of risk to maritime units”.\textsuperscript{84} It is
unclear whether this threat is deemed large enough to stop from entering into a littoral area if
there are enemy missile batteries on land. This disproportionate risk versus reward lays at the
heart of littoral warfare, and is further exemplified in regards to sea control. The level of sea
control required is dependent upon the threat and the mission. Gaining and maintaining sea
control is a “major component of any maritime or expeditionary operation”.\textsuperscript{85} Sea control in
littoral operations also encompasses the shoreline and some distance in-shore, and can only
be acquired by a combination of sea-based and land-based forces.

\textbf{Means}

The UK currently have one commissioned aircraft carrier and six destroyers. It possesses a
sizeable submarine fleet, though none of which are diesel-powered. Alongside destroyers and
frigates, the UK also commissions several coastal patrol and fast patrol vessels; they also
possess several amphibious landing vessels and assault ships. A proposal is currently being
reviewed for a Littoral Strike Ship, a multi role vessel enabling power projection and Special
Forces missions. Presently, the UK does not possess a vessel designed specifically for littoral
combat away from British mainland.

\textbf{4.3 United States of America}

\textit{Operational environment}

The United States Navy is a multifaceted naval force capable of operating in blue, green and
brown-water alike.\textsuperscript{86} Concerning the littoral operating environment two definitions can be
found in US maritime doctrine, these are presented below:

1) The littoral comprises two segments of the operational environment:
   \begin{itemize}
   \item 1. Seaward: the area from the open ocean to the shore, which must be controlled to
   support operations ashore.
   \item 2. Landward: the area inland from the shore that can be supported and defended
directly from the sea. (JP 1-02. Source: JP 2-01.3)\textsuperscript{87}
   \end{itemize}

\begin{footnotesize}
\textsuperscript{84} ibid., p.43
\textsuperscript{85} ibid., p.42
\textsuperscript{86} Department of the Navy (2010). \textit{Naval Doctrine Publication 1 Naval Warfare}, Scotts Valley, Ca: Createspace
Independent Publishing Platform, p.28
\textsuperscript{87} ibid., p.49
\end{footnotesize}
2) In naval operations, that portion of the world’s land masses adjacent to the oceans within direct control of and vulnerable to the striking power of sea-based forces. (Naval Doctrine Publication, NDP 1)\textsuperscript{88}

The first definition denotes the two ways in which to view the littoral namely as “seaward” and “landward”, however, in essence, and in relation to the ideal types, they mean the same thing. Both concern themselves with how seaborne unites can project power onto land, and not how power can be projected from land onto the sea. The NDP 1 defines the littorals as “land masses” and fails to mention the sea in these regions.

\textit{Maritime goals/aims}

The overarching goals for the US Navy are primarily to defend the United States and control and deter any approaches towards continental USA. The next priority is establishing forward lines of communication and maintaining control of the sea.\textsuperscript{89} Control of the sea does not equal sea control, but rather it means to allow for freedom of navigation, and the free flowing of maritime trade. The US recognizes that rapid globalization and urbanization (most of which takes place in the littorals) have important implications on their operating environment and in turn, for their strategic goals. Foreign sensitivity to US troops and diminishing access to overseas states mean that maintaining a forward presence becomes more difficult. In this context, the navy is vital. The US navy does not require a host-nations permission to maintain a forward presence; the navy is viewed as an integral part of US power projection.\textsuperscript{90}

\textit{Method:}

One of the goals of the US navy is power projection; this is achieved in the littorals of the world. Power projection can be accomplished in three ways: attacking targets on shore, amphibious landings or raids and supporting a sea-control operation. Two of these methods

\begin{itemize}
\item \textsuperscript{88} ibid., p.49
\item \textsuperscript{89} ibid., p.15
\item \textsuperscript{90} ibid., p.19
\end{itemize}
are directly hostile in nature. Supporting a sea-control operation is, according to NDP 1, the only credible, non-lethal, way of power projection. US doctrine recognizes that their potential adversaries are becoming more lethal. Anti-access and area-denial capabilities, such as sea mines, surface-to-surface missiles are becoming more widely available, to both less-developed states, but also to non-state actors.⁹¹

“Sea control is the foundation of seapower primacy. Credible combat power is the combination of sea control and power projection, the ability to exploit the sea as maneuver space in order to project influence and power ashore.”⁹² Sea control is a necessary precursor to power projection. In fact, the doctrine states that the two complement each other. Sea control allows naval forces to get within striking distance of land-based threats and, in turn, neutralize them, in order to enhance freedom of action at sea; which ultimately enables power projection of forces ashore.⁹³ To clarify, the doctrine refers to two different aspects. In step 1, a strike from an offshore location is carried out, away from potential threats. In step 2, a landing operation is carried out, power projection by “boots on the ground”. Sea control operations in the littoral include the “destruction of enemy naval forces, suppression of enemy sea commerce, protection of vital sea lanes, and establishment of local military superiority in areas of naval operations.”⁹⁴ Such operations are mainly executed by naval forces but can be supported by land and air forces when appropriate. Gaining sea control to an area closer inshore may well require the control of key land areas and terrain.

**Means**

NDP 1 contests that operations in the littorals, including ports, harbors and coastal waters require “ships, amphibious ships, landing craft, and patrol craft with the stability and agility to operate effectively in surf, in shallows, and the near-shore areas of the littorals.”⁹⁵ The US navy commissions these types of means. It is not a fruitful exercise to list all of the US navy’s vessels and capabilities; the list would simply be too long. There are currently 16 active littoral combat ships of the Freedom- and Independence-class, 11 active aircraft carriers and approximately 70 active submarines.

⁹¹ ibid., p.19
⁹² ibid., p.29
⁹³ ibid., pp.28-29
⁹⁴ ibid., p.29
⁹⁵ ibid., p.28
4.4 Discussion

After an analysis of the maritime doctrines, Sweden appears to align with the type A navy described in chapter 3. Sweden’s operational environment is a narrow sea and a littoral by Vega’s definition, introduced in chapter 2. The Baltic Sea in combination with Sweden’s unique archipelago\(^96\) earns the epithet ‘extreme littoral’. The UK and US navies are global in the sense that they can operate anywhere on the planet; brown-, green- and blue-water alike. The US navy, is regarded by many to be the only global *superpower* navy, as they can on short notice enter almost any theatre. The UK have global power projection abilities but are limited to one place at any one time.

Regarding maritime aims/goals, the analysis shows that Sweden once again falls close to a type A navy. The Swedish navy’s main purpose is deterrence (in all conflict scales) and in the event of war, coastal defense.\(^97\) Sweden has no explicit goal of power projection. The UK and the US both have stated power-projection goals, both mentioning the littorals as the most likely place for this. The UK doctrine reads more aggressively than the US doctrine where the US mentions deterrence as an underlying goal as well. This paper refers to the note made earlier about potential bias in the doctrines. This may of course be a bias on the author’s part in reading and interpreting the doctrines; however, the UK maritime goals, particularly “project *globally*” and “promote the free movement of *global* trade” might be hard to attain considering the size of the royal navy. Although the research question asks how states view, littoral warfare it may still be wise to ponder the implications of the UK simply posing as a type B state in this regard.

Sweden expresses that it wants to establish sea control and, whenever this cannot be done, contest an enemy’s sea control (sea denial). The doctrine recognizes that sea control is only possible during extremely favorable conditions; however, there is a slight misfit between a type A navy and Sweden in this case. A type A navy recognizes that their best course of action is to not even attempt sea control – a type A navy will avoid a decisive battle with the

\(^96\) Comparable maybe only to Finland’s in regards to amount of islets.
knowledge that active units in the littorals pose a much greater threat, then could ever be gained from a head-to-head battle. The UK navies and US navies both wish to establish sea control, preferably with other service types or allies, however, it is possible, and sometimes necessary, to do it alone. Both navies recognize that establishing sea control in the littorals is difficult, yet it is viewed as essential, partly for operational maneuverability and freedom of navigation, but also because the potential threats and risks associated with littoral warfare are recognized. The US and UK are also mainly concerned with how power can be projected from the sea onto land while Sweden regards the littorals as a place for regrouping and keeping friendly units hidden from the enemy. Sweden, at the time of writing this paper, cannot be said to mainly direct combat power from land onto the sea. However, amphibious forces are tasked with this mission and land-based missile batteries are recommencing.

The US navy has all available means at their disposal; the UK navy is more limited in this relation. However, it is feasible to assume that the UK navy could conduct a sea control operation in the littorals, however, probably not without the support of other services (land or air). A discussion about means becomes more interesting when Sweden is considered. Sweden ticks many of the boxes introduced in the theory, and in the ideal types. Multipurpose corvettes and diesel-powered submarines to name a few. Land based surface-to-surface missile systems are returning to the Swedish warfare organization and are expected to be operational in mid 2020. Sweden still possess sea mines however, their sophistication could be up for discussion; mining operations are not a core capability of the Swedish naval forces.

A matrix is presented below to summarize the analytical results.
Operational environment | Maritime aim/goal | Method | Means
---|---|---|---
Sweden | 'Extreme littoral’ + narrow sea | Coastal defense/deterrence | Sea denial, when possible sea control (rare), combat power from land and sea | Corvettes, mines, diesel submarines, (land-based missile-systems), combined with the army and air force
USA | Brown, green and blue water | Global power projection | Sea control, combat power primarily from sea onto land | Aircraft carriers, All relevant means.
UK | Brown, green and blue water | Limited global power projection | Sea control (when possible), combat power primarily from sea onto land | 1 aircraft carrier, lacking corvettes and littoral strike crafts.

Table 2. Summary of the results. Underlined words denote a difference from the ideal types.

The US navy is a type B navy, the UK is not, Sweden however, is not a true type A navy since it displays some capabilities which are beyond that of a type A navy. However, the three examined countries come close enough to the presented ideal types (type A and type B navy) to draw some interesting conclusions.

What does littoral warfare mean to these countries, and how are they different? Are they different? Regarding means, the conclusion is that the US and the UK have both recognized the need for different littoral warfare systems. They also accurately identify the threats connected to the littorals (mines, missiles, etc.). When considering means, a type A and B navy are simply opposite sides of the coin; namely, an aggressor and a defender. For example, we do not expect a global projection navy to deploy land-based missile batteries in a foreign theater; the means matches the methods which, in turn, matches the aims.

In the US and UK doctrine littoral warfare cannot be described without these countries taking on the role of the “aggressor”; their expeditionary nature is discernible in their doctrines. They have assumed (or want to assume) the role of the global superpower and type B navy; when referencing the littorals, they are not implying their own littoral – they are implying...
someone else’s. They do not have the home-field advantage\textsuperscript{98} so therefore, careful preparations must be made to even the balance. The US and UK will go to great lengths in securing sufficient sea control. The littorals and warfare in the littorals without sea control is a much greater threat to an aggressor; “the risk is sometimes unacceptable”\textsuperscript{99}. A defender or type A navy recognizes its own shortcomings, and it is perhaps only in conjunction with other services that sea control may ever be gained. However, it is not entirely necessary either. It is a balance of economics, littoral warfare for the type A navy is about maximizing effect by limited resources, and this is achieved by taking advantage of the physical environment, enabling short supply-lines and lines of communication. A type A navy views the type B navy as a potential enemy and vice versa. A \textbf{type A and a type B navy view littoral warfare in relation to themselves}. Littoral warfare, for these navies, accomplishes different goals, and thus requires different means and methods. In the literature review, it was mentioned that the objectives of littoral warfare are the same as those of blue-water warfare, project power, defeat the enemy.\textsuperscript{100} For a type B navy this may well be true. However, the type A navy is not concerned with power projection, rather with deterrence. Defeating the enemy might not be as important as denying sea control or indeed, just staying alive.

In any conflict, or war, it is helpful, sometimes necessary, to understand your opponent’s motives. It is clear that the type B navy recognizes the threats a type A navy can pose, and they do not underestimate them. In Swedish doctrine, the threat of the type B navy is less explored. This maybe pertains to the theory and doctrine-production - most maritime theory comes from type B navies! Where does a type A navy want to engage a type B navy? All the evidence points in one direction, in the littorals, or preferably in the archipelago; well in range of land-based and amphibious units, and with an increased chance to avoid detection. Swedish doctrine states that the archipelago should be used for “regrouping”. Rather, it should say, “engaging”. How does a type A navy lure a type B navy into the archipelago? How does it deter an opponent long enough to even enter? This paper contends that a type A and a type B navy view littoral warfare differently, however, the type A navy’s perspective is not explored

\textsuperscript{100} See Murphy, F. (1993). Littoral warfare: Adapting to brown-water operations. Marine Corps Gazette (pre-1994), 77(9), pp.64-65
enough in Swedish doctrine to make any meaningful commentary on exactly how this difference is characterized.

5. Conclusions

5.1 Summary

A type A and a type B navy have different goals and aims within the scope of littoral warfare. This, in turn leads to different methods and means. This paper has shown what these are and has answered the question, how do different types of states view littoral warfare? Littoral warfare for a type B state is a dangerous necessity in their pursuit of global power projection and sea control. Littoral warfare for a type A state is immensely challenging, and requires close cooperation with friendly forces, if this can be achieved though, then the challenges of the littoral offer a disproportionate advantage. Littoral warfare for the type A state is characterized by deterrence, sea denial and simply staying afloat.

5.2 Reviewing the ideal-types

The ideal types, in acting as polar opposites, has revealed an interesting notion. It is possible that a type A and a type B state view littoral warfare as a different side of the same coin. However, in essence, it is still the same coin. That is to say, it is imaginable that the type A (Sweden) and B state (the USA and UK) understand littoral warfare from both perspectives, but have chosen only to present their own. This is hypothetical of course, nonetheless, it leads to an interesting question. What would a type C state see when viewing littoral warfare and how would such a state look like? Imagine a state that had some regional power projection goals and simultaneously, had a vast littoral to defend; Japan and South Korea, for example. Would they fall in the middle of the spectrum, in between the type A or B states? Alternatively, would another dimension have to be considered? The ideal types in this paper may not be satisfactory in such an instance.

5.3 Future Research

The defender/aggressor nature of littoral combat lead partly to the construction of the ideal types. The views on littoral warfare that this paper presented, in turn, were (purposefully) at
opposite ends of a spectrum. It is very possible that to understand littoral warfare fully we must consider the middle, as it were. This can be achieved in two ways; either by using the ideal types as they are and applying them to a state C, and then analysing how far from A and B it lands; this could lead to many contradictory conclusions. More fruitful perhaps, could be to construct a completely new type, consisting of new variables; such as analyzing how a country that is both a potential defender and aggressor view littoral warfare.

5.4 Contribution to the Swedish officer-corpse

The dichotomy of the type A and B state reveal a startling idea; that the USA and UK navies, when considering their littoral opponents, are imagining a country like Sweden. Sweden is one of the countries that enjoy a home-field advantage.\footnote{See Hughes, W.P. (2000). Fleet Tactics and Coastal Combat. Annapolis, Md: Naval Institute Press.} When reviewing the doctrine and theory it is clear that such an advantage is to be taken (and is taken) very seriously by a potential enemy, as Sweden display further and more advanced capabilities than that of a type A state (diesel submarines, for example). This paper has demonstrated how a potential aggressor could behave in the Swedish littoral, and what the potential objectives and goals could be. It has also become strikingly clear that Sweden must continue to learn from (and teach) our stronger allies about littoral warfare. This paper’s intention was not to present tactical concepts in the littorals but hopefully it has served to shed some insight on some potential, stronger adversary.
References

Articles


Books


Electronic Sources


**Dissertations**