

Sea Control

The Context for Norwegian Submarine Modernization

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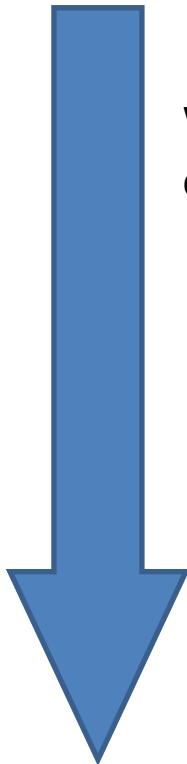
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Modes of Thinking

Top-Down Thinking

Strategic

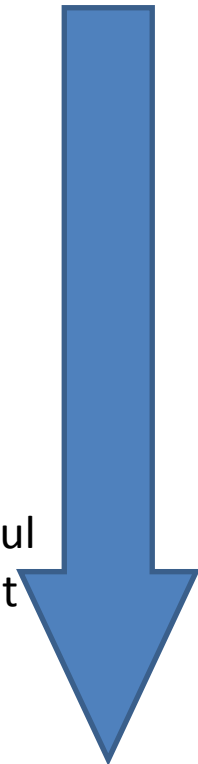


Tactical

War is a continuation
of politics...

Bottom-up Thinking

Strategic

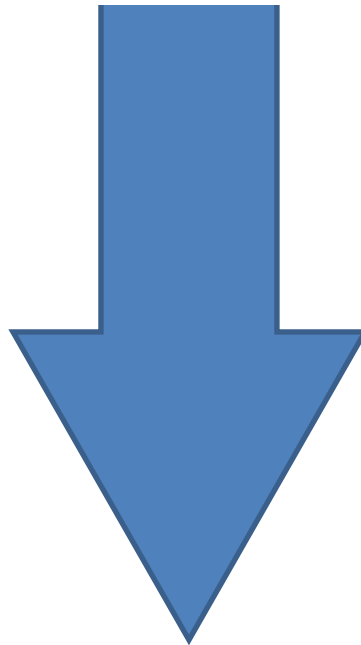


Tactical

No naval policy can be wise
unless it takes into very careful
account the tactics that ought
to be used in war...



Top Down





3 Rings of Security Analysis

- .Sovereign Defense

- .Alliance Commitments

- .Global Systemic Support (UN or ad hoc)

These are embedded in the 2013 Norwegian Defense Policy



Security Questions for Norway

.Is there a proximate threat that justifies the opportunity cost of devoting scarce defense resources to sovereign defense?

–Will Russia ever attempt to invade Norway?

–If they do, will 4-6 submarines be sufficient to

.Stop them?

.Prevent disaster until alliance help shows up?

.Is there a potential NATO commitment that warrants priority investment of defense resources?

–In area

–Out of area

–Does Norway have discretion in participating?



Bottom Up



Fixing Sea Control Doctrine

The primary purpose of any theory is to clarify concepts and ideas that have become, as it were, confused and entangled. Not until terms and concepts have been defined can one hope to make any progress in examining the question clearly and simply and expect the reader to share one's views.

Clausewitz

...and naval strategy, like naval tactics, when boiled down, is simply the proper use Of means to attain ends. But in peace, as in idleness, such matters drop out of Mind, unless systematic provision is made for keeping them in view.

Mahan

Thoughts on Sea Control

- Big ocean, little ships: there is no possibility of true control of any ocean area
- Sea control cannot be usefully thought of as a condition for the purposes of naval planning
- Sea control is actually a function performed by navies and sometimes by air forces
- Mission elements of sea control
 - Protection of friendly ships and positions
 - Disruption of enemy ability to attack own forces
 - Disruption of enemy ability to carry out his maritime missions



Strategic Context: Command of the Sea

• **Mahan:** that overbearing power that drives the enemy's flag from the sea except as a fugitive

• **Corbett:** the ability to disperse elements of one's fleet in order to exercise sea control in specific localities; control of sea communications

- 1945 -

• **Modelski and Thompson:** the ability to define and enforce an international order

• **Rubel:** the inability of any other force to impose a strategic defeat on the USN



Command of the Sea

- Provides the following strategic benefits

- Peacetime

- Ability to set rules of the international order

- Ability to enforce the rules / defend the system

- Struggle and war

- Credible contact with allies

- Sanctuary for one's war economy

- Strategic options (sea as maneuver space)

- Associated with capital ships – the strongest and most capital intensive types

- Is an expression of a strength relationship between navies and says what one can do and the other(s) cannot do



Naval Warfighting: Key Concepts

- Relative strength (Perceived)
- Hughes: Strike effectively first
- Strong points vs mobility
- Pulse vs persistent application
 - Feeding a fight



Tactical Stability





Key Ship Type

- .Must be calculated in terms of the whole operation
- .That ship type which carries most or all of a needed capability to make the operation work.
 - Loss compromises the whole operation
 - Atlantic Conveyor nearly did in the Brits
- .Sufficient distribution of capability to prevent the loss of a key ship from causing mission failure



Fleet Fighting Rules

- .Keep the fleet concentrated
- .Do not become decisively engaged with land forces unless decisively superior
- .Do not sacrifice mobility

Don't get yourself into a position in which you have to risk a disaster at sea in order to avert one ashore, or vice versa



Naval Operational Strategies

.Blockade

.From the Sea

.Air-Sea Battle

.Decisive Battle

.Fleet in Being

.Guerre de Course

.Delay Disruption Denial Demoralization

Sanctuary + Mobility = Capability

New Definitions

.Command of the Sea: the inability of any other navy or group of navies to impose a strategic defeat on the USN. (condition)

.Maritime Battlespace Superiority: Sufficient degradation of enemy capability to interfere on a local or regional basis such that the risk level is deemed low enough for an amphibious or other maritime operation to go forward. (condition)

Sea Control: The rendering of protection to forces or ships at sea or positions ashore in a degree adequate to align risk with mission. (function)

Watercolors

.Blue Water

–**NOC:** Operations in blue water, which consists of the high seas and open oceans, require forces capable of remaining on station for extended periods largely unrestricted by sea state and with logistics capability to sustain these forces indefinitely.

–**Rubel:** Areas of water in which HVUs can be operated at an acceptable degree of risk

.Green Water

–**NOC:** Operations in green water stretching seaward, which consists of coastal waters, ports, and harbors, require ships, amphibious ships and 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.

–**Rubel:** Waters in which HVUs cannot be operated at an acceptable degree of risk

.Brown Water

–**NOC:** Brown-water operations, in general terms, consist of navigable rivers, lakes, bays, and their estuaries.

–**Rubel:** Waters in which only shallow draft vessels or UVs may be operated

New Rules

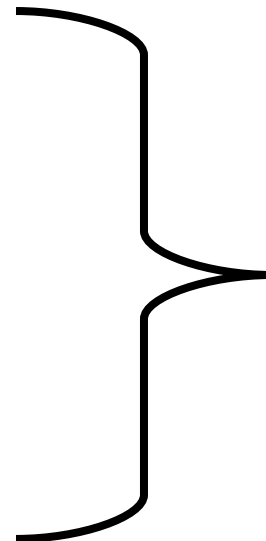
- Do not risk command of the sea in a sea control fight
- Do not allow tactical instability to turn naval forces from political assets into political liabilities
- There is no such thing as a bastion at sea



Some Observations

• It is way too easy to ignore things you cannot see:

- Mines
- Subs
- Stuff over the horizon
- Hidden stuff
- Small things
- Electromagnetic waves



Taking them seriously
causes operational and
programmatic inconvenience

• Who gets to say whether a piece of water is “safe” for passage and on what basis does he or she make that determination? Same deal with air.

• Operational deception will be harder.



Norway Principles

- Submarines, UVs, and A2AD systems increase the uncertainty and cost of invasion or raids from the sea
 - The issue is deterrence and leverage, not absolute defense capability
- The more useful a Norwegian naval capability is in systemic support, the more voice and influence Norway will have
 - Systemic support suggests deployable capability
- Alliance commitment and systemic support may overlap
 - The more these are predicted to be successful, the less sovereign defense investment is needed

Discussion

Functional Elements of Sea Control

.Surveillance: General ability to keep track of who is doing what, where, in those areas of the ocean of interest

.Scouting: Finding units of interest, including those that do not want to be found

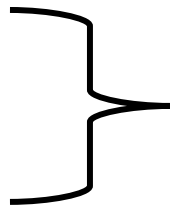
.Deterrence: Convincing a potential or active enemy not to go somewhere you don't want him to go or do something you don't want him to do

.Attack: Damaging or sinking enemy units

–Decisive

–Sequential

–Cumulative



Wishful thinking not allowed



Case Study: Decisive Naval Battles

(It's about the admiral)

- Actium, Lepanto, Trafalgar

- The admiral with the weaker fleet was lured or forced into battle

- Salamis, Midway

- The admiral with the stronger fleet was ambushed or lured into a position where he could only use part of his fleet

- Jutland

- Both admirals were aware of the stakes and had the ability to bail out

Case Study: Sea Control Fights

(it's about the ships)

•Battle of the Atlantic

- The convoy was a dot on the ocean
- A cumulative fight over time
- Control a misnomer – relative attrition the key
- Information tipped the balance

•Guadalcanal

- Protecting a position
- Warships as consumables
- Under what conditions should carriers be committed?
- Air Sea Battle

Case Study: D4

(it's about disruption)

.Leyte Gulf

- Sho plan meant to create strategic breathing room
- All IJN forces consumables
- USN tied to beachhead

.Okinawa

- The cost of positional defense at sea
- Leakers

Case Study: Gunboat Diplomacy (it's about risk)

.Yom Kippur War 1973

- Responsiveness: CVs vs CGs
- Tactical vs strategic risk
- US had default command of the sea
- US/USSR external parties
- Nuclear context

Case Study: Maritime Security

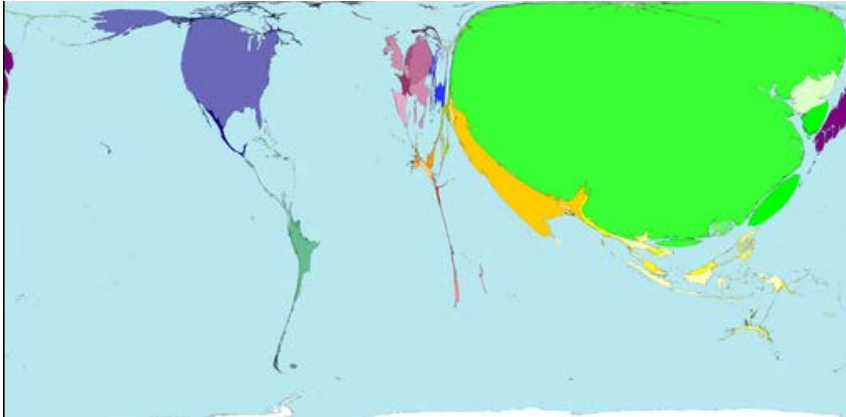
(Its about information)

- After 9/11, USN, USCG could not provide assurance
- Recognition of the problem
 - No steel wall
 - Defense in depth
 - 1KN
- CS21 and the GMP

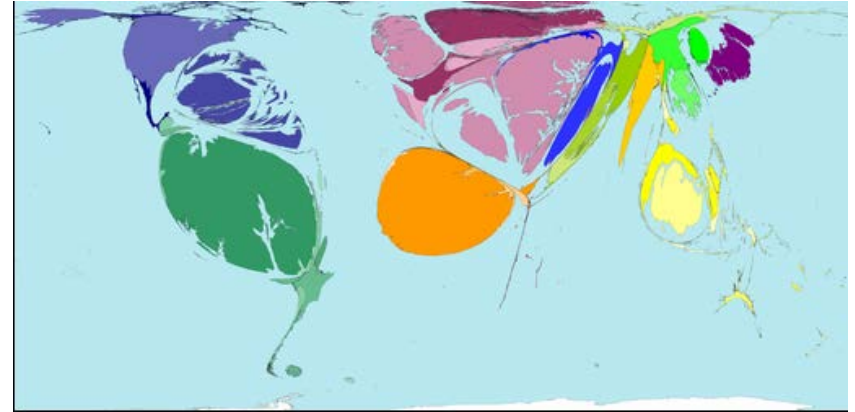
Case Study: Suppression of Enemy Sea Commerce

- .Who owns what ship?
- .Who has beneficial ownership of the cargo?
- .Petroleum spot market
- .Container hub and spoke system
- .Subcomponency
- .Break bulks
- .Unrestricted sub warfare vs mines vs close surface blockade

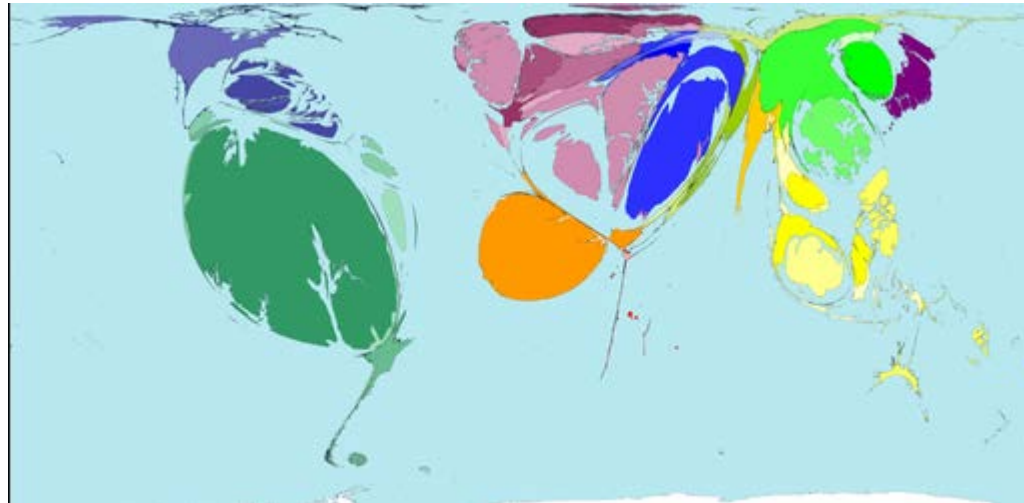
Who Owns What?



World Container Activity



Tanker Registrations



Cargo Ship Registration by Tonnage

Today's Cases

- .Hormuz: positional defense
- .Taiwan: D4
- .South China Sea: gunboat diplomacy, sea denial, and command of the sea
- .BMD stations: positional defense
- .Piracy/drugs/WMD proliferation/terrorist smuggling/human trafficking/ pollution/overfishing: global sharing of information

Aircraft Carrier Roles

- .Eyes of the Fleet
- .Cavalry
- .Capital Ship
- .Nuclear Strike Platform
- .Airbase at Sea
- .Geopolitical Chesspiece