



CAL MARITIME

# Major in Global Studies & Maritime Affairs

Cal Maritime Week 2021

## Dr. Assis Malaquias

- Strategy
- Security
- War
- International Politics
- Formerly with National Defense University



## Dr. Ryan Wade

- Maritime Policy
- Maritime California
- Senior Thesis
- International Studies Director





## Dr. Dianne Meredith

- China and Southeast Asia
- Indian Ocean Rim
- Cross-Cultural Competence
- International Migration





## Ms. Jennifer Metz

- Maritime History
- American Institutions
- U.S. History & Government



## A few facts...

- GSMA is the only undergraduate major of its kind in the United States
- Some of our courses are offered only at Cal Maritime – and nowhere else



## As a GSMA student, what will you study?

- All of the General Education (G.E.) classes required by any California State University
  - Math, science, writing, etc.
- Core GSMA courses in maritime affairs
- *Elective GSMA courses* that will allow you to branch out into your special interest areas



## GSMA Core Courses include:

- Ocean Politics
- International Relations
- Comparative Politics
- Foreign Language
- Political Geography
- Maritime Organizations
- U.S. Maritime Policy
- U.S. Maritime History
- U.S. Foreign Policy
- Globalization of Culture
- Maritime Security
- Ethics

## GSMA Electives include:

- China & Its Neighbors
- Indian Ocean Rim
- Maritime California
- Geopolitics of Energy
- Marine Spatial Planning
- Environmental Policy
- International Migration
- Polar Politics
- International Law
- And many more!

# Senior Thesis Research Projects

- You choose your own focus area!
- Senior Capstone Thesis
- Poster Presentation of Thesis Findings
- Some examples on the next slides.....



# Consequences of Shipbreaking in the Indian Ocean Realm

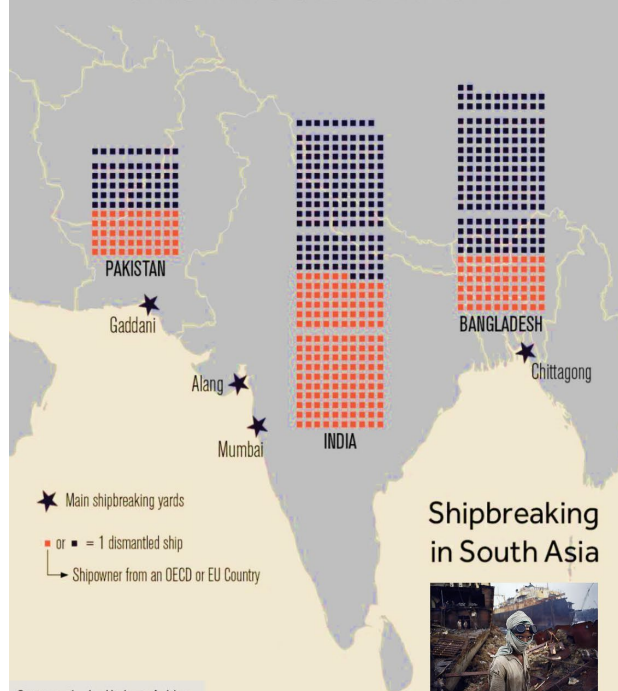
DYLAN COOK

## Abstract

Shipbreaking is an industry that uses destructive practices to dismantle end of life vessels who have exceeded their economic value to salvage raw metals. These actions expose the environment and workers to harmful and toxic substances. The international community has taken measures to alleviate the situation but hasn't been successful in regulating the primary shipbreaking industries in South Asia.



## SHIPBREAKING in 2014

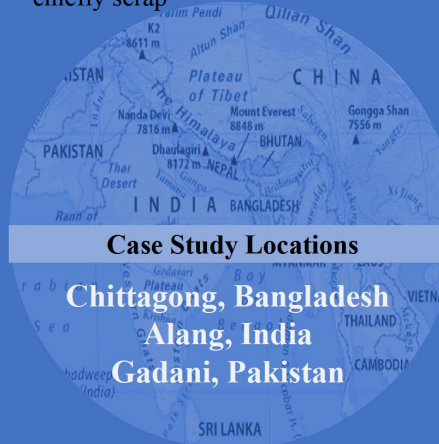


Cartography by Hisham Ashkar  
©GRID-Arendal 2015

Source: Shipbreaking Platform, <http://www.shipbreakingplatform.org>

## Ship Recycling Definition

- By definition, shipbreaking is a type of ship disposal involving the breaking up of ships for either a source of parts, which can be sold for re-use, or for the extraction of raw materials, chiefly scrap



## Case Study Locations

Chittagong, Bangladesh  
Alang, India  
Gadani, Pakistan

## Issues

- Lack of Domestic enforcement and International policies
- Extreme Environmental Damage
- Worker Safety (equipment & training) and Health
- Child Labor

## Types of Pollutants

- Polychlorinated Biphenyls (PCBs)
- Persistent Organic Pollutants (POPs)
- Heavy Metals (e.g. lead, mercury, iron, etc.)
- Asbestos
- Residual Oil

## The Hong Kong Convention

- This Convention focuses on the Safe and Environmentally Sound Management of Recycling Ships which was adopted in 2009
- For the Convention to enter into force it needs at least 15 ratifying members along with a representation of a Gross Tonnage (GT) of 40%
- Currently, there are only 6 ratifying members and a GT of 21.23%; Therefore, the Convention hasn't impacted the Shipbreaking Industry

## Hong Kong Convention Signatories



© Mike Hottel/NATIONAL GEOGRAPHIC



# Catastrophic Blackout: California Ports and National Security

## Abstract

With rising threats from naturally occurring events and human caused attacks, California's ports are a critical piece of infrastructure that must be protected at all times. In order to operate these ports rely on systems and networks. Electricity is the most important critical node that drives port operations. Without electricity, California's ports will be dormant and the U.S. border would open a weakness that can be exploited by threat actors. These actors may have the intent and capability to exploit that weakness. If and when the grid does fail, the incorporation of continuity of operations for California's ports and the maritime domain will be imperative for security and economic prosperity.



## Critical Dependency

- Ports and its critical infrastructure (CI) depend on electricity
- Without electricity CI would be dormant and port operations would cease



## Impacts without Electricity

- Negative economic impacts to California, U.S. and worldwide
- Vessel movement to other ports that have full operations
  - Ports experience an overload of cargo to move
- National security concerns
  - Vulnerable boarder
  - Increase of illegal goods and drugs
  - Illegal migrants and human trafficking
  - Smuggling of WMD

## Threats to the Grid

### **Natural Disasters**

Massive earthquake  
Intense heat wave  
Solar Flare

### **Human Caused**

Physical Attack  
Electromagnetic Pulse (EMP)  
Cyber Threats: Hacking



## Continuity of Operations

Recommendations during blackout

Securing the ocean border

- USN Pacific Fleet
- USCG
- Port Security Units
- International assistance

Restoring Power

- USN fleet assets generate shore side
- Allows imports of resources, aid National Interest

# State Power-Grabs Heat up the Melting Arctic

## Polar Claims

- 1926  
Russia becomes the first government to officially claim the North Pole as part of its territory.
- 2002  
Russia submits North Pole claim, which is rejected due to a lack of evidence.
- 2014  
Denmark submits a detailed claim of the North Pole.
- 2015  
Russia re-submits claim of North Pole with scientific evidence.
- 2016  
Canada announces its intention to submit claims of the North Pole by 2018.

## Tanis Whittington – California Maritime Academy

### Abstract

The Arctic is a vast and changing region. Climate change is affecting the availability of many sectors in the Arctic and opening the door for state actors to approve the implementation of industrial resource development, as well as commercial shipping lanes. This thesis seeks to bring territorial claims from states in the Arctic into a singular compilation from the Russian perspective. Finally, this thesis recommends a proposed solution to disputed territory in the Arctic after a thorough analysis of the policies presented throughout the thesis.

The area around the North Pole remains international waters until the United Nations rules on Arctic claims.

The location of oil and natural gas reserves are shown as orange dots. Arctic fisheries are represented in dark blue.



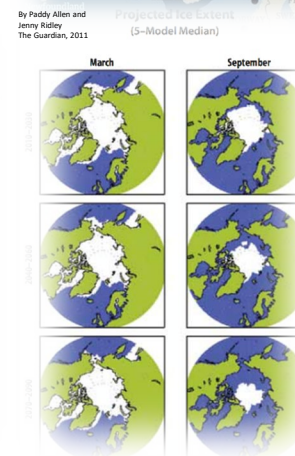
- Up to 20% of hydrocarbon resources on the earth are located in the Arctic, most near fishing grounds
- Shipping lanes in the Arctic significantly decrease shipping time from Asia to Europe and the Eastern United States
- Some routes are already being used for commercial traffic

## Russia

- Fortifying Arctic bases
- Negotiating boundary disputes
- Increasing ship tracking abilities
- Investing more in Search and Rescue
- Introduced a new class of ice breakers



The map above creates a visual of Russia's extensive Arctic presence, including oil and gas developments in the Arctic.



This chart from the Arctic Council shows projected levels of sea ice over the next 70 years.

## Climate Change

- The Arctic will be nearly ice free and navigable by an ice breaker by 2040.
- Arctic sea ice pack is currently the lowest it has ever been
- Relatively little is known about what will happen to the environment when the Arctic ice pack is gone

## Policy Recommendations

It is recommended that states with disputes meet to resolve issues within the next 7-10 years instead of waiting for a United Nations decision on boundary disputes. This will allow states to begin negotiations for regional agreements on environmental, industrial, and commercial shipping issues before the Arctic becomes widely accessible.





# IS BREXIT HARMFUL TO UK MARITIME POLICY?



## ABSTRACT

The international community was shocked by the United Kingdom's recent vote to secede from the European Union. Although the UK pondered the idea of leaving the EU for many years, the proposal became official on June 23<sup>rd</sup>, 2016. There is no doubt that the future implications of this decision remain unclear. Many British politicians warned the people of the United Kingdom of the challenges that a "yes" vote would present. To the contrary, some UK politicians promoted the high level of uncertainty regarding secession as a source of excitement and motivation. As the UK continues to negotiate with the EU, and other world partners, regarding the details of implementing the British-exit (Brexit) decision, many people question the effects that this will have on key policy areas. One key policy area is the UK's maritime sector and industry. Understanding the effects of Brexit on maritime security, trade/shipping, marine environmental policy, and marine insurance provides for greater insight regarding the extreme vulnerability of the United Kingdom's economic, national defense, and environmental interests.

## DOMINANT THEMES

- European Economic Area (EEA)
  - EEA membership guarantees access to single EU market
  - European Union could deny continued UK membership to the EEA
  - UK would be bound to many existing EU laws if it remains an EEA member
- Reduced access to single EU market
  - Access to single EU market affects all UK maritime policy areas
  - Without access to single EU market, UK would lose major advantage within the international trade community.
- Brexit decision was uninformed and premature.
- UK domestic policy completely unregulated without EU oversight.
- Parallels with current political climate in the United States.

## THE MARINE ENVIRONMENT

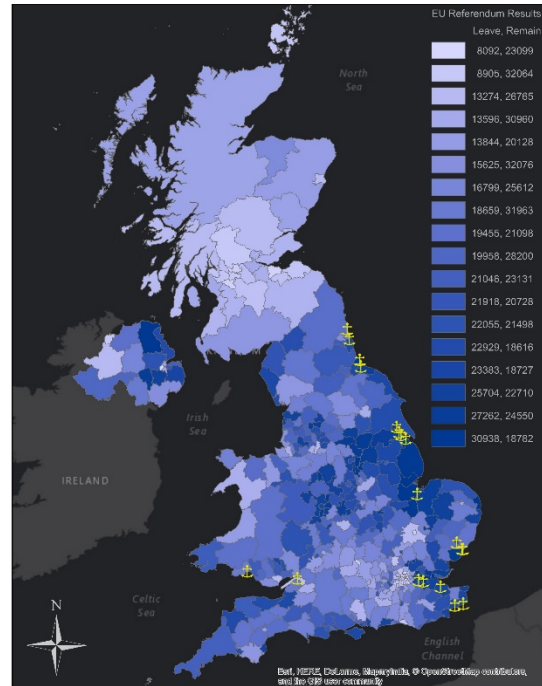
- UK benefits from vast network of over 200 EU environmental laws.
- Great potential for marine environment to be forgotten with rise in nationalist movement in the UK.
- UK may be bound to EU environmental law as prerequisite to EEA membership.



Only 29% of existing Marine Environmental Regulations will remain in effect for the UK post-Brexit.

## MAJOR PORTS VOTE TO LEAVE EU

### EU Referendum Results & Major UK Ports



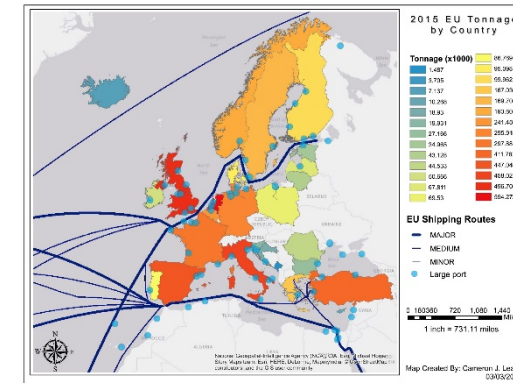
Map Created By: Cameron J. Leahy  
03/03/2017

0 40 80 160 240 320 Miles

## MARINE INSURANCE

- Major marine insurance corporations forming subsidiaries within remaining EU nations.
  - i.e. Lloyd's of London exploring Dublin and Brussels as new hubs.
- Ability for marine insurers to provide "passporting" services to clients will be eliminated if EEA membership is denied.
  - "Passporting" is the ability to do business with any EU nation without needing special permits or authorization.
- Marine insurance-associated business will likely leave UK if major marine insurers create subsidiaries.

## UK VITAL TO EU TRADE



This map demonstrates that the UK ranks #2 in total EU tonnage, second only to the Netherlands.

## TRADE & SHIPPING SECTOR

- Trade tariffs and other taxes will climb post-Brexit for shipping companies wishing to do business in UK ports.
- Trade agreements
  - UK no longer member of EU trade agreements.
  - Entirely new trade deals must be negotiated with EU and non-EU nations. Very time consuming and difficult.
  - UK may be faced with penalties for seceding from EU trade agreements.
- UK flag of convenience not so convenient post-Brexit
  - If access to single EU market is eliminated, foreign shippers will look elsewhere for flagging.
  - Revenue resulting from UK flagging will decline and likely stress UK port funding.

## MARSEC & IMMIGRATION

- Defense spending will likely drop as a result of Brexit, including Maritime Security efforts.
- Illegal maritime migration increasing daily.
- 3 Security Cutters for 7,700 miles of coastline. Not enough!
- Possibility of Scottish secession from the UK
  - Scotland values participation within the EU.
  - Key strategic naval assets located in Scotland that would have to be relocated.

# LOST IN TRANSLATION

## IMPACT OF MULTICULTURAL CREWS ON SAFETY IN THE SHIPPING INDUSTRY

DAIJA DANIELS

### Problem: Cultural Practices

- Seafarers' training depends on the country that they came from
- Different nationalities have different perception. Including time and punctuality
- They Interpret hierarchy differently
- Interpretation of verbal commands and their responses are often very different

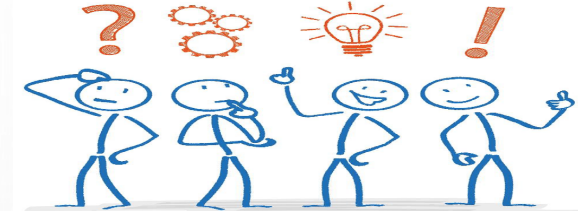


Costa Concordia:

This image shows an accident that happened due to safety and communication.

### Abstract

Today's shipping industry is operated by multicultural and multilingual crews. As a result there are miscommunication, communication constraints, alienation and discrimination due to race, culture and religion differences, that cannot be avoided. These challenges lead to consequences leading to serious safety risks. Both Maritime academies and the shipping world should implement culture classes.



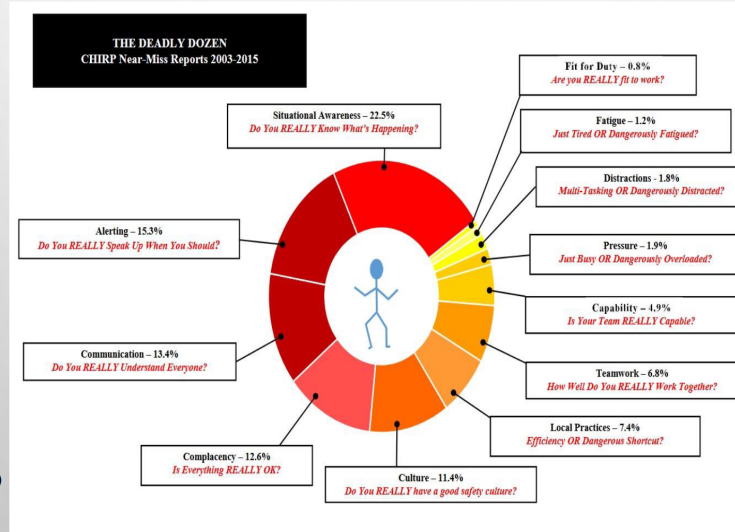
### Problem: Social Context of Language

Recent emphasis in mariner education focuses only on vocabulary and grammar. This omits other important aspects of communication:

- Speech rhythm
- Speed of delivery
- Nuances of body language
- Common rules of physical proximity

### Recommendations:

- Maritime Academies should be pro-active and teach socio-cultural topics
- Shipping companies should provide short courses/training related to culture.
- Maritime instructors should develop their own cultural competencies related to the countries where maritime laborers originate.



The deadly dozen– a diagram showing analysis of the breakdown of the twelve factors by near miss reports submitted to CHIRP Maritime.

# Unique Global Opportunities

## International Experience

3 week summer program

Various locations:

- South Africa
- Morocco
- Brazil
- Vietnam
- Japan
- China
- Greece
- Spain
- Europe
- New Zealand

## Study Abroad

California State University  
International Programs

- United Kingdom
- Spain
- Germany
- South Africa
- Sweden





International Experience, Vietnam





International Experience, Vietnam



China





# Japan













# Learning Cross-Cultural Competence





We also provide *real* internships





## **Past Internships have included:**

- Panetta Institute, Washington D.C.
- Mystic Seaport
- NOAA
- FBI and Secret Service
- US Ports
- US Coast Guard
- Shipping Companies
- Pacific Maritime Association
- State & Local Government

## Where do our students go after graduation?

- Military Sealift Command
- Environmental Technician
- Ship Agents
- Maritime Security Officer
- Management Development
- Human Resources-Ports
- Maritime Professionals in varied companies
- Port Management
- Cruise Purchasing Agent
- Marine Field Rep
- Projects Coordinator
- Wildlife Technician
- Graduate School
- Officer Training-Military
- Law School



Questions?