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### 1AC — Advantage

#### The Advantage is Megaships —

#### The United States is expanding antitrust enforcement of international shipping

Seward & Kissell 3/2/22, Law firm specializing in antitrust. (Federal Maritime Commission and Department of Justice Announce New Steps to Strengthen Antitrust Enforcement Efforts in the Shipping Industry, <https://www.sewkis.com/publications/federal-maritime-commission-and-department-of-justice-announce-new-steps-to-strengthen-antitrust-enforcement-efforts-in-the-shipping-industry/>)

Building on our July 2021 alert regarding the signing of the first interagency Memorandum of Understanding (“MOU”) entered into by and between the Federal Maritime Commission (“FMC”) and the Department of Justice (“DOJ”), the DOJ and FMC on February 28 issued a joint release announcing additional steps that each agency would take to strengthen their partnership and support efforts to enforce the antitrust laws of the United States, reflecting their ongoing focus on promoting competition in the shipping industry. In press releases posted to each agency’s website, the Antitrust Division of DOJ and the FMC disclosed that “the Justice Department will provide the FMC with the support of attorneys and economists from the Antitrust Division for enforcement of violations of the Shipping Act and related laws” and that “the FMC will provide the Antitrust Division with support and maritime industry expertise for Sherman Act and Clayton Act enforcement actions.” This interagency initiative highlights an increasing level of sophistication and an ongoing focus by both DOJ and FMC to investigate and enforce violations of the Shipping Act and the antitrust laws of the United States. Simultaneously, the White House also on February 28 released a companion fact sheet that highlights ongoing enforcement efforts by the Executive Branch, with a particular focus on ocean carrier companies and alliances that operate in the container shipping industry. The fact sheet includes criticism of ocean carrier detention and demurrage fees and price increases, and contends that certain ocean carrier business practices have contributed to supply chain disruptions and port congestion. The fact sheet also notably states that the FMC will continue ramping up oversight of the global ocean shipping industry, and seeks additional reforms that “address the current antitrust immunity for ocean shipping alliances.” As shipping industry participants have speculated that supply chain pressures may last well into 2022, we expect that the government’s focus on fair competition in the shipping industry will continue.

#### They’re targeting all major shipping alliances

Consadine 21, Attorney with Seward & Kissell LLP. (Michael, Shipping Companies Beware: Antitrust Challenges Ahead as DOJ Focuses On Industry, <https://www.sewkis.com/publications/shipping-companies-beware-antitrust-challenges-ahead-as-doj-focuses-on-industry/>)

On July 12, 2021, the FMC and DOJ signed its first interagency MOU to foster cooperation in the enforcement of antitrust and other laws related to the maritime industry. Key provisions of the MOU provide that the agencies will: i) share information and materials relevant to the competitive conditions in the U.S.-international ocean liner shipping industry, including terminal services provided to ocean liners, and ii) confer, at least annually, to discuss and review enforcement and regulatory matters. Unlike the FMC, DOJ has the authority to bring criminal charges against alleged offenders of antitrust laws. In the past, DOJ has made its presence known by issuing statements regarding certain alliance agreements (vessel-sharing agreements); this MOU raises the stakes as it suggests more intense scrutiny by DOJ. FMC Activity, Audit Program and Recent Litigation On July 19, 2021, within days of the Executive Order and the signing of the MOU, the FMC also disclosed the Vessel-Operating Common Carrier Audit Program to review carrier compliance with FMC’s detention and demurrage rule. As part of this new audit program, the FMC will audit the top nine carriers by market share ― i.e., Maersk, MSC, CMA CGM, COSCO Group, Hapag-Lloyd, ONE, Evergreen, HMM and Yang Ming. Initially, the FMC will request information from the carriers to create a database of quarterly reports on detention and demurrage practices, and will follow with individual carrier interviews. The audit may also focus on other aspects of these companies’ practices and operations, such as billing, appeals procedures, penalties assessed by the lines, and any other restrictive practices. Significantly, the FMC has already been auditing carriers to address issues concerning intermodal congestion related to COVID-19 and to identify operational solutions to cargo delivery system challenges. The FMC is apparently poised to investigate eight carriers ― CMA CGM, Hapag-Lloyd, HMM, Matson, MSC, OOCL, SM Line and Zim ― that were identified as having implemented congestion-related surcharges. In August, the FMC requested information about these surcharges from these carriers. The FMC’s inquiry may focus on whether surcharges were implemented following proper notice, if their purpose was clearly defined, and whether there were clear events or conditions that triggered or terminated the surcharges. The FMC suggested enforcement action may occur if tariffs are improperly established. Shipping customers are also imploring the FMC to investigate shipping practices. On July 28, 2021, MCS Industries, a Pennsylvania-based home furnishings manufacturer, filed an administrative proceeding against COSCO and MSC, alleging that the carriers had violated provisions of the Shipping Act and refused to honor their service contracts, calling for the FMC to conduct an investigation of these companies’ shipping practices. COSCO and MSC have denied the allegations and noted, among other things, that MCS’s complaint should be heard in the fora specified in its respective service contracts with the carriers. An administrative law judge was appointed to hear the matter, the outcome of which should be closely watched by industry participants. DOJ Antitrust Landscape DOJ’s coordinated efforts with the FMC have implications for the shipping industry as DOJ antitrust prosecutions have been both expansive and punitive. DOJ’s jurisdiction includes foreign business activities that have a “substantial and intended effect in the U.S.” That broad reach has impacted numerous companies throughout the world in various industries ranging from auto parts to air cargo. Companies in such industries have paid millions of dollars in penalties and many of their employees have been imprisoned. The shipping industry has not been spared. In a long-running investigation, a Norwegian shipping company and its executives were indicted for their participation in an antitrust conspiracy focused on the allocation of customers and routes, rigging bids, and fixing prices for the sale of international ocean shipments of roll-on, roll-off cargo to and from the United States. The company pled guilty and was sentenced to pay a $21 million fine; four individuals have already been sentenced to serve prison terms. Four other companies also pled guilty for their roles in the conspiracy, leading to the assessment of more than $255 million in criminal fines.

#### BUT the Shipping Act creates immunity for vessel-sharing agreements

UNCTAD 18, UN Conference on Trade and Development – Report of Intergovernmental Group of Experts on Competition Law and Policy, (Challenges faced by developing countries in competition and regulation in the maritime transport sector, https://unctad.org/system/files/official-document/ciclpd49\_en.pdf

The Federal Maritime Commission [FMC] is the independent regulatory agency responsible for the regulation of seaborne transportation in the foreign commerce of the United States for the benefit of United States exporters, importers and the United States consumer. 25 Its mission is to ensure competitive and efficient maritime transportation services for shippers, by monitoring agreements among carriers and service contracts with regard to their effects on prices and services. The amendment of the Shipping Act (1916) in 1961 established the Commission and gave it the power to disapprove agreements between liner shipping carriers that were not in the public interest. In this regard, a violation of antitrust laws would be considered against the public interest. The Shipping Act (1984) removed both the public interest clause and the requirement for approval by the Commission for agreements between liner shipping carriers. Vessel-sharing agreements and other cooperative agreements are also permitted under the Act. 23. The United States has a statutory antitrust exemption for liner conferences. The Shipping Act, as amended by the Ocean Shipping Reform Act (1998), provides an alternative competition enforcement regime and includes limited antitrust immunity for agreements between liner shipping carriers from competition law. The Act introduced reforms that ended the authority of liner conferences to regulate the service contracts of members. In addition, the Act allows conference members to negotiate independent confidential service contracts with shippers and prohibits other members from retaliating against shippers or carriers that do so. Prior to the Act, such contracts had to be made public, potentially reducing the incentive for participants to enter into them. The annual report of the Commission in 2014 stated as follows: “Conference or price-fixing agreements have become largely irrelevant to United States liner shipping. No new carrier conference agreements have been filed with [the Commission] since fiscal year 2000. The remaining three conferences cover only government cargoes.” 26 All conduct that does not fulfil antitrust exemption requirements is subject to competition law and investigated by the Department of Justice if it involves cartel-like practices, including price fixing, bid rigging and market allocation.

#### That allows for the continuous acquisition of larger and larger megaships

O’Connor 14, Cozen O'Connor Law Firm, (A New Era For Vessel Sharing Agreements – FMC Allows P3 and G6 Alliances To Go into Effect https://www.jdsupra.com/legalnews/a-new-era-for-vessel-sharing-agreements-23682/)

Perhaps the first true vessel sharing agreement was called, appropriately enough, The Vessel Sharing Agreement (which led to use of the term “VSA” to describe such arrangements) among Sea-Land Service, Inc., Nedlloyd Lijnen, B.V., and P&O Containers, Ltd. This agreement was intended to maximize the utilization of the then very large and fuel efficient containerships (the so-called Econships) that Sea-Land had acquired from the estate of the bankrupt U.S. Lines. The P3 and G6 agreements have a similar purpose — maximizing utilization of large, efficient vessels as a means to reduce carrier costs. In other words, some of the basic reasons lines enter into VSAs have remained unchanged over the years. The use of space charter and vessel sharing agreements increased through the late 1980s and early 1990s, although the vast majority of these agreements were (like the original VSA) often focused on a single trade lane. During this period, relatively few lines were considered “global” carriers and those that were often offered service through a combination of stand-alone strings that did not involve partners, trade-specific vessel sharing agreements, and space charter arrangements. As world trade increased and the phenomenon of globalization emerged, carriers sought to meet the transportation needs of their increasingly global customer base. Hence, carriers moved to geographically broader cooperations that the FMC labeled “global alliances,” most notably The Grand Alliance, The New World Alliance, and the CKYH alliance. These agreements, although not truly global, were often broader in geographic scope and involved a more integrated, long-term cooperation than many of their predecessors. However, the objective was still the same: to provide a service superior to that which could be offered alone while reducing operational costs and capital risks. In many respects, the P3 and G6 agreements represent the next logical step in the evolution of carrier agreements: geographically broader, more operationally integrated, long-term vessel sharing arrangements that come closer to being truly global. As in the past, these arrangements help carriers hedge against the risk of the investment required to build the large, fuel-efficient ships necessary to provide service at a competitive cost. They also allow improved utilization, a key to achieving cost savings. The difference between these agreements and past VSAs is primarily one of degree rather than kind — the cost advantage offered by new tonnage is necessary to remain competitive, but the size and cost of new ships has reached the point where it may no longer be feasible for carriers to operate outside an alliance that helps reduce the risk of such an investment to the point that it is acceptable. Indeed, some are questioning whether it is possible for a line to remain competitive on a global scale following a 1990s model of offering a patchwork of stand-alone and cooperative services rather than being a member of a global alliance.

#### The size of those megaships are about to explode, drastically shaking up the entire industry

Fickling 21, Reporter for The Print. (David, March 30, 2021, Get ready for future, giant next-gen cargo vessels will make ‘Ever Given’ look like bath toy, <https://theprint.in/opinion/get-ready-for-future-giant-next-gen-cargo-vessels-will-make-ever-given-look-like-bath-toy/630839/>)

If you think the ultimate reason the Suez Canal got blocked last week is because container ships are getting too big, get ready for the future. The next few generations of cargo vessels are going to make the Ever Given look like a bath toy. Big enough to carry 20,124 twenty-foot equivalent units, or TEUs — the standard measure for cargo, representing a single shipping container — the Ever Given was one of the world’s largest such vessels when it was launched in 2018. The first container ship to break the 20,000 TEU mark had been at sea for less than a year. One famed 1999 study, written at a time when the largest boats carried less than 8,000 TEUs, argued it would prove impossible to build craft bigger than 18,000 TEUs. The Ever Given, finally floating on its way again, is now distinctly in the second class of mega freighters. There are nearly 100 ships carrying more than 20,000 TEUs on the seas or under construction, and the bigger vessels being assembled in Chinese and South Korean shipyards are mostly around the 24,000 TEU mark. A quarter of the capacity moved by the world’s largest container line, AP Moller-Maersk A/S, is on boats above the 17,500 TEU mark. That’s unlikely to be the end of it. Chinese shipyard Hudong-Zhonghua Shipbuilding Group Co. has already registered designs for a 25,000 TEU vessel, and it has become relatively commonplace to predict that 30,000 TEU monsters will be plowing the oceans before the decade is out. Such enormous hulls may cause problems that will put the Ever Given’s mishap into the shade. At Rotterdam, the largest ships already have to arrive at high tide to ensure there’s enough clearance for them to get through the channel, according to a 2019 study by Nam Kyu Park of South Korea’s Tongmyong University. Larger vessels will soon be unable to berth at Shanghai, Busan and Hong Kong even at high tide, unless channels are dredged out further, Park wrote. There are similar problems with infrastructure on dry land. Modern ports are astonishingly efficient at unloading, and can turn around a fully laden 20,000 TEU vessel in a couple of days. But the time spent waiting for a berth can cut deep into the wafer-thin economics of a container line. Longer quays may have to be built to accommodate the larger ships, as well as cranes that can reach across wider decks, larger loading yards for tens of thousands of containers, and faster rail and road terminals to take cargo to its next destination. Current vessels are already at the limits of what can fit along major shipping lanes. The Ever Given is too bulky to squeeze through the Panama Canal, where boats must be lifted over its mountainous spine with massive lock gates. At 24 meters (79 feet) deep, the Suez Canal has more capacity — but it’s roughly as deep as the Straits of Malacca and Singapore, so dredging it further to accommodate bigger ships won’t help much. The binding constraint on East-West trade at this point isn’t engineering, but geology. Extending 15.7 meters below the water line, the Ever Given shouldn’t, on paper, have trouble making it through any of those channels, which typically require 3.5 meters of clearance from the bottom. Next-generation ships with a 20-meter draught, on the other hand, would be at constant risk of grounding. How have container ships managed to defy expectations that their size would hit fundamental limits? A large part of it is because the economies of scale are so compelling. Bigger vessels use more fuel, but relative to the number of boxes stacked on their decks they’re far more efficient. They can also turn around a larger number of containers at a time and serve a wider array of feeder ports, ensuring they can defray their massive capital costs quicker. There’s little sign that this is about to change. New International Maritime Organization regulations against the burning of sulfur-intensive fuel oil introduced last year mean current ships are using costlier diesel, putting more pressure on naval architects to come up with yet more efficient designs. Beyond that, the IMO now has plans to reduce carbon dioxide emissions by 40% in 2030 compared with 2008, and by 70% by 2050. Even with a switch to cheaper, less polluting liquefied natural gas as the main fuel, that’s going to mean further drastic improvements in efficiency, not to mention propulsion technologies that don’t exist yet. To date, the best way to chip away at fuel consumption and emissions is by increasing size. It’s hard to know how the industry is going to cope with this. Perhaps Suez, Malacca and Singapore can be dredged to accommodate even bigger vessels. Perhaps shipyards will find ways to squeeze a few more inches out of existing channels. If not, alternative routes around the Cape of Good Hope and through the deeper Straits of Sunda and Lombok between Indonesia’s islands may prove the only viable way to accommodate such massive boats. Should that happen, those economies of scale will have to be drastically larger to make up for the longer sailing time. We’ve seen container ships leap from 10,000 TEUs to 24,000 TEUs. Don’t be shocked to see 50,000 TEU vessels plying the sea in your lifetime.

#### Those ships are inherently anticompetitive

Veitch 16, Head of Policy for the Global Shipping Foundation, (Alex, Nov 2016, Report by Global Shipping Foundation, “The Implications of Mega-Ships and Alliances for Competition and Total Supply Chain Efficiency: An Economic Perspective”, <https://paperzz.com/doc/9427398/the-implications-of-mega-ships-and-alliances-for-competit>...)

The container shipping Market is undergoing considerable change. The development of the mega ship has had a profound impact. They have led to the creation of new strategic Global alliances and quickened the pace of consolidation in the industry. This paper analyzes the impacts for shippers, the customers of container ship operators, and in particular the Wider supply chain implications of Mega ships and the potential impact on competition between competitors and their shipper customers. This paper comes in two parts: the first provides an economic assessment of megaships, alliances and consolidation of the container ship industry; the second part, in the form of an Annex (Annex 1) takes a competition policy analysis of megaships, strategic alliances in the impacts of consolidation in the industry. the paper draws on various detailed studies and sources, including the recent Organization for Economic Cooperation and Development (OECD) International Transport Forum report on Mega ships and the oecd competition committee report on competition issues in liner shipping , but it also provides its own independent economic and competition assessments. The following key findings, conclusions, and recommendations for carriers, regulators and competition authorities, and shippers are summarized below. Economic Issues: Mega ships and the associated commercial practices of strategic alliances and mergers are driving consolidation in the container shipping sector. This is harmful to shippers because megaships and strategic alliances reduce supply chain efficiency and rivalry unimportant parameters of competition, including capacity, sailing frequency, de transit times, ports of call and Associated service quality. The higher economies of scale associated with megaships mean that fewer ships can operate in a market of a given size. Higher barriers-to-entry are likely to reinforce the trend towards fewer independent operators, with smaller operators being driven out of the major trades into niche markets faced with a trend towards consolidation and cooperation due to Mega vessels. It is unlikely competition problems associated with consolidation and megaships will be solved by new entrance into liner shipping. The report asks whether the time is right to question the received wisdom that shipping alliances and Consortium are preferable to consolidation between carriers because Shipping Lines operating common capacity cannot compete amongst themselves with regards to the Consortium has agreed capacity, sailing frequency, transit times, ports of call and Associated service quality.

#### There are three scenarios —

#### The first scenario is Accidents —

#### Megaships drastically increase harms to the Arctic

Baker & Harris 16, Chairman of Marsh Marine Practice, and, Senior Vice. (Marcus & Stephen, Marsh Report: "PLUMBING THE DEPTHS" OF MEGASHIP SUPER-SIZED RISK, In Navigating a Shifting Risk Landscape Expert Perspectives on the Marine Industry, file:///C:/Users/sharris/Downloads/Navigating%20a%20Shifting%20Risk%20Landscape%20Expert%20Perspectives%20on%20the%20Marine%20Industry.pdf)

Navigation routes, such as those leading to or from the Panama Canal, have been the same for many years, with commercial cargo vessels following tried-and-tested pathways through the sea; however, the known safe depth for the navigation of many is only as much as the draught of the largest, deepest vessel ever to have used it. An extra four meters of depth that the newest megaships can draw could be the vital difference between uneventful navigation and a serious grounding or stranding, with all the perils of ship damage, crew endangerment, cargo loss and marine pollution that could result. As container ships are the largest users of both the Suez and Panama Canal systems, these are the vessels that, having the ability and commercial reasons to navigate new parts of the world’s oceans, are of most concern. Governments seeking to have large vessels use their ports and terminals will often be the first to blame the shipping industry when a serious grounding or stranding accident occurs in their waters. But how much of that blame should actually lay at a government’s own doorstep, when it comes to ensuring hydrographic surveys meet modern standards (and, where necessary, the funding to do so), especially when it is known that increasingly larger vessels will be using their waters? Let us not forget that the attempted—and ultimately unsuccessful—salvage of the MV Rena after it grounded on Astrolabe Reef in New Zealand in October 2011 resulted in one of the largest-ever protection and indemnity losses to the market. And the MV Rena was a very small container ship in comparison to the modern generation. Many vessel operators have been viewing, with great interest, the increasingly viable Arctic routes between Asia and Europe as an alternative to the much longer (both in time and distance) routes via Singapore and the Suez Canal; however, the vessels that have, to date, successfully transited the Northern Sea Route (NSR) around northern Russia have been relatively small in size. Marsh has already voiced concerns about the potential risks of larger vessels using this route with greater frequency, but the knowledge that so few of the waters have been adequately surveyed for depth to modern standards adds to those concerns. In addition, there is increasing talk of commercial use of the Northwest Passage (NWP) around northern Alaska and through the many islands of northern Canada, which still poses considerable risk, as some of the waters are even less bathymetrically assured than parts of the NSR. Only a handful of commercial vessels have ever successfully transited the NWP, yet some operators are already heralding those few successes to prove the NWP to be a major route for the future. The lack of hydrographic data for that whole region should remain a major concern for any sensible operator, echoed by similar warnings in the new Polar Code.

#### They make accidents inevitable

Waterson 19, Senior Vice President - Marine Hull and Liability for Lockton Companies LLP World’s Largest Insurance Broker. (Robert, Re-evaluating the risk of mega ships, https://www.locktoninternational.com/gb/articles/re-evaluating-risk-mega-ships)

“A consolidation process in the shipping transport market has contributed to a trend towards fewer but bigger ships,” says Robert Waterson, Senior Vice President - Marine Hull and Liability at Lockton. “Fleet operators have ordered larger ships and because they are newer this tends to have a positive effect on all costs including insurance premium levels. However, this does not necessarily mean claims volumes will be lower,” Waterson notes. With larger and more sophisticated vessels entering the sector – and more hazardous areas such as polar waters being explored – this is aggravating the risk of ever larger single losses, insurer AGCS warned in its “Marine claims trends 2018” report. “A major incident involving a fully loaded ultra-large container ship will easily result in a $1bn to $2bn insurance claim including damage to cargo, hull, salvage and wreck removal costs,” the report added. A number of container ship casualties recently fuelled a discussion about the growing risks associated with fires on mega-containerships. Ship fires are one of the major loss drivers in the shipping industry: In March 2018 a fatal fire on the new 15,252 TEU Maersk Honam. The incident is believed to have been triggered by mis-declared chemical cargoes causing a blast and fire which resulted in 130 people being taken to hospital. “The cargo description is often not clear and containers may contain chemicals and hazardous goods that were not supposed to be there or that were incorrectly described and thus loaded in the wrong part of the vessel,” says Waterson. Insurers’ apprehension focuses not only on large container ships but also on large passenger vessels, especially after Costa Concordia off the Tuscan holiday island of Giglio in Italy set off a chaotic evacuation of 4,229 passengers and crew, and 32 people died, according to the May 7, 2019 presentation “Megaship Challenges: The P&I Perspective” by Joe Hughes from the The American Club. Large vessels are more difficult to navigate, and grounding and/or collisions are harder to deal with as there is more cargo and fuel to salvage. Where salvage/wreck removal is required, the costs are vastly influenced by the type of cargo that has to be removed and how hazardous this cargo is. Very often this has to be accomplished in remote and difficult environmental conditions, and always within the requirements of both the local and international law. As environmental regulations tighten globally, these costs will only rise further and more cover will be required. A discussion in the insurance industry about whether large container ships might require a specific insurance rating, previously under consideration but not implemented, may now re-open as more data is available. As some underwriters withdraw from underwriting large container fleets this may affect renewals pricing and available capacity in the short term. “In hull and cargo, the specific risks attached to large ships are not being addressed. Ratings do not take this into account,” Waterson says. “Mega-ships carry higher risks and are not necessarily safer. While the claims frequency may fall, the size of a loss is likely to be much higher,” he notes.

#### They independently increase drastic amounts of pollution in the Arctic AND risk massive oil spills

Shavley 21, Reporter for Business Insider. (Kevin, May 1, 2021, The Ever Given crisis put mega ships under the spotlight. As vessels get bigger and more automated, a long-serving captain and other experts are weighing up the risks., <https://www.businessinsider.com/ever-given-suez-canal-blockage-mega-ships-sea-captain-2021-4>)

Shipping vessels have grown larger by multiples in just a few years, adding to worries among some industry insiders that a single mistake made by a massive ship could cause a global supply chain disruption, as the world saw with the Ever Given. That ship, which was stuck in the Suez Canal for about a week in March, slowed or stalled shipping traffic around the world. It was estimated to cost the global economy about $400 million per hour, and its effects have still been rippling through the economy in recent weeks. As ships like the Ever Given have grown over the last few decades, their crews have been shrinking because they're using more automated processes, said Captain Rahul Khanna, global head of marine risk consulting at Allianz Global Corporate & Specialty, whose team publishes an annual safety review. "Decades ago, the ships with 3,000 TEU — that's the number of twenty-foot containers that can fit onboard — were considered the big ones," said Khanna. Now, ships like the Ever Given carry maximum loads of more than 20,000 containers. Boat-building technology could in the years and decades ahead produce ever-larger ships, perhaps growing to 50,000 containers or more. If there's demand for such ships, modern technology could allow for such builds, Khanna said. Between 2006 and 2020, the largest shipping vessels in the world grew by 155%, according to a January report from the United Nations Conference on Trade and Development. The biggest ships are loading or unloading 125% more at each port they visit. With bigger boats, there could be more impactful accidents. "While seemingly efficient, they are too large to fit in some ports, increase dangers in storms, and highly piled containers are falling, causing product and the corresponding financial losses," said Cheryl Druehl, associate professor of operations management at George Mason University. Even the Ever Given debacle, which grabbed hold of the worldwide news cycle, could have been worse. If that ship's hull had broken, say, it would have taken even longer to fix the issue, Khanna said. It's likely that a crane would have had to have been constructed nearby to remove some or all of its load. Refloating it would have been a more complex task, likely stretching into months. As the shipping industry gets back to its normal routine, Khanna and other shipping industry insiders walked Insider through their concerns about the next big disaster. The most obvious answer was that another ship could get stuck in the Suez or Panama canals. The risk of a situation similar to the Ever Given's crash in one of those waterways was "unlikely but high impact," said Ambrose Conroy, founder and CEO of Seraph, a consulting and turnaround firm. The risk was lower at other heavily travelled shipping lanes, including the Singapore Strait, and the Strait of Hormuz, although it has geopolitical risks of its own, said Khanna. Ports in the future may also have trouble handling larger ships, but that's an issue that can be fixed with proper planning, Conroy said. Instead, it's the "black swan events" like the Ever Given that the industry needs to look out for. One concern is a shipping route that's becoming more popular. In decades past, a lane through the Arctic would open in summer months, giving ships a more direct path between Europe and Russia. As the climate crisis has reduced the amount of ice in those northern regions, that passageway is now increasingly being used in the winter. It's become so popular that the International Maritime Organization issued a revised Polar Code. As the Ever Given stalled global shipping in March, Moscow officials pointed to the Northern Sea Route through the Arctic as an alternative. But Arctic travel comes with its own risks. While it's unlikely that modern ships, with all their technology, would hit an iceberg, smaller ice floats can still damage hulls, Khanna said. An oil spill in the Arctic would also be devastating to marine life. And rescue crews might have difficulty reaching a stranded ship in such inhospitable waters.

#### That risks global species and ecosystem destruction

Tewari 17, IIASA Science Communication Fellow. (Parul Aug 16, 2017, What would an oil spill mean for the Arctic?, https://blog.iiasa.ac.at/2017/08/16/what-would-an-oil-spill-mean-for-the-arctic/)

While it can never be good news, an oil spill in the Arctic could be particularly dangerous because of its sensitive ecosystem and harsh climatic conditions, which make a cleanup next to impossible. With an increase in maritime traffic and an interest in the untapped petroleum reserves of the Arctic, the likelihood of an oil spill increases significantly. Maisa Nevalainen, as part of the 2017 Young Scientists Summer Program (YSSP), is working to assess the extent of the risk posed by oil spills in the Arctic marine areas. “That the Arctic is perhaps the last place on the planet which hasn’t yet been destroyed or changed drastically due to human activity, should be reason enough to tread with utmost caution,” says Nevalainen Although the controversial 1989 Exxon Valdez spill in Prince William Sound was quite close to the Arctic Circle, so far no major spills have occurred in the region. However, that also means that there is no data and little to no understanding of the uncertainties related to such accidents in the region. For instance, one of the significant impacts of an oil spill would be on the varied marine species living in the region, likely with consequences carrying far in to the future. Because of the cold and ice, oil decomposes very slowly in the region, so an accident involving oil spill would mean that the oil could remain in the ice for decades to come. Yet, researchers don’t know how vulnerable Arctic species would be to a spill, and which species would be affected more than others. Nevalainen, as part of her study at IIASA will come up with an index-based approach for estimating the vulnerability (an animal’s probability of coming into contact with oil) and sensitivity (probability of dying because of oiling) of key Arctic functional groups of similar species in the face of an oil spill. “The way a species uses ice will affect what will happen to them if an oil spill were to happen,” says Nevalainen. Moreover, oil tends to concentrate in the openings in ice and this is where many species like to live, she adds. During the summer season, some islands in the region become breeding grounds for birds and other marine species both from within the Arctic and those that travel thousands of miles from other parts of the world. If these species or their young are exposed to an oil spill, then it could not only result in large-scale deaths but also affect the reproductive capabilities of those that survive. This could translate in to a sizeable impact on the world population of the affected species. Polar bears, for example, have, on an average two cubs every three years. This is a very low fertility rate – so, even if one polar bear is killed, the loss can be significant for the total population. Fish on the other hand are very efficient and lay eggs year round. Even if all their eggs at a particular time were destroyed, it would most likely not affect their overall population. However, if their breeding ground is destroyed then it can have a major impact on the total population depending on their ability and willingness to relocate to a new area to lay eggs, explains Nevalainen. Due to lack of sufficient data on the number of species in the region as well as that on migratory population, it is difficult to predict future scenarios in case of an accident, she adds. “Depending on the extent of the spill and the ecosystem in the nearing areas, a spill can lead to anything from an unfortunate incident to a terrible disaster,” says Nevalainen. It might even affect the food chain, at a local or global level. “If oil sinks to the seafloor, some species run the risk of dying or migrating due to destroyed habitat – an example being walruses as they merely dive to get food from the sea floor,” adds Nevalainen. As the walrus is a key species in the food web, this has a high probability of upsetting the food chain. When the final results of her study come through, Nevalainen aims to compare different regions of the Arctic and the probability of damage in these areas, as well as potential solutions to protect the ecosystem. This would include several factors. One of them could be breeding patterns – spring, for instance, is when certain areas need to be cordoned off for shipping activities, as most animals breed during this time. “At the moment there are no mechanisms to deal with an oil spill in the Arctics. I hope that it never happens. The Arctic ecosystem is very delicate and it won’t take too much to disturb it, and the consequences can be huge, globally,” warns Nevalainen.

#### Extinction

Petersen et al 4, Director @ Icelandic Institute of Natural History (Aevar, “Circumpolar Biodiversity Monitoring Program,” CAFF, http://library.arcticportal.org/309/1/CircumpolarBiodiversityFramework.pdf )

The circumpolar Arctic region, as defined for the purpose of CAFF at its inaugural meeting (see Figure 1 - CAFF map of the Arctic), covers some 14.8 million km of land and 13 million km of ocean. It plays a key role in the physical, chemical and biological balance of the globe. The Arctic region encompasses relatively pristine environments, compared to the rest of the globe. Vast wilderness areas are crucial for the preservation of the Arctic’s unique biological diversity, and the Arctic is additionally of much cultural, economic, and recreational value. The CAFF overview report (2001) highlighted such diverse actual and potential importance of Arctic biodiversity as for fuel, food (e.g. fisheries), fodder, nature tourism, ecosystem functioning, feedbacks f rom ecos y s tems to the global atmosphere, future genetic recombinations and adaptations, fiber pharmaceuticals, anti-microbial drugs and industrial enzymes (from extremophiles). The Arctic is unique in biological, physical, and chemical properties. Life in the Arctic has adapted to extreme conditions of darkness, cold and a brief summer season where food becomes plentiful. Arctic ecology is shaped by the severity of the climate and its variability in space and time. Arctic species must survive long periods when food is limited or unavailable, or otherwise migrate to more southerly latitudes, as many do to all corners of the globe. Arctic species must be adapted to respond quickly when conditions improve. The growing season is brief and intense. When sunlight reaches the oceans in the spring, plankton bloom. On land, the growth of plants begins the summer feast for the terrestrial species, allowing the breeding, raising of young, and storage for the upcoming winter. At the foundation of the intricate marine food webs are highly specialized species of phytoplankton and sea ice algae, especially adapted to the extreme conditions of darkness and cold, and the freshwater-brine conditions of the sea iceocean interface. Terrestrial and freshwater food webs are usually simpler than those in the marine environment, but are closely linked to the marine ecosystem, e.g. through run-off and many creatures which move between the different ecosystems. The complexity of Arctic biodiversity stems in part from the interplay between the terrestrial species, habitats and ecosystems, with those in the marine environment. In the overlapping structure of ecosystems, all species in a system depend to some degree on the ecological functions of other species such as good production, competition, and predation; and species behavior such as reproduction and migration are closely linked with these functions. With an integrated, ecosystem-based approach to monitoring, the impacts of stressors to these ecological functions are better identified and understood, as this type of monitoring bridges ecosystems, habitats and species. For example: seabirds nest on land but may feed in the ocean or in lakes and rivers on fish and invertebrates. Salmon, Arctic Char and certain other fish species are anadromous – crossing from the marine ecosystem to the freshwater ecosystem to breed. Polar bears den on land in snow banks, but hunt almost exclusively out on the edge of the sea ice. Seals make their homes in and on the sea ice and hunt in the ocean. Indigenous Peoples hunt across all ecosystems and habitats in the Arctic, marine, terrestrial and freshwater. Monitoring of the natural and anthropogenic impacts to the food webs and the ecological func t ions of the Arc t i c env i ronment and ecosystems provides critical information about the status and trends of Arctic species and the integrity of the food webs on which they depend for their survival. For humans, this directly relates to the socio-economic stability of their societies. The Arctic has high genetic diversity among its species. Many migratory species breed in the Arctic but spend the non-breeding season at more southerly latitudes. As a polar region, greater and faster impacts are being seen in the Arctic from climate change. Consequently Arctic biodiversity is experiencing both greater and earlier impacts than many other parts of the globe. These issues, vulnerabilities and impacts are more fully documented in Arctic Flora and Fauna: Status and Conservation (2001), and Impacts of a Warming Arctic: Arctic Climate Impact Assessment (2004). Of the approximately 450 species of birds, which breed or have bred in the Arctic region, 279 breed in significant numbers within the Arctic and spend the boreal (northern hemisphere) winter in significant numbers outside the CAFF member states. Migratory birds from the Arctic reach every part of the world except the interior of Antarctica. Thirty species reach southern Africa, 26 species reach Australia and New Zealand, 22 species reach southern South America and several pelagic species reach the southern oceans. Virtually all the world’s major ecosystems support some Arctic breeding birds during the boreal winter, with Arctic migrants occupying every major habi tat in ever y major region. The c o n s e r v a t i o n o f a l l A rc t i c b re e d i n g b i rd s throughout their migratory ranges is a global challenge, covering virtually all of the world’s major terrestrial and marine ecosystems, and requires a high level of international cooperation which can be achieved in part through the CBMP. In addition to the migrating birds, several species of land and marine mammals migrate to the Arctic in search of rich food resources. Migration routes link Arctic species to marine and terrestrial ecosystems throughout the world including the Antarctic. The Arctic’s nutrient-rich coldwater feeding grounds are crucial to the survival of many species of whales and are the foundation for the huge numbers of Arctic fish stocks. Northern waters, particularly the North Atlantic and the Bering Sea, are some of the world’s largest and most important marine fisheries. The link between the survival of humans and sustainability of the living environment is therefore obvious and of paramount importance.

#### Independently, megaships decimate phytoplankton populations

Xue et al 21, State Key Laboratory of Estuarine and Coastal Research, School of Marine Sciences, East China Normal University, (Chengfang, with Yang Yang, Peipei Zhao, Dongyun Wei, Jianhua Gao, Peng Sun, Zhiyang Huang and Jianjun Jia, Impact of Ship Traffic on the Characteristics of Shelf Sediments: An Anthropocene Prospective, https://www.frontiersin.org/articles/10.3389/fmars.2021.678845/full)

Marine vessels are undoubtedly one of the most prominent symbols of human activities in the ocean. Large ships cause significant disturbances in sediment dynamic processes mainly in three ways: (i) the jet flow generated by ships’ propellers causes resuspension of sediment on the bed of shipping lanes (Soon and Lam, 2014; Hong et al., 2016); (ii) the propagation of ship-induced waves may cause erosion of the channel slope and shoal (Rapaglia et al., 2011); and (iii) prolonged and frequent ship shuttle services enhance seabed sediment activity and increase the thickness of the active layer (Hong et al., 2013). Consequently, suspended sediment concentration increases significantly during ship navigation, and can be 30 times higher than the average background concentration (Rapaglia et al., 2011). More than that, turbid water affects the growth of phytoplankton, which in turn affects marine productivity (Huang et al., 1986; Pan and Shen, 2009). Compared to known ship-related hydrodynamics (e.g., propeller-jet, ship wave, ship wakes, etc.), little is known about the impact of ship traffic on marine sedimentation records (e.g., the characteristics of shelf sediments), largely due to the scarcity of studies dedicated to this field. Considering that maritime transport is responsible for 80% of the total volume of international trade (Notteboom et al., 2021), this rising anthropogenic-force induced sedimentary process deserves more attention, and research related to this will be important for marine biogeochemistry, sedimentary dynamics, and geomorphology. Over the past 70 years, China’s maritime transport has experienced explosive growth. Shanghai Port and Ningbo-Zhoushan Port have become the world’s leading ports in terms of container and cargo throughput. Due to these two ports, the coastal shipping lanes along Zhejiang Province are particularly busy. This area represents an ideal place to analyze the effects of seagoing traffic on the shelf sedimentary record. In this study, a shipping lane suitable for 5,000 ∼ 50,000 tons ships along the Zhejiang coast of the East China Sea was selected as the study site, and two short sediment cores were collected from the centerline and the periphery of the lane to analyze their ages and sediment characteristics. We use an improved 210Pb dating model to establish a more accurate depth-age framework in regions with frequent ship disturbance. In combination with development of China’s offshore shipping lanes, we explore the possible linkage between ship traffic and the changes in sedimentation. Study Area The booming development of China’s coastal and ocean-going shipping began in the late 20th century, with coastal transport accounting for 60% of the total domestic transport [China Port Yearbook (1999–2019)]. After decades of development, Shanghai Port and Ningbo-Zhoushan Port have become the world’s leading ports in terms of container and cargo throughput. The coastal shipping lanes along Zhejiang Province are particularly busy due to these two ports and the coastal shipping lanes intersect. The north–south lanes throughout the East China Sea include four main lanes: the Outer Shipping Lane, the Eastern Shipping Lane, the Middle Shipping Lane, and the Western Shipping Lane (Figure 1). The eastern and western shipping lanes intersect outside Aiwan Bay, where shipping is well-developed and traffic is frequent in the north–south direction. The lanes can allow ships of 5,000- to 50,000-ton to pass through, even up to 100,000 tons on some sections. This area is close to the Wenzhou Port, where many passenger ship lanes lead to the surrounding islands (He, 2008). Therefore, it is an ideal area to study about the disturbance caused by ships. The tides are regular semidiurnal tides with an average tidal range of 4 m, and the maximum can be 7 m. The wave height is approximately 1 m. During typhoons, the wave height is up to 5 m, and the maximum can reach 10 m (China Gulf Annals, 1993). The bottom sediment is clayey silt and silt (Jia et al., 2018). Materials and Methods We obtained two cores off the coast of Aiwan Bay, Zhejiang Province, China, to analyze grain size and geochemical elements. Combined with the dating framework, we analyzed the changes in sediment characteristics over time. A literature review was conducted to understand the history of the marine transport industry and the shipping lanes where the cores have been located over the past decades, with a view to quantify the sedimentation effects of ship disturbance. Coring Two cores were collected in May 2018 using a gravity coring tube. Core Z7 (28°3′0″N, 121°33′36″E), 1.5 m long with a water depth of 13.2 m, was collected at the intersection of two main shipping lanes used by vessels of 5,000- to 50,000-ton. Core Z8 (28°5′21″N, 121°32′36″E), 1.5 m long with a water depth of 12 m, was collected outside the shipping lane at a distance of 4.7 km from core Z7 in the northwestern direction. The natural sedimentary environments in the region of two cores are nearly identical because of the short distance between the two cores, which will better ensure an accurate representation of the effects of disturbance on the sediment due to maritime traffic through contrast analysis. XRF Core Scan The cores were each split into two parts using a GeoTek Core Splitter. One half of the core was covered with a 4 μm thick Ultralene film to avoid the contamination of the X-ray fluorescence (XRF) core scanner (Avaatech 3RD, Netherlands) measurement unit and the desiccation of the sediment (Richter et al., 2006). Instrument settings were optimized to minimize the mean square error (MSE) values, and the step size was 0.5 cm. Count times for XRF analysis ranged from 10 to 30 s (Table 1). Reliable data were obtained for 29 elements. Four powdered standards were analyzed every day before and after the analysis of the sediment cores to monitor signal drift and indicated that the signal remained stable during the analytical runs. The experiment was completed at the State Key Laboratory of Marine Environmental Science, Xiamen University, Xiamen. Grain Size Analysis Grain size analysis of 1 cm sub-samples was conducted using a laser particle analyzer (Mastersizer-2000, United Kingdom), which has a measurement range of 0.02–2000 μm with a relative error of <3% for repeated measurements. The experiment was completed at the Key Laboratory of Coastal and Island Development, Nanjing University, Nanjing. The matrix formula of McManus (1988) was used to calculate the sample statistics of the grain size distribution, that is, mean grain size (Mz), sorting (S), skewness (Sk), and kurtosis (K). The above four parameters refer to: the average size, the spread of the sizes around the average, the symmetry or preferential spread to one side of the average, and the degree of concentration of the grains relative to the average, respectively (Blott and Pye, 2001). The grain size standard deviation at 10 cm intervals was calculated to extract the sensitive grain size fraction (Sun et al., 2003). The changes in the sensitive grain size fraction over time can reflect the evolution of sedimentary dynamic processes and depositional environments. Age Models Age models are of critical importance in interpreting sedimentary records. One of the most important means for dating recent sediments (0–150 years) is by 210Pb (half-life 22.3 years), a natural radioactive isotope of lead (Appleby, 2001). The dried sample was homogeneously pulverized, weighed, and then sealed in a plastic box (70 × 70 mm) for 3 weeks. The activities of 210Pbex and 137Cs in the sediment samples were measured following the method described by Du et al. (2010). The radioactivities of the above nuclides were measured using an HPGe γ-ray detector (Canberra Be3830, United States) with a relative counting efficiency of 35% and an energy resolution of 1.8 keV (at 1332 keV). The detector has multilayer shielding (ultralow cryostat and no peak background in the isotopes of interest). The activity of 210Pbex was calculated from the activity of total 210Pb (46.5 keV, 4.25%) minus the activity of 226Ra, determined using the γ lines at 351.9 keV (37.6%) for 214Pb and 609.3 keV (46.1%) for 214Bi. The efficiency calibration of the detector systems was conducted using LabSOCS (Baronson, 2003). The experiments were performed at the State Key Laboratory of Estuarine and Coastal Research, East China Normal University, Shanghai. The commonly used 210Pb data processing and computation mainly include the CIC dating mode and the CRS dating model (Appleby, 2001). Given the strengths and weaknesses of the two computational models, the 210Pb chronology of this study was determined using both models. Historical Documents To study the response of sediment characteristics to the disturbance effects of ships, it is necessary to be familiar with the shipping lanes near the study area and the frequency of ship navigation. Compared to bulk cargo ships, container ships have the characteristics of large loading capacity, fast speed, and fixed throughput, which are more representative indicators to better reflect the impacts of ship disturbance on sedimentation. The China Port Yearbook comprehensively and accurately recorded the development of China’s port navigation and shipping industry, and recorded the container throughput of China’s coastal ports from 1979 to date, which could reflect the intensity of disturbance by ship movement on the shipping lanes. Therefore, the container throughput of the whole country and three ports, namely Qingdao Port, Shanghai Port, and Guangzhou Port, were calculated for the period 1979–2018. These three ports are important coastal ports in the Yellow Sea, East China Sea, and South China Sea, respectively. Results Depth-Age Framework The excess 210Pb of Z7 and Z8 remained in the law of radioactive decay. The linear fitting result of the excess 210Pb of Z7 was good, with a correlation coefficient of 0.66 by the CIC model and a sedimentation rate of 1.09 cm/yr. The Z8 was better, with a correlation coefficient of 0.91 and a sedimentation rate of 1.54 cm/yr (Figure 2). Considering that the locations of the two cores were not far from each other, approximately 4 km—expecting a great difference in sedimentation rate would be unreasonable. According to sedimentation rate data of the mud area along the coast of Zhejiang and Fujian (Jia et al., 2018), the average sedimentation rate here is approximately 1.5 cm/yr. The entire 150 cm long sedimentation sequence was recorded from approximately 100 years ago, which was before the emergence of container ships navigation along the coast of China in the late 1970s. Thus, it would be inaccurate to use uniform sedimentation rates to infer the age of sediment before and after the emergence of shipping lanes. In theory, the CIC model of 210Pb dating is suitable for a stable sedimentary environment, but for a less stable sedimentary environment, the CRS model may provide more accurate dating results (Zhang et al., 2008). It was found that above 70 cm depth both models gave similar curves for Z8 (Figure 3D), whereas for Z7, the difference was extremely large, with some layers up to 24 years (Figure 3A). The CRS dating results of the two cores above a depth of 70 cm were almost identical, and the sedimentation records were from 1977 to 2018; below a depth of 70 cm, the CRS model algorithm led to older dating results, and increasing depth (Zhang et al., 2008), with a small sedimentation rate. Therefore, in this study, the CRS dating model was used at depths above 70 cm and the CIC dating model at depths below 70 cm. The sedimentation rate was assumed to be uniform below 70 cm, and the sedimentation rate at 70 cm was used as the sedimentation rate for the 70–150 cm section. On this basis, the dating framework was established for the two cores, and the age of sediment for each layer at the same depth were almost identical, with a mean time difference of 0.4 year. The two cores showed the sedimentation records of 1873–2018 (Figures 3B,E). The sedimentation rates of Z7 and Z8 were in the ranges of 0.77–2.76 cm/yr and 0.77–2.53 cm/yr (Figures 3C,F), respectively. Grain Characteristics of Sediments The grain size components of Z7 and Z8 were dominated by silt, followed by clay, with the least amount of sand (Figure 4). Overall, the content of the grain size component did not fluctuate significantly with time. The sediment type was mainly clayey silt, with an occasional silt layer. Through comparative analysis of the two cores, it was found that the grain size parameters were quite different below and above 70 cm. The sensitive grain size fraction was calculated at 10 cm intervals. Both Z7 and Z8 had two sensitive grain size fractions—the first between 4 and 6 Φ, and the second between 6 and 9 Φ. The peak heights (standard deviation values) of the two sensitive grain size fractions below and above 70–60 cm were very different for the two cores, with the 70 cm value corresponding to the year 1977 (Figure 3). Generally, before 1977, the standard deviation of Z7 was smaller than that of Z8, whereas after 1977, the standard deviation of Z7 was larger than that of Z8. To better illustrate the variation in the sensitive grain size fraction over time, the layer at 70–60 cm was selected and two layers below and above 70–60 cm were shown, such as 150–140 cm, 120–110 cm, 30–20 cm, and 10–0 cm (Figure 5). Here we can see the difference below and above 70–60 cm for the two cores (Table 2), which indicated that the sedimentary dynamics of the environment had changed considerably since 1977. Before 1977, the standard deviation of Z7 was smaller than that of Z8, which meant that the sedimentary dynamics of Z7 were more stable than those of Z8. However, after 1977, the standard deviation of Z7 was larger than that of Z8, which meant that the sedimentary dynamics of Z7 were more turbulent than those of Z8. Moreover, after 1977, both the first and second sensitive grain sizes of Z7 were finer than those of Z8, which assumed that the finer particles were more affected by ship disturbance (Table 2). The first sensitive grain size fraction of Z7 (4.50–5.75 Φ) did not change significantly in the 150–110 cm section, with a moderate increase in the 110–70 cm section, a sudden increase in the 70–60 cm section, and a moderate increase above 60 cm (Figure 6). The second sensitive grain size fraction of Z7 (6.75–8.25 Φ) did not change significantly in the 150–110 cm section, with a moderate decrease in the 110–70 cm section, a sudden decrease in the 70–60 cm section, and a moderate decrease above 60 cm. The first grain size fraction of Z8 (4.25–5.50 Φ) showed a significant change in the 150–70 cm section, a moderate increase and then a decrease, and it changed very little above 70 cm, with a moderate decrease. The second grain size fraction of Z8 (6.50–8.00 Φ) varied significantly in the 150–70 cm section, with a moderate decrease and then an increase, and it changed very little above 70 cm, with a moderate increase. The measured grain size distribution curve (in the range of 2–12 Φ) was divided into 40 small cells in units of 0.25 Φ. The difference between two cores at the same time in these small cells was calculated separately. The content of Z8’s grain size component was subtracted from that of Z7 on the same layer, with the difference shown on a two-dimensional contour plot (Figure 7). Here we can see the quantity of coarser or finer particles difference between two cores at the same time. The results showed that the sediment can be divided into two groups—coarse and fine—using 6.25 Φ as the boundary, and the sediment varied considerably over time. In the section of 150–140 cm, the difference in relative content between the two cores was approximately zero. In the section of 140–80 cm, the coarser particles (<6.25 Φ) of Z7 were significantly less than those of Z8, whereas the finer particles (>6.25 Φ) were significantly more than those of Z8. In the section of 80–0 cm, the opposite occurred, especially above 70 cm, where the coarser particles of Z7 were significantly more than those of Z8. This indicates that the sediment on the shipping lane showed an increase in the coarse particulate fraction and a decrease in the fine particulate fraction from 1977. Elemental Characteristics of Sediment Elements with specific indicators, including S, Cl, Br, Si, Ti, and Ca, were selected for comparative analysis. These elements have steady repeat scanning results and reliable detection, and have often been used by previous researchers (Thomson et al., 2006; Marsh et al., 2007; Agnihotri et al., 2008; Croudace and Rothwell, 2015; Grygar and Popelka, 2016). The content of elements is a relative value, and the data quality is influenced by several factors, such as grain size and water content variations, core surface imperfections, and the presence of organic matter (Croudace and Rothwell, 2015). In order to attenuate above effects, element-to-element ratios were used, which can allow comparison between the cores. Ti is a typical reference element used for normalization (Grygar and Popelka, 2016). The element ratios Br/Cl, S/Ti, Si/Ti, and Ca/Ti, were selected for the study (Figure 8). The Br/Cl ratio for Z7 ranged from 0.06 to 0.17, with a mean value of 0.12, and the element ratio decreased slightly in the 0–40 cm section, with a mean value of 0.11. The S/Ti ratio ranged from 0.12 to 0.38, with a mean value of 0.20, and the element ratio increased significantly in the 0–40 cm section, with a mean value of 0.24. The Si/Ti ratio ranged from 2.77 to 6.79, with a mean value of 5.01, and the element ratio decreased significantly in the 0–40 cm section, with a mean value of 4.87. The Ca/Ti ratio ranged from 2.86 to 4.32, with a mean value of 3.54, and the element ratio decreased slightly in the 0–40 cm section, with a mean value of 3.48. The element ratios shifted at approximately 40 cm. According to the established dating framework (Figure 3B), the year was estimated to be approximately 1999. For Z8, the most significant shift was Si/Ti, which transformed at 77 cm, with a decrease in the 0–77 cm section. The Br/Cl ratio for Z8 ranged from 0.08 to 0.21, with a mean value of 0.14. The S/Ti ratio ranged from 0.14 to 0.34, with a mean value of 0.21. The Si/Ti ratio ranged from 3.92 to 7.20, with a mean value of 5.50, and the element ratio decreased significantly in the 0–70 cm section, with a mean value of 5.17. The Ca/Ti ratio ranged from 3.05 to 4.73, with a mean value of 3.63. Discussion Development of China’s Offshore Shipping Lanes Containerized maritime transport plays an important role in global trade, accounting for 80% of international cargo trade and growing at an average annual rate of 4% (Ducruet and Notteboom, 2012). A country’s container transshipment capability and accessibility directly reflect its maritime transport capacity, as well as its level of maritime transport development. China’s container industry began in 1979, with a container throughput of 32,900 twenty-foot equivalent unit (TEU). The late 20th century was in a period of rapid growth (Figure 9). According to statistics, the average annual container throughput in 1979–1999 was 2.95 million TEU, and in 1999–2018 it was 127.18 million TEU, a staggering 42-fold increase. The Port of Shanghai has held the top position for container throughput of the world’s largest ports since 2010. The external and internal feeders of foreign trade from the Port of Shanghai pass through the outside of Wenzhou Port, where our cores were collected. Combining the model with global economic development scenarios, it is suggested that global maritime traffic will increase by 240–1,209% by 2050 (Sardain et al., 2019). In addition, the shipping industry entered the so-called megaship era in 2007 when a leading container shipping company deployed a fleet of mega-containerships with a carrying capacity of more than 10,000 TEUs (Imai et al., 2013). The development of megaships requires deeper draft depths and the sea areas affected by ship disturbance is expanding into deeper water accordingly, thus the disturbance effect of megaships will have an increasing impact on relatively deep waters. China’s coastal shipping lanes are traversed in dense networks, with frequent passenger and cargo lanes. Vessels with a container load of more than 5,000 TEU, bulk cargo of more than 100,000 tons, and tankers of more than 100,000 tons meet our definition of a megaship. The southeast coast of China, the Bohai Bay, the Changjiang Estuary, the Taiwan Strait, and the eastern side of Taiwan Island are all areas affected by the disturbance of megaships (Figure 10). The study of modern sedimentary dynamics and its products in these areas should consider the influence of megaships on shipping lanes. Differential Performance of Grain Size and Elements The element content in the sediment is mainly controlled by its mineral composition. In addition, hydrodynamic conditions, adsorption and flocculation of fine particles, redox conditions, and human activities all have an influence on the variation of element content (Dong et al., 2009; Singh, 2009; Ye et al., 2013; Grygar and Popelka, 2016). The grain size of marine sediment is closely related to geochemical elements, both of which are in accordance with the “law of elements controlled by grain size” (Zhao and Yan, 1994). Fine-grained sediment can be readily enriched in some chemical elements, either because they are present in the clay minerals or because of the adsorption effect of the fine-grained particles. This is due to the correlation between particle size and elements, which are often used as a proxy for particle size (Zhou et al., 2019). However, as mentioned above, the particle size changed significantly approximately 1977, whereas the elemental ratios of S/Ti, Ba/Ca, Si/Ti, and Br/Cl did not change significantly until approximately 1999. The behavior of particle size and elements was not identical, and it was therefore worthwhile to investigate the underlying mechanism. Correlation analysis was conducted between the element ratios selected in this study and the sand, silt, and clay contents. Both were found to be poorly correlated, with the correlation coefficient almost always less than 0.3 (Table 3). There was therefore no significant correlation between the grain size and the elements. The factors influencing the change in the grain size of marine sediments can be summarized into two categories: the first is the change in sediment sources (sources or sediment flux), and the second is the change of sedimentary dynamics environment, which is closely related to the coastal circulation system and extreme climate events (Liu et al., 2010). The study area is located in the distal mud of the subaqueous Changjiang River delta, and the sediment mainly comes from the Changjiang River. Thus, the annual sediment flux of the Changjiang River Datong Station was counted during the period 1953–2018 (Figure 11). Before 2000, the annual sediment load was more than 300 Mt. After 2003, due to the influence of the Three Gorges Reservoir, the annual sediment load was less than 200 Mt. In this study, the grain size transition occurred early before the drastic change in sediment flux, so the grain size transition was not influenced by the change of sediment source. Some studies suggest that the load, grain size and sediment composition deposited over the coastal and shelf water adjacent to the estuary have changed in response to the Three Gorges Dam. However, this phenomenon occurs mostly downstream of the reservoirs and estuaries, and after long-distance transport, the signal of changing grain size in the study area has been difficult to detect (Gao et al., 2019). Even in the downstream of the reservoir, the median grain size variation is only about 5 μm (Gao et al., 2015), which is smaller than the variation caused by the navigation channel. Therefore, the transition of grain size was caused by changes in the sedimentary dynamics environment, mainly due to disturbance by ships. Marine sediments are mainly composed of terrestrial debris, biogenic materials, and marine authigenic substances, whose relative content determines the distribution of elements in the sediment. The elements, especially the biogenic elements related to the ecological environment, can reflect the evolution of the sedimentary environment. The time of element ratios shift lags behind the time of grain size shift, which was most likely a response of the ecological environment to the effects of ship disturbance. This occurred approximately 1999, when the frequency of navigation began to increase rapidly (Figure 9). At the beginning of ship navigation, the effects of ship disturbance did not cause significant changes in elements, until the rapid growth in the maritime transportation of China in 1999. There are complex mechanisms behind this response, involving processes such as the migration and transformation of marine biological production, biogeochemical cycling of marine substances and elements, especially redox-driven processes (Schubert et al., 1998; Duan et al., 2010). All of these processes were influenced by the environmental characteristics include suspended sediment concentration, salinity, total dissolved organic carbon, temperature, depth, pH, Eh, phytoplankton, and water circulation (Marcussen et al., 2008). Only after the disturbance frequency reached a certain level, would the elemental variation manifest. Therefore, grain size variations were expressed soon after the start of navigation, whereas the biogenic elements did not change significantly until 1999. Sedimentary–Ecological Response to Ship Disturbance Quantitative studies on the impact of human activities on ecology are of vital importance. In recent years, global reductions in riverine sediment fluxes have become widespread (Syvitski et al., 2005; Milliman and Farnsworth, 2011). Studies to investigate the impact of human activities, mainly in terms of changes in the fluxes and sediment properties of the sea (Dai et al., 2008; Gao et al., 2014; Yang et al., 2019), have made good progress in quantifying these impacts. For example, Dai et al. (2008) argued that, for the Changjiang River, the contribution of climate change to the reduction of sediment flux into the sea was only approximately 3%, with anthropogenic contributions accounting for 97%. Ship navigation is an important anthropogenic agent. During navigation, ships alter the local hydraulic regime, i.e., the generation of currents and ship-induced waves (Rapaglia et al., 2011; Fleit et al., 2016). The highest near-bed velocities resulting from ship generated waves range between 0.1 and 0.4 m/s in Danube River of Hungary, which was obtained by computational fluid dynamics (CFD) modeling (Fleit et al., 2016). The average flow velocity with no ship is 0.02 m/s, which means an increase of an order of magnitude due to ship (Fleit et al., 2016). In situ measurement shows that the water velocity increases to 2.1 m/s when the ship passes by, which is more than an order of magnitude higher than the typical tide and wind driven current speed in the channels of Venice (Coraci et al., 2007). The increased current speed can increase bottom shear stress, which will cause the resuspension of sediment in shallow water areas and the erosion of the channel slope and seabed (Rapaglia et al., 2011; Ji et al., 2014; Fleit et al., 2016). It is found that the ship-generated waves (including drawdown and surge waves) have much more effects on sediment resuspension than wind waves (Houser, 2014). Once the shear stress generated by the ship is larger than the critical shear stress which is further determined by sedimentary characteristics, the seabed sediment would move in suspension, saltation, and creep (Liou and Herbich, 1976; Liao et al., 2015). The bottom shear stress caused by propeller scour is an important mechanism contributing to sediment resuspension and subsequent erosion (Liao et al., 2015). In the same situation, the resuspension of coarser particles requires a greater incipient velocity (Liou and Herbich, 1976). Finer particles are easier to resuspend. Ship-generated waves are capable of resuspending significant quantities of bottom sediment and suspended sediment concentration increases with increment of turbulent kinetic energy of the ship wakes (Houser, 2014; Ji et al., 2014). In situ observation showed that suspended sediment concentration rose from 12 mg/L to 400 mg/L in Venice Lagoon, Italy, after the ship had sailed (Rapaglia et al., 2011). The intensity of sediment disturbance by a ship is related to the speed, propeller rotation speed, water depth, and draft of the ship (Liou and Herbich, 1976; Hong et al., 2013). Generally, the faster the speed of ships, the shallower the water depth, and the deeper the draft, the stronger the intensity of the disturbance. Sediment resuspension caused by ship disturbance has led to a series of changes in both the sedimentary environment and ecology. In this study, when establishing the dating framework, it was found that in a relatively stable sediment environment (such as the location of core Z8), the dating results obtained by the CIC and CRS dating models were consistent. However, in an unstable sediment environment (such as the location of core Z7), the results of the two dating models differed greatly, and the age difference of the same layer could be up to 24 years. Because of the inherent shortcomings of the CRS model, the bottom age is biased toward aging, whereas the CIC model homogenizes the sedimentation rate, which is obviously not applicable in an unstable sediment environment. A single dating model cannot establish a convincing and comparable dating framework. The best approach is to combine the two models, using the CRS model in the layer affected by ships and the CIC model in the lower part, to establish a CRS–CIC dual dating model. Figure 3 shows that the CRS–CIC dual dating model can be used with reliable results to address sedimentation rates in an overall sedimentary environment, but locally influenced by frequent ship motion. Since the development of coastal shipping in China in 1977, the fluctuations of grain size has changed largely. Before 1977, the fluctuation of grain size of Z8 is wider than that of Z7, which shows an opposite trend after 1977. Core Z8 is located near a small bedrock island called “Pishan,” which will cause more complicated hydrodynamics (tidal and wave) compared to core Z7 before 1977. In this case, the fluctuation of grain size at Z8 is wider than that of core Z7. However, the hydrodynamic condition is more complicated at core Z7 than that of core Z8 after 1977 due to the disturbance of ships, causing the fluctuation of grain size of Z7 is wider than that of Z8. In addition, the sensitive grain size at Z7 has been finer (Figure 5A). With 6.25 Φ as the boundary, the grain fraction finer than 6.25 Φ decreased (Figure 7). It was calculated that before 1977, core Z7 had a significantly higher fine grain fraction (>6.25 Φ) than core Z8, with a mean value of approximately 6%, but after 1977, core Z7 had a significantly lower fine grain fraction (>6.25 Φ), with a mean value of approximately 5%. This indicated an 11% reduction in the grain fraction finer than 6.25 Φ at the shipping lane and a significant coarsening of the sediment. Ship motion affected the local sedimentary dynamic environment. Although the total sedimentary flux was the same as the flux outside the shipping lane, it has a selective modifying effect on the sedimentary record: in the sediment on the shipping lane, which was dominated by silt, all grain fractions became more active under frequent ship disturbance. Due to differences in sedimentation mechanisms, it was relatively slow for fine grain to settle, and a significant proportion of the fine grain fraction may leave the shipping lane, causing a reduction in the fine grain fraction entering the seabed sediment. It has been shown that vessel-induced wakes can increase the concentration of suspended sediment by a factor of 30 above background values, but this surge only lasts for a few minutes, and then the high concentration persists for almost an hour before returning to background values (Rapaglia et al., 2011). The sustained high concentration is due to the slow settling velocity of fine particles. Ship disturbance also caused ecological changes. After 1999, the value of Br/Cl in the Z7 core decreased from 0.12 to approximately 0.11, the value of S/Ti increased significantly from 0.20 to 0.24, the value of Si/Ti decreased from 5.01 to 4.87, and the value of Ca/Ti decreased from 3.54 to 3.48. The decrease in Br/Cl could indicate, to some extent, the decline of primary productivity in the region (Thomson et al., 2006). High S-levels tend to indicate a low oxygen zone (Croudace and Rothwell, 2015). Si/Ti is an important indicator of siliceous phytoplankton productivity. The principle of reduced Ca/Ti is the same as that of Si/Ti, both of which belong to the response of biogenic elements to the marine environment (Marsh et al., 2007; Agnihotri et al., 2008). Specific to the above individual indicator, small changes in value may not be evidence of significant changes in the ecological environment. However, the changes in the four indicators pointed to consistency, which may be related to the disturbance of ships in the waterway. For example, frequent disturbance by ships made the shipping lane waters turbid, and light became the most important factor limiting marine productivity. The turbidity and high concentration of suspended solids was not conducive to the growth and reproduction of phytoplankton, and this reduced primary productivity (Jiang, 1993; Pan et al., 2011). In addition, the amount of phytoplankton directly affected the dissolved oxygen content in seawater. The reduction of phytoplankton decreased the dissolved oxygen content in seawater, leading to the dissolution of iron oxides and the formation of pyrite (FeS2), which increased the amount of elemental S in the sediment (Jiang, 1993; Croudace and Rothwell, 2015). Frequent disturbance was detrimental to diatom growth and reproduction, and decreased the biotransformation rate of silicates in seawater and the “silicon fixation” effect, thus decreasing the Si/Ti value in sediment (Huang et al., 1986; Pan and Shen, 2009). Calcareous phytoplankton such as coccolithophores are widely distributed and abundant in the ocean, are well preserved in the sediment and are important sources of biogenic Ca in the sediment (Poulton et al., 2007, 2013). Frequent disturbance was also detrimental to the growth of coccolithophores, and made it difficult for biogenic Ca to adhere to the particulate matter, which can reduce the Ca/Ti ratio in the sediment. Overall, the quality of habitat conditions along the shipping lane was significantly different from those outside the shipping lane. The content of each element in the sediment of the shipping lane was controlled by a combination of physical, chemical, and biological interactions. Suspension of fine particles caused by physical disturbance affected the marine ecosystem and ultimately changed the elements in the sediment.

#### Extinction

Poddar 21, Director SafEarth Clean Technologies Pvt Ltd. (Harshit, How The Loss Of Phytoplankton Could Lead To Our Demise, <https://medium.com/climate-conscious/how-the-loss-of-phytoplankton-could-lead-to-our-demise-8f9c91b937a8>)

The base of the entire aquatic food chain is the phytoplankton. Essentially what plants do on land, phytoplankton does in the ocean. It is the foundation on which the entire aquatic life is built. Any threat to this species would ultimately lead to a complete collapse of aquatic life. Unfortunately, the phytoplanktons are dying, and we are the ones killing them. These microscopic algae have been critical in making life on Earth possible for a number of key reasons. Oxygen Phytoplankton are responsible for over 50% of all the oxygen in our atmoshpere. These microscopic algae in our oceans are some of the most laborious workers in our ecosystem. Day and night, they absorb the carbon dioxide in the atmosphere and convert it into oxygen through photosynthesis. Food All the food in the ocean is ultimately produced by phytoplankton. Through photosynthesis, they produce carbohydrates which are in turn consumed by small fishes. These fishes are then consumed by larger fishes and so on. Kill the phytoplanktons and the oceans will be left with no food.

#### The second scenario is Indian Ocean Conflict —

#### The continued growth of megaships will cut India off from global trade

Iyer 19, Fellow with the ORF Maritime Policy Initiative. She tracks ocean governance policies and international maritime trade sustainability for global development. (Gayathri, Mega-ships in the Indian Ocean: Evaluating the impact and exploring littoral cooperation, https://www.orfonline.org/research/mega-ships-in-the-indian-ocean-evaluating-the-impact-and-exploring-littoral-cooperation-53235/)

According to the ITF, direct port calls by ships are considered important because they reduce risks, feeder vessel costs, and turnaround time in comparison to the option of trans-shipment feedering[2] via other ports.[23] Ports are considered competitive when they are chosen more regularly for direct calls than other ports.[24] Maritime landside infrastructure limitations dictate direct call options. A terminal’s integration with the wider set of requirements in the supply chain decides the choice of routes.[25] Even if a terminal is large enough to handle the berthing of a mega-ship, it needs several large cranes, better yard management capability, increased automation, larger storage facilities, more inland connectivity, and enhanced labour productivity. Mega vessels seek speedy unloading of the large volumes they carry.[26] Most countries in the Indian Ocean have to deal with reduced direct port calls due to their inability to serve mega-ship port calls.[27] With the size of ships predicted to grow beyond 21,000 TEU after 2020, more countries could be increasingly cut off from direct calls unless they undertake extensive modernisation. India’s largest port, the Adani CMA Mundra Terminal Private Limited on its west coast, can currently accommodate ships only up to 18,000 TEU. The majority of India’s container traffic is therefore shipped through ports outside the country, mainly from Colombo and Singapore. India is developing six deep-water sea mega-ports for receiving mega-ships under its ambitious Sagarmala Project, though the project is still in its nascent stages.[28] Unless India invests in maritime infrastructure, it will be unable to attract direct port calls to its shores, and will be vulnerable to geopolitical risks emerging from the Chinese investments in Colombo’s Hambantota mega-port and Pakistan’s Gwadar mega-port.[29] Cities unable to manage land acquisition for mega-port complexes are in danger of becoming completely cut out of direct calls. Long-term market projections suggest that by mid-century, international trade could require container ships of up to 50,000 TEU capacity which are likely to sail exclusively between trans-shipment terminals and mega-port complexes.[30] Mega-ship port calls could therefore mark the beginning of the end for the link between cities and ports.[31]

#### Indian fear of global isolation causes lash out and conflict with China

Mukherjee 20, Researcher on Asian Security with the Stimson Center. (Tuneer, Sino-Indian Maritime Competition: Shadow Fighting In The Indian Ocean, https://www.stimson.org/2020/sino-indian-maritime-competition-shadow-fighting-in-the-indian-ocean/)

Sino-Indian conflict has historically been restricted to the land domain. However, as both Beijing and New Delhi have opened their economies to global commerce, their dependency on sea-borne trade has exponentially increased. Both have come to realize the importance of naval power in enabling them to secure their sea lines of communication (SLOC), their primary concern being undisrupted energy access from the Middle East. To this end, both nations have outlined ambitious force modernization plans to develop a “blue-water navy” that can operate at longer distances from their homeland for sustained periods of time. As Beijing’s maritime security interests intersect with India’s, there has been a linear escalation in the interactions between the two naval forces, leading to benign competition between them in the Indian Ocean Region (IOR). The Malaccan Dilemma As early as 1985, Chinese naval planners began deploying squadrons for routine port calls in the Indian Ocean. 1 Over the years, this has evolved into Chinese naval taskforces engaged in security missions. In fact, in September 2019, India’s naval chief Admiral Karambir Singh asserted that at any given time on an average, about seven to eight Chinese ships operated in the area. This escalation of Chinese naval presence has been gradual and can be linked to China’s security dilemma over its access to SLOCs west of the Strait of Malacca. The “Malaccan Dilemma,” first touted by Chinese President Hu Jintao in 2003, was predicated around a crisis scenario in which China would be denied access to its trade and energy routes in the IOR. Since then, Beijing has stepped up its diplomatic, trade, and naval efforts to secure a foothold in the Indian Ocean. According to some estimates, around 40 percent of Chinese trade passes through the choke point every year. China’s Indian Ocean Outreach To address the “Malaccan Dilemma,” President Hu Jintao in 2004 initiated the policy of “new historic missions,” which entailed Chinese naval forces being deployed in the far seas for military operations other than war. The deployment of Chinese naval forces to the Gulf of Aden in 2008 for anti-piracy operations marked an inflection point in Sino-Indian maritime dynamics. It signaled Beijing’s intention of building a robust presence in the IOR to safeguard its interests. Since then, China has increased its footprint in the IOR by weaving together a patronage network in the Indian Ocean littoral countries. China has undertaken massive port development projects in countries such as Sri Lanka, Pakistan, and Bangladesh, under its 21st Century Maritime Silk Road initiative, accompanied by bountiful transfers of naval equipment and technology. All this has affected India’s strategic calculus, triggering fears of encirclement in what it considers its backyard. Shifting the Status Quo Notably, these Chinese endeavors resulted in three significant developments that have challenged the status quo in the Indian Ocean maritime theater. The first was the frequent deployment of Chinese submarines for “anti-piracy operations” in the region. This highly unusual move made Indian strategists wary of Beijing’s bona fide intentions in the IOR. The second was the inauguration of China’s first overseas naval base in Djibouti in 2017, which made concrete the prospect of a Chinese logistical support network in the region. The third is that, since 2015, Chinese research vessels have routinely plied the area collecting data and improving China’s knowledge of the hydrography, topography, and bathymetry of the waters. Such civilian missions help improve China’s operational knowledge of the IOR, while making it increasingly difficult for Indian forces to monitor Chinese activities in the region. India naval strategists fear these missions are aimed at augmenting Chinese subsurface maneuvers to counter India’s theatrical superiority. India’s Naval PostureIn the backdrop of their strategic competition and both countries’ efforts to arm themselves with the latest technology, Sino-Indian maritime rivalry raises concerns about an impending altercation between them in the high seas of the Indian Ocean.[…] In a likely scenario of a maritime confrontation between them in the region, their naval power will be well-matched. India’s biggest strategic advantage lies in its central position in the Indian Ocean, and its familiarity with the operating environment of the IOR. The Indian Navy has always maintained that its primary focus of operations is providing security for the Indian Ocean – protecting the homeland against external actors and maintaining sea control over the various SLOCs and chokepoints of the IOR. Thus, considering China’s increased presence, India has recalibrated its bearings and sought to improve its maritime domain awareness (MDA) in the IOR. It has adopted a more vigilant constabulary role using anti-submarine warfare equipment. Beginning in 2017, India initiated a new pattern of mission-based deployments in various areas of the IOR, conducting patrols around key SLOCs all year round. Taken together, these moves have amplified the Indian Navy’s operational awareness of the region. India has also initiated closer maritime cooperation with nations that are likewise cautious of China’s naval expansion. On the sidelines of the 2017 East Asia Summit in Manila, India, Japan, Australia, and the United States, took part in consultative discussions, reinvigorating the once abandoned Quadrilateral Security Dialogue. What came out of that summit and subsequent discussions, which have since been elevated to the ministerial level, was a loose framework for how to manage issues pertaining to the maritime commons and the concept of a free and open Indo-Pacific. The brainchild of Japanese Prime Minister Shinzo Abe, the Indo-Pacific essentially represents a realignment of the strategic backdrop against which the maritime security dynamics of Asia are set, reimagining the Indian and the Pacific Ocean as a unitary maritime theater. The United States has also supported this alignment by means of strategic and diplomatic outreach in the region via the Free and Open Indo-Pacific strategy. Washington and New Delhi have correspondingly cultivated a closer maritime security relationship, cementing strategic cooperation via a logistics exchange agreement in 2016 and an information sharing agreement in 2018. Comparing China and India’s Naval Capabilities In the backdrop of their strategic competition and both countries’ efforts to arm themselves with the latest technology, Sino-Indian maritime rivalry raises concerns about an impending altercation between them in the high seas of the Indian Ocean. China and India have progressively strengthened their naval capabilities over the years, investing in high value platforms such as nuclear-powered submarines, aircraft carriers, and autonomous unmanned vessels. Beijing and New Delhi have also made sustainable efforts to develop their C4ISR (Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance) capabilities by launching their own navigation satellites. However, as Figure 1 & 2 below indicate, there is a growing gap between the blue-water naval capabilities of the two nations, with China clearly ahead. Yet, it is also important to note that China’s primary focus of naval strength has been in its near seas surrounding the first island chain. The Indian Ocean, while important, is a secondary focus for Beijing. Comparatively, India has not engaged China with a counter-theater presence in the Western Pacific and has focused its efforts instead on amplifying its naval defense of the IOR. The tri-services base at the Andaman & Nicobar Islands serves as an important component of this effort. In a likely scenario of a maritime confrontation between them in the region, their naval power will be well-matched. Anticipating Future Conflict In September 2019, a Chinese research vessel was forced to retreat by Indian forces for operating inside the exclusive economic zone of the Andaman & Nicobar Islands without prior permission. The incident reminded both sides of the delicate intricacies surrounding maritime engagement in the open seas. Specific confidence-building mechanisms and crisis management protocols are nearly non-existent between the two navies. Save for statutory procedures guiding interactions on the high seas, Sino-Indian maritime interactions remain unregulated. As both countries’ naval forces come in contact more frequently, tensions loom on the horizon. China and India have been engaged in a competitive embrace with one another for a while now. Both sides realize the importance of a cooperative bilateral relationship but are unwilling to cede any strategic ground. In the likelihood of a situation where Beijing gains an upper hand in the continental realm, strategists in New Delhi might be tempted to implement access-denial measures against Chinese naval assets in the region, to tilt the strategic balance back in India’s favor. While a confrontation along their international border could be isolated, a similar scenario in the maritime domain is likely to have multifaceted implications far beyond New Delhi and Beijing.

#### That goes nuclear

De Silva 21, Department of Strategic Studies, General Sir Johnkotelawala Defence University, Disarmament, Indian Ocean and Strategic Externalities: The Case of Sri Lanka, Journal for Peace and Nuclear Disarmament Volume 4, 2021 - Issue 2)

Frank Hoffmann’s “Pink Flamingo” concept is pertinently applicable to the South Asian region (Barner and Bensahel 2015) since it highlights a disaster that a state or an entity would have noticed emerging but ignored and that could cause catastrophic devastation. Hoffman is of the view that Pink Flamingo situations are patently evident but deliberately disregarded by policymakers for diverse reasons. South Asia is prone to dangerous nuclear trends and they are often ignored by the policymakers of non-nuclear states. This situation is worsened due to the tendency of avoiding adherence to the international disarmament mechanisms by the emerging nuclear powers in the region. Neither India nor Pakistan is a party to the Nuclear Non-Proliferation Treaty (NPT). It is understood that if an accident flares up in any of these states it could escalate into a worse pitch due to the public panic. In such an atmosphere nobody can guarantee that South Asia is suitably prepared to handle the transnational after effects of a nuclear catastrophe. Even though the threat is imminent, none of the non-nuclear states in South Asia has paid adequate attention to mitigate it. Apart from the direct danger of an accident or nuclear confrontation, the neighboring states of nuclear powers also face the threat of strategic manipulation of their assets by nuclear states. The worrisome factor is a blissful underestimation by non-nuclear states about the gravity of the emerging and persistent problem. The lack of awareness on how to face such situations could result in an abrupt collapse of the security well-being of non-nuclear states due to factors that operate beyond their control. This paper attempts to reveal the dangers of the existing “pink flamingo” situation in South Asia through the lens of a non-nuclear state.

#### Nuclear deterrence fails — conceptions of “limited war” are wrong

Sawhney 21, Editor at FORCE National Security and Defence Newsmagazine, ex-Indian Army. (Pravin, September 1st, “Ladakh Stand-off Has Exposed India’s Failed Nuclear Deterrence against China. Now What?”, *The Wire*, [https://thewire.in/security/ladakh-stand-off-has-exposed-indias-failed-nuclear-deterrence-against-china-now-what accessed 3-11-2022](https://thewire.in/security/ladakh-stand-off-has-exposed-indias-failed-nuclear-deterrence-against-china-now-what%20accessed%203-11-2022))

The Ladakh crisis, still not over, has established an unpalatable reality: India’s nuclear weapons, whose raison d’etre is deterrence, have failed to deter China.

By reportedly occupying 1,000 square kilometre (sq km) of Indian territory in Ladakh, China not only walked through India’s conventional military capabilities, but also lobbed its purported nuclear deterrence out of reckoning. The Chinese message was loud and clear: China did not consider India’s nuclear weapons of any consequence.

Interestingly, Shivshankar Menon, former national security advisor, in his 2021 book India and Asian Geopolitics: The Past, Present – written after the 2020 Ladakh crisis began – says, “Since India became an overt nuclear weapon state in 1998, there has been no credible threat of using nuclear weapons against India nor attempt to use nuclear black-mail to change its behaviour. To that extent, India’s nuclear weapons have served their desired purpose.”

As NSA, Menon was responsible for India’s nuclear doctrine, posture, and operationalisation with the command of nukes vested in the prime minister-led National Command Authority.

To recall, after a series of five nuclear tests done on May 11 and 13, 1998, Prime Minister Atal Bihari Vajpayee wrote a letter to US President Bill Clinton citing China’s nuclear tests and the nuclear weapons nexus between China and Pakistan as the reasons for India’s tests. India also announced a nuclear ‘no first use’ policy, which meant that if deterrence failed, India would be prepared for an assured and credible second-strike capability after absorbing a first strike from the enemy – China, in the present case.

The second-strike capability is based on a triad of land, sea and air vectors. Given the paucity of combat aircraft for conventional war, especially when catering for a two-front war, aircraft availability for the nuclear role is merely theory. The land vector would be provided by the Agni-5 ballistic missile with a 5,000 km range meant to cover China. While this missile has yet to be operationalised, the Defence Research and Development Organisation (DRDO) has announced plans for Multiple Independent Re-entry Vehicles (MIRVs) which can deliver a number of warheads at different targets simultaneously instead of a single big bang.The DRDO awaits government clearance for MIRVs, which is the technology of the late 1960s.

The sea vector of the triad would be India’s indigenous ballistic missile submarines (SSBNs) INS Arihant and the follow-on vessel INS Arighat, which are expected to be armed with K-4 submarine launched ballistic missiles with a range of 3,500 km to hit China. The K-4s are still under development.

Incidentally, INS Arihant was commissioned in August 2016 and did its only deterrent patrol in November 2018. However, it was not clear what was meant by a deterrent patrol since SSBNs should carry its nuclear missiles, which was not done in this case.

Meanwhile, unsure about India’s assured second-strike capability, especially against China, some Indian analysts, writes Menon, “believe that India should change its no-first-use policy and begin to think of nuclear weapons as war-fighting weapons to compensate for India’s conventional inferiority against China.” The assumption is that since nuclear powers do not go to war there is very little possibility of a war between India and China. However, if war happens, it would, at best, be a limited border war.

The origin of this thinking that nuclear powers do not go to war lies in Cold War theology, where it was correctly believed that the presence of nuclear weapons with the US and Russia prevented war between the two blocs — NATO and Warsaw Pact — which had divided the world. Holding it as a truism for all times to come, Indian analysts – comprising policymakers, the military brass and retired senior officers – have superimposed this template on India. Hence, this popular narrative has emerged since the Ladakh 2020 stand-off between India and China.

These assumptions — no war, or a limited one between India and China — have neither been analysed nor war-gamed. The reality is that let alone the People’s Liberation Army (PLA), these assumptions do not even hold true against the Pakistani military, whose capabilities, with China’s support, have increased substantially.

Nuclear weapon powers

Before examining India’s case, there is a need to put into perspective the nuclear weapons of the US and the Soviets, and now the US and China.

In the 1950s, the Soviets had an overwhelming advantage over the US military in conventional forces. While the Soviets were not as technologically advanced as the US, they believed that quantity had a quality of its own. Instead of matching the Soviets’ quantity — tank for tank and gun for gun — US President Dwight Eisenhower introduced battlefield atomic or tactical nuclear weapons (TNWs) to thwart any Soviet conventional offensive in the European theatre. The TNWs worked because the US had superiority in strategic nuclear weapons (big yield bombs).

Called the ‘New Look’ strategy, the belief was that if the Soviets retaliated with their strategic nukes in response to the US’s TNWs, the latter could counter-retaliate with a bigger nuclear arsenal and perhaps control the nuclear escalation ladder. Since the Soviets did not put the US’s assumption to test as it would have resulted in Mutual Assured Destruction (MAD), the ‘New Look’ strategy, which came to be known as the US’s first offset strategy, worked.

However, by the early 1970s, two things happened. While retaining a formidable conventional arsenal, the Soviets managed to match the US in certain key conventional technologies. And their strategic nukes inventory matched the US’s nukes in range and yields, making an early use of TNWs extremely risky. With the Soviet or Warsaw Pact forces outmatching the US-led NATO in conventional forces’ size while maintaining near-technology parity, TNWs – without a superior strategic nukes arsenal – became too risky for use since the US’s control over the nuclear escalation ladder was no longer credible.

This led to the US’s second offset strategy where the reliance on nukes was abandoned. Instead, highly accurate and long-range conventionally guided munitions which could stop Soviet forces before they were arrayed for an assault were sought. Making use of battle networks and space for precision and stand-off attacks, conventional munitions which could achieve battlefield effects comparable with TNWs were fielded. This second offset strategy was used in the 1991 Gulf War against Iraq with spectacular success.

The central point of the US’s second offset strategy was that both conventional and nuclear forces had to be credible and strong for major powers to not go to war since neither side would feel confident of exercising war control. This line of thought holds good even today, as observed between the US and China with regards to military tensions in the Taiwan Strait and the South China Sea.

In both the Taiwan Strait and South China Sea, the PLA has built a formidable Anti-Access and Area Denial (A2AD) firewall, in addition to excellent cyber and electronic warfare capabilities comparable with the US military. So, while the US military can continue with its aggressive freedom of navigation patrols in both theatres, which are meant to signal its intent to China, Taiwan and ASEAN, it worries about crossing Chinese red lines since it is not confident of winning a conventional war.

For this reason, the Biden administration has, since coming to office, been seeking an appointment for defence secretary Lloyd Austin with Chinese senior vice-chairman of the Central Military Commission General Xu Qiliang to determine mutual red lines. China has repeatedly refused this meeting on the ground that Xu outranks Austin on the protocol front.

The US fear is that continued uncertainty over Chinese red lines worries ASEAN – and the group’s members may then request the US military to slow down, if not totally abandon, its sea and air combat patrols.

On the other hand, having achieved parity in conventional war in these two theatres with the US military, China worries about getting overwhelmed by the US’s massive nuclear arsenal and aggressive first-use posture. This, theoretically, could lead to a reprise of the US’s first offset strategy situation where, backed by a bigger strategic nuclear inventory, the US military could, if outdone in conventional war, use its tactical nukes.

While refusing to be a party to the Strategic Arms Reduction Treaty (START) between the US and Russia on the plea that its nuclear weapons arsenal is comparatively small, and unwilling to change its no-first-use posture since it could affect its peaceful rise, China has decided to increase its strategic weapons inventory to build credible nuclear deterrence to discourage the US military from any nuclear misadventure.

This explains the building of an additional 120 missile silos for its DF-41 and DF-31 Inter Continental Ballistic Missiles (ICBMs). From its de-alert status — with separate launchers, missiles, and warheads — the PLA seems to be moving towards keeping a part of its nuclear arsenal on a launch on warning (LOW) nuclear posture. This refers to initiating a nuclear strike on detection of an incoming hostile missile. China’s early detection system comprising ground and space-based components, a control centre and data processing system has been provided by Russia. This strategic early warning, command and control, and rapid reaction system is available with only three nations — the US, Russia and China.

China has also deployed lower yield nuclear weapons for use against campaign targets to reduce collateral damage. Its DF-26 ballistic missile which can conduct precision strikes is the likely vector for lower yield warheads.

India’s nuclear domain

Against this backdrop, the belief that abandoning no first use and using nukes for war-fighting could compensate for India’s conventional inferiority against China seems especially misplaced.

For one, a shift to a first-use policy would not diminish the need for conventional deterrence. For another, while not being able to match Chinese nuclear deterrence, it could compel the PLA, if required, to use any or all three options: destroy the Indian nuclear kill chain with its cyber, electronic, directed energy weapons or long-range precision hypersonic glide vehicles; use lower yield nukes in campaign as a warning signal; or resort to an LOW nuclear posture. Simply put, India’s first-use policy against China would be suicidal.

Moreover, the proposition of fighting a limited war with China is equally ill-informed. The genesis of the concept of limited war is the 1999 Kargil conflict between India and Pakistan which, at best, was an aberration on three counts.

First, with no participation of the Pakistan Air Force, the Indian Air Force had air dominance, which would not be possible in war. Second, since the Pakistan Army too did not participate — it was a combination of the mujahids and Pakistan’s Northern Light Infantry (then, a paramilitary and not a regular army) versus the Indian Army and the IAF — the Indian side could build an overwhelming superiority of land forces in a localised area with massive employment of artillery in a direct firing role; all this will not happen in a proper war. And third, the Nawaz Sharif government cracked under the US’s pressure to withdraw its forces and end the conflict.

Instead of learning the right lesson – that the Indian military needed to build credible counter-offensive capability – Army Chief General V.P. Malik formalised the limited war concept. Writing in the Indian Express newspaper of June 21, 2002, he said, “In the changed Indo-Pak strategic environment, there is a likelihood of limited wars than an all-out war. A limited war implies limited political and military objectives, not hurting excessively at any one time, limited in time, space and force levels.” The reality is that the complexion of war — whether it be limited or all-out — would be determined by the stronger side. In this case, China.

Failure to develop deterrence against China

On the question of nuclear tests, what needs to be asked is this: Why did the Vajpayee government, which said its nuclear tests were to maintain balance with China, fail to develop nuclear deterrence against it?

The answer has been provided in US’s former deputy secretary of state Strobe Talbott’s book Engaging India: Diplomacy, Democracy, and the Bomb. According to Talbott, days before India’s tests, Jaswant Singh, who was close to the prime minister but held no office at that time, sought an impromptu appointment with the US energy secretary Bill Richardson, who was visiting India. Considered close to the US President Bill Clinton, Richardson was staying at the US ambassador’s residence in New Delhi. During their meeting, Singh told the US officials that should the US president wish to convey something urgent to the Indian prime minister, it could be done through him, bypassing the slow bureaucratic procedures. Confused at that time, the US understood the import of Singh’s secret mission when, within days, India did its nuclear tests.

Instead of strengthening national security by quickly covering the paces from nuclear tests to nuclear weaponisation, the Vajpayee government dawdled, working on close ties with the US by offering itself as a strategic counterweight to China. Singh’s meeting with Richardson led to 13 rounds of talks on non-proliferation between him and Talbott. The talks were not about China, which ostensibly was the reason for India’s tests, but on Pakistan. Since the Pakistan Army Chief, General Jehangir Karamat, had told Talbott that Pakistan would not compromise on its national security and would do its own tests to match India’s, the US’s hope on non-proliferation was to dissuade a willing India from credible weaponisation. Pakistan had made it clear that its nuclear programme was tied with that of India.

Fast forward to May 2020. India lacks both conventional and nuclear deterrence against China. With little possibility of catching up on either, the gap will only continue to grow. Specific to the nuclear domain, India has several tough questions on the table: How to develop nuclear deterrence? What should India’s nuclear policy and posture be? What to do with Agni-5 and SSBNs since nuclear deterrence had failed? How to develop conventional deterrence since the military leadership has shown little interest in understanding the PLA’s informatised and intelligentised wars to modify its own military reforms? Procrastination on these issues is not an option since China would soon be tempted to militarily reclaim its territories from India, including Ladakh and Arunachal Pradesh.

Sadly, the situation vis-à-vis Pakistan is not encouraging either. Reported to have more nukes than India, and with full spectrum nuclear capability (covering tactical, operational and strategic targeting), Pakistan has developed credible nuclear deterrence against India. Moreover, with increased interoperability (i.e. the ability of the PLA and Pakistan military to fight together against India) since the scrapping of Article 370 from Jammu and Kashmir – which brought the two friends in tight military embrace – operational surprises by the Pakistan military cannot be ruled out in conventional war.

The going, as the saying goes, has got tougher for India, both in the north and the west.

#### The third scenario is Hacks —

#### Megaships are unique targets for cyber attacks

PTN 16, (3 Ways to Tackle Piracy and Terrorism, <https://www.porttechnology.org/news/how_shipping_lines_can_tackle_piracy_terrorism_and_cyber_threats/>)

However, as ships become larger, and the volume of containers increases, this puts ships at a much bigger threat of piracy and terrorism; however, the motivations behind each are fundamentally different, since they both have a different aim in mind. So what are the motivations behind attacks on mega containerships? Peter Cook, Director of the Security Association for the Maritime Industry, argues: “Whilst there is a clear difference between the motivation for piracy and terrorism (piracy being a criminal act is predicated purely on financial gain, whereas terrorism has an ideological aim and is therefore designed to terrorise those involved and affected), it does not necessarily mean that they should be treated exclusively. “Whilst a pirate is looking at what he can make out of attacking a ship from a business perspective (weighing up the risk v return ratio) a terrorist group will be looking at how they can further their cause by attacking a specific type of vessel, perhaps due to its flag, company of ownership or national/international standing. The terrorist attacks listed above clearly demonstrate that terrorists want a sensational attack and therefore the bigger the better.” Technical Paper: Port Security and the Effect of Piracy As well as piracy and terrorist threats, cyber security is also a massive issue within the maritime industry. It is such that cyber security has a fluctuating level of severity within the industry and requires increased focus to effectively deal with potential threats. It is therefore important for shipping lines not to underestimate their exposure to risk and implement the appropriate solutions. A recent survey from Moore Stephens found that although risk management strategies are satisfactory in the shipping industry, the companies that do not implement sound practices for preventing security threats are at risk or paying a much higher price, with cyber security being one of the most pertinent threats. Peter Cook elaborates on the main types of cyber security threats facing mega ships: “Cyber-attacks fall into three main categories: a criminal using cyber as the facilitator to commit another crime such as fraud; a targeted cyber-attack when the systems of a shipping company/ship are attacked to get specific data/IP or cause the company to lose business and or revenue or a “Hacktivist” who may target a company for personal gratification (CIA hackers for example).

#### Terrorists have the means, motive and opportunity to hack and weaponize megaships

Demchak & Thomas 21, Chair of Cyber Security and Senior Cyber Scholar, Cyber Innovation Policy Institute, U.S. Naval War College (Chris with ichael L. Thomas, Ph.D., is currently assigned to Maxwell Air Force Base as a professor of cyberwarfare studies at the U.S. Air Force Cyber College, CAN’T SAIL AWAY FROM CYBER ATTACKS: ‘SEA-HACKING’ FROM LAND, <https://warontherocks.com/2021/10/cant-sail-away-from-cyber-attacks-sea-hacking-from-land/>)

The vast bulk of the world’s critical economic and military traffic passes through a handful of narrow strategic waterways known as “maritime chokepoints.” While these waterways have always been prey to pirates, weather, and maritime accidents, these perils are now joined by maritime cyber attacks — whether conducted for ransom, malicious disruption, piracy, or as part of larger geopolitical conflicts. When a commercial vessel or warship is strategically delayed via sea-hacking, critical shipments are delayed by days or weeks. The massive size of modern container ships such as the Ever Given makes hacking their steering systems or forward speed a means of weaponizing the vessel. It is worth a bad actor’s effort to experiment with grounding a major new container ship remotely from land-based cells. The Suez Canal could be one of the more lucrative cyber disruption targets due to the amount and expected speed of traffic flow through its two-lane and one-lane sections. 30 percent of the world’s shipping container volume carrying 12 percent of global trade passes through the canal. Ships, including the very largest container vessels, can cut an average 12 days off a three-week trip from India to Italy by transiting the canal. The 205-meter-wide canal is known to be challenging even at modest speeds for ships the size of the Ever Given. Its 120-mile-long narrow transit offers the opportunity for cyber-induced disruption, particularly if one wanted to stall oil and gas deliveries to the Mediterranean and Europe. If the canal is blocked companies must take the alternative route — around the Cape of Good Hope, adding 10 to 12 days transit time, fuel costs, and security costs. Comparatively, according to a 2006 RAND study, the closing of the Malacca Strait would increase transit time by only an additional three days. With the grounding of the enormous container ship — the Ever Given — on March 23, 2021, the world was reintroduced to the issue of “maritime choke points”. The giant ship blocked the Suez Canal for six days. The Ever Given was not a cyber target this time but its grounding demonstrated the potential impact on global trade when a ship blocks a chokepoint. For example, the BBC reported that fears that the blockage would tie up shipments of crude oil resulted in crude prices rising by 4 percent on international markets. The Ever Given was launched in 2018, and is one of the largest ships in the world. It was built and is owned by a Japanese firm, leased and operated by a Taiwanese company, and sailing under a Panamanian flag. Similar-sized ships carry an increasing percentage of global trade, and the relatively recent 2015 addition of a second channel to the Suez Canal was undertaken in part to accommodate them. The canal is wide enough to accommodate such large vessels but physical clearance on either side of both channels is currently still limited. Mistakes in speed or understanding of wind effects on huge vessels can (and did in this case) come from human error. But they can also be stimulated by difficult-to-detect cyber intrusions into the navigation and steering systems of these ships, especially in newer vessels. The internet protocol networks used for steering and navigation are often not segregated effectively for cyber security. They are connected to the serial bus networks that make up the supervisory control and data acquisition systems critical to ship operations. The blockage caused by the grounding of the Ever Given demonstrates to cyber-competent terrorists or adversaries the potential for disruption if they are able to manipulate or disrupt transit mechanisms from the ships themselves, their containers’ content, and pilotage management systems. Even basic electricity supplies for locks such as those in the Panama Canal offer disruption options to a world of bad actors who have already demonstrated a willingness to attack critical infrastructure. The 900-kilometer-long Malacca Strait carries 40 percent of the world’s maritime trade, including a quarter of the globe’s seaborne oil supplies and 80 percent of the Middle East’s oil and gas supplies to China. Traffic congestion is its major challenge, particularly where the strait narrows to just 2.7 kilometers wide near Singapore. In addition to posing a lucrative target, these chokepoints also afford the opportunity, both from shore and through remote means, for potential bad actors to track particular ships, owners’ fleets, crew, content, origin, destination nationalities, or missions in order to select targets. These risks are aggravated as ships and systems rely increasingly on automation. Fully autonomous ships are a stated goal of the industry and the U.S. Navy. Such systems should include proper cyber security. Ships and Cyber Security Still Strangers In 2018, security researchers at Pen Test Partners found vulnerabilities in electronic chart display and information systems commonly used on cargo and container ships. These chart systems are often linked to GPS-guided autopilots, which when exploited give hackers the ability to access the operational technology of the ship: If networks are not segregated, hackers can remotely manipulate the ship’s steering, ballast pumps, and navigation. The electronic charting system is often slaved directly to the autopilot on many ships, causing the ship to automatically follow the charted course. Hackers can redirect the ship’s course by planting false information messages via satellite communications in order to mislead navigational decisions. Many satellite communications terminals on ships are available on the public internet with default credentials and can be hacked remotely. Numerous other paths can also prove useful vectors in the cyber attack of a vessel. For example, the 2018 research also showed that the electronic charting systems on some ships were still using relic operating systems with many known major vulnerabilities, such as Windows NT, often because these are expensive to upgrade. Even when malicious control is discovered, as the cliché goes, it can be very difficult to regain control in a timely manner. Commercial ship networks tend to have flat network architectures that are originally unsegmented networks without firewalls or other cyber security measures as part of their architecture. Once inside such networks, it is not difficult to travel around across the systems of the entire ship. Internal systems often use manufacturer default passwords, not just on firewalls but also on the critical programmable logic controllers running systems, as well as satellite communication equipment. Researchers have identified other vulnerabilities in computer-security forums, such as using the ship’s satellite terminal as a point of penetration. The terminal opens the system itself to attackers replacing the poorly secured firmware or simply reverting to an even less secure previous version, and then altering the applications running the terminal. Similar research results have produced similar concerns. Access in — whether through the electronic charting system, the satellite communications terminal, or any other outward-facing communications — means the ability to control critical ship systems covertly and use the massive bulk for any reason the attacker desires. At the outset some experts suggested that the Ever Given grounding was a cyber incident. When the voyage data recorder was examined, this speculation was shown to be wrong in this case. However, as long-time cyber control systems expert Joe Weiss noted, the potential for cyber disruption still exists. Despite the ship’s relative youth, the latest marine electronics likely installed for control and navigations do not resolve the vulnerabilities discussed earlier. The recent DefCon exercise is not a one-off example of success in simulated seahacking. Concurrent with the actual grounding of the Ever Given, a team of doctoral students competed in a NavalX “Hack the Machine” exercise — using the same “Grace” maritime system as DefCon — in order to determine if “hackers” could successfully attack maritime systems remotely through a cloud network. The team succeeded, “hacking and crashing the [fictional ship’s] cyber security monitoring system.” These oversights are major safety and security issues currently left unaddressed. One reason is a gap in crew skills and the costs of maintaining cyber secure systems while underway. Leaving poor default administrative passwords on essential systems means that attackers can take control of those systems. Shipping as a Cyber Campaign Weapon Attackers will not ignore the opportunities presented by poor maritime cyber security. A cyber campaign can provide a good enough return on investment in either economic or political benefits to make it attractive, and possibly even lucrative. American adversaries such as China, Russia, and Iran learn from these exploits and integrate them in larger cyber-enabled campaigns. Russia, for example, has spoofed a ship’s GPS at least 7,910 times between 2016 and 2019, affecting about 1300 commercial ships. In 2017, North Korean navigation jamming was said to be behind the forced return of hundreds of South Korean fishing vessels, and its cyber attacks led to the devastating NotPetya attacks that crippled the large Maersk shipping line the same year. In July 2021, Sky News reported the acquisition of documents said to originate from an Iranian offensive cyber unit called Shahid Kaveh, which is part of the Islamic Revolutionary Guard Corps cyber command. They present research on how to sink a cargo ship using cyber techniques and include details on the satellite communications systems used in the global shipping industry. The routine hacking of ships from space is coming. Currently the Global Navigation Satellite System constellation includes the American-run GPS, the Russian GLONASS, the European Union’s GALILEO, Japan’s QZSS, China’s BeiDou, and the Indian system known as NAVIC. Each nation’s ships tend to use their own national system. No nation’s commercial ships are as secure as necessary today, and they lag in securing the shipboard systems in the near and medium term. There is some talk of using older but functional radio wave technology as a more secure alternative to satellite-based systems, but the discussions are only just beginning. It is questionable how rapidly or widely alternatives such as eLORAN will spread. It will take investment and a sense of urgency on cyber security from major shipbuilding firms and shipping lines to accomplish this. As one researcher states, “[Electronic charting] systems pretty much never have anti-virus.” The anti-virus industry that protects land-based personal computers in the United States and Europe started over 30 years ago, but a multitude of huge ships launched during that time with complex computer architectures contain only basic cyber protection. U.S. and allied warships — as well as most of the world’s exporting economies — plan on free transit through the Suez Canal and other chokepoints. Iranian intelligence services have collected maps, means, and incentive to use maritime cyber weaknesses for Iranian campaigns. In the mid-1990s, Osama bin Laden’s al-Qaeda group experimented with a variety of attempted attacks using public transit, notably in Paris. Six years later al-Qaeda used commercial airliners against the Twin Towers in New York City on Sept. 11. The maritime cyber environment is abysmally insecure. The technical means to exploit these ships is well distributed across land-based hackers with no prior maritime systems experience. It doesn’t take much to mess with a passing ship. The opportunities are well-known, from the chokepoints and the ship dependence on external networks, clouds, and satellite navigation communications. The motivation is as varied as the adversary, ranging from the ransomware criminal, to the “just because they can” opportunist, to the state adversary and its proxies.

#### Ukraine means that attacks on megaships ensure escalation between the US and Russia

Borger 2/13/22, Reporter forn the Guardian. (Julian, Ukraine crisis: miscalculation could trigger unintended wider conflict, https://www.theguardian.com/world/2022/feb/13/ukraine-crisis-miscalculation-could-trigger-unintended-wider-conflict)

The unprecedented Russian military encirclement of Ukraine has not only brought closer the prospect of a devastating war in that country, it has also raised the risks of triggering an unintended wider conflict. The US and Nato have been adamant that their troops will not enter Ukraine no matter what happens, and the Pentagon has pulled out the 160 national guard soldiers who were acting as military advisers. This image provided by The White House via Twitter shows President Joe Biden at Camp David, Md., Saturday, Feb. 12, 2022. Biden on Saturday again called on President Vladimir Putin to pull back more than 100,000 Russian troops massed near Ukraine’s borders and warned that the U.S. and its allies would “respond decisively and impose swift and severe costs” if Russia invades, according to the White House. (The White House via AP) Biden warns Putin: you’ll pay a heavy cost if you attack Ukraine Even during the cold war, Washington and Russia made sure their forces did not clash, and Joe Biden has made clear he would seek to keep it that way. “That’s a world war when Americans and Russia start shooting at one another,” Biden said. However, the massing of Russian troops in Belarus and the deployment of a substantial Russian naval force in the Black Sea, matched on a smaller scale by Nato land, sea and air reinforcements on the alliance’s eastern flank, means there is far more military hardware in close proximity than is normal. And with proximity comes the increased danger of accidents and unintended consequences. “The risk of something going down like a mid-air collision, or a trigger-happy Russian or American, can really escalate things quickly,” said Danny Sjursen, a former army major and director of the Eisenhower Media Network. “You’re setting yourself up for accidents and miscalculation, and that’s when you can get out of control real quick, because there are domestic considerations both in Russia and in the United States. An American pilot dies – now what? I’m not saying that necessarily means we go to cataclysmic nuclear war but it escalates things.” The US national security adviser, Jake Sullivan, told CBS News on Sunday that the US had sought to be transparent about its troop deployments in eastern Europe in order “to avoid mistake, miscalculation or escalation and also to send a very clear message to Russia we will defend every inch of Nato territory”. There is a long history of close encounters over the Baltic and Black Seas. Earlier this month US jet fighters scrambled to intercept Russian warplanes operating close to Nato airspace while British and Norwegian planes took off to monitor Russian aircraft flying into the North Sea. While Russia has shut off large parts of the Black Sea to conduct its manoeuvres, Nato navies have stayed out of the immediate vicinity for now, while building up their presence in the Mediterranean. If they do decide to go through the Bosphorus in a show of strength, or to safeguard commercial shipping, the risk will rise again. Elisabeth Braw, a senior fellow at the American Enterprise Institute, said the danger was further heightened by Russia’s suspected use of “GPS spoofing”, interference with the navigational equipment of other vessels. On several occasions recently, civilian ships traveling in the Black Sea have encountered mysterious GPS troubles that showed the vessels being in a different part of the Black Sea or even on land. It was widely though the incidents were caused by Russia testing its technology. “It raises the risk for naval vessels that are in the Black Sea, which we should remember is not that big, and it’s crowded,” Braw said. “There’s enormous shipping activity in the Black Sea, and so all those crews face the risk of having no GPS.” The transfer of combat troops from Russia’s far east to Belarus has not only significantly increased the imminent threat to Ukraine, but also made eastern European Nato members increasingly nervous. “The closest training ranges in Belarus are 150 to 200km from Vilnius or Warsaw,” said Kristjan Mäe, the head of the Nato and EU department at Estonia’s ministry of defence. “This is a Russian force posture that hasn’t been there previously.” A refugee crisis at the Polish-Belarus border last year led to a close encounter between the troops facing each other, with Warsaw complaining that Belarus forces opened fire in the direction of their soldiers. “We have to remember that the people who are actually out on the frontline are very young men and women and they face enormous responsibility,” Braw said. “Yes there is a chain of command but if there is some sort of provocation or aggression, intentional or unintentional, that is directed against them, then they have to respond.” The close encounters so far have occurred in peacetime. In the event of war, nerves will be far more on edge, communications could be hampered or flooded with disinformation. “We cannot be entirely confident that in the lead-up to or during a conflict that Nato and Russia will be able to communicate, especially as current civil and military communication systems between them are not as robust or technically resilient as they should be,” Sahil Shah, a policy fellow at the European Leadership Network, said. “The world’s two largest nuclear-armed states have returned to the brink of conflict exactly 60 years after the Cuban missile crisis. If diplomacy is not pursued to the fullest extent, the risks of miscalculation and miscommunication could potentially pull in wider Europe into a devastating war. Without dialogue on how to manage de-escalation, it will be as if our leaders are running into a monsoon with newspapers over their heads.”

#### US-Russia escalation over Ukraine causes extinction

Helfand 2-8-2022, MD, is Immediate Past President of the International Physicians for the Prevention of Nuclear War, recipient of the 1985 Nobel Peace Prize, and cofounder and past president of Physicians for Social Responsibility, IPPNW’s US affiliate. He has published studies on the medical consequences of nuclear war in the New England Journal of Medicine, the British Medical Journal, and the World Medical Journal. (Ira, “Ukraine and the Threat of Nuclear War,” *The Nation*, <https://www.thenation.com/article/world/ukraine-russia-nuclear-threat/>)

As the crisis in Ukraine deepens, it is appropriate to consider what the actual consequences of war there might be. An armed conventional conflict in Ukraine would be a terrible humanitarian disaster. Last week, US government officials estimated that the fighting could kill 25,000 to 50,000 civilians, 5,000 to 25,000 Ukrainian military personnel, and 3,000 to 10,000 Russian soldiers. It could also generate 1-to-5 million refugees. These figures are based on the assumption that only conventional weapons are used. However, if the conflict spread beyond Ukraine’s borders and NATO became involved in the fighting, this would become a major war between nuclear-armed forces with the very real danger that nuclear weapons would be used—and the public debate about this crisis is utterly lacking in discussion of this terrible threat. Both sides in such a conflict would, of course, begin fighting with non-nuclear conventional weapons. But as a result of advances in technology and firepower over recent decades, these weapons possess much greater range and destructiveness than earlier models, enabling them to strike high-value targets—airbases, radar stations, command centers, logistical hubs, and so on—far behind the front lines. As the losses mounted up on both sides—and if one or the other faced imminent defeat—its leaders could feel driven to employ their tactical nuclear weapons to avert such an outcome. Both US and Russian military doctrines allow for the use of tactical nuclear weapons under such circumstances. Despite reductions in nuclear forces over the last several decades, Russia still has 1,900 tactical nuclear weapons and 1,600 deployed strategic nuclear weapons. On the NATO side, France has 280 deployed nuclear weapons and the UK, 120. In addition, the United States has 100 B-61 tactical bombs deployed at NATO bases in Belgium, Germany, Italy, the Netherlands, and Turkey, and an additional 1,650 deployed strategic warheads. If even a single 100-kiloton nuclear weapon exploded over the Kremlin, it could kill a quarter of a million people and injure a million more, completely overwhelming the disaster-response capability of the Russian capital. A single 100-kiloton bomb detonated over the US Capitol would kill over 170,000 people and injure nearly 400,000. But it is unlikely that an escalating nuclear conflict between the United States and Russia would involve single warheads over their respective capitals. Rather, it is more likely that there would be many weapons directed against many cities and that many of these weapons would be substantially larger than 100 kiloton. For example, Russia’s 460 SS-18 M6 Satan warheads have a yield of 500 to 800 kilotons. The W88 warhead deployed on US Trident submarines has a yield of 455 kilotons. A 2002 report showed that if just 300 of Russia’s 1,600 deployed strategic warheads were detonated over US urban centers, 78 million people would die in the first half hour. In addition, the nation’s entire economic infrastructure would be destroyed—the electric grid, Internet, food distribution system, transportation network, and the public health system. All of the things necessary to sustain life would be gone, and in the months following this attack the vast majority of the US population would succumb to starvation, radiation sickness, exposure, and epidemic disease. A US attack on Russia would produce comparable devastation there. And if NATO were involved, most of Canada and Europe would suffer a similar fate. Still, these are just the direct effects of the widespread use of nuclear weapons between NATO and Russia. The global climate effects would be even more catastrophic. Recent studies have confirmed the predictions, first advanced in the 1980s, that large-scale use of nuclear weapons would cause abrupt, catastrophic global cooling. A war involving the full deployed arsenals of the US and Russia could loft up to 150 teragrams (150 million metric tons) of soot into the upper atmosphere, dropping average temperatures around the world as much as 18 degrees Fahrenheit. In the interior regions of North America and Eurasia temperatures would drop 45 to 50 degrees, to levels not seen since the last ice age, producing a disastrous decline in food production and a global famine that might kill the majority of humanity. Even a more limited war involving just 250 warheads in the 100 kiloton range could drop average global temperatures by 10 degrees, enough to trigger a famine unprecedented in human history, which would almost certainly bring the end of modern civilization. The enormity of the risk inherent in the current game of nuclear chicken between the US and Russia demands a fundamental change in their relation to each other, and in the equally fraught relation between the US and China. The great powers can no longer pursue a zero-sum game to see who will come out on top. It is possible that one of them will emerge on top of the heap—but the heap may well be a global ash pile. Nuclear weapons are a discrete manmade threat to the survival of our species. Their elimination could be achieved within a decade if the leaders of the nuclear-armed states were committed to doing so. And the process of negotiating a verifiable, enforceable timetable for dismantling these weapons would establish a new cooperative paradigm in international relations that would enable them to address the other, more complex existential threat posed by the climate crisis. The elimination of nuclear weapons is not some pie-in-the-sky fantasy. It is an absolute necessity for our continued survival. We have not survived this far into the nuclear era because of wise leadership, or sound military doctrine, or infallible technology. As Robert McNamara famously observed, “We lucked out. It was luck that prevented nuclear war.” A hope for continued good luck is an insane security policy. A determination to eliminate these weapons is a policy grounded in reality, and it offers us the only acceptable path forward.

### 1AC — Plan

#### The United States federal government should substantially increase its criminal prohibitions of anticompetitive vessel sharing agreements involving the acquisition, use, and sharing of mega-ships above 10,000 TEU capacity in container shipping through debarment.

### 1AC — Solvency

#### Solvency —

#### Prohibiting agreements forces a shift away from megaships

Haralambides 19, Professor of Maritime Economics and Logistics at Erasmus University Rotterdam. (Hercules, 2019, Gigantism in container shipping, ports and global logistics: a time-lapse into the future Maritime Economics & Logistics volume 21, pages1–60, https://link.springer.com/article/10.1057/s41278-018-00116-0)

Such consolidation in an industry that is already highly concentrated is bound to take place under the increasing scrutiny of the regulator who, with the final consumer in mind, is likely to encourage more competition rather than further consolidation. If the liner shipping market thus becomes more open and competitive in the future, i.e. if alliance agreements regarding vessel sharing, investment planning, etc. are scrutinized more closely for their compatibility with competition law, as I expect, the joint filling of the ship will become more difficult and ship sizes shall by necessity decrease, together with an increase in the number of ports of call. Low prices would then be achieved through higher competition rather than big ship sizes. In such a scenario, shipping companies will be forced to provide the services their customers want, rather than the ones they find it convenient to offer. Shippers do not like too much transshipment and, if they could help it, they would like their container as close to them as possible. Reduction in ship size and more direct calls could thus follow the example of the air-transport industry. The most common jet flying across the Atlantic is not the 420-seat 747 jumbo but the 200 plus-seat Boeing 767. Eight out of 10 transatlantic planes are twin-engine craft such as the 767, its bigger brother the 777, or the various airbuses. This taste for smaller international jets reflects the fact that travellers now like to shun big international hubs such as London and New York and fly directly to their destinations. This is changing the international market into a web of direct intercontinental flights rather than one big air-bridge between London and New York.

#### A reduction in ship-size leads to a more competitive industry

Haralambides 19, Professor of Maritime Economics and Logistics at Erasmus University Rotterdam. (Hercules, 2019, Gigantism in container shipping, ports and global logistics: a time-lapse into the future Maritime Economics & Logistics volume 21, pages1–60, https://link.springer.com/article/10.1057/s41278-018-00116-0)

The impact of alliances on container shipping and ports I just stated that the gigantism in shipping has been induced by both port competition and shipping alliances. Indeed, without the ability to use each other’s ships, no carrier alone would be able to achieve a capacity utilization high enough to justify the use of present day mega-ships, while at the same time offering the frequency that shippers demand. But carriers have gone a step too far: At the time of writing, three alliances carry 80% of global trade. Such consolidation, in an industry that is already highly concentrated, is bound to take place under the increasing scrutiny of the regulator who, with the final consumer in mind, is likely to encourage more competition rather than further consolidation. If this happens, i.e., if container shipping becomes more open and competitive in the future, and alliance agreements regarding vessel sharing, investment planning, etc. are scrutinized more closely for their compatibility with competition law, as I expect, the joint filling of the ship will become more difficult and ship sizes shall by necessity decrease, together with an increase in the number of ports of call. Low prices would then be achieved through more competition rather than big ship sizes. This is more so when it is doubtful if the economies of scale in shipping are passed on to the final consumer, as required by the consortia block exception from the provisions of competition law in Europe.Footnote51

#### Criminal enforcement in shipping is effective and ensures compliance

Consadine 21, Attorney with Seward & Kissell LLP. (Michael, Shipping Companies Beware: Antitrust Challenges Ahead as DOJ Focuses On Industry, <https://www.sewkis.com/publications/shipping-companies-beware-antitrust-challenges-ahead-as-doj-focuses-on-industry/>)

In response to U.S. President Joseph Biden’s July 9, 2021 Executive Order to enhance competition and antitrust enforcement, the U.S. Federal Maritime Commission (“FMC”) entered into a Memorandum of Understanding (“MOU”) with the Antitrust Division of the U.S. Department of Justice (“DOJ”) to facilitate criminal investigations of violations of U.S. laws. Given that shipping companies and their employees may be separately charged by DOJ regardless of their physical location and face draconian penalties upon conviction, it is incumbent for all shipping companies – foreign and domestic – to monitor these recent developments and take steps to minimize the likelihood of harmful consequences, including by establishing or enhancing existing compliance programs.

#### Empirics prove antitrust enforcement deters cartelization

Bos et al 15, Professor of Economics Department of Organisation and Strategy Maastricht University. (Iwan, with Stephen Davies Centre for Competition Policy & School of Economics University of East Anglia and Peter L. Ormosi Centre for Competition Policy & Norwich Business School University of East Anglia, , The deterrent effect of anti-cartel enforcement: A tale of two tails <https://ueaeco.github.io/working-papers/papers/ccp/CCP-14-06v2.pdf>)

The empirical contribution of this paper derives from a novel comparison of the distributions of overcharge observed for cartels between jurisdictions which did and did not prohibit cartels. It shows that the distribution for legal cartels has significantly more mass in its tails than does the distribution for illegal cartels. This finding is robust to controlling for the time period in which the cartels occurred and the perceived quality of the sources of the data. We suggest it has two potential explanations, not necessarily mutually exclusive. It may be that anti-cartel law is most effective in deterring very low or very high overcharge cartels, or it may be that such cartels are least likely to be detected in a world where cartels are illegal. The remainder of the paper is designed to distinguish which of these potential explanations is more likely. To do this, we present a fairly general theoretical model which is representative of the previous literature on cartel formation. This establishes the conditions under which we can deduce that its is deterrence which drives the empirical result. We argue that only relatively weak assumptions are required: in essence, low-overcharge cases are deterred by fines which have (at least partly) a fixed element, while high-overcharge cases, in the face of a higher probability of detection, either moderate their overcharge to lessen the likelihood of detection and lower the expected penalty (composition deterrence), or entirely abandon the cartel (frequency deterrence) because incentives become incompatible. This has some potentially important implications. In the previous literature, evidence on the nature of detected cartels has been widely used as a key source of information about the nature of collusion in the real world. But it now needs to be underlined that this evidence emanates only from cases which are not deterred, and are detected, by active anti-cartel enforcement policy. In that this ignores cases 21 which are deterred, it may seriously underestimate the welfare-enhancing impact of policy, especially insofar as it is the most harmful cases which are most likely to be deterred.18 This also raises doubts about conventional empirical wisdoms on the structural factors which are conducive to collusion. The evidence of this paper is confined to overcharge, but it is not unlikely that overcharge will be related to the structure of the cartel (number and asymmetries of members, duration, etc). If so evidence from previous studies on the structure and stability of cartels may require revisiting.

#### Criminal debarment ensures deterrence — it’s normal means for DOJ enforcement

Wright 10, professor of law at George Mason University, (Joshua, with Douglas Ginsburg, ANTITRUST SANCTIONS, Competition Policy International, Vol. 6, No. 2, pp. 3-39, Autumn 2010, https://www.law.gmu.edu/assets/files/publications/working\_papers/1060AntitrustSanctions.pdf)

The Disqualification Act applies to a person if “a company of which he is a director commits a breach of competition law,” which means participates in a cartel and “his conduct as a director makes him unfit to be concerned in the management of a company,” which means his conduct “contributed to the breach of competition law,” “he had reasonable grounds to suspect that the conduct of the undertaking constituted the breach and he took no steps to prevent it,” or “he did not know but ought to have known that the conduct of the undertaking constituted the breach.”68 A disqualification order provides the named individual “shall not be a director of a company ... or in any way, whether directly or indirectly, be concerned or take part in the promotion, formation, or management of a company.”69 The Act has been applied for almost 25 years in contexts other than antitrust, with dozens of disqualification orders issued in 2009 alone, 70 so there should by now be a substantial body of precedent informing terms that are facially unclear, such as what it means indirectly to “take part in the … management of a company.”71 Thus far, the single example involving debarment of an antitrust violator is the Marine Hose case, which is also the only criminal competition case to go to judgment in the United Kingdom. The court sentenced three individuals to jail terms of two to three years for their participation in the cartel and, upon the petition of the OFT, entered disqualification orders of from five to seven years against each of the three defendants. One need not look only to the United Kingdom for significant experience with debarment as a legal sanction. At least since the early 1980s, the U.S. Securities and Exchange Commission has routinely negotiated consent decrees barring a person accused of violating the securities laws from serving as an officer or director of a public company for a stated period of years. 72 Similarly, the Federal Trade Commission has regularly negotiated consent decrees amounting to judicial debarment orders against individuals and businesses accused of violating the consumer protection laws the agency is charged with enforcing. 73 The U.S. Department of Justice should consider taking a similar approach to sentencing individuals convicted of a criminal violation of § 1 of the Sherman Act. We are aware of no reason for which the Department needs to wait for statutory authority to get started, as did the SEC, by negotiating consent orders providing for debarment. 74 Prosecutors might, for example, if the conditions for leniency are met, agree to allow individual defendants to reduce or avoid jail time, in return for debarring them from working as a manager or director of any publicly traded corporation or for any company in a particular industry if it is either located in or sells into the United States. 75 Negotiated orders of debarment would allow the Antitrust Division to accrue much of the benefit of a prison sentence—publicizing the offense and keeping the offender from recidivating—without undertaking the risk and cost of a criminal trial. The period of debarment should be calibrated to have the same average deterrent effect as jail. 76 Further, as we have pointed out, debarment would bolster currently weak reputational penalties, thereby reducing the need for individual fines, which are less likely to deter efficiently because of individuals’ wealth constraints.

#### It's the most efficicent way to deter anticompetitive practices — fines are insufficient

Mariniello 12, Senior Fellow at Bruegel and former Digital Adviser at the European Political Strategy Centre. (Mario, European antitrust fines: a new wave of deterrence?, <https://www.bruegel.org/2012/12/european-antitrust-fines-a-new-wave-of-deterrence/>)

Deterrence is all about expectations. Companies refrain from entering into cartels or abusing their dominant position if what they expect to gain (ie the additional profit with respect to a counterfactual scenario in which they compete fairly) is less than what they expect to lose (ie the fine imposed by the antitrust authority if the illegal activity is discovered). Expectations depend on a number of variables: expected gains depend on markets’ structural features, such as demand elasticity or actual competitive conditions in the market, and on the likelihood that a cartel will not collapse because of the risk of defections by other cartel participants. Expected losses depend on the size of the fine imposed, the speed with which the fine is imposed and the probability that the illegal activity is ultimately detected. Protecting whistle-blowers through leniency programmes has shown to be an effective means to reduce cartel stability and increase the likelihood of detection. However, much of the debate in practitioners’ and academic circles is now focussed on how to increase deterrence through personal liabilities. After all, companies are managed by individuals. Those individuals may have a lot to gain by breaking antitrust laws, reaping short-term benefits, while they might not expect to carry the costs: by the time a cartel investigation is concluded, the very same individuals might have already left the original company. They may care little if their former shareholders bear the costs of their past illegal decisions. And even if they stay within the same company, they often do not face severe consequences on their career. Conversely, criminal sanctions have proven very effective in the US. In the UK, evidence from the Office of Fair Trading (see Deloitte Deterrence Study – 2007) indicates that business perceives criminal penalties and disqualification of directors as the most important factors motivating compliance. The level of fines comes only fourth in the ranking.

#### Biden is spending PC on shipping alliances now

Greenstein 3/2/22, partner in the Washington, D.C. office of Constantine Cannon, (Seth, UPDATE: The End of the Ocean Carriers’ Antitrust Exemption? <https://constantinecannon.com/antitrust-group/update-the-end-of-the-ocean-carriers-antitrust-exemption/>)

President Joe Biden’s call for shipping reform during his State of Union address is the latest indicator that the longstanding antitrust exemption for ocean carriers may be running aground. On January 7, 2022, this blog asked whether supply chain delays and skyrocketing container shipping prices could lead to the end of ocean carriers’ historical immunity from the antitrust laws under the Shipping Act of 1916. Given events in the ensuing weeks, the answer may well be “yes.” The White House released a Fact Sheet on February 28, entitled “Lowering Prices and Leveling the Playing Field in Ocean Shipping.” After citing estimates that in 2021 the pandemic enabled the container shipping industry to reap profits seven times higher than its 2020 profits, and five times its profit over the entire prior decade, the Biden administration announced several steps designed to “lower consumer prices and level the playing field in ocean shipping.” Id. Among those initiatives, the President called on Congress to pass “reforms that address the current antitrust immunity for ocean shipping alliances.” Id. President Biden echoed this message in his State of the Union address. After commenting that “capitalism without competition isn’t capitalism,” it is “exploitation,” President Biden observed: “During the pandemic, these foreign-owned companies raised prices by as much as 1,000% and made record profits.” Id. He then announced a “crackdown” on ocean carriers “overcharging American businesses and consumers.” Id. In fact, Congress did not wait for the State of the Union to put the shipping antitrust exemption on the chopping block. Representative Jim Costa issued a press release following the State of the Union address describing his bipartisan Ocean Shipping Antitrust Enforcement Act as the answer to President Biden’s call for shipping reform. The bill, which would eliminate the shipping antitrust exemption in its entirety, was introduced in the House on February 28 by Rep. Costa and co-sponsors- Rep. Dusty Johnson and Rep. John Garimendi (whose Ocean Shipping Reform Act passed the House in December 2021 by a 364-60 bipartisan vote). This legislation would thus go even further than the Free Market Antitrust Immunity Reform (“FAIR”) Act bill proposed in 1999-2001, which would have eliminated the exemption for ocean carriers while preserving the exemption for marine terminal operators. We can expect this drive to revive competition in the shipping industry to continue. Reps. Costa and Johnson are the Chair and Ranking Member, respectively, of the House Agriculture Subcommittee on Livestock and Foreign Agriculture. Agricultural export interests have been severely affected by ocean carrier practices during the pandemic, including the shipping of empty containers back to foreign ports.) Our January 7 post observed that Congress could consider more granular approaches. In addition to the FAIR Act approach, we noted that a pro-competitive bill could eliminate the exemptions that enable fuel profiteering while “permitting ocean carriers to continue entering into vessel-sharing agreements that at least in theory promote efficiency by combining containers from multiple carriers onto a single ship—similar to airline codesharing arrangements.” The adverse market effects of the Shipping Act antitrust exemptions continue to command the attention of the White House and Congress. The days of ocean carriers’ antitrust immunity, though more than a century old, may now indeed be numbered.

# 2AC

## Advantage

## T — Exemptions

#### Counter Interpretation---prohibitions expand the scope

Bradford and Chilton 18 (Anu Bradford, Henry L. Moses Professor of Law and International Organization, Columbia Law School. Adam S. Chilton, Assistant Professor of Law and Walter Mander Research Scholar @ the University of Chicago. “Competition Law Around the World from 1889 to 2010: The Competition Law Index” , Columbia Law School Scholarship Archive Faculty Scholarship, <https://scholarship.law.columbia.edu/cgi/viewcontent.cgi?article=3519&context=faculty_scholarship> , 2018, date accessed 9/5/21)

The Scope Index is the closest to the CLI in that it also measures the law in the books, treating prohibitions as elements that increase the scope (or stringency) of the law and defenses as elements that reduce the scope (or stringency) of the law. Basic categories in the Scope Index and our CLI are also the same, even if somewhat differently labeled. For example, we refer to “anticompetitive agreements” where the Scope Index refers to “restrictive trade practices.”

## Indict

## CP — China

## CP — Taxes

#### Debarment is a criminal penalty for violating antitrust

Hogge 19, Office of Preconstruction, Construction and Pavements Department of Transportation,

(Brian, Suspension and Debarment - Frequently Asked Questions,https://www.fhwa.dot.gov/construction/cqit/susdebqa.cfm)

Answer: The basis for a debarment can be for either a conviction or a civil judgment. Criminal convictions that lead to a debarment may include fraud, antitrust violations, forgery, bribery, falsification of records, making false statements, making false claims, conspiracy, failure to comply with applicable environmental requirements (such as the proper storage, transportation, and disposal of hazardous waste), failure to pay the predetermined minimum wage, and other offenses indicating a lack of business integrity or business honesty that seriously and directly affects a person's or company's present responsibility. Civil judgments that lead to a debarment typically include qui tam actions for making false claims under the False Claims Act, 31 U.S.C. 3729 et seq. In addition to a civil judgment or conviction, a person or company may be debarred whenever the agency can show by a preponderance of the evidence that some other serious cause that affect a person's of company's present responsibility has occurred.

#### 2 — You can’t collect taxes against international shipping

Pedley 76, J.D. candidate, Case Western Reserve University, (James, Under Foreign Flags: The Inequitable Avoidance of U.S. Taxation by American-Owned Ships, https://scholarlycommons.law.case.edu/cgi/viewcontent.cgi?article=2163&context=jil)

Sections 872 (b)(1) and 883 (a)(1) were enacted in 1921.21 The Senate committee report on those sections indicates that the purpose was to promote international stability in shipping and to prevent retaliatory taxation of shipping by different nations.2 2 It has been suggested, however, that a major reason was actually that collection of the tax would have been practically impossible. If a foreign ship failed to pay the tax, the United States would have been forced into attaching a foreign ship for delinquent taxes when it arrived in port, and the fear of possible retaliation on United States vessels far outweighed the marginal revenues that could be gained.23 Also, during World War I, the United States spent over $3 billion for ship construction 24 ranking its merchant fleet second only to England. At the time of the enactment of sections 872 (b)(1) and 883 (a)(1), the United States had the most to gain from such exemptions. The thought of American vessels registering under foreign flags, and foreign countries inducing registration of American vessels through tax incentives had not entered into the committee's deliberations.

#### Counterplan violates treaties and removes shipping exemptions from tax — causes retaliation

Pedley 76, J.D. candidate, Case Western Reserve University, (James, Under Foreign Flags: The Inequitable Avoidance of U.S. Taxation by American-Owned Ships, https://scholarlycommons.law.case.edu/cgi/viewcontent.cgi?article=2163&context=jil)

Foreign Shipping may be Exempt from United States Tax - Sections 872 (b) and 883 (a) Internal Revenue Code If the income of foreign vessels which entered any particular nation's ports were taxed, not only would the expense be great but there would also be a risk of international tax retaliation. To eliminate this problem of double taxation, the United States has entered into tax conventions of a bilateral nature with more than 21 nations, providing for reciprocal exemptions of foreign ship income. Additionally, the U.S. tax code provides a broad unilateral exemption. 7 Also, the United States, in 1963, was a signatory of an international treaty that provided for a reciprocal exemption of income from foreign vessels s Sections 872 (b)(1) and 883 (a)(1) provide for exclusions from United States gross income of a foreign corporation's"9 earnings derived from the operation of a ship, documented under the laws of a foreign country, which grants equivalent exemptions to citizens of the United States and to corporations organized in the United States." If a Cuban ship entered a United States port and Cuba did not grant United States ships an exemption, then the United States could tax that vessel's United States earnings.

#### Goes nuclear

Muller 2K

Dr. Harold Muller is the Director of the Peace Research Institute-Frankfurt and Professor of International Relations at Goethe University¶ Compliance Politics: A Critical Analysis of Multilateral Arms Control Treaty Enforcement¶ <http://cns.miis.edu/npr/pdfs/72muell.pdf>

Great Power Cooperation¶ A third very crucial condition is a sufficient commonality of interest and commitment among the major powers with regard to both the treaty in general and the compliance issue in question in particular. The great powers act on the basis of a multiplicity of interests, commitments, and orientations. If the major powers\* broader political, economic, and security concerns turn out to be contradictory or even antagonistic, a non-multilateral compliance action by one or more of them becomes more likely. Such action outside the multilateral context will affect the great power relationship and, in turn, the prospects for continued institutionalized cooperation.¶ In short, power relations do not develop in an ahistorical and context-free way, following quasi-natu¬ral laws. They depend rather on habits, conventions, and perceptions that are shaped by experience. The con¬straints and relations in the international system are thus not immutable, but rather malleable.12 When a treaty regime creates expectations of multilateral compliance policies, unilateralist behavior can thus cause one of two difficulties: • It may push other powers (and possibly their fol¬lowers, proxies, allies, and partners) to rally around the accused party. This may occur either because the accused party is a close ally, or to deter the power(s) acting unilaterally from further unilateral actions out of fear that such actions may lead to an adverse change in the balance of power. Such a course of events would seriously diminish the chances for pursuing further the road towards a world order based on cooperative security,11 rather than balance of power principles. Moreover, such confrontations include a risk of escalation, which could lead to another confrontation like¶ the Cuban missile crisis, by far the most dangerous event so far in the nuclear age. • Alternatively, the aggrieved powers may abstain from a direct confrontation out of concern for these risks, but freeze their cooperation in the arms control field as a sort of reprisal. Such a development, while less dangerous on the surface, would risk the erosion of multilateral arms control and nonproliferation in¶ the long run. Would-be rule-breakers could be tempted to play off great powers against each other, making it possible for them to pursue their rule-breaking activities with less risk and a greater likelihood of getting away unscathed with their deviant course of action.¶ In either mode, arms agreements suffer, the prospects of cooperative security policy as an ordering principle of world politics decline, and the risk of a major confrontation among great powers increases. This trajectory is a reflection of the pivotal role of treaty community cohesion. Because of the particular importance of major powers within that community—the presumption of legal equality notwithstanding—antagonisms among them are particularly likely to sunder that community and prevent it from maintaining and strengthening the treaty when it is challenged by deviant behavior.

#### Internal link is environmental tax, concludes its not sufficient to solve [KU HW reads blue]

Bachus and Vanswijgenhoven 17 (Kris Bachus, research manager of climate and sustainability @ the HIVA Research Institute of the University of Leuven. PhD in social science and a master’s degree in Economics, and, Frederic Vanswijgenhoven, Hospital financing expert @ Jessa Research public rescources, 8-29-2017, "The use of regulatory taxation as a policy instrument for sustainability transitions: old wine in new bottles or unexplored potential?," Taylor & Francis, https://www.tandfonline.com/doi/abs/10.1080/09640568.2017.1358155, accessed 2-17-2022)

So, if the neoclassical policy instrument of environmental taxation is so hard to reconcile with the bottom-up governance principles of transition theory, is it still worthwhile to study the combination? Four arguments support an affirmative answer. First, as we demonstrated in Section 3, the impact of environmental taxation is much higher in the long run than in the short run, which gives this instrument an interesting appeal considering the fundamental long-term change transition theory describes. Second, when the economy is (threatening to get) stuck in a technology that is not serving the long-run transition goal, a regulatory tax on that technology may unlock (further) lock-in, thus avoiding an important obstacle for a sustainability transition (den Butter and Hofkes 2006). Third, policy attention tends to go to supporting niches but much less to destabilising the dominant regime, which is politically more difficult. However, according to Kivimaa and Kern (2016), niche support policies will need to go hand-in-hand with regime destabilisation policies aimed at internalising externalities. A tax on the dominant regime technology is particularly suitable for that purpose (Geels and Schot 2007). Fourth, the bounded rationality concept embraced by transition theory still incorporates a level of rationality, implying that a price signal may still have an effect.

We conclude that there is no consensus on the use of regulatory taxes to enhance sustainability transitions. Some scholars see a role for taxation, but rather as one part of a more comprehensive policy mix (Geels 2006; Kemp, Schot, and Hoogma 1998; Markard and Truffer 2008).

## DA — SOE

#### Non-UQ — the DOJ just started an investigation against an international alliance

Maritime Executive 3/16/22, Maersk Receives Subpoena in DOJ Antitrust Investigation of Carriers , Maersk Receives Subpoena in DOJ Antitrust Investigation of Carriers

Two weeks after the White House singled out the container shipping industry announcing the administration’s intent to investigate antitrust, competition, and price collusion in the industry, the first news of an investigation surfaced. This follows similar actions by two Congressional subcommittees which also issued requests for information from three of the largest shipping companies. As first reported by the Journal of Commerce, Maersk has received a subpoena from the U.S. Department of Justice. Details of the investigation have not been announced but it is believed to relate to Biden’s direction to the Department of Justice and the Federal Maritime Commission to ensure compliance with existing antitrust regulations. At issue for the administration is the domination of container shipping by the three big alliances which they highlighted as having rapidly expanded to control 80 percent of global volumes. Shippers, retailers, manufacturers, and agricultural interests have all been complaining and calling for investigations over the sudden increases in fees and what they have called abusive businesses practices that emerged during the pandemic. In addition to the increase in D&D fees shippers have been experiencing as port congestion worsened, the Biden administration cites the problems of exporters to ship their goods as containerships have skipped ports and rushed back to Asia loaded with empties. Maersk said it believes the information covered by the subpoena was part of an ongoing investigation by the DOJ into the supply chain disruptions working in cooperation with the Federal Maritime Commission. It is unknown if other carriers were also subpoenaed or how the information DOJ is requesting differs from the requests from the Congressional subcommittees. Maersk, CMA CGM, and Hapag-Lloyd each received requests from Congress for documents and information from each company explaining their decision to increase shipping rates well beyond their costs. The companies were given a deadline of the end of this week to reply.

#### FTAIA solves any risk — we don’t modify it

Buretta 22, Attorney with Cravath, Swaine & Moore LLP, (John, with John Terzaken, The Cartels and Leniency Review: USA, https://thelawreviews.co.uk/title/the-cartels-and-leniency-review/usa)

Foreign Trade Antitrust Improvements Act (1982) The FTAIA limits the extraterritorial reach of the antitrust laws by excluding from antitrust review all foreign conduct except that involving import commerce, or conduct having a 'direct, substantial, and reasonably foreseeable' effect on US commerce. The FTAIA was once commonly assumed to impose limits on the subject-matter jurisdiction of the US courts to consider claims involving non-US commerce,29 but more recent cases have revisited this view,30 and courts now treat the FTAIA as creating a substantive requirement for stating a claim on the merits under the Sherman Act.31 Courts reason that the FTAIA serves to clarify the text of the Act, which reaches trade 'among the several States, or with foreign nations'.32 This has important consequences in the criminal context. As a substantive element of the offence, the government must adequately allege that the foreign conduct involves either import commerce or a 'direct, substantial, and reasonably foreseeable' effect on US commerce when bringing an indictment.33 Outside the pleading context, courts must also take a plaintiff's or government's allegations as true for the purposes of deciding a motion to dismiss, and the plaintiff or government will have to prove the FTAIA's requirements at trial to the finder of fact. Foreign Sovereign Immunities Act (1976) Under US law, foreign sovereigns and their 'instrumentalities' (which importantly may include companies owned or controlled by the state) are presumptively immune from the jurisdiction of US federal and state courts. The Foreign Sovereign Immunities Act (FSIA)34 is the sole basis through which US courts can obtain jurisdiction over these entities. A defendant seeking to establish FSIA immunity bears the initial burden of demonstrating that it qualifies as a foreign sovereign, after which the burden shifts to the plaintiff to prove that an exception applies. For antitrust purposes, the most important FSIA exception applies to commercial activity.35 Immunity does not extend to suits based on commercial activity having a sufficient tie to US commerce. Commercial activity is 'either a regular course of commercial conduct or a particular commercial transaction or act', the character of which is determined 'by reference to the nature of the course of conduct or particular transaction or act, rather than by reference to its purpose'.36 The question is not one of motive but of whether the actions in question are akin to those undertaken by a private party engaged in trade or commerce. The act of state doctrine In some foreign jurisdictions, companies may still be subject to regulatory requirements that put them at risk of violating US law. The act of state doctrine dictates that the US courts must decline jurisdiction over a case when to decide that case might entail the court's refusal to give effect to the official act of a foreign sovereign. Despite its name, the act of state doctrine may be invoked by both state and non-state actors. The pivotal issue is that the US court must confront the validity of the official act of a foreign sovereign to adjudicate the case.37 The act of state doctrine is based on concerns about judicial branch interference with foreign policy, which is the domain of the executive and legislative branches. Thus, while the FSIA is principally concerned with protecting the dignity of foreign sovereigns, the closely related act of state doctrine is founded upon US constitutional principles of separation of powers.38 Foreign sovereign compulsion Foreign sovereign compulsion is a narrow doctrine that is invoked only when a defendant can demonstrate that it was actually compelled by a foreign sovereign to violate US law, such that there was no way that it could possibly have complied with the law of both jurisdictions.39 What constitutes compulsion is likely to be a fact-specific inquiry, but compulsion is probably demonstrated when the defendant can show that its failure to comply with the directive of the foreign sovereign would have resulted in penal or other severe sanctions. In two cases based on roughly analogous facts,40 the district court in In re Vitamin C Antitrust Litigation found that the Chinese company arguing that it had been compelled to follow export regimes created by the Chinese Ministry of Commerce could not demonstrate compulsion when it appeared to have engaged in 'consensual cartelization'.41 However, in In re Vitamin C, the Second Circuit overturned this conclusion, on comity grounds.42 The Second Circuit gave great weight to a formal proffer by the Chinese government that its laws compelled the challenge of coordination. However, the Supreme Court vacated and remanded the Second Circuit decision, holding that, while domestic courts should give respectful consideration to a foreign government's submission, judges are not 'bound to accord conclusive effect to the foreign government's statements'.43 Comity International comity is a flexible, somewhat fluid doctrine under which the federal courts sometimes abstain from exercising jurisdiction over a legal matter where to do so might impinge upon the laws or interests of another nation. Comity therefore overlaps with the act of state and foreign sovereign compulsion doctrines in its concern with the extraterritorial effects of US judicial action, but, because it is more flexible, it is perhaps more potent in antitrust as an informal recognition of the need for cooperation in dealing with conduct that has transnational effects than as a formal limitation on the jurisdiction of the US courts over cases having an extraterritorial dimension. The Second Circuit's decision in In re Vitamin C and the Supreme Court's subsequent remand offer a rare illustration of an application of comity principles and underscore the value of a direct appearance of a foreign sovereign.44

#### No leadership impact---empirics.

Fettweis 20, Associate Professor of Political Science at Tulane University. (Christopher J., 6-3-2020, "Delusions of Danger: Geopolitical Fear and Indispensability in U.S. Foreign Policy", *A Dangerous World? Threat Perception and U.S. National Security*, https://www.cato.org/publications/publications/delusions-danger-geopolitical-fear-indispensability-us-foreign-policy)

Like many believers, proponents of hegemonic stability theory base their view on faith alone.41 There is precious little evidence to suggest that the United States is responsible for the pacific trends that have swept across the system. In fact, the world remained equally peaceful, relatively speaking, while the United States cut its forces throughout the 1990s, as well as while it doubled its military spending in the first decade of the new century.42 Complex statistical methods should not be needed to demonstrate that levels of U.S. military spending have been essentially unrelated to global stability.

Hegemonic stability theory’s flaws go way beyond the absence of simple correlations to support them, however. The theory’s supporters have never been able to explain adequately how precisely 5 percent of the world’s population could force peace on the other 95 percent, unless, of course, the rest of the world was simply not intent on fighting. Most states are quite free to go to war without U.S. involvement but choose not to. The United States can be counted on, especially after Iraq, to steer well clear of most civil wars and ethnic conflicts. It took years, hundreds of thousands of casualties, and the use of chemical weapons to spur even limited interest in the events in Syria, for example; surely internal violence in, say, most of Africa would be unlikely to attract serious attention of the world’s policeman, much less intervention. The continent is, nevertheless, more peaceful today than at any other time in its history, something for which U.S. hegemony cannot take credit.43 Stability exists today in many such places to which U.S. hegemony simply does not extend.

#### Heg is unsustainable---retrenchment is gradual now, but recommitting makes it violent and forced.

Kupchan 20, professor of international affairs at Georgetown University and senior fellow at the Council on Foreign Relations. (Charles A., 10-21-2020, "America’s Pullback Must Continue No Matter Who Is President", *Foreign Policy*, https://foreignpolicy.com/2020/10/21/election-2020-smart-retrenchment/)

As the Trump era potentially comes to an end, many foreign-policy voices in the United States and abroad relish the prospect of the country’s roaring return to the global stage. But attempting a full-on comeback would be a mistake. If anything, the strategic pullback that President Donald Trump has initiated needs to continue—albeit in a more coherent and judicious manner.

Much of the debate surrounding the next administration’s foreign policy has focused on boldly reasserting U.S. leadership in the world. And it’s true: Global interdependence and upheaval do require steady U.S. leadership and engagement. What’s been largely missing from this debate, however, are the challenges facing the next president when it comes to right-sizing U.S. engagement abroad—especially military involvement—and bringing the nation’s strategic commitments back into line with it means and purposes.

The American electorate has turned sharply inward in response to military overreach in the Middle East, the economic dislocations brought about by innovation and globalization, and the national calamity caused by COVID-19. The nation’s next president would be wise to take note—and craft a brand of global statecraft that is effective but also politically sustainable. Otherwise, the strategic pullback that needs to take place will occur by default rather than by design, risking that U.S. overreach could turn into even more dangerous underreach. Indeed, that’s what’s been happening during Trump’s presidency. He seems to have understood the need to retrench. But his troop withdrawals from Afghanistan, Iraq, Syria, and Germany have been haphazard, making a hash of the effort. Retrenchment cannot be done by tweet, in unpredictable fits and starts, and couched in an abrasive “America first” unilateralism that has alienated allies and set the world on edge.

Democratic candidate Joe Biden is far better suited to restore an equilibrium between the nation’s foreign policy and its political will. Throughout his career, he has been a pragmatic and prudent internationalist; looking forward, pragmatism and prudence will require a more selective and discriminating internationalism, not restoration of the status quo ante. Three-quarters of the American public want U.S. troops to leave Afghanistan and Iraq—it is time to downsize the U.S. footprint in the Middle East. U.S. foreign policy has become over-militarized—the next administration should reallocate priorities and resources, putting more emphasis on diplomacy, cybersecurity, global public health, and climate change. Washington should also return to being a team player if it is to lighten its load; retrenchment and multilateral engagement go hand in hand. Meeting the threat posed by China, managing international trade and finance, preventing nuclear proliferation, addressing pandemics—these and other urgent challenges all require broad international cooperation. And as the United States pulls back from its role as global policeman, it will want like-minded partners to help fill the gap. These partnerships become stronger through diplomacy and teamwork.

The top priorities of the next president will be at home: taming the pandemic, repairing the economy, and reviving democratic institutions and norms. Only if the country’s democratic lights come back on can it effectively deal with the rest of the world. In the meantime, the next administration needs to continue Trump’s effort to downsize the nation’s foreign entanglements—but in a smart and measured way. The United States needs to step back without stepping away. “Build back better” applies abroad just as much as it does at home.

## DA — BBB

#### Mega ships accelerate CO2 emissions

Heckstall 18, Editor of Verma Media, (Victoria, April 22, 2018, Here’s How Much Pollution Shipping Containers and Freight Trucks Cause, <https://medium.com/@victoria27/heres-how-much-pollution-shipping-containers-and-freight-trucks-cause-b358cb034c70>}

Container ships Shipping containers produce more greenhouse gas emissions than some small countries. According to The Essential Daily Briefing: “It has been estimated that just one of these container ships, the length of around six football pitches, can produce the same amount of pollution as 50 million cars. The emissions from 15 of these mega-ships match those from all the cars in the world. And if the shipping industry were a country, it would be ranked between Germany and Japan as the sixth-largest contributor to CO2 emissions.” It’s difficult to imagine how much carbon dioxide that is, especially because ships operate so far out at sea. Alongside CO2, ships also release nitrous oxides (NOx) and sulphur oxides (SOx), which are highly toxic chemicals that are proven causes of acid rain. While manufacturers are slowly designing less environmentally detrimental cars, the oceanic freight industry is subject to fewer regulations. Effects on the ocean Besides gas emissions, container ships are responsible for other kinds of pollution including ballast water, biocides (chemicals used in antifouling paints), waste (such as sewage and garbage from human activity), and sometimes outright oil spills, which are excruciatingly difficult to clean. DoSomething.org mentions how the National Academy of Science estimated in 1975 that ships (including cruise ships) dumped as much as 14 billion pounds of garbage into the ocean (which has only increased since then). Contaminants have disastrous effects on ocean ecosystems: pollution kills over one million seabirds and 100,000 sea mammals every year because they cannot survive in toxic waters, and coastal nations dependent on seagrass meadows, mudflats, and wetlands are losing critical resources when aquatic vegetation dies off.

#### Manchin will require funding for new fossil fuel development---offsets any climate benefit

Dayen 3-7-2022 (David, “Oh No, Joe Manchin’s Talking About a Deal Again,” *American Prospect*, <https://prospect.org/infrastructure/building-back-america/oh-no-joe-manchins-talking-about-a-deal-again/>)

So at the absolute most, you have $2.2 trillion in potential revenue. I’d be shocked if the package would include all of that, given that the original Build Back Better process topped out at $1.8 trillion. So let’s be optimistic and use that as the marker. Half of that $1.8 trillion would have to go to deficit reduction, leaving $900 billion for new programs, all of which would have to be permanent and paid for over the long term. And there’s a strong bias on Manchin’s part for the only new programs to be on climate and energy. “The revenue producing would be taxes and drugs. The spending is going to be climate,” Manchin told reporters. The most recent Biden framework had $555 billion for clean-energy tax credits and investments. But Manchin wants an “all of the above” approach to energy—he’s the one spearheading the effort to ban Russian energy imports on the idea that we can make up for that with domestic oil and gas. Not only would the current compromise tax credits for nuclear and even hydrogen energy need to be sustained; negotiators would probably have to throw in fossil fuel subsidies or supports or some other enticements to make the deal. The current clean-energy subsidies would reduce emissions by between 13 and 22 percent, according to one analysis. But additional compromises on dirty energy would reduce that effectiveness.

#### Unleashes new fossil fuel drilling and exports

Sobczyk 3-14-2022 (Nick, “Congress set to keep focus on Ukraine, energy prices,” *E and E News*, <https://www.eenews.net/articles/congress-set-to-keep-focus-on-ukraine-energy-prices/>)

‘Build Back Better’

In addition to the Republican attacks, the political atmosphere has caused some friction among Democrats, who still hope to revive the $1.7 trillion “Build Back Better Act” in some form before the midterms. Senate Energy and Natural Resources Chair Joe Manchin (D-W.Va.) opposes the package because of its potential inflationary impact, a concern that has only been amplified in recent weeks. Manchin has been pushing for more domestic fossil fuel development. While the original “Build Back Better Act” contained some $550 billion for clean energy and climate policy, Manchin said last week he wants to see support for clean energy in any legislation balanced with fossil fuel development and reliability (E&E News PM, March 11). “I don’t want to give anyone hope that there’s going to be something,” Manchin said during a press conference at the CERAWeek by S&P Global conference. “I really don’t know if there’s going to be any bill.” Some lawmakers are seeking a deal on climate and fossil fuel energy production. Last week, Sen. Bill Cassidy (R-La.), a senior member of the Energy and Natural Resources Committee, released a framework that he said could help tackle global emissions while helping meet the oil and natural gas demands of the current crisis (E&E Daily, March 10). He said his hope was to attract bipartisan buy-in. At the Democratic retreat last week, some lawmakers expressed interest in ideas contained in the proposal. “This is not set up to be some partisan hit piece against the administration,” Cassidy said. “This is set up to … have a consensus across the political spectrum.” Many of the provisions pitched in the proposal follow Republican calls for quicker permit timelines to further unleash domestic production and increase exports abroad. Cassidy said the energy policies should help shore up supply chains while opening up international financing to help deliver American fuel to European allies caught in the midst of Russia’s power struggle.

#### That makes existential warming inevitable

Havey 21 (Fiona, “No new oil, gas or coal development if world is to reach net zero by 2050, says world energy body,” The Guardian, <https://www.theguardian.com/environment/2021/may/18/no-new-investment-in-fossil-fuels-demands-top-energy-economist>)

Exploitation and development of new oil and gas fields must stop this year and no new coal-fired power stations can be built if the world is to stay within safe limits of global heating and meet the goal of net zero emissions by 2050, the world’s leading energy organisation has said. In its strongest warning yet on the need to drastically scale back fossil fuels, the International Energy Agency (IEA) also called for no new fossil-fuel cars to be sold beyond 2035, and for global investment in energy to more than double from $2tn (£1.42tn) a year to $5tn (£3.54tn) The result would not be an economic burden, as some have claimed, but a net benefit to the economy. Fatih Birol, the IEA’s executive director and one of the world’s foremost energy economists, told the Guardian: “If governments are serious about the climate crisis, there can be no new investments in oil, gas and coal, from now – from this year.”

## K — nIeTzScHe

#### Realizing the value of suffering doesn’t necessitate allowing suffering

**Clark**, Professor Philosophy UC Riverside, **’12** (Maudemarie, Spring, “Suffering and the Affirmation of Life” Journal of Nietzsche Studies, Vol 43 No 1, p 87-98, ProjectMuse)

**Nor can I see**—turning now to my second set of worries—**why Nietzsche should think that a revaluation of values requires us to value suffering** for its own sake. I am going to leave aside here my doubts about whether this is something that we can actually do. But **if the main point is to counter the idea that the ideal life is free from suffering, why would it not be enough to recognize that suffering is necessary for the realization of many of life’s goods?** “Death is the mother of beauty,” as Wallace Stevens tells us in the poem Reginster uses as epigraph for his book. **The problem**, according to Reginster, **is that if suffering is only “a (contingently) necessary condition** or consequence of the realization of” the value in question—which means, I take it, that **there is at least some possible world in which one could realize it without suffering—“this remains compatible with a condemnation of suffering,” so that “we might still coherently aspire to a world in which we do not have to suffer” to realize the value** (AL 15). So it is only if suffering is an essential or constitutive part of what we want—as Reginster thinks it is if we want power, understood as overcoming resistance—that Nietzsche can answer the nihilist who claims it would be better if the world did not exist due to the suffering in it. But, again, going back to my previous worry, **does Nietzsche really think he needs an answer for those who do not think that existence is worth living given the amount of suffering in it?** And, in any case, **why would the answer have to rule out the possibility of coherently wishing for another existence?** In fact, in the case of one’s own individual life, Reginster has to grant the coherence of wishing it were different—unlike Nehamas, who tries to rule out that possibility by interpreting the will to power as a doctrine of internal relations. According to Reginster, it is only the general features of life that Nietzsche’s philosophy of the will to power makes it rationally necessary to affirm by making any other choice incoherent. In other words, the view Reginster attributes to Nietzsche is that this is the best of all possible worlds in its general features, even though not necessarily in its individual events. To my mind, this modified theodicy seems all too Christian and all too caught up in the project of demonstrating rational “necessity”—which feels somewhat like an attempt to box us into a corner and show us that we have no choice. This does not seem in the spirit of the philosopher whose Zarathustra, in talking of necessity, says he would “rather dance on the feet of chance” (Z:III “Sunrise”). So Reginster’s book has given me no reason to backtrack from my view that **the affirmation of life that Nietzsche idealizes and formulates in terms of the eternal recurrence is supposed to be compatible with recognizing at least the possibility that this world, even in its general features, is not the best of all possible world**s. And since Reginster has to agree that this is true in the case of one’s individual life, I fail to see the harm to Nietzsche’s philosophy in saying the same thing of life’s general features.

#### Nietzsche is a racist Nazi — his theories directly rely on those fundamental ideals

Preston 96 (William A, Political Theorist with a specialization in Marxism, Nietzsche, and French Political Thought, “Nietzsche on Blacks” in Existence in Black, p. 165, GAL)[edited for language]

To be sure. Nietzsche is no hypocrite in the sense that Marxists and liberals so¶ often art—but he is no hypocrite, it must be noted, because his theory aims to be¶ as evil as his practice. Nietzsche strove to be as inegalitarian, illiberal, and anti-progressive as possible. Nietzsche addressed black suffering—of that there should be¶ no doubt—but his intent, it appears from his writings, was to make ~~blacks~~ [black people] suffer more.¶ Given the fact that Nietzsche has so displaced Marx among contemporary aca-¶ demic leftists, one could almost be forgiven for regarding the famous critique of¶ the subject as some sort of "grammatological" revolt of the masses against the¶ dominion of reason. A rebellion against reason it very much is. But a rebellion¶ against dominion of man over man? I think not. The subject of grammar, morally¶ accountable for decisions to harm or not harm, must, Nietzsche argues, be over-¶ come in favor of the morally unaccountable ego of the aggressor. The "critique of¶ the subject" as Nietzsche enacts it in the Genealogy of Morals aims to demolish¶ moralities that would try to restrict the license of successful aggressors to lord it¶ over the weak. Nietzsche's critique of the subject would find its consummation in¶ the formation of a new aristocracy from the ranks of the bourgeoisie. It is typical¶ of the"Nietzscheans\*\*of the Left to miss the essential connection between the cri-¶ tique of the subject and the anti-socialist urge to create a new ruling caste. But¶ then, to be a Left Nietzschean is, in the first place, to subscribe to a contradictio in¶ adiecto. What those who subscribe to this particular contradiction in terms thereby¶ evade are the global power-stakes involved in Nietzsche's critique of the subject¶ and his assault on the idea of moral accountability.¶ The problem is as follows. The concept of the subject especially plagues the¶ "Indo-Germanic" peoples, among whom Nietzsche numbers the Aryans of the¶ Orient and the Occident, the Nordics as well as the Brahmanic caste, plus the¶ ancient Greeks (BGE #20: 217—8).2 This "concept of the subject" originating on¶ Nietzsche's account in the grammar of the Aryan hordes who once roamed¶ Eurasia, is now with democracy and even more so with socialism being exploited¶ to postulate the moral worth and political accountability of every person on earth.¶ The descendants of the Aryan originators of the subject (i.e., the spiritually high-¶ er men) are expected to be politically accountable to the conquered race in the¶ West (i.e., the European workers) and to the nonphilosophic peoples of the South¶ (e.g., the Africans).¶ Nietzsche's writings, unlike, say, John Rawls', do not address themselves to an¶ anonymous aggregate about whom practically nothing is presumed. Nietzsche¶ excludes many people, and this exclusion is at the core of his philosophy. It is not¶ a mistake or a mere "bias" somehow separable from that which is of enduring value¶ in his writings.3 It cannot be historicized away as inessential to Nietzsche's serious¶ philosophy, as if Nietzsche's racism is the unfortunate intrusion into his philosophy¶ of an alien element. Nietzsche's writings address themselves only to people from¶ certain cultures: Brahman India, Aryan Persia, Jewry, Semitic Islam, Russia,¶ Scandinavia, and Europe with England as its westernmost outpost. What Nietzsche¶ calls the "poles of philosophical endowment" run from India to England (GM:¶ 106). Japan he admires for its noble men of prey, China he despises for the alleged-¶ ly proto-socialist essence of its culture (GM: 41; GS: 99, 338; EH: 330). America¶ has its exceptions, like the Yankee Emerson, but remains on the whole peripheral¶ to the creation of new values. Africa, philosophically speaking, is not even on¶ map. Black people, he affirms in a casual aside, are not even fully human:4¶

**<<<QUOTE OF NIETZSCHE BEING RACIST>>>**

[L]et me declare expressly that in the days when mankind was not yet ashamed¶ of its cruelty, life on earth was more cheerful than it is now that pessimists¶ exist\_\_\_\_Perhaps in those days—the delicate may be comforted by this¶ thought—pain did not hurt as much as it does now; at least that is the con-¶ clusion a doctor may arrive at who has treated Negroes (taken as representa-¶ tives of prehistoric man) for severe internal inflammations that would drive¶ ; even the best constituted European to distraction—in the case of Negroes they¶ do not do so. (The curve of human susceptibility to pain seems in fact to take¶ an extraordinary and almost sudden drop as soon as one has passed the upper¶ ten thousand or ten million of the top stratum of culture; and for my own part,¶ I have no doubt that the combined suffering of all the animals ever subjected¶ to the knife for scientific ends is utterly negligible compared with one painful¶ night of a single hysterical bluestocking.) (GM: 67—68)¶

**<<<END QUOTE>>>**

Nietzsche is a cruel racist. This should be directly acknowledged, and his cruelty and racism in no way played down. Upon what basis would Nietzsche consign even "prehistoric men" to the category of laboratory animals? And how really does Nietzsche know that "pain does not hurt as much" to the Negro and to the prehistoric man and to the animal and to all those others who do not have the good fortune to share the top stratum with the hysterical bluestocking? Something other than a logical argument is at work here.¶ If blacks, M ' >'< the Genealogy of Morals quite clearly suggests, are more akin to¶ animals III fel lillmi, v experimentation than to people of "the top stratum of¶ , iiliui. " Mi. M h ■ I" gained by feeling superior to them? Nietzsche, to be¶ sure, does not mention blacks [black people] that much. When he does, of course, they are described as inferior.5 All in all, blacks simply do not figure that much in Nietzsche's writings, and with good reason: the feeling of distinction derived from a sense of superiority towards blacks is not worth much. A man of distinction, on Nietzsche's account, could not feel ecstasy in his pathos of distance from blacks [black people]. In Nietzsche's scheme of things, the value to life of black people is so negligible it is absurd to try to acquire a rise by oppressing them. Heightened, and infinitely more refined, feelings of power, though, are obtainable through cruelty towards people who are more racially equal, for instance, European working-class people. Oppressing lower-class whites is so much more enjoyable and fulfilling precisely because upper-class whites recognize in the rage of the white proles the envy of a relatively racially superior being. That such a being envies them makes them even more superior.¶ The new world, according to Nietzsche, is an antiblack world. So was the old world. But it was not antiblack enough. In the old world, European imperialisms dispatched missionaries to conquer the Africans for Christ. That would now be passe, but not because it is imperialist. Rather, such proselytizing among black people would be passe because Christianity affirms—however much it honors in the breach—that the souls of black people are equally precious to God. All that changes when God dies. Black equality, on Christian grounds, is argued for in terms of the equality of all souls before God. Democracy only secularizes this religious claim in the normative order of the state. Socialism, that most dreadful regime, would put the poor, including the poor blacks, in charge of the world. But if God is dead, then there is no longer a watchful spirit in whose eyes the poor and the black are the equals of the rich and the white. And a whole new world, wondrously abundant with possibilities for a novel kind of domination, opens up.There is disclosure, after the debris left by Christians and democrats has been lit up in the clearing, of authentic possibilities for a world rather shocking. In the future as Nietzsche would, cruelly but actually, envision it, black people would exist only—and explicitly—to be dominated, experimented on, or just simply killed.6¶ In the most profound sense, Nietzsche's whole philosophy—and not just his view of blacks—is racist. Blacks to Nietzsche are at a lower stage of evolution than whites, and as such are generally of marginal consideration. But the European bourgeoisie is racially inferior, too. The crucial difference, though, is that Nietzsche cherishes hopes for the European bourgeoisie he does not in the slightest feel for blacks. The centrality of race to Nietzsche's deepest concerns becomes apparent in his discussion of bourgeois racial inferiority. Equating class with race, Nietzsche attacks the individual members of the bourgeoisie for failing to embody the nobility of blood they must somehow incorporate if they are ever to purge themselves of their slave instincts. Nietzsche's wish to ennoble the bourgeoisie is also a wish¶ to elevate the bourgeoisie racially. A higher race-quality must be incorporated¶ there.Two kinds of racist commitment are manifest in Nietzsche’s thought: one,¶ affirming the need to heighten the race-quality of the European bourgeoisie, the other, denying the full humanity of black people. The democratic movement Nietzsche detests would realize black political equality and sap the will to power of the European bourgeoisie, thereby effecting a blood-poisoning of its instincts by way of a dissemination of lies about equality in general. Nietzsche's racist commitment aims to counter these different but ultimately related forms of the egalitarian peril.¶ Not a New Left but a New Right is the genuine political expression of Nietzsche's philosophy. By "Right," I mean any party opposed to the progressive legacies of both the French and the Russian revolutions. By "New" I mean a Right that is really worthy, unlike twentieth-century European pretenders, of being called new.¶ The common confusion that Nietzsche is neither Right nor Left was expressed even through Georges Bataille (1897-1962), perhaps because, rather than in spite of, the fact that Bataille was the foremost Nietzschean anti-Nazi of his generation. Nietzsche was neither Right nor Left because, Bataille informs us, the subordination of thinking to a political cause appalled Nietzsche (Bataille: xxii). Bataille is correct about what appalls Nietzsche. But Bataille also misconstrues what it means to be a man of the Right. He projects his own left-wing concept of the political cause onto the rightist thinker, as if Right and Left thinkers can be easily equated in terms of their respective relations to "a cause." Bataille ignores that what makes Nietzsche a rightist is not only his hatred of leftist goals but also his violent objection, as a superior human being, to the voluntary discipline and dutiful commitment that characterize Left commitment. Joseph de Maistre phrased it rather well when he indicated, in regard to his own royalist intentions, that wise monarchists did not want a cownfefrevolution but rather the opposite of revolution (de Maistre: 105). Nietzsche is no restorationist. But like de Maistre before him he would rather not join a cause, even an antirevolutionary cause. He would rather there had not been a revolution in the first place. As the revolution exists, though, Nietzsche must oppose it—but without mimicking its militant conformism.¶ Nietzsche is a man of the Right. But his philosophy charts a course toward a Right remade as atheist, forward-looking, and trans-European. Nietzsche counsels conservatives to lose their hopes for a return to the feudal-medieval epoch, and he despises the nationalistic thoughtlessness. An authentically New Right would found a New Order beyond—and above—"modern ideas," a new Order that would legalize arson against the individual freedom and social justice to which the wretched of the earth feel entitled as a result of "Western reason, religion, and politics. Prometheus, Marx's favorite god, is to be replaced by man-become-god who gives new meaning to the sacrilegious calling: "bring the fire to the people." Even the fascists, presuming as they do the national superiority of one people over anoth-er, could never be right-wing enough for this politics. For their politics are still of "the people.”

**Identifying and responding to extreme and involuntary suffering is good---our political strategy illuminates our innate compassion for others through empathy and harmony---that link turns their offense**

**White 11** – associate professor of philosophy Creighton University

(Richard, “Levinas, the Philosophy of Suffering, and the Ethics of Compassion,” The Heythrop Journal, 53.1)

Levinas fails to recognize that what is properly meaningful is not so much the suffering itself but our response to that suffering. For example, if my suffering leads me to commit suicide, then in what sense can it be considered meaningful? And if my awareness of the suffering of another becomes so overwhelming it paralyzes action, does it really have an issue or a point? **Suffering is neither ‘meaningful’ nor ‘meaningless’ in itself. What determines the significance of suffering is the response of the one who suffers**. This may be the original victim – someone like Elie Wiesel who lost his family in the Holocaust, but who sought to live a life devoted to justice; or it could be the spectator who suffers in sorrow when she contemplates these events and who may feel compelled to respond. In this respect, my suffering, the suffering of the other, and my suffering for the suffering of the other all remain quite ‘open’ in terms of their ultimate meaning. 4). Finally, then, the third question asks **what should the proper response to suffering be**? Of course, I should turn aside from my own self-involvement in order to help, and **the refusal to help is wrong**. But this does not say enough, and we must now consider another perspective. According to ordinary moral understanding, there is a difference between the one who deliberately inflicts suffering on another and the one who doesn't prevent that suffering from happening; they are both at fault, but there is a moral distinction between the perpetrator and the bystander. There are also others who are not involved in any way, and therefore innocent, at least in this case. According to Levinas, however, I am always already responsible for the suffering of the Other; and he frequently emphasizes this point: **I am** in reality **responsible** for the other even when he or she commits crimes, even when others commit crimes. This is for me the essence of the Jewish conscience. But I also think that it is the essence of the human conscience. All men are responsible for one another, and ‘I more than anyone else’. One of the most important things for me is that asymmetry and that formula: All men are responsible for each other and I more than anyone else. It is Dostoyevsky's formula which, as you see, I quote again.[46] For Levinas there is apparently no distinction between the three ethical levels – of perpetrator, bystander and innocent – at the original moment of ethical encounter. Regardless of whether I caused the suffering of another or had nothing at all to do with it, I am still ‘infinitely’ responsible for the other person. But this is problematic, and it ignores the obvious distinction between compassion and remorse. As Steven Tudor puts it: In the case of compassion, the self stands as witness to the Other's suffering, while in the case of remorse, the self stands as responsible for the Other's suffering, that is, as having wronged the Other. In both compassion and remorse, however, the self is in some way “claimed in response to” the Other: the compassionate witness to suffering is “called upon” to respond to what she sees, while the remorseful person is obligated to answer for what he did.[47] For Levinas, the only proper response to suffering is remorse or guilt, even to the point of self-abnegation and self-loathing. Of course, it may be argued that Levinas's discussion of responsibility is at a higher ‘transcendental’ level and has no bearing on the variety of ethical responses that exist in the everyday world. But to have any relevance at all, there must be a relationship of analogy between the two levels so that our everyday responses will be shaped by the description of their ultimate ground. Eagleton complains: ‘The very act that constitutes me as a subject also places me at a distance from my own being. Before the Other I am always in the wrong, always a guilty innocent’.[48] Thus, even though he refers to compassion, Levinas's ethics is essentially deontological or Kantian, insofar as it is based on responsibility and duty, rather than empathy with the feelings of those whom we take to be sentient like ourselves. For Levinas, ethics is severe and the traumatic relation to the other seems to rely entirely on duty rather than love. And even though Levinas discusses my suffering for the suffering of the other as the origin of the ethical, he does not have compassion in mind as this is typically understood. There are other accounts of **compassion** in which I **overcome the sense of an absolute separation** between myself and others by going out of myself towards the Other, **putting aside my own concerns**, and bearing witness to her suffering as something that brings me sorrow. Such compassion implies the desire to help the other person which may or may not be acted on; but the very recognition of someone else's suffering is itself a beneficial act. As Elaine Scarry comments, even in extreme physical suffering, An act of human contact and concern, whether occurring here or in private contexts of sympathy, provides the hurt person with worldly self-extension … By holding that world in place, or by giving the pain a place in the world, sympathy lessens the power of sickness and pain, counteracts the force with which a person in great pain or sickness can be swallowed alive by the body.[49] In this way, **sympathy or compassion works to overcome the isolation that suffering imposes**. In Buddhist practice, compassion requires feeling for the suffering of others. It is responsiveness to misery which includes not only the particular sorrows that others experience, but also the underlying reality of suffering which is grasped as the permanent condition of human existence. **Compassion allows us to experience our affinity and our connection with all creatures; and the more committed and involved with others we become, the less preoccupied we are with our own selfish desires**. As we cultivate our sense of compassion, the concerns and anxieties that characterize our everyday existence fall away, and **we become more open to other people and the rhythm of life itself**. Such compassion involves an overall attentiveness and availability to the other person. According to Buddhist teaching, it should be unconditional, undifferentiated and universal in scope; and it would certainly include compassion toward oneself. For Buddhists, compassion is one of the most important virtues that should be enhanced because it affirms the underlying reality of our connection with all sentient beings; while at the same time, hatred and cruelty must be diminished, since they are the opposite of compassion. According to the Dalai Lama: When we enhance our sensitivity toward others' suffering through deliberately opening ourselves up to it, it is believed that we can gradually extend our compassion to the point where the individual feels so moved by even the subtlest suffering of others that they come to have an overwhelming sense of responsibility towards those others. This causes the one who is compassionate to dedicate themselves entirely to helping others overcome both their suffering and the causes of their suffering.[50] In the Mahayana tradition of Buddhism, such a focus on compassion inspires the ideal of the Bodhisattva, or the saint who refuses Nirvana until all other creatures have been released from their suffering. Thus, instead of emphasizing the opposition and distinction between self and other – in terms of radical alterity which is finally irreducible to conceptual thought – this account of compassion calls upon us to see the other person as someone who is basically like ourselves, who has the same capacity for suffering and joy. There is no absolute difference between myself and the other person, for there is nothing that separates me from the affliction of the other that cannot be destroyed by a change of circumstances. **Through compassion I affirm my sense of belonging to the human community insofar as I show my care for another person; while at the same time, the one who is afflicted and isolated by suffering is brought back into the community by the respect and acknowledgement she is shown. There is an obvious reason why this version of compassion, though briefly sketched, is preferable to the Levinasian view**: It explains our connection to the other as one whom we care for – for even though she is an ‘other’, she is also someone with whom we share a common humanity and sentience. But without the recognition of any kind of connection between us – if the other is absolutely other and if it is in some sense inappropriate to put myself in her place – then it is unclear how I could ever be concerned about her wellbeing or feel responsibility for her. I do not feel the same obligation to rocks as I do to humans, but this is because I have a sense of a ‘shared humanity’ which leads me to care for others in the first place. 5). In the past, **philosophers have sometimes ignored suffering by denying its significance or its wrongness**. One way of doing this is through theodicy which seeks to justify suffering as the will of God (or from the secular perspective, as part of the march of history.) This takes attention away from the reality of suffering by framing it within an optimistic narrative, **making suffering** something that actually belongs to the **good**. Likewise, **stoicism diminishes the problem of suffering by making it subject to the projected mastery of the self. This implies that suffering is not a reality** since it is rather a perspective on reality that can change if we change our attitude towards it. In his brilliant phenomenological descriptions, Levinas shows how suffering tends to undermine all significance and meaning. Levinas recovers the problem of suffering and his opposition to theodicy in all its forms is well considered. The problem with Levinas's account emerges **once we step back** from his specific discussion of what suffering is, to consider the place of suffering in his overall account of ethical philosophy. As we have seen, it is not the meaning of suffering that is really at issue – depending on the context suffering can be meaningful or quite pointless; but the **response** to suffering is what **matters**. At the end of this paper, we focussed on the response of compassion; but compassion as it is typically understood is not a central part of Levinas's ethical framework. Levinas himself comments, ‘for me the suffering of compassion, suffering because the other suffers, is only one aspect of a relationship that is much more complex and much more complete at the same time: that of responsibility for the other’.[51] Against Levinasian compassion, which involves suffering and self-laceration, **we considered** another version of **compassion** which loosely follows the Buddhist model. The latter involves feeling for the other in her distress, and presupposes the recognition of our common humanity. **We must learn to cultivate this attitude, for we can be moved** by the other person because she suffers like we do, **and** because **we** all **share a common fate**.

**Nietzsche’s embracing of disorder necessitates an abandonment of traditional morality and justifies mass murder.**

**White, 90** (Alan, online book, Within Nietzsche’s Labyrinth, Professor of Philosophy, Williams College, http://www.williams.edu/philosophy/faculty/awhite/WNL%20web/beauty\_and\_goodness.htm).

Nietzsche exhorts us to live beautifully; on this point, Nehamas and I agree.  A second point of our agreement is in at­tributing to Nietzsche an insistence that the assessment of a specific life's beauty is a matter, primarily, for the individual living that life.  From these teachings a serious problem emerges:  if beauty is the criterion for goodness, and if there are no universal criteria for beauty, is there anything to prevent the mass murderer and the child molester on the one hand, or the couch potato on the other, from viewing their lives as beautiful, and thus as good -- even as ideal?  This question leads me to one of Nehamas's central concerns:  "Nietzsche is clearly much more concerned with the question of how one's ac­tions are to fit together into a coherent, self-sustaining, well-motivated whole than he is with the quality of those actions them­selves" (166);  for this reason, "the uncomfortable feeling per­sists that someone might achieve Nietzsche's ideal life and still be nothing short of repugnant" (167). This uncomfortable feeling arises, for Nehamas, from the teaching that life is literature.  According to Nehamas's Nietzsche, "one should not take one's misdeeds seriously for long, [because] virtue does not depend on *what* one does but on *whether* what one does is an expression of one's whole self, of one's 'own will.'"  This position makes sense, Nehamas adds, because "these are exactly the considerations that are relevant to the evaluation of literary characters" (166). Continues... Nietzsche rejects the notion that there are human obligations deriving from a different world; yet he is not one of Marcel's fools.  Nehamas stresses, and I stress, that Nietzsche does not want to take the position of encouraging sadists and egotists.  Unbridled egotism, he insists, would lead only to "universal wars of annihilation" (*BT*:15).  His position is made yet more explicit in a passage quoted above, but worth repeating: I deny morality as I deny alchemy, that is, I deny their premises:  but I do *not* deny that there have been alchemists who believed in these premises and acted in accordance with them. -- I also deny immorality:  *not* that countless people *feel* themselves to be immoral, but that there is any *true* reason so to feel.  It goes without saying that I do not deny -- unless I am a fool -- that many actions called immoral ought to be avoided and resisted, or that many called moral ought to be done and encouraged -- but I think the one should be encouraged and the other avoided *for other reasons than hitherto*. (*D*:103) Nietzsche does not want to deny "that many actions called immoral ought to be avoided and resisted, and that many called moral ought to be done and encouraged"; he agrees with Marcel that only fools could think otherwise. Yet he rejects other-worldly sources of obligation; how then can he answer Marcel's questions?  What is to be said, or done, to the mass murderer and the child molester, or to the couch potato? Nehamas responds to this question on Nietzsche's behalf, but his response strikes me as in part inaccurate and in part dan­gerous, and thus, on the whole, unacceptable.  In responding, Nehamas first suggests that Nietzsche severely restricts the audience to whom he addresses his transvaluative teachings: Exemplifying the very attitude that prompts him to reject uncondi­tional codes, Nietzsche does not reject them unconditionally.  His demand is only that philos­ophers, and not all people, "take their stand *beyond* good and evil and leave the illusion of moral judgment *beneath* them" (*TI*VII:1) Here, Nehamas suggests that only philosophers -- who, he seems to assume, are not "fools" of the sort Marcel and Nietzsche are worried about -- are to recognize that moral judgment is il­lusory.  In this central respect, Nehamas's Nietzsche seems to remain a Platonist:  he tells noble lies to the masses in order to keep them in line, reserving the truth for the intellectually privileged few. No doubt, Nietzsche does restrict the scope of some of his teachings; he has Zarathustra announce, for example, "It is a dis­grace [*Schmach*] to pray!  Not for everyone, but for you and me and whoever else has his conscience in his head.  For *you* it is a disgrace to pray" (*Z*III:8.2; 227.27-29).   I grant in addition that Nietzsche points philosophers beyond dogmatic morality; he agrees with Marcel that nothing on this earth *obliges* us to be thoughtful or kind.  Yet even in the passage Nehamas cites, Nietzsche does not present his teachings to philosophers alone.   And if we distinguish more generally between esoteric and ex­oteric strains in Nietzsche's teachings, then his immoralism, his apparent advocacy of violence and oppression, must certainly be included among his teachings for the many. *Continues...* As long as the illusion of moral judgment holds sway, Nietzsche's question cannot be my guiding question, for as long as that illusion holds, Zarathustra's minotaur rules:  good for all, evil for all.  A post-moral world, one wherein the minotaur was silenced, would be one in which each of us could determine his or her own good; that would have to be a world within which diversity would be encouraged rather than inhibited.  But that, it might seem, would entail a new form of moral dog­matism, one with the paradoxical form, "the good for all is that there be no 'good for all'"?  How could Nietzsche defend such a perspective, or such affirmation, as one appropriate for everyone?

# 1AR

## DA — BBB

#### Post-Ukraine, even progressives will use BBB for a fossil fuel bonanza

Weisman 3-15-2022 (Jonathan, “Ukraine War Shifts the Agenda in Congress, Empowering the Center,” *New York Times*, <https://www.nytimes.com/2022/03/15/us/politics/ukraine-politics-congress.html>)

The escalating crisis in Ukraine is upending policy and political thinking on both the left and the right on Capitol Hill, as an immediate threat to the global order and soaring energy prices empower the political center at the expense of the two parties’ flanks. When lawmakers convene on Wednesday for a virtual speech by President Volodymyr Zelensky of Ukraine, Republicans and Democrats will be confronting a changed environment, for better and for worse. “It’s bringing Congress together in a way, frankly, I haven’t seen in my 12 years,” Senator Chris Coons, Democrat of Delaware and a confidant of President Biden, said on Tuesday of the consensus to support Ukraine. “You’d have to go back to 9/11 to see such a unified commitment.” That has meant a retreat by both parties from the policy proposals and political messages that most thrill their core supporters. On the left, Democrats are acquiescing to higher military spending and dropping a bid to pull back rapidly from fossil fuels. On the right, Trump-era isolationism and attacks on the trans-Atlantic alliance are being relegated to the fringe in Congress. Plans to make the president’s son Hunter Biden and Ukrainian corruption front and center in a Republican-controlled House now seem far-fetched.