

Polar Disaster Diplomacy: Geostrategies for Norway

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Disaster Diplomacy

A disaster, by definition, is when people, human constructions, or human interests are harmed beyond their ability to cope themselves (UNDRR 2019). Given this focus on human impacts, from the beginnings of disaster studies through to current understandings (Gaillard 2019; Hewitt 1983, 1997; Lewis 1999, 2019; O’Keefe, Westgate, and Wisner 1976; Rodríguez, Donner, and Trainor 2018; Wisner 2004), disaster research has accepted that processes and phenomena from nature, such as high or low temperatures, storms and floods, earthquakes, and volcanic eruptions, are not disasters per se, but can sometimes be hazards. When a hazard interacts with elements of society unprepared for it or unable to deal with it, then a disaster can occur. One consequence is the preference in disaster studies for avoiding the phrase “natural disaster” on the premise that disasters are caused by society, rather than nature (Chmutina and von Meding 2019; Gaillard 2019; Kasdan 2019; O’Keefe, Westgate, and Wisner 1976; Staupe-Delgado 2019). Not differentiating between natural and non-natural disasters also permits studying all forms of disasters together, whether hazards

emerge from nature (e.g., meteorite strikes), technology (e.g., chemical spills), or society (e.g., riots).

Given this starting point and the basic definitions, environmental conditions in the Arctic and Antarctic can be hazards but are not disasters. Much is said of these locations often being harsh, dangerous, and challenging, especially in relation to temperature, wind, storms, snow, ice, and waves, along with wildlife like polar bears and orcas. Large swathes of the Antarctic are also hazardous with respect to high elevation. When intersecting with people's and societies' vulnerabilities, a long history of a variety of disasters results in both the Arctic and the Antarctic (Finnish Red Cross 2018; Jabour 2007; Munk School of Global Affairs 2014), though plenty of examples exist of managing in both places without succumbing to vulnerabilities (e.g., Mileski et al. 2018; Sellheim, Zaika, and Kelman 2019; Taylor and Gormley 1997). These experiences demonstrate that action can be taken individually and collectively in developing and pursuing geostrategic futures so that hazards do not become disasters. This does not always occur, meaning a continual need for response, recovery, and reconstruction.

Some of these actions for dealing with disasters—before, during, and after—can mean co-operation and conflict among numerous parties, including independent state governments, many of which have or claim interests in the Arctic or the Antarctic. Seven states make territorial claims in the Antarctic: Argentina, Australia, Chile, France, New Zealand, Norway, and the United Kingdom. All of these countries, except Norway, claim a sector from the continent's shoreline to the South Pole. Norway's claim does not accept a sector-based approach and thus does not place explicit northern or southern limits on its claim (Government of Norway 2014–15). Russia and the United States maintain the basis for potentially claiming territory in the future.

At the other end of the globe, five states border the Arctic Ocean—Canada, Denmark (through Greenland), Norway, Russia, and the United States—with Finland, Iceland, and Sweden also having territory above the Arctic Circle. Iceland's territorial waters extend above the Arctic Circle, whereas Sweden's and Finland's do not. From these two sets of countries, the only one with claims at both poles is Norway. Other countries express interest. For instance, as part of its geostrategic futures, the United

Kingdom has been positioning itself as an Arctic country or, at minimum, a country with significant Arctic interests (e.g., Depledge 2018), with the Scottish government and its Arctic strategy (Scottish Government 2019) being one driver. Meanwhile, countries at lower latitudes get involved in affairs of one or both poles, with examples being China, the Czech Republic, India, Poland, Singapore, and South Korea. For formal territorial involvement in both regions, Norway remains unique and thus serves as a useful case study for exploring similarities and differences in interstate ventures for strategically addressing polar disasters, especially with respect to improvements in the future.

One research area for examining the implications of disaster-related work for co-operation and conflict as part of geostrategic futures is “disaster diplomacy.” Disaster diplomacy examines how and why reducing disaster risk, preventing disasters, responding to situations, and recovering from them do and do not influence different forms of peace and conflict (Kelman 2012, 2016). Much disaster diplomacy research has focused on violent conflict and countries deemed to be “enemies,” such as Greece and Turkey from the 1950s to the 1990s (Ker-Lindsay 2007), Cuba and the United States when Fidel Castro led Cuba (Glantz 2000), and climate change possibly influencing sub-Saharan conflict (Buhaug 2010; Burke et al. 2009). This field expands to how non-violent political disputes or disagreements could be influenced by disaster diplomacy alongside non-state-based parties.

A large amount of disaster diplomacy work has also focused on environmental hazards. Greece-Turkey disaster diplomacy has been influenced primarily by earthquakes (Ker-Lindsay 2007). Cuba-US disaster diplomacy has been mainly climate- and weather-related (Glantz 2000), although Glantz (2000) also discussed how wind patterns could have distributed fallout over the southern United States from an incident at Cuba’s Juragua Nuclear Power Plant, if the plant had ever been completed. The few detailed disaster diplomacy case studies not involving environmental hazards include poisoning in Morocco in 1959 (Segalla 2012) and Southeast Asia’s regional haze over previous decades (Brauer and Hisham-Hashim 1998; Islam, Pei, and Mangharam 2016). Other work (e.g., Whittaker et al. 2018) has developed health diplomacy and medical diplomacy within a disaster diplomacy framework. Aspects of disaster diplomacy are being

explored for polar regions (e.g., Kontar 2018; Kontar et al. 2018; Nikitina 2017; Pincus and Ali 2016).

All this theoretical and empirical work on disaster diplomacy has so far not been able to provide evidence for new, lasting diplomacy based on only disaster-related activities. Instead, disaster-related activities are frequently used as one excuse among many to pursue pre-desired diplomatic pathways, whether for co-operation or for conflict. This approach sometimes leads to short-term influences that are invariably superseded by interests in and priorities regarding non-disaster-related factors, with examples being changes in leadership, the inertia of historical dislike, or preference for geopolitical gain over dealing with disasters.

Given this background on disasters and disaster diplomacy, as well as the unique geostrategic position of Norway in relation to the Arctic and the Antarctic, this chapter provides the first exploration of polar disaster diplomacy using Norway as a case study to consider some wider implications. The focus is on state-based diplomacy to provide a baseline for discussion. The next section examines possibilities for Norway's polar disaster diplomacy. Norway's geostrategic interests are then considered within understandings of "enemies." Conclusions provide possible analogues for polar disaster diplomacy.

Norway

Norway has typically prided itself on being a neutral state seeking peace (Leira 2013), and therefore has worked actively to end conflicts, such as in Sri Lanka (Moolakkattu 2005) and the Middle East (Jones 1999). Since the forced union with Sweden in 1814, followed by full independence in 1905, Norway has not been involved in extensive interstate violent conflicts, apart from Nazi Germany's invasion and occupation of 1940 to 1945 during the Second World War. Norwegian troops have seen combat in several post-Second World War overseas wars under international auspices—namely, the North Atlantic Treaty Organization (NATO) and the United Nations (UN).

Norway has nonetheless been involved in other forms of political conflict. As a founding member of NATO in 1949, and with a land border with the Union of Soviet Socialist Republics (USSR) until 1991 and then Russia, the country has always been assumed to be at the front line of violent and

non-violent Cold War conflict. In the high Arctic, this relationship becomes complicated regarding the archipelago of Svalbard. Svalbard is a sovereign territory of Norway, but it is governed by the Svalbard Treaty (1920) providing rights for livelihood and commercial activities to the citizens of countries that have signed the treaty. The USSR ratified the treaty in 1935 and Russia is currently one of forty-six treaty signatories. Irrespective of the Cold War and contemporary tensions between the USSR/Russia and other countries, Norway was and is bound to co-operate with the USSR/Russia regarding Svalbard.

Co-operation in relation to the Svalbard Treaty does not necessarily entail disaster-related activities. Norway's stance is clear that Svalbard is sovereign Norwegian territory and so Norway has the responsibility for response, rescue, and recovery. The Joint Rescue Coordination Centre of Northern Norway is based in Bodø and is responsible for the region from 65 degrees North latitude to the North Pole, which covers all of Svalbard and its surrounding waters (Hovedredningsentralen n.d.). When disasters have occurred around Svalbard, Norwegian authorities have responded and led efforts even if in collaboration with other countries such as Russia when a Russian airplane crashed in 1996 killing 141 people (Olaisen, Stenersen, and Mevåg 1997), and when a Russian helicopter crashed in 2017 killing 8 people (AIBN 2018). The main Russian settlement on Svalbard is Barentsburg, and Russia has been pushing to lead search-and-rescue from there using its own personnel and equipment. Political tussles continue over this leadership issue, while co-operation also continues through joint training exercises, exchanges of information and equipment, and collaborative planning and meetings for scenarios such as oil spills, health concerns, and cruise ships sinking.

Norway-Russia interactions, co-operative and conflictual, in Arctic disaster-related activities have not been confined to the Svalbard Treaty area. Both countries are involved in numerous regional multilateral and bilateral efforts. The Barents Euro-Arctic Council has focused on disaster-linked topics such as transportation safety (BEAC 2019) and climate change (BEAC 2017). The Arctic Council covers disaster risk reduction through the Sustainable Development Working Group and covers disaster response through the Working Group on Emergency Prevention, Preparedness and Response. Russia-Norway direct co-operation occurs,

for instance, through the Joint Norwegian-Russian Environment Commission for pollution disasters and the Norwegian-Russian Nuclear Commission for nuclear disasters. Norway and Russia coordinate the monitoring of Barents Sea maritime vessels through the International Maritime Organization (2012) agreement; although Norway controls its waters from Lofoten to the Russian border, and Russia is responsible for its waters from the Norwegian border to Murmansk. Mutual aid nonetheless shows operationally, such as when a Russian ship was foundering on the Rybachiy Peninsula on 18 December 2007, and a Norwegian rescue helicopter crossed the border to lift the crew to safety (Marchenko et al. 2015).

Throughout all the policies, talks, actions, and disagreements, this Norway-Russia Arctic disaster diplomacy has not shown evidence of wider impacts or spillover into other areas of interaction. As with all other disaster diplomacy case studies investigated so far (Kelman 2012, 2016), disaster-related activities for Norway in the Arctic have not been shown to create new, lasting diplomacy. Instead, co-operation tends to be confined to the disaster-related activities with other aspects of Arctic relations dominated by non-disaster factors. Examples are trade, culture—including cross-border Sámi links—and geopolitics (Wilson Rowe, 2018). Similar conclusions result for Norway when examining the Antarctic.

The Antarctic is governed by the Antarctic Treaty System (ATS), which applies to all areas south of 60 degrees south latitude. Many examples exist of countries with conflicts being jointly involved in aspects of the ATS, such as Argentina and the United Kingdom (both claimant countries for Antarctic territory) attending negotiation meetings in 1982 during the Falklands War (CCAMLR 1982); the USSR and the United States both joining at the initiation of the Antarctic Treaty in 1959 despite the Cold War; and North Korea joining as a non-consultative member in 1987, despite its relative international isolation and continuing threats to the region, with South Korea as a full ATS treaty party. The pattern within the ATS appears to be countries dealing with Antarctic matters without connecting to possibilities outside of the ATS area or permitting the links to influence other matters. If this pattern continues, then disaster-related activities, from an eruption of Mount Erebus to a cruise ship sinking, would not spill over into other diplomatic realms, instead continuing the pattern of disaster diplomacy's ineffectiveness.

Norway was an original signatory to the Antarctic Treaty, and as a country making territorial claims on the continent, it retains strong interest in the southern regions. Bouvet Island in the South Atlantic Ocean is outside the ATS area and is recognized as a dependency of Norway, while the Antarctic territories of Queen Maud Land and Peter I Island fall under the ATS claims provisions. Disaster-related activities for these three dependencies are limited due to the absence of permanent settlements and the low rate of people in their vicinity. Hazards are frequent and numerous such as the weather, icebergs, tsunamis, and volcanic eruptions as well as possibilities for pollution. Disasters are rare, and most disaster-related activities relate to either (1) pre-disaster actions through appropriate siting, construction, and maintenance of infrastructure along with personnel training, and (2) post-disaster actions of search and rescue.

Otherwise, the most prominent considerations would be shipping and aircraft incidents, mainly related to science, tourism, fishing, and exploration. For Bouvet Island outside of the ATS area, prospects remain for vessels used for mineral exploration or military purposes. Search and rescue in and around Bouvet Island and the ATS area is not straightforward since equipment and people are not available rapidly and environmental conditions often preclude deployment. The South Pole station is effectively inaccessible during the winter, and other stations might or might not have winter access. For instance, significant efforts for winter aircraft landings at McMurdo Station (outside the Norwegian claim area) started in 2015.

Perhaps one of the most political Antarctic disasters for Norway was the deaths in 1912 of the British explorer Robert Scott and four of his companions while returning from the South Pole after the Norwegian explorer Roald Amundsen and his team reached there first. Despite significant resentment in the United Kingdom at the time, and continuing debate today about the two expeditions and their competition, little major, long-term political fallout was evident. Amundsen and his mentor, the Norwegian explorer Fridtjof Nansen, continued representing Norway on the world stage for exploration, science, and international relations.

Major political differences emerge between the Arctic and Antarctic regions that influence Norway's disaster-related interests, roles, and activities. Much of the Arctic is owned by sovereign states, some of which use it for military purposes. In comparison, the Antarctic is governed by ATS,

neither recognizing nor denying sovereign territory claims but prohibiting military uses. Many Indigenous peoples have long lived around the Arctic, and territorial discussions continue with the current governing states. As far as the evidence suggests, no peoples have established themselves in the Antarctic. Many parts of the Arctic are fairly easy to reach, with many settlements established and thriving alongside livelihood activities including all-season resource extraction and regular tourism. The Antarctic is expensive and difficult to get to, meaning that even if resource extraction were legal, it might not yet be financially or technically viable. Meanwhile, Antarctic tourism remains limited because it is expensive and onerous. Both regions fall under some similar international governance regimes for disaster-related activities such as the International Convention for the Safety of Life at Sea, or SOLAS Convention (IMO 1974), the International Convention on Maritime Search and Rescue, or SAR Convention (IMO 1979), and the International Code for Ships Operating in Polar Waters (IMO 2017). Pollution prevention and response are covered by another series of international protocols, as well as some that are region-specific such as through the Arctic Council and as part of ATS.

Could Norway link the two polar regions for disaster diplomacy? It would be possible if an active approach were taken, so that Norway explicitly aims for disaster diplomacy with a polar perspective. It is not clear that this approach would necessarily be in Norway's interest, unless there were a specific peace process in which Norway were trying to intervene. For instance, Sri Lanka and Middle Eastern countries as examples of Norway's previous attempts at brokering peace have thus far expressed limited interest in the polar regions. Could the two Koreas' ATS involvement provide a way for Norway to start with common ground leading to further talks? Similarly, during the 1982 Falklands War, could Norway have used the combatants' Antarctic interests to try to foster a non-violent resolution? Given that this conflict was over sub-Antarctic territories, it is highly unlikely.

Similarly, other factors indicate that, despite Norway's unique position with respect to neutrality and both poles, such efforts might not be successful. First, the overarching disaster diplomacy analysis is that disaster diplomacy processes are rarely successful because parties involved in disaster-related activities tend to prioritize non-disaster-related reasons

for peace and conflict (Kelman 2012, 2016). Past failures do not preclude future successes, but caution would be needed in assuming that polar disaster diplomacy would work if Norway attempted it. Second, despite Norway's positioning of itself within diplomacy, its successes are debated, especially as shown by Sri Lanka and the Middle East, but also due to its early membership in NATO and its military roles overseas.

More specifically regarding possible contemporary case studies, it is not clear that Norway would necessarily be viewed as an appropriate player. For the Korean Peninsula, China is a significant party, especially as a somewhat-ally of North Korea. After Chinese activist Liu Xiaobo received the 2010 Nobel Peace Prize and was refused permission to leave China to receive the prize in Oslo, China instituted several retaliatory measures against Norway that took several years to achieve restitution. Would China trust Norway as a peace broker for the Koreas or would it pretend not to trust Norway to gain leverage? The same challenge could occur with another of the world's hot spots, Kashmir, since China and India are involved, and both these countries profess Arctic and Antarctic interests. Meanwhile, conflicts within or around Russia would not place Norway well as a neutral party due to Norway-Russia relations. Other major conflicts currently tend to have few parties with strong Arctic or Antarctic interests, with examples being the Democratic Republic of Congo, Yemen, Iraq, Iran, Afghanistan, Burma's treatment of the Rohingya people, and internal strife in and migration from Latin American countries (e.g., Colombia and Mexico).

Consequently, even if Norway wished to pursue polar disaster diplomacy, scope for doing so is constrained. One limitation to this conclusion is the assumption that polar disaster diplomacy would be led by Norway's government. This chapter is bound to state-based formal diplomacy, but the diplomacy and disaster diplomacy literatures explore possibilities beyond state-based interactions. This multi-track diplomacy could involve sub-national governments, supra-national organizations, media, business, non-governmental organizations, and private citizens such as philanthropists and celebrities (e.g., McDonald 2012). While the multi-track disaster diplomacy examples explored so far are characterized as being as unsuccessful as state-based disaster diplomacy, options remain for

Norway or Norwegians to pursue polar disaster diplomacy beyond state-based diplomacy.

Norway in Wider Perspectives: Beyond “Enemies”?

Norway’s potential for, and lack of fulfillment of, state-based polar disaster diplomacy occurs within the context of trying to understand who a state-based “enemy” might be. The differences between the Arctic and the Antarctic become even more apparent, demonstrating that establishing parallels between the two regions might be tenuous.

In the Arctic, the paradigm has typically been of one enemy: The USSR and then Russia, especially since the other four countries bordering the Arctic Ocean, as well as Iceland, are NATO members, although Sweden and Finland are not. This discourse is about hostility from Russia in the Arctic, emphasizing storylines of re-militarizing the North and increasing military-related actions including flying bombers near NATO’s Arctic territories (Laruelle 2014; Overland and Krivorotov 2015). In April 2018, Russia transported a floating nuclear power plant, the *Akademik Lomonosov*, along the coastline of nuclear-free Norway to reach Russia’s Arctic (Lenton 2018), which was also seen as being provocative and asserting Russia’s northern rights. Other analyses do not necessarily deny that Russia pursues its self-interests but explain that Russia tends to see Arctic co-operation as the best way to achieve its Arctic self-interests, evidenced by numerous agreements such as for fisheries and oil spills (Nikitina 2018; Wilson Rowe and Blakkisrud 2014). Some authors describe few prospects for a recurrence of Cold War attitudes and antipathy for the Arctic (Åtland and Pedersen 2008; Young 2019).

Even among NATO allies, territorial disputes around the Arctic remain (Pincus and Ali 2016). In May 2018, Canada and Denmark/Greenland set up a Joint Task Force on Boundary Issues to seek recommendations regarding their maritime boundary line in the Lincoln Sea, the Labrador Sea continental shelf overlap beyond two hundred nautical miles, and any land boundary across Hans Island. The United States continues to dispute Canada’s sovereignty over the Northwest Passage (Pompeo 2019). Meanwhile, the current Russia-Norway land border was effectively established in 1326 and formalized in 1826, while their maritime boundary was delimited by the Barents Sea Treaty (2010). Consequently, it is not

clear that the main antipathy around the Arctic comes from or is directed toward Russia. Russia and Finland, though, have exchanged plenty of violence across their shifting border, and Karelia remains an issue for the countries' relations (Raudaskoski and Laine 2018).

In contrast to the Arctic, few direct players in the Antarctic are enemies, and the international governance regime is about collaboration. Among countries claiming territory, the only recent violent conflict was between Argentina and the United Kingdom in 1982, and although this territorial dispute remains unresolved, the specific war was led by an Argentine president who held the role for less than six months. The United States and the USSR/Russia have retained their right to claim territory in Antarctica, leading to similar discussions as for the Arctic regarding the USSR/Russia and NATO. Chile and Argentina nearly came to war in 1978 over three islands and the surrounding sea at the southern tip of South America, with Argentina intending to occupy them in 1982 after a presumed victory in the Falklands. Since then, a series of agreements between the two countries has resolved most disagreements with commitments toward peaceful relations and amicably finalizing remaining disputes. The overlapping Antarctic claims of Argentina, Chile, and the United Kingdom could lead to problems if Antarctic territorial claims are ever accepted.

None of the issues seem to have affected disaster-related activities around the continent, mainly because many of these activities are governed by international law. For instance, when the Norwegian yacht *Berserk* set off its emergency beacon in McMurdo Sound in 2011, a New Zealand naval vessel responded, although it could not find the yacht and its three crew members. Violations of Antarctic law by the yacht's captain, who had been dropped off on the continent and so was not aboard the boat when it disappeared, were dealt with by Norway since the captain is Norwegian. Given that Norway and New Zealand have limited enmity anyway, how germane is the disaster diplomacy question in this instance?

The key is considering wider scopes for and implications of disaster diplomacy. Given disaster diplomacy's definition, it is important to consider connections, friendships, enmity, and disputes emerging from disaster-related activities that go beyond disaster-related activities. That is, the parties involved would not necessarily need to be enemies or even have

pre-existing conflict. The difficulty, then, is that the starting point might be the truism that any interaction among people creates positive, negative, and neutral connections and often outcomes. Meanwhile, a long-standing literature exists examining a variety of dimensions of these questions (e.g., Olson and Drury 1997; Quarantelli and Dynes 1976).

Consequently, to understand polar disaster diplomacy and its relevance or otherwise, a balance is needed. In the Arctic, the USSR/Russia have played key roles as enemies, but there might be little else that is highly relevant from state-based disaster diplomacy among Arctic countries, apart from considering historical wars—and possible future ones. In the Antarctic, the disaster diplomacy question at the state-based level for claimant countries might remain with Argentina-Chile, Argentina-United Kingdom, and Russia, yet the absence of actual conflict at the moment decreases the relevance of any of these. Similar patterns are seen for some non-state-based case studies providing disaster diplomacy insights, such as disaster casualty identification (Scanlon 2006). For instance, passengers on board Air New Zealand Flight TE901, which crashed into Mount Erebus in 1979 killing all 257 people on board, had eight different nationalities. Because the aircraft was registered in New Zealand and the flight originated in and would have landed in New Zealand, the body recovery was led by New Zealand through the NZ Police Disaster Victim Identification Team.

In both the Arctic and Antarctic, however, questions arise regarding states from outside of the respective regions having polar interests. For example, some commentators describe an Arctic role for Australia (e.g., Halt 2014), but little in-depth scientific discussion has been published formally. At the moment, thirteen states—eight in Europe and (analyzed by Tonami 2016) five in Asia—and more than two dozen non-state groups have observer status at the Arctic Council. From a disaster diplomacy perspective, China and India are perhaps of most interest given previous analyses (see Kelman 2012, 2016; Venugopal and Yasir 2017; Weizhun and Tianshu 2005). China's first Arctic Policy (Government of China 2018) in effect mapped out a Polar Silk Road for connecting China to the Arctic and supporting Arctic initiatives (Glantz 2019). Both China and India maintain research stations in Svalbard, as do other non-Arctic countries including the Czech Republic and Poland. China and India also have

research stations in the Antarctic, as do more than a dozen non-claimant countries, again including the Czech Republic and Poland.

From all this work, it currently appears that science-related collaboration is the most prominent interstate outcome of polar disaster diplomacy, as discussed for the Arctic by Kontar (2018) and Kontar et al. (2018) with applicability to the Antarctic. Thus far, no operational examples of disaster diplomacy potential could be found for countries outside the respective Arctic and Antarctic regions. As one instance, on 19 May 2019, a Svalbard avalanche killed two Polish scientists from the Polish research station, but the search and recovery operation was not linked to politics or to Norway-Polish relations, nor should it have been. The protocol was to inform Svalbard's Norwegian authorities that the two had failed to return to base so that these authorities could lead proper, safe, and effective actions for rescue or recovery.

This limited relevance of polar disaster diplomacy raises the question, as with Norway earlier, of whether or not countries should actively try to make it more relevant. If Australia wishes to be involved more in the Arctic or if India wishes to be involved more in both polar regions, should the government push disaster diplomacy as a possible entry point or leadership possibility? This would require the government making active choices to direct policy in favour of pursuing disaster diplomacy and to try to demonstrate successful polar disaster diplomacy.

Conclusions

This chapter has provided the first exploration of polar disaster diplomacy, considering pre-disaster and post-disaster actions, using Norway as a case study. Norway's unique position as the only country with territorial claims around both poles makes it geostrategically distinct with respect to its polar activities, and also provides it with many futures pathways, only some of which are represented in this chapter. In particular, since Norway does not operate in isolation, wider perspectives are covered, including but not limited to Norwegian interests, even if often from the perspective of relevance to Norway.

One area for further exploration is how unique polar situations really are from both geostrategic and futures perspectives. Could lessons from other situations be drawn up for, or apply from, the Arctic and Antarctic?

Two locations that could be parallels, especially for the Antarctic due to the lack of territorial sovereignty and the difficult accessibility, are the deep sea and outer space, including other celestial bodies. Could a governance system modelled on ATS be implemented for the moon, Mars, and beyond, especially given that disaster-related issues have some parallel challenges for risk reduction, search and rescue, and recovery? Similarly for the deep sea, would it be helpful to formulate and apply conventions similar to SOLAS, the SAR Convention, and the Polar Code?

From the analysis here corroborating the wider disaster diplomacy literature within geostrategic futures, if the goal is to bring together parties for long-term peace and co-operation within or based on the polar regions, then a focus on disaster-related activities is unlikely to be successful. This conclusion should not preclude interest in disaster-related activities to ensure that continuing work in the Arctic and Antarctic is as safe as feasible. Polar diplomacy, if it is desired for geostrategic futures, can still be pursued and achieved through other means.

REFERENCES

- AIBN (Accident Investigation Board Norway). 2018. *Investigation of Air Accident in the Sea Near the Helicopter Base Outside Barentsburg, Svalbard, Norway*. Lillestrøm, NO: Accident Investigation Board Norway.
- Åtland, K., and T. Pedersen. 2008. "The Svalbard Archipelago in Russian Security Policy: Overcoming the Legacy of Fear—or Reproducing It?" *European Security* 17 (2–3): 227–51. <https://doi.org/10.1080/09662830802642470>.
- Barents Sea Treaty. 2010. Treaty between the Kingdom of Norway and the Russian Federation Concerning Maritime Delimitation and Cooperation in the Barents Sea and the Arctic Ocean. Oslo: Government of Norway; Moscow: Government of Russia.
- BEAC (Barents Euro-Arctic Council). 2017. *Action Plan on Climate Change for the Barents Cooperation*. 2nd ed. Kirkenes, NO: Barents Euro-Arctic Council.
- . 2019. *Declaration of the Transport Ministerial Meeting of the Barents Euro-Arctic Council (BEAC), 12 September 2019*. Umeå, SE: Barents Euro-Arctic Council.
- Brauer, M., and J. Hisham-Hashim. 1998. "Fires in Indonesia: Crisis and Reaction." *Environmental Science and Technology* 32 (17): 404A–407A. <https://www.doi.org/10.1021/es983677j>.
- Buhaug, H. 2010. "Climate Not to Blame for African Civil Wars." *Proceedings of the National Academy of Sciences* 107 (38): 16477–82. <https://doi.org/10.1073/pnas.100573910>.

- Burke, M. B., E. Miguel, S. Satyanath, J. A. Dykema, and D. B. Lobell. 2009. "Warming Increases the Risk of Civil War in Africa." *Proceedings of the National Academy of Sciences* 106 (49): 20670–74. <https://doi.org/10.1073/pnas.090799810>.
- CCAMLR (Commission for the Conservation of Antarctic Marine Living Resources). 1982. *Report of the First Meeting of the Commission for the Conservation of Antarctic Marine Living Resources (Hobart, Australia 25 May–11 June 1982)*. Hobart, AU: Executive Secretary Commission for the Conservation of Antarctic Marine Living Resources.
- Chmutina, K., and J. von Meding. 2019. "A Dilemma of Language: 'Natural Disasters' in Academic Literature." *International Journal of Disaster Risk Science* 10:283–92. <https://doi.org/10.1007/s13753-019-00232-2>.
- Depledge, D. 2018. *Britain and the Arctic*. Cham, CH: Palgrave Macmillan.
- Finnish Red Cross. 2018. *Red Cross Arctic Disaster Management Study*. Helsinki: Finnish Red Cross.
- Gaillard, J. C. 2019. "Disaster Studies Inside Out." *Disasters* 43 (S1): S7–S17. <https://doi.org/10.1111/disa.12323>.
- Glantz, M. H. 2019. 2000. "Climate-Related Disaster Diplomacy: A US–Cuban Case Study." *Cambridge Review of International Affairs* 14 (1): 233–53. <https://doi.org/10.1080/09557570008400340>.
- . *One Belt One Road: China's Long March Toward 2049*. Nepean, ON: Sumeru Press.
- Government of China. 2018. *China's Arctic Policy*. Beijing: State Council Information Office of the People's Republic of China.
- Government of Norway. 2014–15. *Norwegian Interests and Policy in the Antarctic*. Meld. St. 32 (2014–2015) Report to the Storting (White Paper). Oslo: Norwegian Ministry of Foreign Affairs.
- Halt, B. 2014. "Poles Apart: The Case for an Australian Role at the Arctic Council." Australian Institute of International Affairs, 26 May 2014. <http://www.internationalaffairs.org.au/news-item/poles-apart-the-case-for-an-australian-role-at-the-arctic-council>.
- Hewitt, K., ed. 1983. *Interpretations of Calamity*. London: Allen and Unwin.
- . 1997. *Regions of Risk: A Geographical Introduction to Disasters*. London: Routledge.
- Hovedredningssentralen. n.d. "Om Hovedredningssentralen." Hovedredningssentralen, accessed 23 August 2022. <https://www.hovedredningssentralen.no/om-hovedredningssentralen/om-hovedredningssentralen>.
- IMO (International Maritime Organization). SOLAS. 1974. *International Convention for the Safety of Life at Sea [SOLAS Convention]*. London: International Maritime Organization.
- . 1979. *International Convention on Maritime Search and Rescue [SAR Convention]*. London: International Maritime Organization.
- . 2012. Resolution MSC.348(91). Adopted on 28 November 2012. Adoption of a New Mandatory Ship Reporting System "In the Barents Area (Barents SRS)." London: International Maritime Organization.

- . 2017. *International Code for Ships Operating in Polar Waters [Polar Code]*. London: International Maritime Organization.
- Islam, M. S., Y. H. Pei, and S. Mangharam. 2016. “Trans-boundary Haze Pollution in Southeast Asia: Sustainability through Plural Environmental Governance.” *Sustainability* 8 (499): 1–13. <https://doi.org/10.3390/su8050499>.
- Jabour, J. 2007. “Underneath the Radar: Emergency Search and Rescue Insurance for East Antarctic Tourism.” *Tourism in Marine Environments* 4 (2–3): 203–20. <https://doi.org/10.3727/154427307784772066>.
- Jones, D. 1999. *Cosmopolitan Mediation? Conflict Resolution and the Oslo Accords*. Manchester: Manchester University Press.
- Kasdan, D. 2019. “The Cure for Catastrophe: How We Can Stop Manufacturing Natural Disasters.” *Disaster Prevention and Management* 28 (2): 299–300. <https://doi.org/10.1108/DPM-04-2019-352>.
- Kelman, I. 2012. *Disaster Diplomacy: How Disasters Affect Peace and Conflict*. Abingdon, UK: Routledge.
- . 2016. “Catastrophe and Conflict: Disaster Diplomacy and Its Foreign Policy Implications.” *Brill Research Perspectives in Diplomacy and Foreign Policy* 1 (1): 1–76.
- Ker-Lindsay, J. 2007. *Crisis and Conciliation: A Year of Rapprochement between Greece and Turkey*. London: I. B. Tauris.
- Kontar Y. Y. 2018. “Perspectives from an Early Career Scientist.” In *The Future of Arctic Ocean Cooperation*, edited by R. W. Corell, J. D. Kim, Y. H. Kim, A. Moe, D. L. VanderZwaag, and O. R. Young, 162–72. Seoul: Korean Maritime Institute; Honolulu: East-West Center.
- Kontar, Y. Y., T. Beer, P. A. Berkman, J. C. Eichelberger, A. Ismail-Zadeh, I. Kelman, J. L. LaBrecque, A. E. Szein, and Y. Zaika, 2018. “Disaster-Related Science Diplomacy: Advancing Global Resilience through International Scientific Collaborations.” *Science & Diplomacy* 7 (2). <http://www.sciencediplomacy.org/article/2018/disaster-related-science-diplomacy-advancing-global-resilience-through-international>.
- Laruelle, M. 2014. *Russia’s Arctic Strategies and the Future of the Far North*. New York: Sharpe.
- Leira, H. 2013. “‘Our Entire People Are Natural Born Friends of Peace’: The Norwegian Foreign Policy of Peace.” *Swiss Political Science Review* 19 (3): 338–56. <https://doi.org/10.1111/spsr.12044>.
- Lenton, D. 2018. “The Measure of Akademik Lomonosov.” *Engineering & Technology* 13 (6): 10–11. <https://www.doi.org/10.1049/et.2018.0612>.
- Lewis, J. 1999. *Development in Disaster-Prone Places: Studies of Vulnerability*. London: Intermediate Technology Publications.
- . 2019. “The Fluidity of Risk: Variable Vulnerabilities and Uncertainties of Behavioural Response to Natural and Technological Hazards.” *Disaster Prevention and Management* 28 (5): 636–48. <https://doi.org/10.1108/DPM-01-2019-0014>.

- Marchenko, N. A., O. J. Borch, S. V. Markov, and N. Andreassen. 2015. "Maritime Activity in the High North—The Range of Unwanted Incidents and Risk Patterns." Proceedings of the 23rd International Conference on Port and Ocean Engineering under Arctic Conditions, 14–18 June 2015, Trondheim, NO. <https://www.poac.com/Papers/2015/pdf/poac15Final00109.pdf>.
- McDonald, J. W. 2012. "The Institute for Multi-Track Diplomacy." *Journal of Conflictology* 3 (2): 66–70. <http://dx.doi.org/10.7238/joc.v3i2.1629>.
- Mileski, J., A. Gharehgozli, L. Ghoram, and R. Swaney. 2018. "Cooperation in Developing a Disaster Prevention and Response Plan for Arctic Shipping." *Marine Policy* 92:131–7. <https://doi.org/10.1016/j.marpol.2018.03.003>.
- Moolakkattu, J. S. 2005. "Peace Facilitation by Small States: Norway in Sri Lanka." *Cooperation and Conflict* 40 (4): 385–402. <https://doi.org/10.1177/0010836705058225>.
- Munk School of Global Affairs. 2014. *National Roundtable on Arctic Emergency Preparedness: Report of Proceedings*. Toronto: Munk School of Global Affairs.
- Nikitina, E. H. 2017. Международное сотрудничество в снижении рисков природных бедствий в Арктике: Проблемы адаптации к последствиям климатических изменений. В кн.: Глобальные и национальные стратегии управления рисками катастроф и стихийных бедствий. Верескун А.В., Жданенко И.В. (ред.). Москва, МЧС России, 85–92.
- . 2018. "The SDGs and Agenda 2030 in the Arctic: An Arctic State Perspective." In *The Arctic in World Affairs: A North Pacific Dialogue on Arctic 2030 and Beyond: Pathways to the Future*, edited by R. W. Corell, J. D. Kim, Y. H. Kim, A. Moe, D. L. VanderZwaag, and O. R. Young, 337–49. Seoul: Korean Maritime Institute; Honolulu: East-West Center.
- O'Keefe, P., K. Westgate, and B. Wisner. 1976. "Taking the Naturalness Out of Natural Disasters." *Nature* 260:566–7. <https://doi.org/10.1038/260566a0>.
- Olaisen, B., M. Stenersen, and B. Mevåg. 1997. "Identification by DNA Analysis of the Victims of the August 1996 Spitsbergen Civil Aircraft Disaster." *Nature Genetics* 15:402–5. <https://doi.org/10.1038/ng0497-402>.
- Olson, R. S., and A. C. Drury. 1997. "Un-therapeutic Communities: A Cross-National Analysis of Post-disaster Political Unrest." *International Journal of Mass Emergencies and Disasters* 15 (2): 221–38.
- Overland, I., and A. Krivorotov. 2015. "Norwegian-Russian Political Relations and Barents Oil and Gas Developments." In *International Arctic Petroleum Cooperation: Barents Sea Scenarios*, edited by A. Bourmistrov, F. Mellempvik, A. Bambulyak, O. Gudmestad, I. Overland, and A. Zolotukhin, 97–110. Abingdon, UK: Routledge.
- Pompeo, M. 2019. "Looking North: Sharpening America's Arctic Focus." Speech in Rovaniemi, FI, 6 May 2019. Washington: US Department of State. <https://www.state.gov/looking-north-sharpening-americas-arctic-focus>.
- Pincus, R., and S. H. Ali, eds. 2016. *Diplomacy on Ice: Energy and the Environment in the Arctic and Antarctic*. New Haven, CT: Yale University Press.

- Quarantelli, E. L., and R. R. Dynes. 1976. "Community Conflict: Its Absence and Presence in Natural Disasters." *Mass Emergencies* 1:139–52.
- Raudaskoski, M., and J. Laine. 2018. "Changing Perceptions of the Finnish-Russian Border in the Post-Cold War Context." In *Post-Cold War Borders: Reframing Political Space in the EU's Eastern Europe*, edited by J. Laine, I. Liikanen, and J. W. Scott, 129–46. London: Routledge.
- Rodríguez, H., W. Donner, and J. E. Trainor, eds. 2018. *Handbook of Disaster Research*. 2nd ed. Cham, CH: Springer.
- Scanlon, J. 2006. "Dealing with the Tsunami Dead: Unprecedented International Co-operation." *Australian Journal of Emergency Management* 21 (2): 57–61.
- Scottish Government. 2019. *Arctic Connections: Scotland's Arctic Policy Framework*. Edinburgh: Scottish Government.
- Segalla, S. D. 2012. "The 1959 Moroccan Oil Poisoning and US Cold War Disaster Diplomacy." *Journal of North African Studies* 17 (2): 315–36. <https://doi.org/10.1080/13629387.2011.610118>.
- Sellheim, N., Y. V. Zaika, and I. Kelman, eds. 2019. *Arctic Triumph: Northern Innovation and Persistence*. Basel, CH: Springer.
- Staupe-Delgado, R. 2019. "Analysing Changes in Disaster Terminology over the Last Decade." *International Journal of Disaster Risk Reduction* 40 (101161). <https://doi.org/10.1016/j.ijdr.2019.101161>.
- Svalbard Treaty. 1920. Treaty between Norway, the United States of America, Denmark, France, Italy, Japan, the Netherlands, Great Britain and Ireland and the British Overseas Dominions, and Sweden Concerning Spitsbergen. Signed in Paris, 9 February 1920.
- Taylor, D. M., and P. J. Gormly. 1997. "Emergency Medicine in Antarctica." *Emergency Medicine* 9 (3): 237–45. <https://doi.org/10.1111/j.1442-2026.1997.tb00394.x>.
- Tonami, A. 2016. *Asian Foreign Policy in a Changing Arctic*. London: Palgrave Macmillan.
- UNDRR (United Nations Office for Disaster Risk Reduction). 2019. "Terminology on Disaster Risk Reduction." UNDRR, accessed 14 December 2019. <https://www.unisdr.org/we/inform/terminology>.
- Venugopal, R., and S. Yasir. 2017. "The Politics of Natural Disasters in Protracted Conflict: The 2014 flood in Kashmir." *Oxford Development Studies* 45 (4): 424–42. <https://doi.org/10.1080/13600818.2016.1276160>.
- Weizhun, M., and Q. Tianshu. 2005. "Disaster Diplomacy: A New Diplomatic Approach?" *Shanghai Institute for International Studies International Review* (Spring): 111–24 [in Chinese].
- Whittaker, C., A. Frühauf, S. J. Burthem, R. S. Parry, M. Kotikalapudi, Y. Liang, M. M. Barker, P. R. Patel, and I. Kelman. 2018. "A Disaster Diplomacy Perspective of Acute Public Health Events." *Disasters* 42 (S2): S173–S195. <https://doi.org/10.1111/disa.12306>.
- Wilson Rowe, E. 2018. *Arctic Governance: Power in Cross-Border Cooperation*. Manchester: Manchester University Press.

- Wilson Rowe, E., and H. Blakkisrud. 2014. "A New Kind of Arctic Power? Russia's Policy Discourses and Diplomatic Practices in the Circumpolar North." *Geopolitics* 19 (1): 66–85. <https://doi.org/10.1080/14650045.2013.789863>.
- Wisner, B., P. Blaikie, T. Cannon, and I. Davis. 2004. *At Risk: Natural Hazards, People's Vulnerability and Disasters*. 2nd ed. London: Routledge.
- Young, O. R. 2019. "Constructing the 'New' Arctic: The Future of the Circumpolar North in a Changing Global Order." *Outlines of Global Transformations* 12 (5): 6–24.

