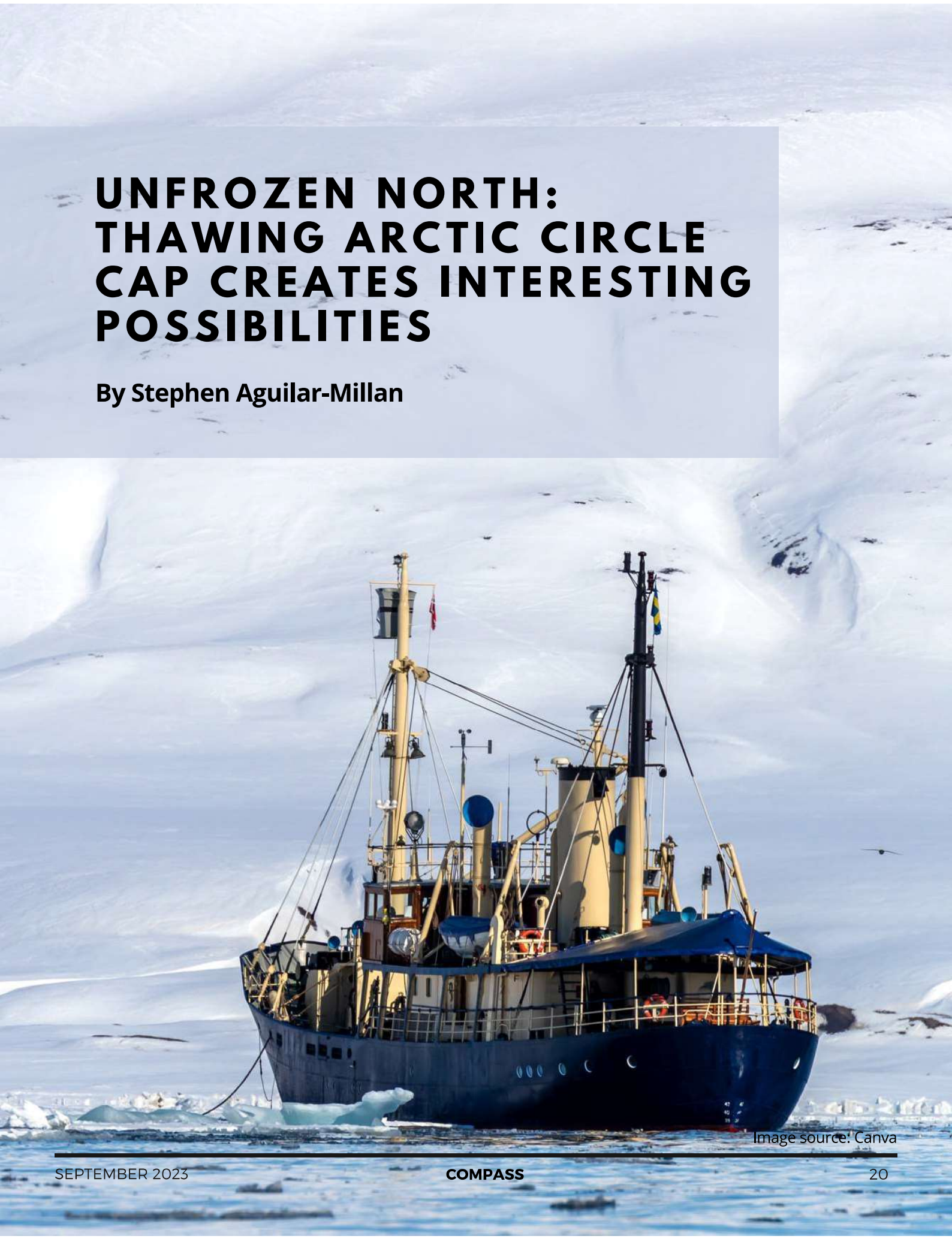
UNFROZEN NORTH: THAWING ARCTIC CIRCLE CAP CREATES INTERESTING POSSIBILITIES

By Stephen Aguilar-Millan



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When thinking about water in a futures context, it is tempting to focus on a potential shortage of potable water. This is an important issue. However, there are some cases where there could be too much water rather than too little.

One such case could well be the Arctic. The onset of climate change is leading to the retreat of the Arctic Polar ice cap and to speculation that the Arctic Ocean could be ice free by the middle of this century. This prospect should command the attention of the futures community because it is likely to have profound consequences for global geopolitics and the global economy.

In applying futures thinking to the question of the Unfrozen North, several questions present themselves. What are the possible outcomes for the Arctic? How might we group these outcomes? What is the pathway from the present into that emergent future? And what does it look like when we get there? We shall address each of these questions in turn.

The possible outcomes for the Arctic relate to the potential future use of the Arctic as a geographical space. At present, owing to the ice cover and the relatively inhospitable climate, the Arctic, whilst being of significant environmental importance, has very little commercial and geopolitical value. However, we know:

- There are significant hydrocarbon and mineral deposits in the Arctic region.
- The Arctic has the potential to become a significant fishery, especially as fish stocks start to migrate northwards because of rising sea temperatures,
- The Arctic also has the potential to become a major shipping route between East Asia and the North Atlantic shores of America and Europe, and
- The Arctic could become another tourism destination, similar to the Antarctic.

At present, the Arctic Polar ice cap prevents the commercial exploitation of these factors. In the relatively ice-free Arctic Ocean of this emergent future, that has the potential to change.

The potential for the commercial exploitation of the Arctic brings into sharp focus the question of who has jurisdiction over the region. It may be felt that the national boundaries of the Arctic region are fairly settled, but that is not quite the case. There are potential disputes between all Arctic nations about exactly where the national boundaries lie. Another complication -- several of the Arctic nations (U.S., Canada, Norway, Finland) that belong to NATO on the one hand, and Russia, on the other hand, does not. The United Nations and the Arctic Council have attempted to bring a degree of certainty to these boundary issues but has failed to do so. On top of this lies a further complication that the Polar Ice Cap is not melting at an equal rate. Owing to a combination of winds, tides, and currents, the Polar ice is melting at a faster rate on the Russian shore than it is melting on the Canadian shore. This means that the potential for commercial exploitation of the Arctic will come to Russia sooner than for other Arctic nations.

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The APF's Emerging Fellows program for 2020 contained a focus upon the Arctic as a region of geopolitical interest[1]. The program participants developed four broad groups of future outcomes, which included:

White Arctic: Owing to a combination of winds, tides, and currents, the Arctic fails to become ice free for a significant part of the year. Although the Polar Ice cap melts back, the Arctic Ocean fails to become navigable to commercial shipping owing to residual ice flows. We dubbed this the 'White Arctic', which we saw as possible, but unlikely.

Blue Arctic: The Arctic Ocean becomes commercially navigable for large parts of the year. In this case, the Arctic Ocean would become open to commercial exploitation of the hydrocarbon and mineral deposits, the harvesting of fish stocks, and the use of the region as a commercial shipping route. In this scenario cluster – which we dubbed the 'Blue Arctic' – there was something of a commercial free-for-all as the virgin territory of the Arctic comes to acquire a commercial significance.

Red Arctic: It would be difficult for the Blue Arctic scenario to act as an end point. The release of the commercial potential for the Arctic is unlikely to be the final position because the question of territoriality is then likely to arise. The Arctic is currently used as a form of global commons that is dedicated to environmental conservation and scientific research. In the face of increasing commercial value to the territory, it is quite likely that the Arctic would be enclosed under the jurisdiction of the Arctic nations, who could gain substantially from these enclosures. Such enclosures, and their commercial exploitation would give rise to a further cluster of scenarios that we dubbed as the 'Red Arctic'. In this scenario cluster, normal geopolitical rivalry continues, only at more northerly latitudes.

Green Arctic: It is always possible, however, that a degree of consensus emerges about the future use of the Arctic, where it continues to be administered as a global commons, with sympathetic development that preserves as much of the environmental integrity of the region as possible that is consistent with a degree of commercial exploitation. We dubbed this cluster of scenarios as the 'Green Arctic,' which would be managed by a supra-national body – the current Arctic Council being a first step – on behalf of humanity. In these scenarios environmental conservation would be balanced with a degree of commercial exploitation.

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At this point in time, all four scenario clusters – the White, Blue, Red, and Green Arctic – are distinct possibilities. In terms of likelihood, the Emerging Fellows felt that the Blue Arctic was a strong candidate to become the eventual outcome, simply because there is evidence of that eventual pathway starting to happen already. From the perspective of EUFO (European Futures Observatory), we decided to embrace that pathway and to conduct additional research into how that might come about.

We used a matrix game as our research technique to explore the pathway to the Blue Arctic between 2020 and 2050[2]. Matrix games are a useful technique because they allow the construction of an opposed futures narrative. The game provides a means by which opposing views can be blended to provide a story of an emergent future and which captures the tension of conflicting positions. The results of the exercise proved to be quite interesting.

Owing to the uneven melt rate of the Polar Ice Cap, the advantage of the Blue Arctic went to Russia at an early stage. Supported by China, Japan, and the East Asian nations, the Russian Arctic coastline soon became a key source of hydrocarbons and minerals, an important fishery was developed, and port facilities had been constructed along the Russian Arctic coast.

In the game, Canada was hampered by a lack of ready access to blue water as the ice melted from the Canadian Arctic coastline at a slower rate. Canada and Europe were more sympathetic to environmental concerns, but powerless to prevent an assertive Russia, backed by East Asian capital, from exploiting the Arctic to the full. The United States was not really engaged with the Arctic as an issue as other concerns, such as a succession of fiscal crises, dominated the US policy agenda. By the end of the game, the Arctic Ocean was something of a Russian lake, dominated by both the Russian and Chinese navies.

This outcome – pretty much a baseline scenario for the Blue Arctic – presented a bit of a concern. As a response to this, we were commissioned – originally under the Horizon Europe programme – to examine what would be needed to ensure a Green Arctic scenario outcome[3]. We explored this possibility through the device of a committee game, with matrix arguments, in a bid to use opposed arguments to reach a consensus outcome. Unfortunately, we couldn't find a solution to the tragedy of the commons. This was an interesting result because it pointed policy away from the Green Arctic set of outcomes and hinted that prudent policy formation would be to prepare for a Red Arctic set of outcomes.

It is fair to say that the onset of disruptive climate change is changing global geopolitics and the global economy in ways that we are only now starting to appreciate. We cannot be fully certain of

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the impact of an unfrozen High North, largely because it is outside of our previous experience. We can, however, speculate about the possibilities and establish a set of milestones to indicate which possibility is likely to dominate.

So far, the evidence suggests that a Blue Arctic is more likely than a White Arctic. In the event of a Blue Arctic, a Red Arctic is more likely to predominate over a Green Arctic because the pathway so far suggests a greater degree of territoriality and a lack of international consensus over the use of an unfrozen Arctic Ocean. This is a conclusion that is not fixed, but it will require a degree of international co-operation that is rarely seen if the Red Arctic is to be avoided.

[1] For a more detailed view of the research undertaken, see Aguilar-Millan SJ (Ed.) 'Our Geopolitical Futures 2050' (2021 Design By Accident Press). The work is available exclusively on Amazon at https://www.amazon.co.uk/Geopolitical-Futures-2050-Stephen-Aguilar-Millan/dp/B09244XNXP/

[2] For more information about the construction and development of the game, see the sequence of blog posts starting at: http://eufo3.blogspot.com/2020/06/introdicing-unfrozen-north.html

[3] For more information about the construction and development of the game, see the sequence of blog posts starting at: http://eufo3.blogspot.com/2022/11/the-green-arctic-introducing-game.html

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