Polarized

Climate Change, Geopolitics and Disinformation in the Arctic

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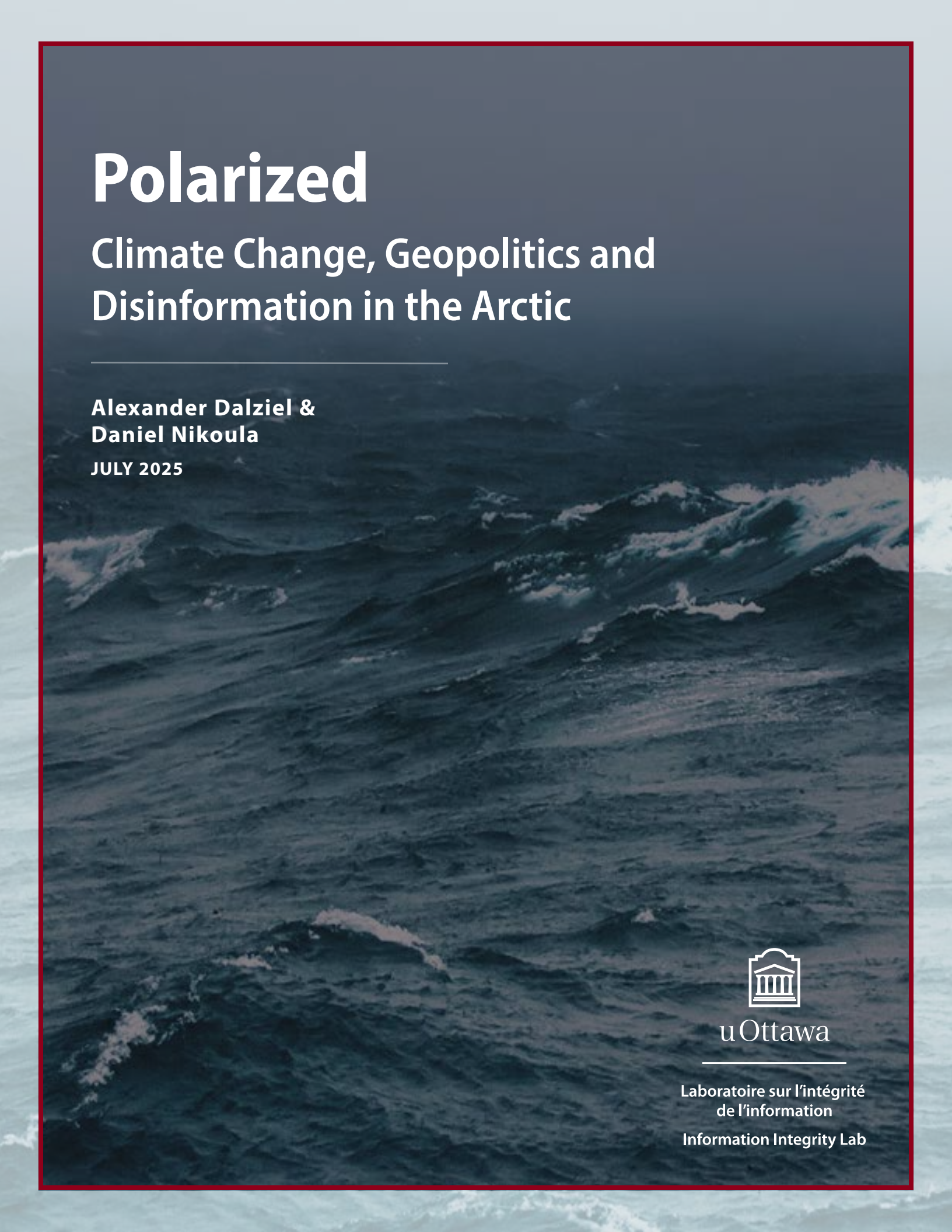

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About the InfoLab

The ***Information Integrity Lab (InfoLab)*** at the University of Ottawa focuses on analyzing and addressing mis/disinformation across key areas like democracy, climate change, and public health. Bringing together analysts, researchers, and practitioners, it works to develop practical insights, tools, and strategies that enhance information integrity and help build public resilience in a rapidly shifting digital environment.

Authors

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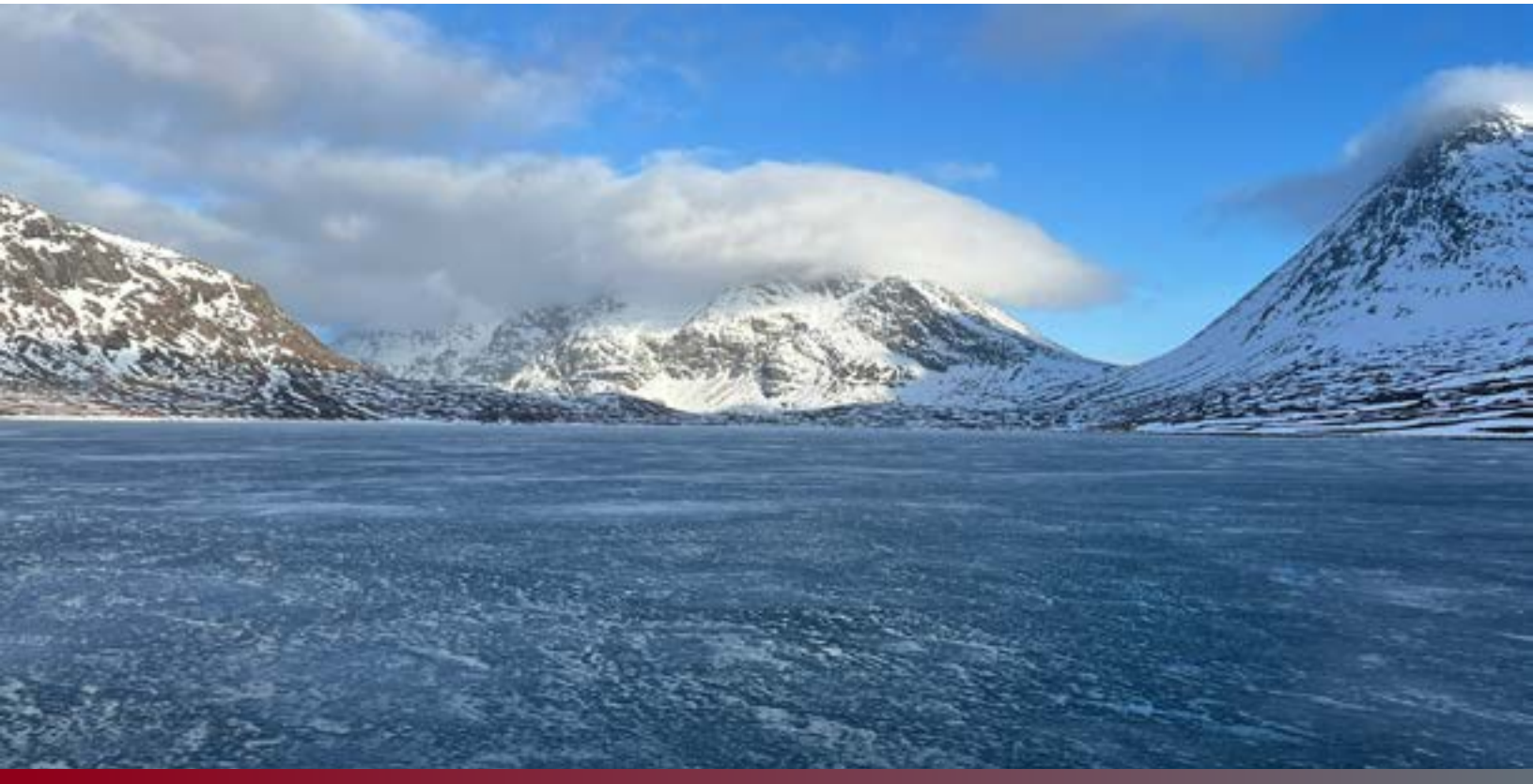

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FOREWORD

Disinformation is a form of `information distortion that seeks to advance the aims of propagators while disrupting the public's perceptions of crises and how to address them.

The worsening effects of climate change on the Arctic, combined with sharpened geopolitical rivalry over the area makes this region a target for disinformation by adversarial state actors such as Russia and China. Concurrently, the Arctic has risen to the forefront of Canadian foreign and defence policies, and is a ripe candidate for increased transatlantic collaboration addressing not only foreign influence campaigns, but also underlying human security challenges in this unique region. For all these reasons, the University of Ottawa's Information Integrity Lab has selected the Arctic as a focal point for a case study: *"Polarized: Climate Change, Geopolitics and Disinformation in the Arctic".*

This publication draws upon applied research conducted by the Information Integrity Lab, and the results of a conference of the same name held in March 2025, organized in collaboration with the Climate Change Security Association of Canada. For both the conference and the publication, the Lab acknowledges a contribution from the Department of National Defence's MINDs program, and from the Trottier Family Foundation in support of the Lab's work on climate mis- and disinformation.

We hope that this review provides a framework for further research, in particular into tools and approaches for mitigating the impacts of information distortion campaigns, with a special focus on addressing the needs of northern and Indigenous communities. The Information Integrity Lab stands ready to do its part, in concert with collaborators, to address the challenges that impact Canada's ability to deliver what is needed to increase our resilience in addressing impacts in the Arctic and more broadly.

Jennifer Irish
Director of the Information Integrity Lab

EXECUTIVE SUMMARY

The worsening effects of climate change, escalating geopolitical rivalry and disruptions caused by new technologies are converging in the Arctic. The global poly-crisis facing humanity is palpable in this distinct space through the concerted assault of rapid climate change and technological and geopolitical factors. Into the "grey zone" and even "hybrid" conflict tactics on the part of Russia and China, which have noticeably increased in frequency and intensity in the Arctic, are interwoven comprehensive disinformation and influence campaigns. Russia in particular has claimed democratic states are militarizing the Arctic and are racing to control its natural resources, claims that Russia uses to justify its own military modernization in the region and to distract foreign audiences with intentional misrepresentations of its adversaries.

Research also demonstrates how intimately climate change and Arctic mis- and disinformation are interacting. Some are mapping the connections between political disruption and the appearance of state-backed fakes and misinformation scams in the particular setting of small communities in Greenland.

The solution is not just to uncover one by one the falsity of these claims, but to strengthen Arctic information resilience. Steps in that direction include looking at the co-production of knowledge about the threats and vulnerabilities of Arctic regions, and bringing Indigenous and national security communities together to share knowledge useful to the region's inhabitants and government policy makers alike. Access to the data on social media platforms—often the favoured sources of news and information in the Arctic—should be strengthened for academic and research institutions, as well as government officials. International cooperation at the government and civil society levels is a powerful way to improve understanding and identify trends and tools. There also needs to be more political unity, especially in the Canadian and US contexts, on the reality of these threats and the importance of addressing them collectively and boldly.

> "In relation to the term (Inuit Nunangat), I think it's important that people know that it's a geopolitical term. It's one that we have thoughtfully created. . . . We bring that into the world now as a defined term and the Canadian government is slowly taking that term up."

— Natan Obed

President, Inuit Tapiriit Kanatami

May 28, 2025

> "All the sovereignty issues [in the Arctic region] stem from the same desires and fears — the desire to safeguard routes for military and commercial shipping, the desire to own the natural riches of the region, and the fear that others may gain where you lose."

— Tim Marshall

2015

INTRODUCTION

The Arctic faces distinct information challenges. Until recently, many perceived it as a region where peace and stability prevailed, captured in the oft cited expression "high North, low tension". Today's perceptions of the region are changing with the recognition that it is suffering some of the most rapid effects of climate change, coinciding with heightened geopolitical competition and the digital revolution, in what international affairs analysts are describing as a poly-crisis (Government of Canada 2024b). Consequently, climate change is omnipresent in its geopolitics, an overarching narrative shaping many discussions of the Arctic, including information distortion and influence campaigns.

Russia's full-out attacks on Ukraine since February 2022 have shattered the spirit of international cooperation in the Arctic that had prevailed since 1991. As global power competition intensifies, so too will tensions in the region, raising concerns about its potential as a future site of physical conflict. But information conflict is already well underway. Russia, the United States and the European Union (EU) are the main protagonists of this struggle. Even China has jumped into the fray, driving information campaigns and cyber activities along with other Arctic players, and interfering in Arctic states.

The primary objective of this paper is to highlight the growing insertion of climate and geopolitics into disinformation and influence campaigns in the Arctic. It will look at how information fits into these types of "hybrid" and "asymmetrical" confrontations, informed by a review of recent academic literature, government reports and the outcomes of an Information Integrity Lab (IIL) conference on the subject in Montréal in May, 2025. Russian and Chinese narratives have been active on topics of Arctic security, climate change, and resource extraction, and US-based sources of anti-climate change disinformation are also extensive (McMahon 2023; Landriault et al 2024). All of these will receive attention.

It then puts forward policy-relevant recommendations. It identifies the co-production of knowledge with Indigenous and scientific communities, international cooperation, and better data access as key steps in improving the north-south exchange of information with integrity, to strengthen resilience in the Arctic.

BACKGROUND

The Information Integrity Lab defines "disinformation" as verifiably false information that is created and spread intentionally to confuse, manipulate or mislead. It may contain a blend of truth and untruth, or purposely exclude/distort context, making it harder to differentiate from content that is "authentic" (Rutherford 2024). Conversely, "misinformation" designates incorrect or misleading information that is not intentionally deceptive, and which hasn't been shared to cause harm; "malinformation" is true information deployed for ill intent (Rutherford 2024). Information integrity is "an information ecosystem that produces accurate, trustworthy, and reliable information" (Government of Canada 2024a). Both state and non-state disinformation is driven chiefly by a desire to shape the information landscape in an advantageous way allowing them to exert influence over people and groups. Scholars in the North American and Arctic Defence and Security Network (NAADSN) have recently emphasized looking at the narratives that Arctic countries advance as a way to understand how they shape the informational environment, through communicating political intent (Bouffard et al 2024; NAADSN 2024).

In the digital age, disinformation is characterized by speed, contestation and complexity. It can now be produced more quickly and cheaply than ever before, and with nearly 70% of the world's population connected to the internet (up 20% from a decade ago), its reach is vast (Kemp 2015 and 2025). However, responses and regulations have struggled to keep pace with the rapid rate of change. Often, those most directly targeted are the least equipped to recognize or respond to digital threats. Understanding the character of these dynamics and trends in and about the Arctic is still in its early stages, as we will see in subsequent sections.

Arctic communities are among those feeling the most immediate and direct effects of climate change, with declining levels of sea ice coverage, snow cover and ice sheets enabling a steady increase of human activity in the region (Steinbeck 2020). Scientists estimate that temperatures in the Arctic are rising at more than twice the global average rate, meaning that nearly ice-free late summers may happen as early as the 2040s, although recent scientific work paints a complex picture that is not accurately described as "easing" navigation or more manageable ice conditions, especially at narrow passages (Cook et al. 2024). The melting of permanent or near permanent ice will further open commercial sea routes like Canada's Northwest Passage and Russia's Northern Sea Route as well as uncover previously inaccessible natural, mineral and biological resources. Concurrently, it will increasingly impact infrastructure necessary to sustain both human security and defence operations.

One approach in dealing with this complex environment, as articulated in the recently announced strategy of the Kingdom of Denmark's Chairship of the Arctic Council (AC), is bringing institutions like the AC closer to northerners, in part because they are among the first to experience some of the worst effects of climate change (Kingdom of Denmark 2025). It is beyond the mandate of the AC, but it is worth noting that northern inhabitants are also experiencing some of the deepest geopolitical fractures and upheavals of the current era.

As the natural environment changes, revealing potential economic opportunities and disruptions, and as global political dynamics shift towards "great power" competition, the Arctic will increasingly be the subject of information campaigns. Through these, states seek to advance their interests at the expense of the democratic Arctic states and exploit the region's vulnerabilities. State and non-state actors are increasingly using Arctic disinformation as a tool to influence public perceptions, climate change and economic policies, as well as security strategies in Arctic regions. They spread narratives that distort economic and resource-related debates, escalate geopolitical tensions and undermine scientific consensus on climate change.

Nordic perspectives: geopolitics, hybrid warfare and influencing in the Arctic

State-backed disinformation campaigns are on the rise, and therefore of growing concern. To provide one set of Arctic-related conceptions of the roles of mis- and

disinformation, we can turn to the publications of the security and intelligence services of the Kingdom of Denmark (of which Greenland is an autonomous part), Finland, Norway and Sweden.

When it comes to the Arctic, Nordic countries are leaders in analyzing the range of disinformation activities. They embed the concept of disinformation in a broader framework of hybrid influence campaigns and warfare. Their publicly released annual intelligence assessments provide insight into how countries like Russia and China are seeking to control the information domain to serve their national strategic goals. As one Canadian analyst puts it, Russia sees itself as being in an "information confrontation" (McMahon 2023). Those documents suggest pathways to building resilience (pro-active) and countermeasure (generally reactive) strategies across the Arctic as ways to mitigate and neuter the disinformation challenge.

Nordic intelligence and security services conclude that "hybrid warfare" is a prevalent and multifaceted threat. The European Centre of Excellence (CoE) for Countering Hybrid Threats, based in Helsinki, defines a hybrid threat as "an action conducted by state or non-state actors, whose goal is to undermine or harm a target by combining overt and covert military and non-military means." The combination of different activities—the Hybrid CoE points to "information manipulation, cyberattacks, economic influence or coercion, covert political manoeuvring, coercive diplomacy, or threats of military force" as examples—is a key point, and contextualizes that the uses of information are not solely intellectual, mental or psychological (Hybrid CoE 2025).

In practice, Nordic security services embed the idea of disinformation in the concept of influence campaigns, themselves part of larger hybrid warfare campaigns. The Finnish Security and Intelligence Service insightfully describes "information influencing" campaigns (Finnish Security and Intelligence Service 2025), a more active voice description of the Finnish word *vaikuttaminen*, a verbal noun that better conveys the frequently ongoing and open-ended character of these activities than the more abstract English noun "influence" usually used in these contexts. It emphasizes a process that is concrete and particular, conducted by those with agency, continually adjusted, and subject to variation in intensity.

These campaigns can be "centrally coordinated," according to the Danish Defence Intelligence Service (DDIS 2025b). Drawing on the concept of hybrid warfare, they extend across a continuum of activities beyond information to include espionage, stealing industrial secrets from companies in strategic sectors, buying property, physical intimidation, sabotage, cyber operations, economic coercion, military exercises and diplomatic tools, among others (Norwegian Police Security Service 2025; Finnish Security and Intelligence Service 2025). Countries, in part in relation to climate change and its consequences for industry and energy, see the Arctic as part of this dynamic. The Swedish Security Service (2024) described it as follows: "The security threat that China poses in northern Sweden is primarily related to intelligence gathering and influence campaigns targeting decision-makers." In the case of the Arctic, Russia and China draw the most attention from Nordic security services.

Russia is the primary actor "centrally coordinating" disinformation in the Nordic countries. As described by Finnish analyst Minna Ålander, in 2024 Finnish authorities became aware of a document posted on the Russian Ministry of Defence's website that showed modified maritime borders for Finland and Lithuania. The Kremlin denied the activities but undertook the removal of navigational buoys from the river that forms the Estonia-Russia border at around the same time (Ålander 2024). Given the economic and military importance of the Barents Sea to Russia (Åtland, Nilsen, and Pedersen 2024), analysts should be attentive for vulnerable points where Russia might choose to undertake similar actions.

Norwegian researchers have studied how Russian disinformation has been active in their country. One example comes from its Svalbard archipelago in the far north. Russian officials and proxies have conducted a cocktail of influence activities, including misrepresenting the archipelago as "Soviet", organizing provocative visits by sanctioned Russian officials and conducting a diplomatic push to demand the 1925 Spitzbergen

treaty—which covers the archipelago—allow Russia to assert Russian "rights" there, rights Norway has asserted are an overreading of the treaty (Gjørv and Bila 2024).

The Nordic security services draw attention to the diversity of ways Arctic influence campaigns express themselves. One is that disinformation need not be false, and in fact effective propaganda ideally has a large truth-content—a manifestation of malinformation (see definitions above)—rhetorically designed to accomplish particular ends (Stanley 2015; Heffernan 2025). As Norwegian authorities point out, "half-truths" (*halvsannheter*) cloud the information environment (Norwegian Government 2025), a point that is relevant to climate change disinformation.

Disinformation and misinformation, even if not intended for foreign consumption or driven by malign intent, affect other countries and societies. In authoritarian cases, targeting domestic audiences for internal political reasons is an example. Russian depictions of a resource race and the resource bounty of the Arctic are a means to prop up Putin's regime. As one Nordic researcher put it, "It becomes even more difficult to identify foreign influence when it is distributed by and through a state's own citizens who, based on an ideological worldview, become amplifiers of Kremlin propaganda and disinformation. This is not in itself a blind spot but may be simply a condition of liberal democracy in opposition to authoritarian regimes" (Ahonen et al. 2024). The local has global implications.

Similarly, the global can have profound local informational consequences. As the Norwegian Police Security Service (2025) puts it, "Even though the spread of Russian and Chinese disinformation often takes place at the global level, online communities in Norway will nonetheless be affected indirectly." The original point need not be authoritarian, either. As the Finnish Security and Intelligence Service contends, undisciplined information in national media can also serve the interests of foreign authoritarian states and actors (Finnish Security and Intelligence Service 2025), unintentionally advancing their narratives and damaging the credibility of media in liberal societies, thereby causing damage to Arctic life and policy-making. Informational "unintended consequences" will present an ongoing challenge to information integrity where voices from the rest of the world often drown out the voices of those who live in or govern Arctic territories.

Gjørv and Bila (2024) furnish a Norwegian example of such undisciplined use of media, exploring how Russian "alternative media" enters the Norwegian information space. In Norway, online anti-authority news portals disseminate "alternative" content obtained from many sources that have degrees of affiliation with the Russian government. Those articles run through the lens of "home-grown" dissident, anti-establishment and anti-American conspiratorial Norwegians, who are entitled to their views but unwary about how this information intersects with the Russian government's goals and activities. This research provides insight into the complex interactions of liberal democratic media spaces that guarantee freedom of expression—even to express erroneous or deceitful claims—and those of authoritarian systems with limited press freedom.

Disinformation and global warming

Studies looking at dominant narratives on large social media platforms have shown that the prevailing form of Arctic disinformation is climate-related, making up more than half of all disinformation content about the region.

Research conducted by Mathieu Landriault, Gabrielle LaFortune & Gregory A. Poelzer shows how disinformation activity spiked during high-profile climate events such as the UN Framework Convention on Climate Change Conference of Parties (UNFCCC-CoPs) and Intergovernmental Panel on Climate Change (IPCC) report releases, as well as during heatwaves and unusual Arctic weather patterns. The study shows that the rise in prevalence of disinformation significantly correlates with Elon Musk's acquisition of Twitter/X (Landriault et al. 2024). Misinformation and disinformation about climate change distorts public awareness of the climate change crises and possible solutions. It can also exacerbate divisions in public discourse. In response, and in preparation for CoP30 scheduled for Brazil in 2025, the Global Initiative for Information Integrity on Climate Change was launched as a joint partnership between the Brazilian government, the UN Secretariat and UNESCO. The uOttawa Info Lab's

Summit on Climate Mis/Disinformation aspires to help shape this agenda. In terms of the Arctic lens, it is difficult to separate climate change information distortion from other information integrity issues in the region: in short, Arctic disinformation is largely climate change disinformation, as highlighted in Landriault, Lafortune and Poelzer's research.

This investigation underscores how geopolitical tensions are inextricably linked with the climate debate. As previous publications from the Information Integrity Lab have stressed, climate disinformation not only seeks to cast doubt on human-induced climate change but more broadly seeks to erode trust in scientists, journalists, and institutions, especially in the area of energy policy. In the Arctic context, misinformation and disinformation surrounding climate change and mitigation efforts thrive in an environment marked by polarization, uncertainty, deepening political divides, and diminishing trust in, and sometimes outright hostility towards, scientific and government authorities. These deceptive narratives often mirror or reinforce existing ideological and societal rifts, allowing them to spread and more effectively resist correction. The consequence is a fractured information landscape, where building consensus on urgent climate action—particularly urgent in the context of a rapidly warming Arctic—is becoming ever more elusive (Rutherford 2024).

As Landriault and his co-authors conclude (2024), scholarship on online harm related to the Arctic remains in its infancy and requires a more comprehensive research agenda to adequately address existing gaps. This can include examining non-English narratives and expanding analysis to other social media platforms such as Reddit and Facebook, enabling a comparative analysis to track similarities and differences across different languages. As Landriault's subsequent article co-authored with Julie Renaud on Russian information campaigns against NATO in the Arctic highlights, addressing this challenge demands collaborative, multinational, and multilingual research initiatives capable of accurately assessing the scale and impact of Russian disinformation. Democratic Arctic nations must do more to pool resources and establish coalitions to address current gaps in Arctic information integrity (Landriault and Renaud 2024).

China's Arctic ambitions and the role of disinformation

As climate change has accelerated the transformation of the Arctic, China has sought to grow its influence there. Although not an Arctic nation (the closest point between mainland China and the Arctic Circle is roughly 1,400 kilometers), in 2018 China nonetheless claimed the status of a "near-Arctic state" and has actively pursued economic, scientific, and geopolitical objectives in the high north (Zhuang 2025). As with much of its broader foreign policy, Beijing carefully calibrates China's Arctic strategy for the long-term. It combines diplomatic engagement, economic investment, scientific cooperation, and digital influence operations. Over the past five years, its Arctic engagement has intensified, complemented by a strategic use of information distortion to further its long-term geo-economic and geo-strategic ambitions, including legitimizing its role as an Arctic player, framing its activities in the Arctic in a favourable light, and crucially, to challenge the influence of Western Arctic powers (Sørensen 2019).

Economic and strategic goals drive China's Arctic ambitions. A narrative of climate change is central to its rhetoric. In this view, global warming is melting sea ice, opening up possibilities for new commercial shipping routes such as the Northern Sea Route (NSR) along Russia's north coast, and eventually the Transpolar Route across the Central Arctic Ocean. Under ideal conditions (which rarely occur in the maritime Arctic), the routes would significantly reduce transit times between China and European markets, but this is more notional than real at this stage, with the partial exception of the NSR. The Chinese icebreaker *Xue Long* transited the Transpolar route in 2012, becoming the first vessel from a non-Arctic state to do so (Pettersen 2012). Beijing has integrated these shipping corridors into its broader *Belt and Road Initiative* under the concept of a "Polar Silk Road," repeatedly emphasized in official messaging.

In addition to shipping, China is pursuing access to the Arctic's vast reserves of natural gas, oil, and critical minerals, harnessing the narrative of an Arctic resource race—again related to the perception of climate change's opening of the Arctic—in which it must stake its rights (Kanunnikova 2024). Chinese state-owned

enterprises have invested in energy projects in Russia's Arctic, notably the Yamal LNG development, solidifying its role as a long-term stakeholder in regional resource extraction (Rao and Gruenig 2024). That extends to the international waters of the Central Arctic Ocean, where China is asserting that it has a right to tap energy, minerals and fish stocks (People's Republic of China 2018).

In Canada, China's quest for minerals and its use of disinformation to secure them has seen it, according to press reporting, sow disinformation about a Canadian critical minerals project in northern Saskatchewan, a model that would also have efficacy in the Canadian Arctic. A prominent cybersecurity firm has alleged that various social media posts disparaging the project and making complaints about its potential environmental impacts originated in a Chinese government-backed campaign they called "Dragonbridge." That effort had also targeted mining operations in the southern United States, a sign of its applicability to a variety of different locations (McGee 2022).

Researchers have also analyzed Chinese telecommunications firm Huawei's activities in northern Canada. The company attempted to portray the federal and foreign governments' security concerns about the company's relationship to the Chinese Communist Party as preventing northern communities from gaining access to digital technologies and services. The researchers contended that this insertion into Canada's sensitive domestic relations between different levels of government and northern and Indigenous communities shows how hybrid threat actors could turn "enduring" infrastructure inequalities experienced in northern Canada into "wedge issues" to divide the government from northern inhabitants (Rivard Piché and Sylvestre 2023).

Beyond economics, China's presence includes a growing scientific and technological footprint. It has built and operated Arctic research stations, deployed icebreakers, and launched satellites for polar monitoring (Lajeunesse and Lackenbauer 2024). While these initiatives are framed as contributions to global knowledge and climate science, many possess dual-use capabilities, potentially serving military or surveillance purposes in the future.

To support its Arctic ambitions, China has increasingly relied on strategic disinformation and information manipulation, primarily through state-controlled media, diplomatic messaging, and social media influence campaigns. These efforts aim to achieve two overlapping goals: legitimize China's Arctic presence, undermine Western narratives and obfuscate the strategic objectives behind its scientific research in the region.

First, China uses information campaigns to reinforce its status as a rightful stakeholder in Arctic governance. Official state media had previously referred to China as a "near-Arctic state," a term Arctic nations rejected, but that state media repeated in an effort to normalize Beijing's role in Arctic affairs (Lajeunesse and Lackenbauer 2024). This narrative presents China's engagement as cooperative, scientific, and environmentally responsible, designed to promote "a shared future for mankind" in the Arctic (People's Republic of China 2018). In recent years, however, the Chinese government has largely shifted its "near-Arctic rhetoric" towards an approach emphasizing "science diplomacy – including a focus on building heavy icebreakers and carrying out polar observations" (South China Morning Post 2025).

Second, China leverages disinformation to sow doubt about Western leadership and environmental stewardship. Chinese media and diplomatic actors have amplified content that frames western Arctic nations as militaristic, exclusive, and hypocritical. These narratives frequently align with those of other revisionist powers, notably Russia, and seek to erode trust in western organizations such as NATO by portraying them as self-serving or dismissive of non-Arctic perspectives (NATO 2021).

Third, disinformation enables China to highlight its scientific activities in the Arctic while obscuring the strategic intent behind them. By emphasizing the ostensibly peaceful and cooperative nature of its research, China masks the dual-use potential of its operations, such as the use of satellite stations for both environmental monitoring and military reconnaissance. As its presence grows—a presence at this time largely contingent on cooperation with Russia—China will continue to employ information campaigns to try to normalize its role and presence, and shape a future

Arctic order that aligns with the global vision and strategic objective of the ruling Chinese Communist Party (Funaiole et al. 2023).

Russia and Arctic militarization

Over the past three years, Russia has intensified its use of disinformation strategies in the Arctic to advance its geopolitical and economic interests as part of a broader destabilization campaign. Central to these strategic efforts is the portrayal of NATO as a destabilizing force militarizing the Arctic. Russian media consistently frame NATO's Arctic presence as provocative, while casting Russia's own military activities as routine and defensive. In tandem, Russia has expanded its hybrid threat operations in the Arctic and surrounding areas, deploying disinformation, cyber attacks, and infrastructure sabotage to destabilize Western actors. Additionally, it asserts legal control over the Northern Sea Route (NSR), portraying Western freedom of navigation operations as unlawful and hostile, while misrepresenting international maritime law to accuse critics of Cold War-style imperialism.

According to a recent study from the NATO Strategic Communications Centre of Excellence in Riga, "Russia has dramatically increased assertive rhetoric regarding the Arctic region. In addition to constant revival of the 'growing conflict potential' theme promulgated by Russia's 'power ministries', other Russian notable political figures increased harsh and frequently conflict-pivoted rhetoric." The study goes on to argue that the Russian government has used allegations of foreign threats to Russian sovereignty "to jus=tify the re-militarisation of the Arctic region," a process that has been ongoing since at least the first decade of Putin's rule in the 2000s (Bouffard et al. 2024; Boulègue 2024a).

In a recent study (2024, based on Bouffard et al. 2022), researchers Landriault and Renaud delineated six themes of Russian Arctic disinformation:

1. the United States and NATO as a "destabilizing force";
2. the other Arctic democracies as US "pawns";
3. the idea of a Russian threat as ludicrous;
4. the US and NATO as "poor houseguests," unpopular with local populations;
5. the US as a meddler in the politics of all the other Arctic countries; and
6. US and EU sanctions as having deleterious blow-back on Arctic democracies.

Notably, these all tie back one way or another to a core militarization theme.

Recent reports from Nordic intelligence agencies expand on the militarization theme. Danish DDIS (2025b) observed that Russia's information strategy is two-pronged. First, "Russia will continue to talk about the need to keep the Arctic as a low-tension area and ensure cooperation in the region" in order to castigate the other Arctic countries for refusing to cooperate and for concealing the rationale for their own military investments in the region. At the same time, Russia, in practice "will demonstrate its power through aggressive and threatening behaviour," in part through forms of signalling like simulated attacks or weapon launches. Aligned with this signalling, the report assesses that "Russia will likely continue to try to divide the Western Arctic countries over the issue of how to address Russia's stance in the Arctic." The Danes saw Russia using the politics of non-cooperation in the region to try to depict the others as damaging the environment and the lives of Indigenous peoples (DDIS 2025a and b).

A North American and Arctic Defence and Security Network (NAADSN) workshop convened in December 2024 explored how, in the Arctic, states are using strategic communications in a struggle for political legitimacy. In this struggle, since 2022, Russia has doubled down on blaming the US and NATO for tensions in the Arctic, and claims it is the only truly sovereign country in the region. In its public rhetoric, influence and disinformation campaigns, it attempts to diminish the other Arctic countries as US pawns. Because of such geopolitics, claims Russia, it is forced to "remilitarize" its northern regions, a narrative that in fact predates the current bout of tension going back to 1999. A new component is China's parroting of many Russian narratives critical of NATO in the Arctic

(NAADSN 2024). Russia also promotes a "positive" image of militarization as an influence tool, for instance by promoting commemoration of Soviet Red Army contributions to the liberation of northern Norway in World War II (Ahonen et al. 2024).

Russia has deep-set motives and goals behind its behaviour. It is the largest Arctic country and is the most comprehensively developed and heavily populated northern region. Moreover, it is the most ambitious state when it comes to developing the northernmost parts of its economy. Its lucrative LNG exports, for instance, come from the Yamal Peninsula on its north coast, and use the Northern Sea Route, the part of the Northeast Passage running along the waters of the Russian north coast. Russian elites around President Vladimir Putin profit immensely from these development plans, which continue to focus heavily on oil, gas and coal. The complexity of monitoring all this territory, asserting maximal levels of control over it, and ensuring its riches flow to Russian elites feed what one analyst has called a "self-perception of vulnerability" (Boulègue 2024b), amounting to a fertile source for strategic messages and influence campaigns aimed at managing that insecurity.

With other forms of cooperation—scientific, people-to-people and economic—between Russia and the other Arctic countries hindered by its invasion of Ukraine, Russia's militarization narrative is likely to be a prominent feature of the Arctic information space, as Russia works to put a positive sheen on its Arctic military investments and impede those of the other Arctic countries. Climate science is a chip in Russia's geopolitical games. NATO and national governments have accused Moscow of withholding environmental data, particularly climate information vital for global climate modeling, thereby obstructing international climate cooperation and masking its regional ambitions (Financial Times 2024).

Both the militarization and resource race narratives depend to a greater or lesser extent on recruiting climate change as a root justification. Climate change, however, is not the only reason for the current course of geopolitics in the Arctic. Researchers have pointed out that sea ice melt, for instance, has little or nothing to do with military threats such as air power and nuclear weapons that implicate Arctic spaces (Bouffard et al 2024). Technological change, not global warming, is driving these threats. Calibrating what military readjustments are required to deal with changing ice conditions and consequent navigational patterns adds a new dimension to northern defence and security, but the advance of technologies in traditional and new threat areas (air defence, submarine detection, drones, cyber, etc.) is a dynamic of its own. In such moments of readjustment, the information environment is particularly susceptible to interference aimed at obscuring the sort of knowledge that countries and communities need to defend and advance their interests.

Greenland, self-determination and the geopolitics of information

Another development is the role of Greenland in the Arctic and global politics. Greenland is a frequent part of climate change discussions, due to the effects of climate change on the kilometres-thick icecap that covers almost all of its territory. It is also a place that is facing high-stakes geopolitical pressure amid its own politics of self-determination within the Kingdom of Denmark. And that is exposing the fact that liberal democracies are pursuing information campaigns to shape narratives among themselves. Recent events and research depict features of the Greenlandic environment common to much of the democratic Arctic: small societies with small media environments, increasingly turning to the politics of self-determination to shape their relationships and futures.

Greenland's information environment is undergoing rapid change. In December, a group of researchers released the first report on disinformation in the Greenlandic social media space (Nielsen et al. 2024). Among their most important conclusions was that their research into a large volume of material had not disclosed evidence of foreign-backed influence campaigns on the preferred sources used by Greenlanders to access and share news. They did, however, identify some of the fault lines of debate, issues that could pose vulnerabilities because of the emotional charge they carry. These were the future of Greenland's independence movement, the character of the Danish Realm (Greenland is an autonomous part of the Kingdom of Denmark), and the role of NATO.

Less than a month later, the researchers announced that the situation had changed entirely (Digital Infrastructure Think Tank 2025). "False content" was proliferating on Greenlandic Facebook pages (Ravn-Højgaard 2025), with fake accounts and posts pretending to be those of then Greenlandic Prime Minister Múte Egede and a Danish political figure appearing on social media. This was occurring against the backdrop of US President Donald Trump's calls for Greenland to leave Denmark and become a part of the US. President Trump did not rule out "force" and annexation to accomplish what he described as an essential national security outcome for the US (CNN 2025). This amounted to a powerful foreign political actor intervening in the domestic political workings of the Danish Realm on the sensitive topic of Greenland's independence, one of the vulnerabilities the researchers had cited. Upcoming parliamentary elections in March lent further urgency to the issue of foreign political interference. They also provided fertile ground for Russia's information operations aimed at creating or exacerbating divisions within the NATO alliance.

Denmark's national security and intelligence service (usually known by its Danish acronym, PET) engaged the public by warning of potentially impending foreign political interference in advance of elections to the *Inatsisartut*, the Greenlandic parliament (PET 2025). However, in a continuing process of public engagement with Danes and Greenlanders, it and Denmark's foreign intelligence agency (DDIS) released a report after the election summarizing that they had not identified any such activity leading up to the vote (in which a party that favours a slow movement towards independence was the largest vote-getter) (DDIS 2025c).

Nonetheless, the increased prominence of Denmark in global affairs because of President Trump's remarks sparked a burst of misinformation and disinformation. The most conspicuous posts appear to have been profit-motivated scams (Hyldal 2025). However, in late April, Danish intelligence announced they and a French organization had uncovered that one of the posts falsely attributed to a Danish politician did in fact have connections to Russian state-affiliated actors (DDIS 2025d). Russia had used the tensions created by overt US political interference in the Danish Realm to pursue a disinformation campaign to further irritate transatlantic relations and provoke possible fissures in the NATO alliance.

The complexity of the misinformation-disinformation distinction (see Heffernan 2025), and the challenges of conclusive attribution, continue to muddle public portrayals of the situation. Headlines diverged significantly but truthfully while reporting the same event: some touted the threat of misinformation being real, while others highlighted the Danish intelligences service's conclusion that no state had attempted systematic covert interference in the election (Thorsson 2025; NORDIS 2025; DDIS 2025c).

These examples from Greenland illustrate information characteristics common to much of the democratic Arctic. Recent research has shown, first and foremost, that Greenland is a "micro media system" (Ravn-Højgaard 2023), a situation common across the Arctic. The Danish linguistic community is a few million people spread across the Atlantic Ocean; the Kalaallisut linguistic community consists of a few tens of thousands in towns and hamlets along Greenland's coast. Social media dominates Greenland's media environment. The dense interconnectedness of a small society, with a population spread out over long stretches of coastline only connected by air or sea, leads to rapid dissemination of information, as shown by this research. The strong interconnection of information, knowledge and society makes disruptive knowledge potentially damaging in the long term. There are only a few local journalists, and the sector can sustain less fact-checking and has little capacity for investigative reporting, crucial, as historian Timothy Snyder has argued, for a resilient democratic polity (Snyder 2017). Moreover, much of the Greenland content comes from media in Denmark. Greenland, like most parts of the Arctic, is saturated in media from non-Arctic places, with the shifts of perspective and resonance that entails (Ravn-Højgaard 2025).

Creating resilience in the Arctic information space

> *"Indigenous Knowledge is inseparable from the right of self-determination. Knowledge production has played a big role in mapping resources, lands, and waters. For many centuries, much of this Knowledge flowed south, out of Inuit homelands, and into the hands of others. Indigenous Knowledge is thus also about our sovereignty. A full recognition of Indigenous Knowledge in its own right is critical to the further development of Arctic research and knowledge production."*
>
> **- Sara Olsvig, Inuit Circumpolar Council Chair (2025b)**

Strengthening the integrity of information available in and about the Arctic demands collaboration. Data collection, mobilizing Indigenous knowledge, more efforts to disseminate public-facing intelligence and forging international cooperation among the democratic Arctic nations are but some of the recommendations that need to be implemented.

Access to data from social media platforms is a fundamental challenge to the Arctic information space. The academic and research communities need more access to social media archives, which has become increasingly restrictive in the past few years. Academics have also cited the need for further research in languages other than English, and of content on other platforms, given that X/Twitter and Facebook have received most of the attention so far (Landriault et al 2024; Nielsen et al. 2024; IIL 2025). This will require government action at the federal and international levels.

The co-production of knowledge is a critical tool. There is good reason to believe that a more dedicated and deliberate approach by government and institutions outside of the Arctic to co-producing knowledge with Indigenous partners about "traditional" security issues such as malign foreign influence would strengthen Arctic information integrity. According to researchers, "Co-production of knowledge is the process of bringing together two different knowledge systems, in true partnership and equity, to enhance, learn, and create new understandings on a specific topic" (Yua et al. 2022). Natural science and Indigenous communities are driving this fusion. Indigenous knowledge brings contemporary, first-hand and intergenerational traditions of knowing to the information integrity conversation. According to the Inuit Circumpolar Council,

> Indigenous knowledge is a systematic way of thinking applied to phenomena across biological, physical, cultural and spiritual systems. It includes insights based on evidence acquired through direct and long-term experiences and extensive and multigenerational observations, lessons and skills. It has developed over millennia and is still developing in a living process, including knowledge acquired today and in the future, and it is passed on from generation to generation. (Inuit Circumpolar Council 2025a)

Co-production helps ensure that the products of research not only originate through collaboration but also come back to Indigenous communities as community-accessible resources and benefit them, in turn becoming part of Indigenous knowledge.

To tackle geopolitical challenges like state-fostered disinformation, national security researchers and policy makers should learn from the scientific community and build a similar ethos of cooperation and co-design of information integrity programs with Indigenous communities, and find opportunities to put national security knowledge in contact with Indigenous knowledge. As speakers at a University of Ottawa Information Integrity Lab (IIL) Arctic and Climate Change conference put it, the co-development of national security will require embedding Indigenous Canadians in policy-making structures to build trust through sustained, culturally informed relationships (2025), a lesson applicable in all Arctic democracies.

Developing understanding drawn from the wealth of natural and social knowledge held by natural and social scientific researchers and members of Indigenous communities will be central to shoring up the information environment. Too many policy decisions are made without sufficient or regionally relevant scientific data (IIL 2025). Again, Indigenous knowledge benefits the scientific and policy agendas

by contributing to the breadth of empirical inputs and contributing to how to make that knowledge most relevant to communities and, ideally, create a stronger foundation for shared political action and integrative policy-making across jurisdictions. Science communication that features co-produced strategies integrating national security and climate change perspectives is a key area for development, for audiences ranging from prime ministers to teachers and local journalists. The security of subsea fibre-optic cables that can collect environmental and defence-relevant data as well as carry data is one example. The poly-crisis will demand such integrative approaches. Such collaboration will be essential to address the need for a comprehensive Arctic strategy in Canada and NATO (IIL 2025).

The highest political levels also need to invest in and enable strategic and tactical communications to keep the citizenry aware of threats. As researchers have put it, "deliberate strategic messaging is more important than ever" and requires a "more active" and "less passive" effort by NATO and national governments (Bouffard et al. 2024). In the case of the Arctic, that involves enhancing the exchange of information "north to south," a recognition that overlooking Indigenous perspectives weakens policy and resilience (IIL 2025). Having the security services warn the public with messaging accessible across a range of media is one important step in this regard. Again, the Greenland case is instructive. The Danish security and intelligence services adopted an active public communications stance, conveying to Greenlanders and Danes their threat assessments and post-event analyses. In the Arctic, national intelligence, security and police agencies will have to work with and listen to local actors, such as territorial governments and Indigenous communities, to build a trusting security-society connection. That activity should create a positive feedback loop, from the frontline operational level in the north, to the formulation of high-level strategic policy in national capitals.

International cooperation remains essential. A recommended step is the inclusion of an information integrity agenda for the Arctic Security Dialogues, as proposed by Canada in late 2024 (Government of Canada 2024b), in order help launch this important initiative. The above-mentioned reports reflect how tackling malign foreign interference and building information resilience are strengthened through research and policy efforts that cut across national borders. Again, Arctic Indigenous understanding of geography are often transborder, such as Inuit Nunaat in North America and eastern Eurasia, and the Sápmi in northern Europe, and serve as inspiration for multilayered international and people-to-people cooperation. Despite the differences between and within Arctic countries, the challenge of establishing reliable sources of knowledge to contribute to democratic political debate is common. And differences are not only barriers: as the linguistic examples highlighted above have shown, they are fruitful sources of comparative insight.

Creating a healthy and secure information space in the Arctic will take a full-court press, involving all levels of government, Indigenous institutions, the scientific community, civil society and the business sector. Experience, knowledge and best practices need to be shared across democratic borders. A whole-of-society approach is essential.

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