



InsSciDE Work Package 7:	
Environment: Monitoring as an Arena for Science Diplomacy	
Case Study n°7.4	Environmental change communication as a diplomacy problem
Author	Miyase Christensen
Consortium Partner n°14	KTH Royal Institute of Technology (KTH)

Abstract

The point of departure for this InsSciDE case study is the following assertion: if diplomacy is the management of change in the international environment through engagement with foreign governments (Pamment, 2012), Arctic public diplomacy is the management of that changing environment through engagement with international publics. Diplomacy has both media and communication dimensions. Our study centers on the communication of Arctic change in the post WWII era. With increasing concerns about the impacts of climate change, the Arctic has achieved visibility in both mainstream and social media. The 2007 and 2012 sea ice minimum added new layers to scientific, political-economic and mediated debates. This study places the Arctic and the record sea ice minima into the broader context of communication about climate change and the role of the Arctic in that continuum. Accounting for communication and media related dimensions is essential for both understanding dynamics that underlie science diplomacy on the whole and for the construction of a holistic and meaningful science diplomacy for Europe.

Introduction

Written reports about Arctic sea ice dynamics stretch back over 1000 years for areas around Iceland, roughly 500 years for the Barents and White Sea off northern Russia, and 200 years for west Greenland and Labrador (Krupnik et al., 2010). While most communication about changes in the Arctic historically did not reach a broad international non-scientific audience, this began to change when satellites detected a downward trend in Arctic sea ice extent particularly throughout the 1990s (cf. Christensen and Nilsson, 2017).

The trend sharpened during the 2000s, and was covered by the news media along with results from International Panel on Climate Change (IPCC) reports. News flows are central in international relations and foreign policy-making. The changing Arctic geography has generated increasing public and political attention to the region (e.g. Dodds and Nuttall 2015, Steinberg et al. 2015, Eklund and van der Watt 2017, Wegge and Keil 2018). Satellite monitoring and its mediation are also a major factor in the public understanding of Arctic space (Wormbs, 2013).

Politics and media are highly enmeshed and geographical specification of politics is commonplace in mediated accounts, with the Arctic being no exception. The salience of the Arctic in the Western public realm over the past decade and a half is underlined particularly by an increased attention to global climate change following the IPCC reports noting anthropogenic climate change, starting with the Arctic Climate Impact Assessment released in 2004 (Tjernhaugen and Bang 2005; Steinberg et al 2014) and further fueled by the sea-ice minima of 2007 and 2012 (Christensen, Nilsson and Wormbs 2013).



Earlier studies indicate that considerations and visibility of the Arctic in geopolitical and mediatized discourses are increasingly illustrative of *scalar transcendence* (Christensen, 2013) – that is, how local regions are discussed in relation to their global significance and how discussions of global change become informed by (in some cases enmeshed with) local discourses and concerns in specific ways. Such discourses display dynamism. In the case of the Arctic and media coverage of the region, the main frames of discussions and journalistic stories of local-global issues alternate between themes such as security, cooperation and peace, conflict, and climate change, which are often linked to global concerns and future scenarios. While one theme can dominate during a given time period, another can peak at another.

With this in mind, the purpose of this study is to examine how the international news media (such as *The Guardian*, *The Wall Street Journal*, and *The New York Times*), the regional media (such *Barents Observer*, and *Arctic Now*) and other press influential in stakeholder power geometries frame Arctic change and challenges. In particular, we will examine the handling of science communication. On the whole the communication of scientific facts is no simple matter (cf. Nisbet, 2009) and the Arctic provides an excellent illustration of the complexity of the dynamics in play.

Our case study will delve into how communication networks and mediation have historically provided links between the scientific, political and policy communities involved in the Arctic and how such mediation factors into science diplomacy. Both the historical trajectory and current trends need to be accounted for in order to reflect on the status of European science diplomacy today.

The questions that guide our study are: how have the selected media outlets framed Arctic change (e.g. melting of the ice and the opening up of the ocean) over time? What are the roles of institutional and normative structures in the mediated communication of Arctic issues? What are the common conceptions of the Arctic and Arctic that these framings entail? Who has voice, who are the visible actors in mediated accounts and who are silent/silenced? What forms of tension are apparent?

Actors

Political actors spatialize international politics and represent it as a ‘world’ characterized by particularities, or as Dalby puts it ‘the politics of the geographical specification of politics’ (1991 274). Such a geopolitical approach, or a “theory of context” (ibid) also lets us grasp shifts at scalar and institutional levels and the positioning of social actors in a historical context. As for the media, Pinkerton (2013: 440) considers the very institutions of journalism as key agents in international and national power geometries that “can challenge official geopolitical doctrines”.

The positioning of social actors in relation to each other has a particular resonance when it comes to the Arctic. Our study considers global and local-regional, corporate and independent news outlets, and those to whom their news stories give voice as actors to be accounted for in understanding how science diplomacy takes shape.

Fields and disciplines, interfaces with technology

We take on board the disciplinary perspectives of media and communication studies, history, critical geopolitics and STS in an effort to approach and analyze the dynamics of mediation in science diplomacy in general, and in communicating Arctic change in particular. We examine popular communication and how speech acts travel whether nationally, regionally or globally. Space is understood in a constructivist way and media and communication channels are viewed as holding key roles.

Disciplinary/methodological approach

In line with visions put forth by scholars of critical geopolitics over the past few decades, we argue that Arctic geopolitics increasingly brings in transnational and global imaginaries, also within cultural and mediated domains. This is particularly evident in how this remote part of the world is envisioned in popular



communication. While *realpolitik* presides, mediatization on the whole and media accounts have a significant role in co-shaping the dynamics that define the region. Of interest here are both mass mediated communication via legacy media (e.g. newspapers, television, etc.) and social media that provide multiple networks and interactions between social actors ranging from the scientific community to policy and political circles and regional peoples and communities.

Our methodological tools include institutional analysis (regarding e.g. the National Snow and Ice Data Center NSIDC; major global and regional media outlets) and content (frame) analysis. We take frames as interpretive storylines that position an issue, the actors, and a portrayal of the essence of a given issue (Gamson & Modigliani, 1987) and what its solutions are or can be. We will also conduct in-depth qualitative interviews to obtain first-hand insights and information from institutional actors, journalists and other figures occupying key roles and/or enjoying media visibility.

Essential bibliography

- Christensen, M. (2013). Arctic Climate Change and the Media: The News Story That Was. In M. Christensen, A. E. Nilsson, & N. Wormbs (Eds.), *Media and the Politics of Arctic Climate Change: When the Ice Breaks* (pp. 26–52). London: Palgrave Macmillan.
- Christensen, M. and Nilsson, A. E. (2017) “Arctic Sea-Ice and Communication of Climate Change”, peer-reviewed journal article, *Popular Communication: The International Journal of Media and Culture*, 15(4), 249-268.
- Dalby, S. (1991). Critical geopolitics: discourse, difference, and dissent. *Environment and Planning D: Society and Space*, 9(3), 261–283. <http://doi.org/10.1068/d09026>
- Dodds, K., & Nuttall, M. (2015). *The scramble for the poles: the geopolitics of the Arctic and Antarctic*. Cambridge, UK ; Malden, MA: Polity Press.
- Eklund, N., & Watt, L.-M. van der. (2017). Refracting (geo)political choices in the Arctic. *The Polar Journal*, 7(1), 86–103. <https://doi.org/10.1080/2154896X.2017.1337334>
- Gamson, W. A., & Modigliani, A. (1987). The changing culture of affirmative action. In *Research in political sociology*.
- Krupnik, I., Aporta, C., Gearheard, S., Laidler, G. J., & Holm, L. K. (2010). *SIKU: knowing our ice*. Dordrecht: Springer.
- Nisbet, M. C. (2009). Communicating Climate Change: Why Frames Matter for Public Engagement. *Environment: Science and Policy for Sustainable Development*, 51(2), 12–23. <http://doi.org/10.3200/ENVT.51.2.12-23>
- Pamment, J. (2012). *New public diplomacy in the 21st century: A comparative study of policy and practice*. Routledge.
- Pinkerton, A. (2013). Journalists. *The Ashgate research companion to critical geopolitics*, 439-460.
- Steinberg, P., Tasch, J., & Gerhardt, H. (2015). *Contesting the Arctic: rethinking politics in the Circumpolar North*. London: I B Tauris & Co Ltd.
- Tjernhaugen, A., & Bang, G. (2005). *ACIA og IPCC en sammenligning av mottakelsen i amerikansk offentlighet* (No. 2005:4). Oslo: Cicero, Center for International Climate and Environmental Research. Retrieved from www.cicero.uio.no
- Wegge, N., & Keil, K. (2018). Between classical and critical geopolitics in a changing Arctic. *Polar Geography*, 41(2), 87–106. <https://doi.org/10.1080/1088937X.2018.1455755>
- Wormbs, N. (2013). Eyes on the ice: Satellite remote sensing and the narratives of visualized data. In *Media and the Politics of Arctic Climate Change* (pp. 52-69). Palgrave Macmillan, London.