All Talk: Analyzing NATO's Discourse on Climate Change

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Abstract

This thesis analyzes NATO’s evolving discourse on climate change from 2009 to 2023 by focusing on its integration into the security narrative of the organization. The study uses a content analysis through a constructivist framework and role conceptions. It explores how NATO has transitioned from viewing climate change as a peripheral issue to framing it as a core security threat and "threat multiplier." The analysis highlights the organization’s dual approach: addressing operational impacts while aligning with broader international climate governance. The findings reveal tensions between NATO's traditional security role and its aspirations for leadership in climate security. This research aims to contribute to understanding NATO’s role in the climate security and its implications for international climate governance.

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1. INTRODUCTION

"The security implications of climate change are also becoming clearer and more pressing. This used to be a subject for environmentalists writing in obscure journals and websites. No more." - Jaap de Hoop Scheffer, NATO Secretary General.[1]

Climate change is reshaping the dynamics of international politics.[2] In 2018, *Foreign Affairs* declared that this threat will most likely define the century.[3]Climate change will have one of the most significant impacts on the global order and international relations. Once considered a distant threat, climate change now requires immediate action. And while the effects of climate change differ per country, the security and existential threats it entails apply to all. Climate change will accelerate political instability, migration crises, and intrastate warfare while stimulating increased military spending to maintain or build upon existing infrastructure.[4]

What differentiates climate change as a global security challenge is its transnational nature. The effects of climate change cannot be attributed to a specific country that causes Greenhouse gas (GHG) emissions. All nations are both the cause and the sufferer of the issue, albeit to different degrees. This shared problem requires a shared solution. As a result, international cooperation is an essential approach to addressing this collective issue.

Intergovernmental organizations like the North Atlantic Treaty Organization (NATO) play a significant role in this governance landscape. The design of an intergovernmental organization gives it a stable set of norms and rules to govern the behavior of states and other actors in the international system, in order to address global challenges. In terms of governing climate change, this would mean coordinating efforts, setting norms, and facilitating multilateral cooperation. For NATO, this entails navigating its traditional mandate as a security alliance while addressing non-traditional threats like climate change.

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[1] Jaap de Hoop Scheffer, "Transatlantic Leadership for a New Era," Speech, January 26, 2009, https://www.nato.int/docu/speech/2009/s090126a.html.

[2] This research will use the definition of the UN Framework Convention on Climate Change (UNFCCC) on Climate Change in Article 1. It defines climate change as: 'a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.' "Glossary — Global Warming of 1.5 °C," accessed 7 December 2024, https://www.ipcc.ch/sr15/chapter/glossary/.

[3] Joshua Busby, "Warming World: Why Climate Change Matters More than Anything Else," *Foreign Affairs* 97, no. 4 (2018): 49.

[4] Pedro Mariani, "Climate Change and International Cooperation," Harvard ALI Social Impact Review, February 2, 2023, https://www.sir.advancedleadership.harvard.edu/articles/climate-change-and-international-cooperation.

In line with the growing need for climate change governance, the amount of research on the matter has increased steadily over the last years. Notably, a recent study shows that from 2019 onward, the number of articles on climate change has increased exponentially.[5] This is in contrast to the period from 2014 to 2019, in which only 20 articles out of 2065 were on climate change in the five major International Relations journals (viz. 0.77 percent of all articles).[6] This increase in academic attention underlines the multidimensional nature of climate: it entails not only environmental issues but also societal and security dimensions.[7] Nonetheless, gaps remain in the academic field on understanding how organizations like NATO communicate on climate change.

The 2023 UN IPCC Synthesis Report reviewed climate science, covering effects, risks, mitigation, and adaptation.[8] Human-caused climate change is driving extreme weather, frequent heat waves, droughts, and flooding due to rising temperatures and shifting rain patterns. The report underscores the critical need for international cooperation and governance mechanisms, especially given the Russian invasion of Ukraine and growing tensions between the United States and China, which complicate geopolitical collaboration. These challenges make international cooperation even more important.

This research focuses on a critical but relatively understudied aspect of NATO's engagement with climate change: its discursive construction of the issue. This perspective is essential for understanding how NATO's rhetoric reflects and influences the organization's approach to environmental security. Furthermore, it provides a unique perspective on the more significant implications of NATO's position in international climate governance.

The study tries to fill the gap in the current literature that often overlooks the discursive dimension of NATO on climate change throughout the years. Currently, case studies dominate the research agenda regarding the approach and justification Internation Organizations (IO) use to address security issues associated with climate change.[9] These

[5] Benjamin K. Sovacool, Chux Daniels, and Abbas AbdulRafiu, "Science for Whom? Examining the Data Quality, Themes, and Trends in 30 Years of Public Funding for Global Climate Change and Energy Research," *Energy Research & Social Science* 89 (July 1, 2022): 1–20, https://doi.org/10.1016/j.erss.2022.102645.
[6] Sovacool, Daniels, and AbdulRafiu.
[7] Busby, "Warming World," 222; Courtney Work, "Climate Change and Conflict: Global Insecurity and the Road Less Traveled," *Geoforum* 102 (June 1, 2019): 222, https://doi.org/10.1016/j.geoforum.2018.11.004.
[8] Intergovernmental Panel on Climate Change (IPCC), AR6 Synthesis Report: Climate Change 2023, March 2023, https://www.ipcc.ch/report/ar6/syr/.
[9] Matt McDonald, "Discourses of Climate Security," *Political Geography* 33 (March 1, 2013): 42–51, https://doi.org/10.1016/j.polgeo.2013.01.002; Lisa Maria Dellmuth and Maria-Therese Gustafsson, "Global

studies provide an in-depth understanding of certain policy areas within specific organizations.[10] A content analysis, conversely, gives a broader and more holistic overview of climate change's role within an organization. In using this research method, one systematically analyzes the content of communication within an organization, as opposed to focusing on specific policies.[11]

In analyzing and comparing NATO's content on climate change over the last one and a half decades, this study gives a comprehensive overview of the changing views and statements of NATO throughout the years. The study expects to find changing attitudes intertwined with the international political landscape and accompanied by different secretary generals: the prioritization of climate change might strongly depend on these factors.

Consequently, this research aims to answer the research question: How does NATO's discursive construction of climate change reflect and shape its approach to environmental security, and what are the implications for its role in international climate governance? By addressing this question, the study contributes to a deeper understanding of NATO's strategies and its positioning within an ever changing global security landscape. As Jaap de Hoop Scheffer's quote suggests, climate change is no longer a topic for "obscure journals." It is now a defining challenge for institutions like NATO.

Adaptation Governance: How Intergovernmental Organizations Mainstream Climate Change Adaptation," *Climate Policy* 21, no. 7 (August 9, 2021): 868–83, https://doi.org/10.1080/14693062.2021.1927661.

[10] Niklas Bremberg, Malin Mobjörk, and Florian Krampe, "Global Responses to Climate Security: Discourses, Institutions and Actions," *Journal of Peacebuilding & Development* 17, no. 3 (December 1, 2022): 343, https://doi.org/10.1177/15423166221128180; Lisa M. Dellmuth et al., "Intergovernmental Organizations and Climate Security: Advancing the Research Agenda," *WIREs Climate Change* 9, no. 1 (2018): 8, https://doi.org/10.1002/wcc.496.

[11] Other content analyses on NATO have researched the growing prominence of cyber security in NATO discourse over the last decade: Roger A. Tosbotn and Eugenio Cusumano, "NATO in a Changing World," in *The Changing Global Order: Challenges and Prospects*, ed. Madeleine O. Hosli and Joren Selleslaghs, United Nations University Series on Regionalism (Cham: Springer International Publishing, 2020), 321–36, https://doi.org/10.1007/978-3-030-21603-0_16; Yan Xia et al., "The Russian Invasion of Ukraine Selectively Depolarized the Finnish NATO Discussion on Twitter," *EPJ Data Science* 13, no. 1 (December 1, 2024): 1, https://doi.org/10.1140/epjds/s13688-023-00441-2.

2. LITERATURE REVIEW

2.1 Introduction

The intersection of climate change and international security is a critical area within international relations. Researchers have discussed the theoretical security implications of climate change extensively.[12] However, few studies have tested the consequences of changing paradigms due to climate change.[13] What position does climate change have in the field of international security studies and how do other international organizations relate to climate change in their discourse? This literature review seeks to answer these questions by examining different discourses of IOs on climate security and by examining various schools of thought within international relations.

The literature review reads from a broad outline to increasingly specific and detailed. It covers several dimensions, starting with the wider context of international climate governance and the need for global cooperation. After discussing the current state of research on international organizations addressing climate security challenges, it then narrows down into the specifics of NATO's climate policies, the history, and its discourse. By doing so, the literature review aims to provide a comprehensive foundation for understanding NATO's discursive construction of climate change and its implications for the organization's role in international climate governance. This foundation is essential for comprehending the nuance of the argument this thesis is making about NATO and climate: through its evolving discourse, NATO not only reflects but also actively shapes its identity and strategic priorities in response to the growing challenges of climate security.

2.2 International Climate Governance

International climate governance refers to the structures, organizations, and processes put in place to handle climate change on a global scale. It includes international agreements, policies, negotiations, and collaborative efforts to reduce GHG emissions, adapt to climate consequences, and promote sustainable development. The main actors in the global field of

[12] John Podesta and Peter Ogden, "The Security Implications of Climate Change," *Washington Quarterly*, January 1, 2008, https://doi.org/10.1162/wash.2007.31.1.115; Nina von Uexkull and Halvard Buhaug, "Security Implications of Climate Change: A Decade of Scientific Progress," *Journal of Peace Research* 58, no. 1 (January 1, 2021): 3–17, https://doi.org/10.1177/0022343320984210.

[13] Example of a study that did explore the changing paradigms due to climate change is: Anne J. Sietsma et al., "Climate Change Adaptation Policy Across Scales: A Machine Learning Evidence Map," January 9, 2023, https://doi.org/10.2139/ssrn.4318820.

climate governance are nation-states, international organizations, the global environmental movement, the corporate sector, and expert groups.[14] The last four are referred to as "non-state actors" and differ considerably from nation-states and each other. This research focuses on NATO, an IO. IOs are "set up by states to manage international problems, provide a forum for collective decisionmaking, and bear responsibility for managing and implementing global policies, including the allocation of international financial loans and aid."[15]

Given the existing environment of growing populism and climate change skepticism in national politics, the role of IOs in international climate governance becomes more critical. For example, one function of IOs is to set up overarching frameworks and agreements that bind internationally. The United Nations Framework Convention on Climate Change (UNFCCC), the Paris Agreement of 2015, and the Assessment Reports published by the IPCC are such leading frameworks within international climate governance.[16]

In terms of climate security, studies reveal increased involvement by IOs in efforts to reduce and prepare for security concerns associated with climate change.[17] The IOs work to improve crisis management and relief capabilities and develop policies on prevention and preparedness, early warning systems, and information sharing.[18] However, Bremberg et al. note: "there is currently a limited understanding of how discourse and action on climate-related security risks develop and diffuse in and across different IOs in various related policy fields and geographical contexts."[19]

Much of the climate security debate centers on whether climate change should be "securitized."[20] Some argue that securitizing climate change results in a shift in the

[14] Kate O'Neill, ed., "Actors in International Environmental Politics," in *The Environment and International Relations*, Themes in International Relations (Cambridge: Cambridge University Press, 2009), 48–70, https://doi.org/10.1017/CBO9780511805974.004.
[15] O'Neill, 53.
[16] The most recent IPCC report published in 2023: IPCC, 2023: *Climate Change 2023: Synthesis Report*. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, H. Lee and J. Romero (eds.)]. IPCC, Geneva, Switzerland, pp. 35-115, doi: 10.59327/IPCC/AR6-9789291691647
[17] Joshua W Busby, "Beyond Internal Conflict: The Emergent Practice of Climate Security," *Journal of Peace Research* 58, no. 1 (January 1, 2021): 186–94, https://doi.org/10.1177/0022343320971019.
[18] Busby, 189–91.
[19] Bremberg, et al., "Global Responses," 342.
[20] McDonald, "Discourses of Climate Security"; Jeroen Warner and Ingrid Boas, "Securitization of Climate Change: How Invoking Global Dangers for Instrumental Ends Can Backfire," *Environment and Planning C: Politics and Space* 37, no. 8 (December 1, 2019): 1471–88, https://doi.org/10.1177/2399654419834018.

geopolitical order.[21] Russia and China have been vetoing a resolution in the United Nations Security Council (UNSC) to add climate change to its mandate: they do not want UN troops accessing their territories.[22] This highly politized discussion resolves around the direct causal link between conflict and climate change: what policymakers and researchers agree on, however, is the excessive impact climate change has on critical areas within the geopolitical arena. Due to the transnational nature of climate change, people are increasingly looking to IOs to address this issue. Addressing climate security does not involve the typical mandate of IOs, as noted by Dellmuth et al.[23] In this relatively young field of research, they conclude that more is yet to be learned about the conditions under which IOs respond to climate security challenges and how they do so.

To provide a clear overview of international climate security governance, this thesis uses the diagram developed by Dellmuth et al. and shown in figure 1.[24] In a thorough and comprehensive study on the state of the climate security and IOs' research agenda, the researchers argue that the current debate is divided into three focus areas. First, they note that the literature on climate security focuses primarily on the analytical distinction of two security notions: state security and human security. Second, the research focuses on a set of policy areas: "state security is the primary focus of studies on security, diplomacy, as well as peace and conflict, whereas human security is predominantly studied in relation to development, Disaster Risk Reduction, and migration."[25] Third, existing studies link individual IOs to a specific policy area (e.g., both NATO and the CIS (Commonwealth of Independent States) cover security, while CIS does not cover diplomacy where NATO does). The figure offers a valuable perspective of NATO's discursive construction in relation to broader international climate security governance. It provides insights into how the discourse on climate security is structured and how different organizations engage with it and relate to one another.

[21] Sabrina B Arias, "Who Securitizes? Climate Change Discourse in the United Nations," *International Studies Quarterly* 66, no. 2 (June 1, 2022), https://doi.org/10.1093/isq/sqac020.
[22] United Nations Security Council. "Security Council Fails to Adopt Resolution Integrating Climate-Related Security Risk into Conflict-Prevention Strategies, as Russia Votes against Draft." *United Nations Meetings Coverage and Press Releases*, December 13, 2021. https://press.un.org/en/2021/sc14732.doc.htm.
[23] Lisa M. Dellmuth et al., "Intergovernmental Organizations and Climate Security," 1–13.
[24] Dellmuth et al., 3.
[25] Dellmuth et al., 3.

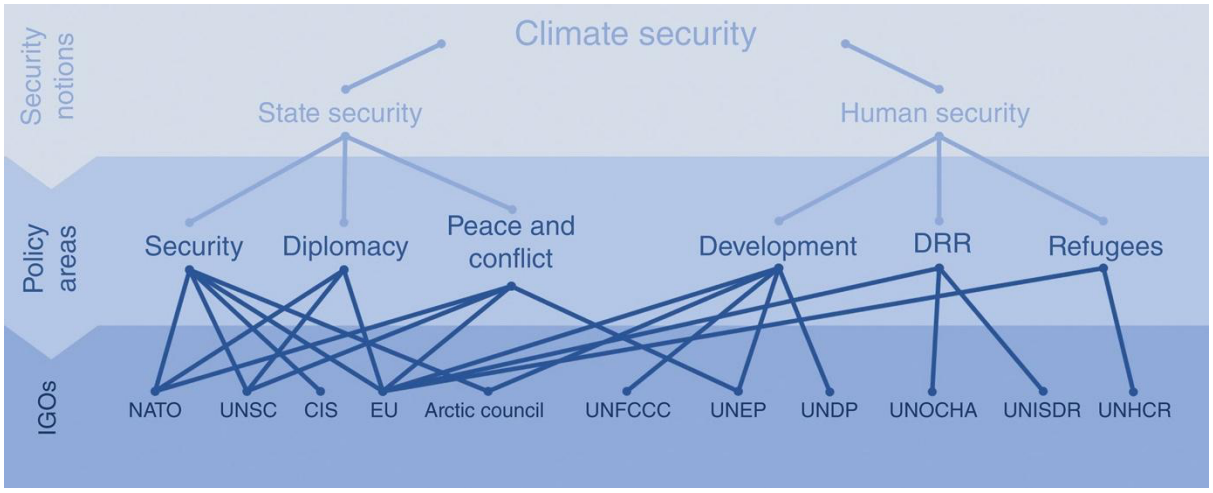

Figure 1 | Categorization of conceptual and empirical foci of the research field of IOs and climate security. Source: Dellmuth et al., 2018.

2.3 Research on Climate Discourses

The current literature concerns how and with what policies IOs address climate security. Bremberg et al. examine the institutional design and policy actions of IOs regarding climate-related security risks.[26] Every IO has a different approach to climate change.

The European Union (EU) names climate change as a "threat/risk multiplier" for security and peace. The EU Global Strategy on Foreign and Security Policy identifies climate change and environmental degradation as factors potentially exacerbating conflicts. It has been doing this for the last decade to legitimize its external actions.[27] Nonetheless, scholars expose a gap between the discourse and the actual policy results within EU climate security policy by examining how practice influences policy.[28] Their findings come from reports on the work being done at the European Union External Action Service to connect the different EU foreign policy instruments and tools to address security issues associated with climate change.

Research by Bengü Çelenk on the UNSC examines how it discursively structured climate security issues over the years and institutionalized them.[29] In analyzing the discourse of the UNSC with its five core members the United States, China, the United Kingdom, France,

[26] Bremberg et al, "Global Responses to Climate Security."
[27] *Concept for an Integrated Approach on Climate Change and Security* (EEAS (2021) 770), working document, 16 September 2021.
[28] Niklas Bremberg, Hannes Sonnsjö, and Malin Mobjörk, "The EU and Climate-Related Security Risks: A Community of Practice in the Making?," *Journal of European Integration* 41, no. 5 (July 4, 2019): 623–39, https://doi.org/10.1080/07036337.2018.1546301.
[29] Bengü Çelenk, "Climate Change and Security Debates in the United Nations Security Council between 2007-2021," *Critical Studies on Security* 12, no. 2 (2023): 167-186, https://doi.org/10.1080/21624887.2023.2290346.

and the Russian Federation, the research shows the unpredictability of the climate system due to its complex structure, making it difficult to comprehend its relative impacts. These circumstances make it difficult to therefore implement concrete policies, which puts the UNSC in a challenging position. This insecurity ultimately results in debates as to if the UNSC is or is not designated to deal with climate change.[30]

Çelenk argues that the discourses on climate security are partially structured. The research therefore lends itself well to the study this thesis seeks to conduct: how does climate security discourse evolve over time. The difference manifests itself in the fact that this thesis examines the articulating of a discourse by one organization as opposed to the debates between different countries within a council. The purpose of this thesis is to investigate the effects of discussing climate change through security narratives.

The climate security debate in Germany from 2007 to 2020 focused on its impact on government practices, policies, and institutions. The study analyzes reports, parliamentary debates, and NGO publications within a securitization framework, and "[…] finds that political climate security debates in Germany have increasingly moved from a focus on ecological security towards articulating climate change as a threat to human and international security."[31] Nonetheless, even though it is more active from the mid-2010s onwards, the German defense sector has been reluctant to engage, resulting in a less intense defense-related climate debate compared to other nations. This reflects internal debates and priorities within NATO member states.

In contrast, France has been a driving force behind climate security discussions in the UNSC during the same period.[32] France's evolving discourse highlights an increasing awareness of the crises climate change may cause and their potential effects on several policy domains. France's active role in these discussions underscores its commitment to addressing environmental challenges through international cooperation.

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[30] Çelenk, "Climate Change and Security Debates," 182.

[31] Franziskus von Lucke, "Climate Security Discourses in Germany: The Transformation of Climate Change Towards a Development and Foreign Policy Priority," in *Climate Security in the Anthropocene: Exploring the Approaches of United Nations Security Council Member-States*, ed. Judith Nora Hardt et al., The Anthropocene: Politik—Economics—Society—Science (Cham: Springer International Publishing, 2023), 131, https://doi.org/10.1007/978-3-031-26014-8_7.

[32] Adrien Estève, "Preventing and Managing Climate Risks: France's Approach to Climate Security," in *Climate Security in the Anthropocene: Exploring the Approaches of United Nations Security Council Member-States*, ed. Judith Nora Hardt et al., The Anthropocene: Politik—Economics—Society—Science (Cham: Springer International Publishing, 2023), 113, https://doi.org/10.1007/978-3-031-26014-8_6.

To relate these observations to this research, they provide insights into how the discursive construction of climate change varies among NATO members and shapes their approaches to environmental security. These insights have implications for NATO's role in international climate governance. Depending on the diversity of discourses and approaches among its member states, NATO's shared stance on climate change and environmental security may differ. In understanding these dynamics, it is crucial for assessing NATO's effectiveness in addressing climate security threats and the potential contributions to global climate governance efforts.

Yet, another elaborate comparative study by Christo Idowu Odeyemi examones the discourses of the UNFCCC, the EU, and the UNSC examines an emerging dominant discourse on climate security and how these institutions have addressed this. Odeyemi investigates the years 2001-2019 and finds that "serious contestation has persisted, […] but that climate security discourse seems unstoppable."[33] The analysis highlights the three organizations' evolving but different conceptions of climate security, as well as the phenomenon's broader relevance.

A similar study was conducted in comparing NATO, the EU, and the Organization for Security and Co-operation in Europe (OSCE). Over the past years climate security has gained more presence on the agendas of the institutions. However, in the discourses of the organizations, the "EU has adopted an integrated approach to climate security, [while] this more holistic understanding has yet to be fully mainstreamed in all the relevant policy domains by NATO and the OSCE."[34] The study's discussion shows that while the organizations have come a long way to raise the interlinkages of climate change, security, and peace on their agendas, it is not sufficient "to just strengthen the discourses."[35]

The analysis puts forward that the organizations have different levels of integration when it comes to climate security, which shows their own attitudes. NATO has adapted its treatment of climate change, recognizing its impact on security, and including it in its strategic documents. The research shows a growing understanding of climate change as a threat to security. NATO's developing approach provides valuable insights into how it perceives and

[33] Christo Idowu Odeyemi, "Climate Risk and Climate Security: A Comparison of Norm Emergence under the FCCC, the EU and the UNSC, 2001–2019" (Thesis, 2021), https://opus.lib.uts.edu.au/handle/10453/149345.
[34] Anniek Barnhoorn, "Comparing Responses To Climate-Related Security Risks Among the EU, NATO and the OSCE" (Stockholm, Sweden: Stockholm International Peace Research Institute (SIPRI), April 2023).
[35] Barnhoorn, "Comparing Responses."

addresses the relationship between climate change and security, which has implications for its role in international climate governance. Also, it demonstrates that NATO's discussion of climate change as a security issue has undergone significant changes, showing a better understanding of the consequences of climate change on security. This change in policy demonstrates NATO's recognition of the necessity of a new approach to environmental security. In summary, the document is directly relevant for this research as it outlines NATO's discourse on climate change, how it shapes its environmental security strategies, and it position in international climate governance.

2.4 NATO and Climate Change: Divergent Perspectives

Academic research on NATO's approach to climate change has increased significantly in the last decade. In the literature, two opposing views have emerged on the matter. On the one hand, there is a skeptical view on the role of NATO in combating climate change: as a defense alliance that safeguards its members from hostile actions by states, mobilizing against climate change is not one of its core duties. The Brookings Institution argues that NATO must not consider dealing with unconventional threats (i.e., cyber-attacks, terrorism, and climate change), as these are not within the purview of a military-political alliance.[36] Lucia Garcia Rico and Tyler Lippert are more nuanced, acknowledging that NATO needs to expand its capabilities for climate change while still stressing NATO's core role as a defense and security alliance.[37]

The other view, however, is that NATO has the duty and the institutional space to combat climate change in the interest of global security. Many authors have published on the matter. They have studied the past as well as the projected ways ahead. Amar Causevic extensively states that climate change is a "threat multiplier": the chance of a conflict escalating is significantly increased by the elements associated with climate change.[38] Climate change as a threat multiplier will cause issues like unstable governments, disease outbreaks

[36] "NATO's Strategic Concept: To Defend Everywhere Is to Defend Nowhere," Brookings, accessed 7 December 2024, https://www.brookings.edu/articles/natos-strategic-concept-to-defend-everywhere-is-to-defend-nowhere/.

[37] Lucia Garcia Rico, "NATO and Climate Change: A Climatized Perspective on Security" (Cambridge, MA: Belfer Center for Science and International Affairs, August 18, 2022), 8; Tyler H. Lippert, *NATO, Climate Change, and International Security: A Risk Governance Approach* (Cham: Springer International Publishing, 2019), 2, https://doi.org/10.1007/978-3-030-14560-6.

[38] Amar Causevic, "Facing an Unpredictable Threat: Is NATO Ideally Placed to Manage Climate Change as a Non-Traditional Threat Multiplier?," *Connections* 16, no. 2 (2017): 59–80.

and disputes over water supply, the resurgence of terrorism, and mass migration. NATO has placed climate change on its threat radar, but still, there is work to be done.

Others take a more direct stance, urging NATO to prioritize climate change as a security issue. The changing climate is already impacting NATO's operations, as the rising sea and extreme weather have significant effects on military equipment and troop deployments, and increasing temperatures are risking training exercises and operations abroad. NATO thus needs to think about how to get ready for a future in which the effects of climate change become even worse.[39]

2.5 Historical Perspective: NATO's Science and Environmental Initiatives

From a broader and more historical perspective, a comprehensive account of NATO's science and environmental diplomacy can be found in *Greening the Alliance: The Diplomacy of NATO's Science and Environmental Initiatives* (2018). This work covers the period from the founding of the Alliance until the present day. It focuses on NATO's Science Committee and the Committee on the Challenges of Modern Society (CCMS), the latter of which played a significant role in NATO's environmental turn. The account gives a helpful insight into NATO's scientific history, examining how through scientific diplomacy it has kept the alliance together at times.[40] The book has made the case that NATO has always been more than just a military alliance. It was also a project of political integration, a different debate but a valuable overview.

2.6 Role of Language in Climate Change Discourse

A common thread running through this review is that of language. Language allows one to analyze what one is proposing to do in policies and pursuits and in what capacity action is (or is not) taken. It is for this reason that this review expands on the role language plays in the climate change debate. Various actors in international politics frequently use the climate as a vehicle for declaring a state of emergency. Activists, politicians, and non-governmental

[39] "NATO Must Prioritize Climate Change as a Security Issue | Chatham House – International Affairs Think Tank," June 27, 2022, "03 Priorities for NATO | Chatham House – International Affairs Think Tank," July 4, 2023, https://www.chathamhouse.org/2023/07/preparing-nato-climate-related-security-challenges/03-priorities-nato-1.

[40] Simone Turchetti, *Greening the Alliance: The Diplomacy of NATO's Science and Environmental Initiatives* (University of Chicago Press, 2018).

organizations (NGOs) are all familiar with using an apocalyptic vocabulary to mobilize people for climate action. In this case, the literature often describes the phenomenon of the securitization of climate change, where changing climate conditions, accelerated by forced migration and a shortage of natural resources, already result in, or will lead to, conflicts.[41]

Declaring climate change as an emergency fits within the speech act of securitization moves: speech or content acts through which vulnerabilities are expressed as existential threats. This theory examines how speech acts can frame issues as security threats. In doing so, it thereby legitimizes extraordinary measures to address them. Such "securitization moves" rely on the tone of the language with audiences to succeed.

In the literature on environmental security, Trombetta's analysis of "securitization" provides a relevant framework for understanding NATO's evolving language on climate change.[42] Trombetta suggests that by redefining environmental challenges as security threats, the discourse can change perception but also the operational responses to these issues. This perspective is essential for analyzing how NATO's discourse on climate change reflects broader shifts in its identity and strategic priorities.

[41] Eric Paglia, "The Socio-Scientific Construction of Global Climate Crisis," *Geopolitics* 23, no. 1 (January 2, 2018): 96–123, https://doi.org/10.1080/14650045.2017.1328407.
[42] Maria Julia Trombetta, "Environmental Security and Climate Change: Analysing the Discourse," *Cambridge Review of International Affairs* 21, no. 4 (December 1, 2008): 585–90, https://doi.org/10.1080/09557570802452920.

3. THEORETICAL FRAMEWORK AND METHODOLOGY

3.1 Introduction

The chapter comprises three parts: the theoretical framework and research design, the data collection process, and the data analysis methods used to explore how NATO discusses climate change and what its approach implies for international climate change governance.

The theoretical framework offers a lens for analyzing how content on climate change within NATO influences its approach to environmental security and international climate governance. In this theoretical framework, constructivism provides insights into the socially constructed nature of reality, emphasizing the role of ideas, norms, and identities in shaping the behaviors and interactions of actors and organizations. Examining how NATO constructs and interprets climate change content allows one to understand how these constructions inform its policies and actions in the realm of climate security.

3.2 Constructivism

Constructivism is often associated with the end of the Cold War, an event that could not be fully explained by traditional theories of international relations such as realism and liberalism. These traditional theories were limited by certain fundamental assumptions, such as the belief that states are solely interested in obtaining power and that the distribution of power among nations dictates their relative strength. Realism and liberalism offer more concrete frameworks for understanding traditional state centric and economic aspects of international relations. In contrast, constructivism argues that the social world is created by our own construct, and that it is shaped and reshaped by various actors, including nations, international organizations, and leaders.[43]

Central to constructivism is identity. Constructivism emphasizes the significance of ideology, such as common standards and values, in addition to tangible elements like power in the context of NATO. NATO members can establish strong ties and find common ground thanks to a shared philosophy, which serves as a fundamental bonding identifier. Alexander Wendt explains the social construction of reality with a striking example in his 1995 paper

[43] Sarina Theys, "Constructivism," in *International Relations Theory*, ed. Stephen McGlinchey, Rosie Walters, and Christian Scheinpflug (Bristol, UK: E-International Relations Publishing, 2017), 36–37, https://eprints.ncl.ac.uk.

'Constructing International Politics'.[44] He argues that 500 British nuclear weapons are less threatening to the United States than 5 North Korean nuclear weapons, "because the British are friends of the United States and the North Koreans are not, and amity or enmity is a function of shared understandings."[45] The American approach results from the *meaning* given to the material structure (the *ideational structure*), and are not caused by the material structure itself, i.e., the nuclear weapons. The United States, North Korea, Britain, and others interact with each other based on a shared understanding and social context, not just on the basis of the possession of nuclear weapons. This means that the weapons themselves are not relevant without considering the social context in which they exist.[46]

This thesis builds on previous research done by Tosbotn and Cusumano (2020) on NATO. In their content analysis on cyber security in NATO's discourse, they use constructivism as a theoretical lens.[47] They note that as far back as 1995, during the beginning of the constructivist turn in International Relations, Waever emphasized that foreign policy is "made" by language.[48] Note that Waever is one of the founders of the Copenhagen School and that this thesis intentionally does not adopt its perspective of *Securitization Theory*. Although NATO's securitization of climate change is a relevant topic for analysis, this thesis sets it aside to maintain a comprehensive scope.

On the same token, one can look at NATO through a constructivist lens. What does it mean when one reads that Russia claims that 'NATO' is a threat? Or that 'NATO' holds its biggest exercise in Germany? As Trine Flockhart mildly puts it: "NATO is no more than an ageing headquarters building on the outskirts of Brussels, a home-page, and an international staff; apart from a few AWACS reconnaissance planes, a command structure and a few other very limited assets, NATO has no military equipment or forces of its own."[49] And yet NATO is a prominent player in international politics and security, despite having very limited material assets. NATO is generally perceived as a factual entity, capable of taking action. Thus, it is

[44] Alexander Wendt, "Constructing International Politics," *International Security* 20, no. 1 (1995): 73, https://doi.org/10.2307/2539217.
[45] Wendt, "Constructing International Politics," 73.
[46] Theys, "Constructivism," 37.
[47] Tosbotn and Cusumano, "NATO in a Changing World," 328.
[48] Ole Waever, "Securitization and Desecuritization," in *On Security*, ed. Ronnie D. Lipschutz (New York: Columbia University Press, 1995), 46–86.
[49] Trine Flockhart, "Constructivism and Foreign Policy," in *Foreign Policy* (Oxford University Press, n.d.), 85, https://www.oxfordpoliticstrove.com/display/10.1093/hepl/9780198708902.001.0001/hepl-9780198708902-chapter-4.

important to note that NATO is at its core a social construct, based on shared practices, interactions, and beliefs.

There are several theories that explain NATO and its actions in the context of international relations, like realism or liberalism. However, the theory of constructivism offers a unique perspective by tracing NATO's evolution and continued existence to its complex network of identities. According to constructivists, these identities have enabled the organization to be flexible in its operations. This flexibility arises from the multilayering of identities that exist within NATO. The first layer is fundamental, representing the basic ideology that all member states share and strive to achieve. The Cold War era had a significant impact on the formation of NATO's fundamental identity. The second layer is the organizational identity, which is encoded in two articles of the alliance treaty. Finally, there is an operational identity that evolves according to the priorities of each member state. These priorities include collective defense, dispute resolution, and cooperative security. By examining NATO's history, particularly during the Cold War, one can observe how constructivism has played a crucial role within the alliance.

The power of identity and ideology within constructivist theory have long been an integral part of NATO. For constructivists, "NATO is the institutional expression of an underlying pluralistic security community whose members have developed a "sense of community" and "dependable expectations of peaceful change.""[50]

There are three main reasons why constructivism is particularly useful in relation to the research question of this study. Firstly, in the case of NATO, constructivism helps understanding that the perception of climate change as a security threat and the discourse surrounding it are socially constructed phenomena. Climate change is not solely an environmental issue but can be framed within the context of security, structured by the interests of NATO member states and other actors. Secondly, by examining how NATO constructs its identity in relation to climate change, constructivism helps uncovering the ideological foundations that shape its approach to environmental security and international

[50] Tobias Bunde, "Social Constructivism," in *Research Handbook on NATO* (Edward Elgar Publishing, 2023), 71, https://www.elgaronline.com/edcollchap/book/9781839103391/book-part-9781839103391-14.xml.
The quotations in the citation refer to: Deutsch, K.W., S.A. Burrell and R.A. Kann et al. (1957), *Political Community and the North Atlantic Area: International Organization in the Light of Historical Experience*, Princeton: Princeton University Press, 5.

climate governance. Lastly, because this research entails a content analysis, constructivism helps to emphasize the role of language in shaping social constructions.

3.3 Role Conceptions

Role conceptions, as described by Tosbotn and Cusumano, consist of how an organization sees itself. This includes what kind of an organization it is and how it can carry out its mission.[51] Role conceptions are connected to several responsibilities, expectations, and duties. By separating activities that support an organization's core goals from those that are incidental, role conceptions assist an organization in identifying its core competencies. Consequently, NATO's role conception offers valuable insights into the organization's pursuit of new competencies after the end of the Cold War and its decision whether to take up climate security as an additional responsibility.[52]

Berger argues that role conceptions and cultures within military organizations can generate cognitive biases that affect organizational change.[53] This occurs because information that aligns with the organization's preferences and reinforces its existing beliefs and role conceptions is easily assimilated. Conversely, information that contradicts existing beliefs tends to be rejected or ignored by the organization. As a result, Tosbotn and Cusumano argue that change in a military organization happens slowly: "organizational theory, in sum, maintains that bureaucracies seek to protect the capacities they deem central to what they consider to be their mission, and express indifference or even resistance to those capacities they see as peripheral or irrelevant."[54]

In this research, the theoretical framework will be applied to a large dataset of NATO documents and speeches by NATO officials to examine how NATO's role conceptions have influenced its approach to climate change. By analyzing the frequency and the context of the climate discourse the research examines a shift in NATO's perceived role, whether and how climate change has been framed as a core security concern or as a peripheral issue. In this regard, role conceptions can either facilitate or hinder the adaption of climate change into

[51] Tosbotn and Cusumano, "NATO in a Changing World," 325.
[52] For an extensive account of NATO's pursuit into new competencies after the Cold War see: James Sperling, Mark Webber, and Martin A. Smith, *NATO's Post-Cold War Trajectory: Decline or Regeneration?* (New York: Palgrave Macmillan, 2011).
[53] Thomas U. Berger, *Cultures of Antimilitarism* (Baltimore, Maryland: Johns Hopkins University Press, 1994), 24-26, https://doi.org/10.56021/9780801858208.
[54] Tosbotn and Cusumano, "NATO in a Changing World," 326.

NATO's strategic objectives. This approach will help providing a nuanced understanding of how NATO's self-perception as a security IO impacts its engagement with climate change and broader speaking with international climate governance.

3.4 Content Analysis: Conceptual and Relational

The focus of this thesis is the role of communication in NATO's response to climate change as a factor in geopolitics and security. Addressing climate change challenges NATO, as these policies often fall outside military expertise. Since the constructivist turn in International Relations, researchers emphasize that foreign policy is 'made' by language. Textbooks on IOs state, "the international political sphere is rich in texts, is built out of texts, and relies on discursive and textual interaction."[55]

Initially, this study aimed to conduct a discourse analysis of NATO's approach to climate change. When reviewing the material on NATO and climate change, one of the conclusions was that NATO mainly had a discursive framing on climate change instead of actual policy action.[56] Analyzing this discourse and linking it to a lack of action proved challenging, as actions that did not occur are difficult to analyze. Thus, the project shifted to content analysis, focusing on the message rather than its language. Content analysis can deliver more objective results, as discourse analysis relies heavily on the researchers interpretation and is thus prone to subjectivity.

Content analysis is defined as "a research technique for the objective, systematic and quantitative description of the manifest content of communication."[57] The method determines the presence and quantity of concepts in a text, this is done by analyzing phrases or words. In simple terms, content analysis can be used to measure a word's prominence in a particular body of documents by looking for its presence.[58] The technique can be used across time, with regard to other words, or both.

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[55] Lucile Maertens, Leah R. Kimber, and Fanny Badache, "Computerized Text Analysis," in *International Organizations and Research Methods: An Introduction* (University of Michigan Press, 2023), https://muse.jhu.edu/pub/166/oa_edited_volume/chapter/3772798.

[56] Barnhoorn, "Comparing Responses," 20-23.

[57] Bernard Berelson, *Content Analysis in Communication Research*, Foundations of Communications Research (New York: Free Press, 1952), 17.

[58] Michael E. Palmquist, Thomas A. Dale, and Kathleen M. Carley, "Applications of Computer-Aided Text Analysis: Analyzing Literary and Nonliterary Texts," in *Text Analysis for the Social Sciences* (Routledge, 1997).

This thesis uses conceptual content analysis to quantify the significance of "climate change" in NATO discourse from 2009 to 2023. Conceptual analysis organizes and explores data, and then quantifies the frequency of codes and its concepts as total numbers and percentages. Qualitative and quantitative analyses reveal trends related to ideas and identities.

Thereafter, the research applies relational content analysis that helps examining relationships between concepts in texts. New meaning can be seen from related concepts and their relationships, useful for establishing causality and contradictions. Proximity analysis identifies related concepts that occur together to deduce communication aspects.[59] In this study, relational content analysis evaluates changes in NATO's use of "climate change" from 2009 to 2023.

3.4.1 Document Selection: Official Documents

Limiting and rationalizing source selection is essential in content analysis. This study looks at NATO's perception of itself and the security context in relation to climate change. Therefore, official NATO remarks, papers and speeches should be included in the original sources. The annual summit declarations of NATO summits between 2009 and 2023 serve as the sources for this thesis, alongside strategic concepts that set out the long-term strategy of the Alliance. Official statements and speeches of NATO Secretary Generals are added to the study volume to expand the body of analysis.

The study focuses on the period from 2009, when Anders Fogh Rasmussen became Secretary General of NATO, until 2022. This period was chosen because in that time, NATO recognized climate change as a security challenge for the first time. While sources before 2009 had discussed climate change and its relationship to NATO, the focus intensified during Rasmussen's tenure.

The focus on official documents is based on the following reasoning: official documents are an excellent primary source for examining how NATO portrays itself and thus how it sees itself in relation to a particular issue. This research assumes that statements and documents issued by NATO are accurately written and that recurring themes and messages in their correspondence can be identified as reflecting their self-image. These documents allow for the following two actions: First, it allows for a quantitative analysis that shows how "climate change" is becoming increasingly prominent in NATO discourse. Second, it allows for

[59] Palmquist, Dale, and Carley, "Applications of Computer-Aided Text Analysis,"

a qualitative study, showing from the statistics information about NATO's conceptualization of climate change over time.

3.4.2 Limitations

It is important to acknowledge the inherent subjectivity in content analysis, given the possibility of introducing biases in coding and interpretation. Despite trying to stay as objective as possible (in coding for instance), the thesis is subject to the perspectives of the researcher. The use of content analysis in this study restricts its ability to provide insights that can be applied more broadly. Although content analysis's descriptive character allows for in-depth research, its results mostly guide conclusions instead of providing definitive results. At the same time, content analysis is a careful and easily repeatable research technique. Although content analysis provides insightful information, its main purpose is to identify patterns and trends rather than causal correlations. As a result, the study's conclusions might point towards more research and support evidence-based thinking, while its interpretation of causality should be treated carefully. It is essential to note that NATO labels some documents as "not formally agreed NATO documents and therefore may not represent the official opinions or positions of individual governments on every issue discussed."[60]

3.5 Research Design: Steps of Content Analysis

This thesis follows the research framework by Zhang and Wildemuth, as well as Elo and Kyngäs, detailing the steps and methods for qualitative and quantitative content analysis.[61]

1. Data Preparation: summits, communiqués, strategic concepts, and speech transcripts are imported into Atlas.ti, a tool for locating, coding, annotating, and visualizing unstructured data.

2. Unit of Analysis: the study analyzes NATO's climate change discourse using policy documents, reports, and speeches from key events like summits. These sources provide insights into how the discourse evolves.

3. Coding categories. The study develops codes based on themes emerging from the

[60] North Atlantic Treaty Organization (NATO), *NATO Handbook* (Brussels: NATO Public Diplomacy Division, 2006), 4.

[61] Yan Zhang and Barbara M. Wildemuth, "Qualitative Analysis of Content," *Human Brain Mapping* 30, no. 7 (2005): 2197–2206, https://doi.org/10.1002/hbm.20661; Satu Elo and Helvi Kyngäs, "The Qualitative Content Analysis Process," *Journal of Advanced Nursing* 62, no. 1 (April 2008): 107–15, https://doi.org/10.1111/j.1365-2648.2007.04569.x.

data. The documents will be coded using these categories to capture the discursive elements such as constructivist narratives, role conceptions, and the portrayal of climate change's security implications. This study will employ a hybrid approach for coding schemes: combining deductive and inductive approaches.[62] Combining these approaches allows to explain phenomena in the research context (inductive concepts) by applying established theory (deductive concepts). This is beneficial when discussing the results in the broader theoretical context and for developing new knowledge.

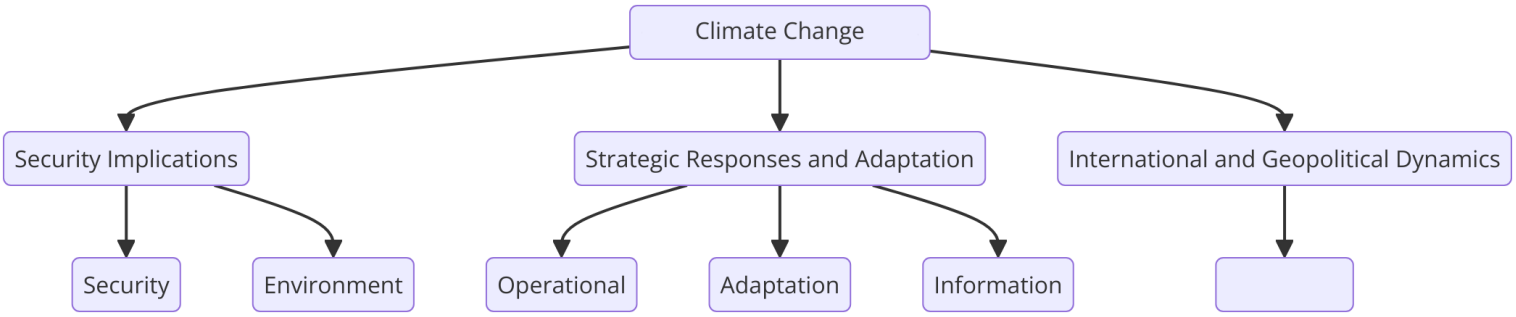

Figure 2 *Example of the abstraction process, subdivided from top to bottom into Category, Code, and Sub-Code*

Elo and Kyngäs outline three data organization steps: open coding, creating categories, and abstraction. Climate change was selected as the main category, and relevant texts were coded using Atlas.ti. Sub-categories summarizing citations were created, followed by generic categories grouped by similarity and overlap (see figure 2).

4. Code all text: All relevant text is systematically coded to match categories. This ensures comprehensive analysis of themes and patterns in NATO's discourse.

5. Draw a conclusion from the results. After coding, the research gets the information together to determine the significance of the identified themes and patterns. This step involves interpreting the codes to draw insights in how NATO's discourse constructs climate change as a security threat. The aim is to uncover implications within NATO's approach to climate change, and how these can influence its role in international climate governance.

6. Report the findings.

[62] Zhang and Wildemuth, "Qualitative Analysis of Content," 2.

3.6 Method

This study conducted the content analysis on a dataset of official NATO speeches and documents spanning the years 2009 to 2022. The NATO speeches were gathered from the NATO archives, filtered on “climate change,” “environment(al),” and “sustainable/sustainability,” narrowing the initial dataset of 1000+ speeches down to 293 speeches over that timeframe. From the 293 entries, 194 speeches contained actual wording with meaning regarding to climate change (i.e., not wording as “hostile environment” or “security climate”). Thereafter, the 194 entries were manually coded using a predefined set of categories related to climate change and security, such as “Security Implications,” “Threat Multiplier”, and “Operations”. Each category was associated with specific keywords, and the presence of these keywords within the texts was coded to measure their prominence and ratio over time.

4. CONTENT ANALYSIS

4.1 Introduction

Previous research focused either on policy-specific analysis or on the broader impacts of climate change on security. Neither integrated how NATO's self-perception and discursive changes reflect and drive its (policy) actions. This analysis aims to fill that gap by directly linking shifts in its climate change discourse to NATO's role conceptions. This research demonstrates how NATO's framing of climate change influences its approach to environmental security and its broader role in international climate governance. It does so by examining these changes through relational and conceptual content analysis.

The chapter begins by analyzing the frequency and context of climate change mentioned in NATO's communications (4.2). It then presents the coded data and thematic categories derived from the content analysis (4.3). The core of the chapter examines three key themes: 'Climate Change as a Security Issue' (4.4), 'NATO's Approach to Operations' (4.5), and 'NATO's Role in International Climate Governance' (4.6), the three themes combined are essential for understanding NATO’s discursive construction of climate change. The discussion (Chapter 5) completes the findings through the theoretical lenses of constructivism and role conceptions.

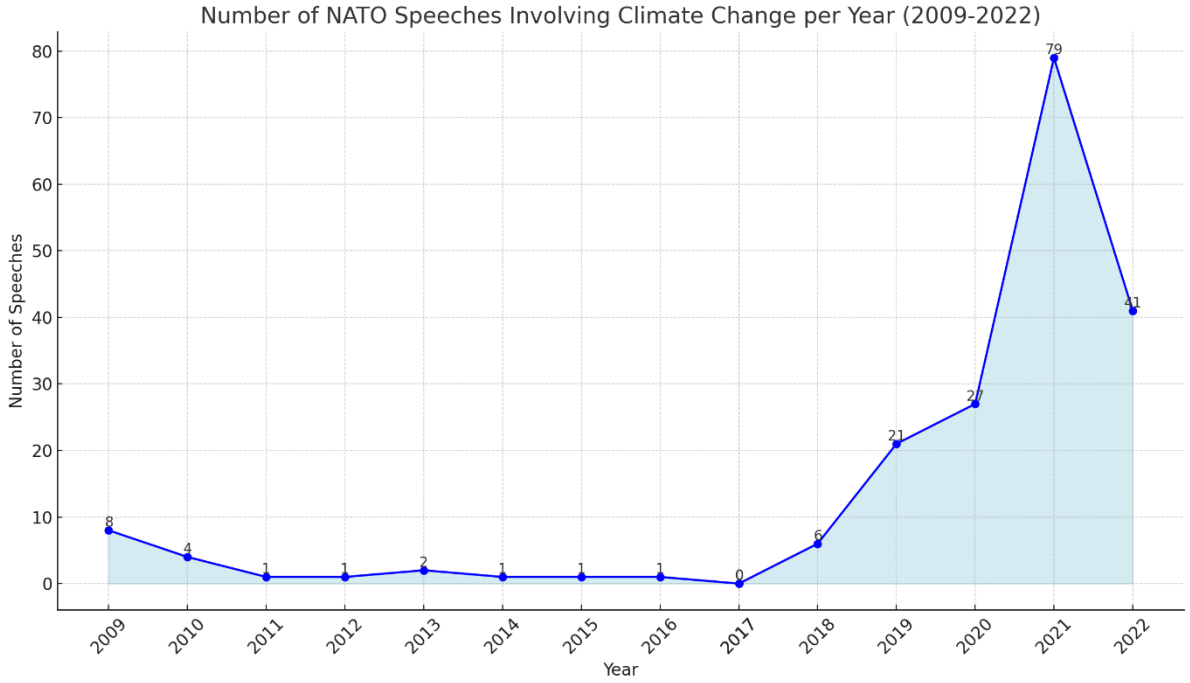

Chart 1 | Quantity of mentions of climate change in speeches by NATO officials

4.2 Initial Analysis: Climate Change as Security Issue

The initial analysis, as seen in Chart 1, reveals a significant increase in the frequency of climate-related terms in speeches of NATO officials and documents from 2018 onwards. From 2014 until 2018 there was no mention of climate change in the official documents and little to no mentioning of the phenomenon in the speeches of NATO officials.

In the early stages (2009-2014), the dataset shows only sporadic mentions of climate change in NATO's discourse. Speeches during this period started to introduce climate change but often did so in general terms and while steering clear from specific actions and commitment. For example, see: "And it is becoming increasingly clear that climate change – the most "global" of all challenges – will also have distinct implications for security."[63] The dataset in this period shows a reluctance to act: "We are in a period in which we are living fundamental climatic challenges – not that NATO can do anything about climatic challenges."[64]

In contrast, by 2019, NATO documents and speeches explicitly discussed climate change in terms of direct security risks. For instance, a 2019 speech directly linked climate change to security, albeit in probabilistic terms:

> "[…] climate change may have security consequences. It may lead to conflicts about resources of water, it may force people to move, so of course there are security consequences of climate change. It will also affect our military infrastructure and the way we have to plan and conduct military operations."[65]

This citation reflects an acknowledgment of the potential direct security risks posed by environmental changes. Later in the dataset, climate change is mentioned in the same breath as other threats.

> "Our adversaries challenge us using bombs and aircraft. But also bots and algorithms. In this more unpredictable world we face a more assertive Russia. Brutal terrorist groups like ISIS. More sophisticated cyber-attacks. Intensifying geopolitical competition with the rise of China. Potentially dangerous new technologies. Disruptions due to climate change. And deadly viruses."[66]

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[63] Anders Fogh Rasmussen, "NATO's Role in the 21st Century and the New Strategic Concept," Speech, Vilnius, October 9, 2009.

[64] Admiral Giampaolo di Paola, "NATO's Strategic Concept, the New Security Environment, and the NATO-Russia Partnership," Speech by Admiral Giampaolo di Paola, Chairman of the Military Committee, Moscow, July 23, 2010.

[65] Jens Stoltenberg, "Speech by NATO Secretary General Jens Stoltenberg at the NATO Parliamentary Assembly Plenary Session," London, Queen Elizabeth II Center, October 14, 2019.

[66] Jens Stoltenberg, "NATO 2030 - Safeguarding Peace in an Unpredictable World," Keynote speech at the Sciences PO Youth & Leaders Summit, January 18, 2021.

This inclusion of climate change alongside other threats like terrorism and geopolitical competition places it within NATO's core narrative of security risks. This change indicates a transformation in how NATO sees its responsibilities. An evolution that shows a proactive and adaptive security actor, as opposed to the hardlined security alliance. In doing so, NATO adds climate change to its other broader security concerns. Another statement by the NATO Secretary General underscores the urgency of adapting military strategies to climate change:

> "Global warming is making the world more dangerous. NATO has recognized climate change as a security challenge for many years. Now we are stepping up our efforts through NATO 2030. And I expect NATO Leaders to approve an ambitious action plan on the security impact of climate change at our Summit on the 14th of June."[67][68]

This indicates not only an acknowledgment of the issue, but a commitment to actions, showing planning for climate change within NATO. Throughout the dataset, NATO frequently refers to climate change as a "crisis multiplier" and "security risk", pointing to its role of "exacerbating existing threats". This framing illustrates that NATO's discourse has gradually come to understand climate change as part of its security mandate. In contrast, earlier mentions treated climate change as a peripheral challenge. Earlier statements emphasized that NATO did not have a role in addressing climate change nor did it perceive climate change as a security risk:

> "I wouldn't call climate change a security risk. Of course, climate change represents a challenge in many ways. And as I have outlined already I also see some strategic implications of climate change in particular speaking about climate change impacts on the Arctic region. Hum, but in general, I don't see a prominent NATO role in addressing the challenges stemming from climate change"[69]

Recent statements, however, explicitly recognize climate change as a threat to stability, with impacts ranging from conflicts over resources to forced migration. For example, "climate change is a conflict multiplier" and the mention of "increased competition for scarce resources" show a direct evolution from acknowledgment to active integration into the

[67] Jens Stoltenberg, "Remarks by NATO Secretary General Jens Stoltenberg at the Leaders Summit on Climate," April 22, 2021.
[68] NATO 2030 is an agenda with a set of proposals to make NATO stronger and fit for the future, endorsed by Allies at the June 2021 Summit.
[69] Anders Fogh Rasmussen, "America, Europe and the Pacific," San Francisco, July 9, 2014.

security discourse. The data shows that this change reflects a broader conceptual shift in NATO's security framework; climate change is no longer external but is embedded in NATO's approach to addressing other security threats:

> "We put climate change at the heart of NATO's agenda for the first time, not just to reduce the impact of climate on our militaries, but also to reduce the impact of our militaries on the climate."[70]

The shift, as demonstrated above, illustrates the constructivist notion that reality is shaped by ideas and discourse. The change of the framing of climate change and the adaption of it into the "heart of NATO's agenda" shows how NATO's role conceptions evolved in line with new constructs in the security realm**.**

4.3 Coded Dataset and Themes

In alignment with the chart provided in the methodology section, the research proceeded to the abstraction process: coding the discourse on climate change. The gathered data was coded into different sub-codes from which generic categories were derived, as seen below in chart 2. This abstraction process helps order the dataset into broader categories.

As the chart shows, the abstraction covered six broad categories. From these categories, the research derives different themes to deepen the analysis. The themes have been organized as follows: *Threats* is renamed under 'Climate as a Security Issue'; *Operational Impacts* falls under 'Operations'; *Cooperation* and *Diplomacy* are grouped under 'International Cooperation'; and *Responses to Natural Disasters* and *Humanitarian Assistance* are grouped under 'NATO's Role in Disaster Response'. See table 1 for a detailed depiction of the themes and their subsequent generic categories and sub-categories.

[70] Mircea Geoană, "Opening Remarks by NATO Deputy Secretary General Mircea Geoană at the NATO Committee on Gender Perspectives Annual Conference (NCGP)," December 7, 2021.

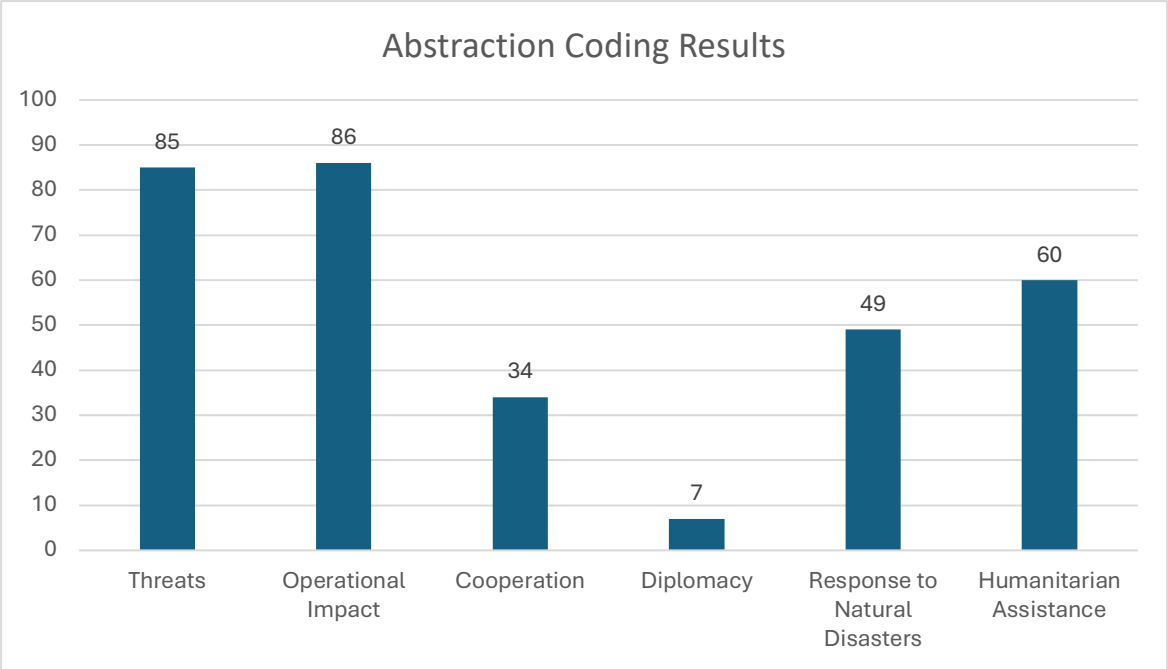

Chart 2 | Abstracted Sub-Codes from Dataset

Sub-category	Generic category	Theme
Terms like “climate risk,” “climate resilience,” and “threat multiplier”	Acknowledging climate change as a security threat	Climate as a Security Issue
Linking climate change to migration and resource conflicts (e.g., “conflicts about resources of water”)	Climate change as a driver of conflicts	Climate as a Security Issue
Mentioning terms of “military readiness” and “infrastructure resilience”	Operational impacts on military planning	Operations
Statements about including environmental impacts into military operations	Operational adjustments due to climate effects	Operations
References to joint climate initiatives or agreements with other international bodies (e.g., EU, UN) and countries (e.g., China)	Cooperation and partnerships on climate resilience	International Cooperation
Mentions of “talks”, “meetings”, “conferences”, and “summits” related to climate	Diplomacy	International Cooperation
Acknowledgement of the implications of and responses to natural disasters	Natural Disasters	NATO’s Role in Disaster Response
Mentions of NATO’s assistance during natural disasters	Humanitarian aid and disaster response	NATO’s Role in Disaster Response

Table 1 | Categorization of Climate Change Discourse in NATO Communications

4.4 Climate as a Security Issue

The literature review discussed the concept of securitization and how climate change has increasingly been framed as a security issue by IOs. One of the central categories in NATO's evolving discourse is the framing of climate change as a direct security threat. Terms such as "threat/crisis/conflict multiplier" and "climate risks" are frequently used in its strategic documents and speeches (31 and 15 occurrences, respectively). This framing aligns closely with discussions found in the broader literature on securitization. Scholars like Trombetta have demonstrated that climate change is redefined in terms of security, which in turn helps legitimize policy shifts.[71] This is visible in the adaption of climate change in NATOs 2022 Strategic Concept, NATO 2030, and several summit declarations:

> I think that in a new strategic concept for NATO, […], climate change has to play a much more prominent and important role. NATO should do its part to look into how we can reduce emissions from military operations.[72]

This ties into the constructivist lens used for this analysis: the development of a new strategic concept and NATO 2030 help to explain how the evolving discourse shape the organization's identity. The Strategic Concept is defined as the Alliance's vision. The integration of climate change in the Strategic Concept once more represents a shift in NATO's identity from a purely military alliance to a proactive player in climate security. From a constructivist perspective, it shows how identities are flexible and can be reshaped through discourse, especially as norms change.

> The Strategic Concept emphasises that ensuring our national and collective resilience is critical to all our core tasks and underpins our efforts to safeguard our nations, societies and shared values. It also emphasises the cross-cutting importance of investing in technological innovation and integrating climate change, human security and the Women, Peace and Security agenda across all our core tasks.[73]

This statement is from the opening section of the Strategic Concept, stating the importance of climate change to NATO by naming it one of its core tasks and by placing it in the beginning

[71] Trombetta, "Environmental Security," 585–90.
[72] Jens Stoltenberg, "Opening Remarks on NATO 2030 and the Importance of Strengthening the Transatlantic Bond in the Next Decade and Beyond," February 4, 2021.
[73] North Atlantic Treaty Organization (NATO), *NATO 2022 Strategic Concept* (Brussels: NATO Public Diplomacy Division, 2022), 1, accessed 7 December 2024, https://www.nato.int/strategic-concept.

of the strategic document. Similarly, the dataset highlights the significance of NATO 2030, with 36 references appearing in documents and speeches starting from 30 June 2020.

When going over the subcategories identified for this theme (Appendix A, table 1), one can construct specific narratives derived from those subcategories. The subcategories feed into the narrative that shows how NATO increasingly frames climate change as a security threat that is similar to other threats. This construction illustrates the securitization approach, making climate change a matter of defense policy. The sub-categories "Natural disasters leading to conflicts" and "Environmental refugees and instability" indicate that NATO views climate change in terms of destabilization. This narrative shows the importance of military preparedness, it renders NATO into a key actor in helping and addressing instability caused by climate change. This narrative and angle show NATO's role in defining climate change within its traditional and core security mandate.

At first, the data showed that NATO focused solely on traditional military threats and climate change was mentioned mainly in the context of *Environment* and *Diplomacy*. This reflected NATO's core identity as a military alliance with a limited focus of environmental security. Increasingly, after 2020, the dataset shows an integration of climate change into NATO's role conception. Climate change was categorized frequently in the "Security" and "Operations" columns from 2018 onwards. This reframing of climate change as a security threat resulted in the expansion of NATO's identity toward an actor that addresses non-traditional threats like climate change. The NATO 2030 agenda and the Strategic Concept of 2022 illustrate this identity transformation.

4.5 NATO's Approach to Operations

Analyzing the dataset through the table on the Operational theme (appendix A, table 2) shows how NATO has over time started to consider climate concerns into its military and strategic planning. The discourse demonstrates a commitment to shaping a more structured approach to environmental security. Framing and the role of language play a significant part in this: naming climate change a "crisis multiplier" that intensifies and accelerates existing threats helps NATO to justify integrating climate change into its operations. Similarly, this also includes addressing the direct effects of climate change on the military infrastructure, exercises, and equipment: "Rising sea levels will impact a lot of naval bases' infrastructure.

We have seen that, for instance, in Norfolk, Virginia, where there are naval bases, including NATO headquarters. They see flooding as a big, big problem."[74]

At the same time, the discourse shows a dual approach to climate concerns and military operations: including climate concerns into its operations while at the same time maintaining a strategic edge. The duality arises when NATO officials speak about the need to "fully integrate climate change into military planning and exercises" and setting the "gold standard" for reducing emissions; but "without compromising our core tasks".[75] One can clearly see this when the organization tries to commit to climate neutral capabilities while having to stress and admit that energy for tanks and jets will remain fossil for the foreseeable future:

> We know that heavy battle tanks or fighter jets and naval ships, they consume a lot of fossil fuel and emit greenhouse or co2, greenhouse gases, co2, and therefore we do have to look into how we can reduce those emissions by alternative fuels, solar panels, other ways of running our missions.[76]

NATO places an emphasis on how climate change affects operational readiness, as becomes clear through the *Training and Deployment* Category. Part of this is the recognition of the impact of extreme conditions on its operations:

> […] we need to adapt our missions and operations. We know that a lot of military infrastructure will be directly impacted by global warming, rising sea levels. […], we are increasing our training mission in Iraq, in Baghdad last summer it was more than 50 degrees Celsius for many, many days.

Acknowledging and addressing the extreme conditions that climate change can cause is part of NATO's overall strategy in being a resilient Alliance. Notably, NATO has always shown great interest into the environment, in part to keep its strategic edge (*Greening the Alliance: The Diplomacy of NATO's Science and Environmental Initiatives*). However, acting responsively to climate change did not materialize until the past half decade. Nonetheless, putting resilience building on the agenda will help forces to remain effective under extreme conditions:

> It will impact such basic things as uniforms and the way we do military operations. […] So we should set the gold standard in NATO for how we conduct

[74] Jens Stoltenberg, "NATO: Keeping Europe Safe in an Uncertain World," Speech at the College of Europe in Bruges, March 4, 2021.
[75] Jens Stoltenberg, "NATO and the Security Implications of Climate Change," Virtual Speech, September 28, 2020; Jens Stoltenberg, "NATO Must Combat Climate Change," Op-ed article, September 27, 2020.
[76] Jens Stoltenberg, "Opening Remarks on NATO 2030 and the Importance of Strengthening the Transatlantic Bond in the Next Decade and Beyond," February 4, 2021.

> military operations in an effective way, but in a way which is also, at the same time, more environmentally friendly.[77]

Going over the Operations theme and table shows that NATO's discourse is not only limited to rhetoric. It extends to specific and practical measures (e.g., operational and technical adjustments). Subcategories like "Infrastructure Resilience" and "Changes on military exercises and equipment due to extreme conditions" indicate an emphasis on adaptability. This reflects how its content construction of climate change has real implications on policy and strategy and how the Alliance shapes its approach to environmental security, as seen in the Strategic Concept and Summit Communiques:

> We will integrate climate change considerations into all of NATO's core tasks, adapt our infrastructure, military capabilities and technologies ensuring resilience to future operating environments.[78]

> NATO should become the leading international organisation when it comes to understanding and adapting to the impact of climate change on security. The Alliance will lead efforts to assess the impact of climate change on defence and security and address those challenges.[79]

The dataset shows that NATO now actively integrates climate change in its operations, with sub-categories like "Adaptation of operational strategies to climate risks" and "Operational readiness in context of climate events." This adaption ties into the changing role conception of NATO, one that reflects an evolution from merely recognizing climate change as a security risk to actively adjusting its capabilities.

4.6 NATO's Role in International Climate Governance

The themes *International Cooperation* and *NATO's Role in Natural Disasters* help elucidate NATO's broader role in international climate governance. Analyzing the dataset and setting up the accompanying tables for the themes provides a basis for understanding NATO's position in international climate governance.

NATO positions itself as an active participant: it has role in responding to climate induced crises but also the aspirations to lead in the in the domain of climate security (n.b.,

[77] Stoltenberg, "Keeping Europe Safe."
[78] NATO, *Vilnius Summit Communiqué* (Brussels: NATO Public Diplomacy Division, July 11, 2023), para. 12, accessed December 7, 2024, https://www.nato.int.
[79] NATO, *NATO 2022 Strategic,* 11.

this is climate security, not climate change). NATO's emphasis in "setting the golden standard" for understanding and addressing the security challenges of climate change clearly implies the ambition of becoming a leader on climate security. However, the organization also recognizes that direct climate action falls under the responsibility of institutions like the United Nations: "Of course, NATO is not going to, in a way, be the main platform for negotiating climate agreements like the Paris Accord. That's for the UN, that's for those institutions to do."[80]

NATO's relationship with international partners, as seen in the sub-categories' Collaboration with UN climate initiatives (e.g., UN Climate Change Convention)' and 'Engagement with the EU on climate adaptation and sustainability', shows collaborative efforts for the role the organization is aiming to take on. The statement that "NATO and the EU are natural partners" in addressing climate security challenges, shows that NATO expands its capabilities to other international partners.[81] The 2022 Strategic Concept echoes this:

> "On the basis of our longstanding cooperation, we will enhance the NATO-EU strategic partnership, strengthen political consultations and increase cooperation on issues of common interest, such as military mobility, resilience, the impact of climate change on security, […]"[82]

This stance on collaboration illustrates NATO's intent to support and contribute to international climate action, instead of operating in isolation with merely reacting to the impacts of climate change. This is further exemplified by NATO's first participation in the United Nations Climate Change Conference (COP 27), which emphasized three pillars for dealing with climate change to which NATO will commit to:

> One is to fully understand the link between climate change and security.
> […]
> The second thing, which matters for NATO is that, of course, climate change, more extreme weather, windier, wilder, wetter weather matters for military operations. […] And we are in the process of doing that by incorporating climate change in our military planning, our capability targets and everything we do.
> […]

[80] Jens Stoltenberg, "NATO 2030 - Safeguarding Peace in an Unpredictable World," Keynote speech at the Sciences PO Youth & Leaders Summit, January 18, 2021.
[81] Mircea Geoană, "Remarks at the Virtual Session of the European Parliament's Committee on Foreign Affairs (AFET) and the Subcommittee on Security and Defence Committee on Foreign Affairs (SEDE)," June 28, 2021.
[82] NATO, *NATO 2022 Strategic*, 10.

> And thirdly, of course, our armed forces have to be part of the efforts to reduce emissions.[83]

On that same token, and expanding on the category' Collaboration with non-NATO actors', NATO officials mention China on multiple occasions as potential partner to collaborate with: "[…]climate change, on other things, there are things that we should cooperate with China."[84] As well as:

> "China will soon have the biggest economy in the world. It is a permanent member of the UN Security Council. So it is instrumental in dealing with issues of our time. From global governance, to international trade and climate change. That is why at NATO, we engage with China."[85]

This shows the will to expand its collaboration efforts beyond traditional partners as there exists significant strategic tension between NATO and China. This becomes clear when it names China alongside other threats, including climate change : "No country alone can tackle military attacks, risk of terrorism, malicious cyber activities, disinformation campaigns, the rise of China, climate change and pandemics."[86] NATO stresses this duality of engaging with China: "There are opportunities to engage with Beijing. On issues like trade, climate change and arms control. But we must be clear-eyed about the challenges China poses."[87]

NATO's role in disaster response and humanitarian assistance also contributes to its participation in international climate governance. The organization positions itself more and more as a crucial actor with providing support during natural disasters. It also helps and coordinates in efforts to build climate resilience for member states.

The sub-categories' Support in natural disaster scenarios with military logistics,' 'Humanitarian assistance during crises and following climate events,' and 'Providing technical expertise in disaster management' all show a preparedness to act quickly in times of crisis:

[83] Jens Stoltenberg, "High-Level Discussion on Climate Security," United Nations Climate Change Conference (COP27), November 8, 2022.
[84] Mircea Geoană, "Keynote Speech at the Atlantic Forum's Conference 'Transatlanticism 2020,'" October 2, 2020.
[85] Jens Stoltenberg, "Speech at the Raisina Dialogue 2021 Conference," April 13, 2021.
[86] Mircea Geoană, "Remarks at the 7th Edition of the Bucharest Model NATO Event," October 16, 2020.
[87] Jens Stoltenberg, "NATO 2030: A Transatlantic Agenda for the Future," Speech previewing the NATO Summit in Brussels, event organized by NATO, The German Council on Foreign Relations (DGAP), and The Brookings Institution, June 4, 2021.

“Climate change looks set to lead to natural disasters in which the military may often be the best organised actor to provide initial humanitarian relief.”[88]

The positioning of NATO as an active responder and mitigator to natural disasters shows a narrative of climate adaption and, at times, climate leadership. By underlining its role in supporting member states and in helping during natural disasters, NATO presents itself as a vital actor in international climate governance. The references in the dataset to “Humanitarian Aide” and “Logistics for Disaster Relief” reflect this expanded role: “Providing our armed forces with the equipment they need to operate in extreme heat and extreme cold. Training them to assist in disaster relief”[89]

The literature review discussed the role of IOs in climate governance with the challenges and at times tensions around their own responsibilities. NATO’s discourse on cooperation (i.e., working with the EU and UN) shows a pragmatic stance. The organization is pragmatic in contributing its security expertise while acknowledging the lead role of other IOs in broader climate governance. This nuanced position is reflected in the dataset, where NATO frequently stresses working “alongside” others rather than as “leading” efforts in international climate policy.

This is in line with the argumentation of Dellmuth et al. who argue that IOs often collaborate on complex issues like climate change to address the issues.[90] This further aligns the themes identified in Table 3, particularly “Collaboration with UN climate initiatives” and “Engaging IOs”. It situates NATO within a broader international climate effort.

These collaborations also help NATO to assess its own identity by showing the its strengths and weaknesses. This collaboration narrative reflects, through a constructivist lens, a constructed identity where NATO sees itself as a contributing actor on climate change rather than an authority. On climate security, however, the organization has increasingly come to see itself as the forerunner [look up dataset on forerunner]. This shift is also reflected in the dataset, as terms like “cooperation,” “collaborative initiatives,” and “joint responses” appear more often. It shows NATO’s will to be part of taking the lead global climate governance.

[88] Jaap de Hoop Scheffer, "NATO: Securing Our Future," Speech, July 7, 2009.
[89] Jens Stoltenberg, "Opening Speech at the High-Level Dialogue on Climate and Security," NATO Public Forum, June 28, 2022.
[90] Lisa M. Dellmuth et al., “Intergovernmental Organizations and Climate Security,” 3-6.

5. DISCUSSION

The discussion critically examines the key findings of the analysis, elaborating on the implications for NATO's identity and strategy and its role in international climate governance. It aims to combine the findings with the literature and theory while underlining several nuances and tensions in the research.

5.1 Identity and Strategy

The data shows how climate change discourse transformed from a marginal topic to a central narrative in speeches, NATO's Strategic Concept, and the NATO 2030 agenda. The organization now frames climate change alongside geopolitical competition, cyber threats, and other security threats – centering it as a core security issue. This securitization of climate change helps gain attention and resources for the issue but is criticized by scholars such as Trombetta. She warns that such framing has the risk of militarizing a global challenge with the potential to marginalize nonmilitary actors that might be better suited for addressing the challenge.[91] This critique highlights the delicate balance for NATO between legitimizing its role in climate change and avoiding overstepping its bounds.

From a constructivist perspective, the shift illustrates a rather flexible identity from NATO, a conservative military organization. Historically speaking, NATO reflects itself as a hard-security alliance. However, integrating climate concerns into NATO's security framework illustrates a broader self-conception of NATO as a modern security actor. Nonetheless, this development is not without resistance. As Tosbotn and Cusumano note, NATO's conservative military nature and culture could slow the integration of non-traditional priorities.[92] The structural emphasis from the organization in the dataset on military readiness highlights this tension.

5.2 Operational Duality

The research presented NATO's efforts to integrate climate considerations into its operational apparatus, exposing a duality: maintaining military readiness while achieving sustainability goals. As shown, the challenges posed by changing climate (e.g., rising sea levels, extreme temperatures and weather conditions) demand changes in NATO operations. However, the

[91] Trombetta, "Environmental Security," 592.
[92] Tosbotn and Cusumano, "NATO in a Changing World," 321–36.

sustainability of these adaptions is at times constrained by limitations such as the need for fossil fuel for heavy equipment. Researchers like Barnhoorn argue that the military's adaptation to climate impacts often lags behind civilian sectors due to its reliance on conservative bureaucracies.[93] This aligns with NATO's cautious pace of integrating climate risks into its planning.

Consequently, this exposes the tension between NATO's commitment to reducing emissions and its overall view of keeping its strategic edge. As Lippert notes, the military's dependence on carbon-intensive technologies remains a critical barrier to achieving net-zero targets.[94] For this reason, the ambition to show leadership with the "gold standard" in climate security is somewhat imperfect. Setting a gold standard in sustainability while continuing the use of fossil fuels for operations is a problematic division.

This duality underlines the need for innovative solutions, such as alternative energy resources. Military modernization already pushes towards biofuels and solar power. Scholars like Egeland argue that such innovations do not only help reduce emissions, but also increase resilience by being less reliant on fossil fuel markets, as previously exposed by Russian energy policies. Moreover, NATO's operational adjustments could be a testing ground for global climate security strategies. By integrating climate considerations into defense planning and capability development, NATO addresses operational challenges and positions the alliance as a forward-looking security actor.

5.3 Collaboration and Leadership

NATO's evolving role in international climate governance showcases the ambition to collaborate with other institutions and the aspiration to be the leader in climate security. The data underlines the reliance on partnerships with the EU and the UN. These partnerships enable NATO to contribute security expertise while at the same time leaving broader climate concerns to other, more specialized institutions. This approach aligns with Dellmuth et al.'s statement that IGOs collaborate on complex issues such as climate change to complement each other.[95]

[93] Barnhoorn, "Comparing Responses," 23.
[94] Lippert, *NATO, Climate Change, and International Security,* 2–6.
[95] Dellmuth et al., "Intergovernmental Organizations and Climate Security," 1–13; Dellmuth and Gustafsson, "Global Adaptation Governance," 868–83.

Additionally, NATO aspires to be the leader in the domain of climate security. Its participation in COP27 and its emphasis on setting the "gold standard" in military sustainability underlines this ambition. This holds to Causevic's argument that NATO's framing of climate change as a security issue has given it a distinct role in international climate governance.[96] Nonetheless, the scope of this leadership is limited due to its mandate and the geopolitical context. The researched period was also one in which NATO was less of a dominant actor in geopolitics and in which it was struggling with its own identity, as pointed out by Macron in 2019.[97] At the same time, conflicting priorities between NATO and the EU, for example, illustrate broader tensions of aligning military and civilian approaches to climate governance.[98]

Lastly, NATO's engagement with China on climate issues further exposes the difficulties of its aspirations of becoming a leader in climate security. The organization expresses its will to cooperate on climate security, which could advance further understanding while complicating this relationship by framing China as a strategic rival. Therefore, this underlines yet another duality for NATO: trying to advance a unified climate agenda in a geopolitically tense world

5.4 Limitations and Recommendations

This research provides insights into NATO's evolving discourse on climate change but has several limitations. Firstly, although the official documents and speech selection give valuable insights into NATO's viewpoints, they do not address the nuances of the perspectives within NATO. Secondly and tied to the previous point, the document selection only contains NATO public documents, classified documents with perhaps more valuable information could give a better scope of NATO's approach to the issue. Thirdly, a content analysis, albeit done systematically, remains a subjective exercise and focuses on discursive framing, which limits the ability to assess the translation of discourse into actual policy and operational implementation.

Further research should address these limitations, especially the gap between discourse and policy. A comparative analysis that examines NATO's discourse with actual

[96] Causevic, "Facing an Unpredictable Threat," 59–80.
[97] "Emmanuel Macron Warns Europe: NATO Is Becoming Brain-Dead," *The Economist*, accessed 7 December 2024, https://www.economist.com/europe/2019/11/07/emmanuel-macron-warns-europe-nato-is-becoming-brain-dead.
[98] Barnhoorn, "Comparing Responses," 20-23.

operational practices would address the gap between rhetoric and action. Studies that would investigate the implementation of climate infrastructure, energy transition initiatives, and emissions tracking within NATO missions could provide valuable insights into how discourse translates into action. Similar studies should also incorporate more detailed accounts of NATO officials (e.g., through interviews).

6. CONCLUSION

This thesis shows how NATO's discourse on climate change has evolved significantly over the past decade and a half. At first, the organization considered climate change a peripheral issue. The dataset showed that NATO documents and officials mentioned climate change sporadically and treated it as an environmental challenge outside of NATO's security mandate. Progressively, NATO started integrating climate change into its broader security narrative. It displayed this integration by framing climate change as a "threat multiplier" and mentioning its impact on military operations, infrastructure, and global stability. The shift illustrates not just an adaptation to the external challenges of climate change but a process of redefining its identity within international climate governance.

The research demonstrated through a constructivist lens how NATO's role conception evolved over the examined period. NATO evolved from viewing itself as a hard security alliance solely focused on traditional threats to acknowledging climate change as a security challenge that requires a proactive stance. The shift in discourse underlines that NATO's approach to environmental security has been shaped over the years by understanding its impact on operations and capabilities. This accumulated into the institutionalization of this effort: the integration of climate change into the 2022 Strategic Concept and the NATO 2030 agenda. Both illustrate NATO's integration of its core defense roles with an active approach towards climate change.

The construction of climate change by NATO also affects its role in international climate governance. The evolved discourse shows the aspiration to become a leader in climate security while caveating that in broader climate governance, lead roles should be left to other institutions like the United Nations. Nonetheless, NATO emphasizes the importance of partnerships with the EU, the UN, and even China. It seeks to increase its strength in climate security to contribute to broader international climate governance in tackling climate issues. Its role in responding to natural disasters adds to the narrative of being an international and proactive player. Overall, the data highlights NATO's understanding of its own nuanced position: it sees itself not as a primary driver of global climate policy but as an actor (and at times forerunner) in the security realm of climate governance.

The duality and tension between NATO's traditional security mandate and its growing role in climate governance become apparent throughout the analysis of this thesis. The organization balances operational readiness with sustainability goals. This translates into

overseeing that forces are well prepared to operate under changing and extreme environments and that militaries contribute to emission reduction. This shows that the NATO discourse is an understanding of climate change and actively shapes the operations.

This thesis contributes to understanding how international organizations like NATO evolve their discourse and, to an extent, their practices in response to threats like climate change. The findings show how NATO's changing discourse on climate change has influenced its operational strategies, shaped its partnerships in the international field, and how NATO has positioned itself as a proactive player in climate security. The research shows its perspective on how the discursive framing of climate change directs NATO policy and, more importantly, on NATO's identity and role conception. The data underscores that NATO's framing of climate change as a security threat is not just rhetorical but part of a broader shift in its role conception. This shift aligns with constructivist principles and reinforces its relevance in modern geopolitics.

Bibliography

Documents

North Atlantic Treaty Organization. *Strasbourg/Kehl Summit Declaration.* Strasbourg/Kehl: NATO Public Diplomacy Division, April 4, 2009. https://www.nato.int/cps/en/natolive/news_52837.htm.

North Atlantic Treaty Organization. *Lisbon Summit Declaration.* Lisbon: NATO Public Diplomacy Division, November 20, 2010. https://www.nato.int/cps/en/natolive/official_texts_68828.htm.

North Atlantic Treaty Organization. *Chicago Summit Declaration.* Chicago: NATO Public Diplomacy Division, May 20, 2012. https://www.nato.int/cps/en/natolive/official_texts_87593.htm.

North Atlantic Treaty Organization. *Wales Summit Declaration.* Newport: NATO Public Diplomacy Division, September 5, 2014. https://www.nato.int/cps/en/natohq/official_texts_112964.htm.

North Atlantic Treaty Organization. *Warsaw Summit Communiqué.* Warsaw: NATO Public Diplomacy Division, July 9, 2016. https://www.nato.int/cps/en/natohq/official_texts_133169.htm.

North Atlantic Treaty Organization. *Brussels Summit Declaration.* Brussels: NATO Public Diplomacy Division, July 11, 2018. https://www.nato.int/cps/en/natohq/official_texts_156624.htm.

North Atlantic Treaty Organization. *London Declaration.* London: NATO Public Diplomacy Division, December 4, 2019. https://www.nato.int/cps/en/natohq/official_texts_171584.htm.

North Atlantic Treaty Organization. *Brussels Summit Communiqué.* Brussels: NATO Public Diplomacy Division, June 14, 2021. https://www.nato.int/cps/en/natohq/news_185000.htm.

North Atlantic Treaty Organization. *Madrid Summit Declaration.* Madrid: NATO Public Diplomacy Division, June 29, 2022. https://www.nato.int/cps/en/natohq/official_texts_197420.htm.

North Atlantic Treaty Organization. *Vilnius Summit Communiqué.* Vilnius: NATO Public Diplomacy Division, July 11, 2023. https://www.nato.int/cps/en/natohq/official_texts_217320.htm.

North Atlantic Treaty Organization. *Strategic Concept 2010.* Lisbon: NATO Public Diplomacy Division, November 19, 2010. https://www.nato.int/cps/en/natohq/official_texts_68580.htm.

North Atlantic Treaty Organization. *Strategic Concept 2022.* Madrid: NATO Public Diplomacy Division, June 29, 2022. https://www.nato.int/strategic-concept.

Speeches

Anders Fogh Rasmussen, "NATO's Role in the 21st Century and the New Strategic Concept," speech, Vilnius, October 9, 2009. Accessed 7 December 2024. https://www.nato.int/cps/en/natolive/opinions_57794.htm.

Admiral Giampaolo di Paola, "NATO's Strategic Concept, the New Security Environment, and the NATO-Russia Partnership," speech, Moscow, July 23, 2010. Accessed 7 December 2024. https://www.nato.int/cps/en/natolive/opinions_65119.htm.

Jens Stoltenberg, "Speech by NATO Secretary General Jens Stoltenberg at the NATO Parliamentary Assembly Plenary Session," delivered at the Queen Elizabeth II Center, London, October 14, 2019. Accessed 7 December 2024. https://www.nato.int/cps/en/natohq/opinions_169819.htm.

Jens Stoltenberg, "NATO 2030: Safeguarding Peace in an Unpredictable World," keynote speech at the Sciences Po Youth & Leaders Summit, January 18, 2021. Accessed 7 December 2024. https://www.nato.int/cps/en/natohq/opinions_180426.htm.

Jens Stoltenberg, "Remarks by NATO Secretary General Jens Stoltenberg at the Leaders Summit on Climate," April 22, 2021. Accessed 7 December 2024. https://www.nato.int/cps/en/natohq/opinions_183287.htm.

Jens Stoltenberg, "NATO: Keeping Europe Safe in an Uncertain World," speech at the College of Europe in Bruges, March 4, 2021. Accessed 7 December 2024. https://www.nato.int/cps/en/natohq/opinions_181723.htm.

Jens Stoltenberg, "NATO and the Security Implications of Climate Change," virtual speech, September 28, 2020. Accessed 7 December 2024. https://www.nato.int/cps/en/natohq/opinions_178336.htm.

Jens Stoltenberg, "NATO Must Combat Climate Change," op-ed article, September 27, 2020. Accessed 7 December 2024. https://www.nato.int/cps/en/natohq/opinions_178298.htm.

Jens Stoltenberg, "Opening Remarks on NATO 2030 and the Importance of Strengthening the Transatlantic Bond in the Next Decade and Beyond," February 4, 2021. Accessed 7 December 2024. https://www.nato.int/cps/en/natohq/opinions_181315.htm.

Jens Stoltenberg, "High-Level Discussion on Climate Security," United Nations Climate Change Conference (COP27), November 8, 2022. Accessed 7 December 2024. https://www.nato.int/cps/en/natohq/opinions_208790.htm.

Jens Stoltenberg, "Speech at the Raisina Dialogue 2021 Conference," April 13, 2021. Accessed 7 December 2024. https://www.nato.int/cps/en/natohq/opinions_182345.htm.

Jens Stoltenberg, "NATO 2030: A Transatlantic Agenda for the Future," speech previewing the NATO Summit in Brussels, event organized by NATO, The German Council on Foreign Relations (DGAP), and The Brookings Institution, June 4, 2021. Accessed 7 December 2024. https://www.nato.int/cps/en/natohq/opinions_184324.htm.

Jens Stoltenberg, "Opening Speech at the High-Level Dialogue on Climate and Security," NATO Public Forum, June 28, 2022. Accessed 7 December 2024. https://www.nato.int/cps/en/natohq/opinions_207932.htm.

Mircea Geoană, "Opening Remarks by NATO Deputy Secretary General Mircea Geoană at the NATO Committee on Gender Perspectives Annual Conference (NCGP)," December 7, 2021. Accessed 7 December 2024. https://www.nato.int/cps/en/natohq/opinions_189535.htm.

Mircea Geoană, "Remarks at the Virtual Session of the European Parliament's Committee on Foreign Affairs (AFET) and the Subcommittee on Security and Defence Committee on Foreign Affairs (SEDE)," June 28, 2021. Accessed 7 December 2024. https://www.nato.int/cps/en/natohq/opinions_184677.htm.

Mircea Geoană, "Keynote Speech at the Atlantic Forum's Conference 'Transatlanticism 2020,'" October 2, 2020. Accessed 7 December 2024. https://www.nato.int/cps/en/natohq/opinions_178693.htm.

Mircea Geoană, "Remarks at the 7th Edition of the Bucharest Model NATO Event," October 16, 2020. Accessed 7 December 2024. https://www.nato.int/cps/en/natohq/opinions_179108.htm.

Jaap de Hoop Scheffer, "NATO: Securing Our Future," speech, July 7, 2009. Accessed 7 December 2024. https://www.nato.int/cps/en/natolive/opinions_56336.htm.

Bibliography

"03 Priorities for NATO | Chatham House – International Affairs Think Tank," July 4, 2023. https://www.chathamhouse.org/2023/07/preparing-nato-climate-related-security-challenges/03-priorities-nato-1.

"NATO Must Prioritize Climate Change as a Security Issue | Chatham House – International Affairs Think Tank," June 27, 2022. https://www.chathamhouse.org/2022/06/nato-must-prioritize-climate-change-security-issue.

Arias, Sabrina B. "Who Securitizes? Climate Change Discourse in the United Nations." *International Studies Quarterly* 66, no. 2 (June 1, 2022). https://doi.org/10.1093/isq/sqac020.

Barnhoorn, Anniek. "Comparing Responses To Climate-Related Security Risks Among the EU, NATO and the OSCE." Stockholm, Sweden: Stockholm International Peace Research Institute (SIPRI), April 2023.

Berelson, Bernard. *Content Analysis in Communication Research*. Foundations of Communications Research. New York: Free Press, 1952.

Berger, Thomas U. *Cultures of Antimilitarism*. Baltimore, Maryland: Johns Hopkins University Press, 1994. https://doi.org/10.56021/9780801858208.

Bremberg, Niklas, Hannes Sonnsjö, and Malin Mobjörk. "The EU and Climate-Related Security Risks: A Community of Practice in the Making?" *Journal of European Integration* 41, no. 5 (July 4, 2019): 623–39. https://doi.org/10.1080/07036337.2018.1546301.

Bremberg, Niklas, Malin Mobjörk, and Florian Krampe. "Global Responses to Climate Security: Discourses, Institutions and Actions." *Journal of Peacebuilding & Development* 17, no. 3 (December 1, 2022): 341–56. https://doi.org/10.1177/15423166221128180.

Brookings. "NATO's Strategic Concept: To Defend Everywhere Is to Defend Nowhere." Accessed 7 December 2024. https://www.brookings.edu/articles/natos-strategic-concept-to-defend-everywhere-is-to-defend-nowhere/.

Bunde, Tobias. "Social Constructivism." In *Research Handbook on NATO*, 69–83. Edward Elgar Publishing, 2023. https://www.elgaronline.com/edcollchap/book/9781839103391/book-part-9781839103391-14.xml.

Busby, Joshua W. "Beyond Internal Conflict: The Emergent Practice of Climate Security." *Journal of Peace Research* 58, no. 1 (January 1, 2021): 186–94. https://doi.org/10.1177/0022343320971019.

Causevic, Amar. "Facing an Unpredictable Threat: Is NATO Ideally Placed to Manage Climate Change as a Non-Traditional Threat Multiplier?" *Connections* 16, no. 2 (2017): 59–80.

Causevic, Amar. "Facing an Unpredictable Threat: Is NATO Ideally Placed to Manage Climate Change as a Non-Traditional Threat Multiplier?" *Connections* 16, no. 2 (2017): 59–80.

Çelenk, Bengü. "Climate Change and Security Debates in the United Nations Security Council between 2007-2021." *Critical Studies on Security* 0, no. 0 (2023): 1–20. https://doi.org/10.1080/21624887.2023.2290346.

Dellmuth, Lisa M., Maria-Therese Gustafsson, Niklas Bremberg, and Malin Mobjörk. "Intergovernmental Organizations and Climate Security: Advancing the Research Agenda." *WIREs Climate Change* 9, no. 1 (2018): 1–13. https://doi.org/10.1002/wcc.496.

Dellmuth, Lisa Maria, and Maria-Therese Gustafsson. "Global Adaptation Governance: How Intergovernmental Organizations Mainstream Climate Change Adaptation." *Climate Policy* 21, no. 7 (August 9, 2021): 868–83. https://doi.org/10.1080/14693062.2021.1927661.

Egeland, Kjølv. "Climate Security Reversed: The Implications of Alternative Security Policies for Global Warming." *Environmental Politics* 0, no. 0 (November 17, 2022): 1–20. https://doi.org/10.1080/09644016.2022.2146934.

Elo, Satu, and Helvi Kyngäs. "The Qualitative Content Analysis Process." *Journal of Advanced Nursing* 62, no. 1 (April 2008): 107–15. https://doi.org/10.1111/j.1365-2648.2007.04569.x.

Estève, Adrien. "Preventing and Managing Climate Risks: France's Approach to Climate Security." In *Climate Security in the Anthropocene: Exploring the Approaches of United Nations Security Council Member-States*, edited by Judith Nora Hardt, Cameron Harrington, Franziskus von Lucke, Adrien Estève, and Nicholas P. Simpson, 113–30. The Anthropocene: Politik—Economics—Society—Science. Cham: Springer International Publishing, 2023. https://doi.org/10.1007/978-3-031-26014-8_6.

Flockhart, Trine. “Constructivism and Foreign Policy.” In *Foreign Policy*, 79–94. Oxford University Press, n.d. https://www.oxfordpoliticstrove.com/display/10.1093/hepl/9780198708902.001.0001/hepl-9780198708902-chapter-4.

Garcia Rico, Lucia. “NATO and Climate Change: A Climatized Perspective on Security.” Cambridge, MA: Belfer Center for Science and International Affairs, August 18, 2022.

Lasconjarias, Guillaume, and Jeffrey Arthur Larsen, eds. *NATO’s Response to Hybrid Threats*. NATO Defense College, Research Division, 2016.

Lippert, Tyler H. *NATO, Climate Change, and International Security: A Risk Governance Approach*. Cham: Springer International Publishing, 2019. https://doi.org/10.1007/978-3-030-14560-6.

Lucke, Franziskus von. “Climate Security Discourses in Germany: The Transformation of Climate Change Towards a Development and Foreign Policy Priority.” In *Climate Security in the Anthropocene: Exploring the Approaches of United Nations Security Council Member-States*, edited by Judith Nora Hardt, Cameron Harrington, Franziskus von Lucke, Adrien Estève, and Nicholas P. Simpson, 131–61. The Anthropocene: Politik—Economics—Society—Science. Cham: Springer International Publishing, 2023. https://doi.org/10.1007/978-3-031-26014-8_7.

Maertens, Lucile, Leah R. Kimber, and Fanny Badache. “Computerized Text Analysis.” In *International Organizations and Research Methods: An Introduction*. University of Michigan Press, 2023. https://muse.jhu.edu/pub/166/oa_edited_volume/chapter/3772798.

McDonald, Matt. “Discourses of Climate Security.” *Political Geography* 33 (March 1, 2013): 42–51. https://doi.org/10.1016/j.polgeo.2013.01.002.

NATO. “Strategic Concept for the Defence and Security of the Members of the North Atlantic Treaty Organization,” November 19, 2010.

O’Neill, Kate, ed. “Actors in International Environmental Politics.” In *The Environment and International Relations*, 48–70. Themes in International Relations. Cambridge: Cambridge University Press, 2009. https://doi.org/10.1017/CBO9780511805974.004.

Odeyemi, Christo Idowu. “Climate Risk and Climate Security: A Comparison of Norm Emergence under the FCCC, the EU and the UNSC, 2001–2019,” 2021. https://opus.lib.uts.edu.au/handle/10453/149345.

Palmquist, Michael E., Thomas A. Dale, and Kathleen M. Carley. “Applications of Computer-Aided Text Analysis: Analyzing Literary and Nonliterary Texts.” In *Text Analysis for the Social Sciences*. Routledge, 1997.

Podesta, John, and Peter Ogden. “The Security Implications of Climate Change.” *Washington Quarterly*, January 1, 2008. https://doi.org/10.1162/wash.2007.31.1.115.

Podesta, John, and Peter Ogden. “The Security Implications of Climate Change.” *Washington Quarterly*, January 1, 2008. https://doi.org/10.1162/wash.2007.31.1.115.

Shea, Jamie. “NATO and Climate Change: Better Late Than Never.” The German Marshall Fund of the United States, 2022.

Sietsma, Anne J., Emily Theokritoff, Robbert Biesbroek, Iván Villaverde Canosa, Adelle Thomas, Max Callaghan, Jan Minx, and James D. Ford. “Climate Change Adaptation Policy Across Scales: A Machine Learning Evidence Map,” January 9, 2023. https://doi.org/10.2139/ssrn.4318820.

Sovacool, Benjamin K., Chux Daniels, and Abbas AbdulRafiu. “Science for Whom? Examining the Data Quality, Themes, and Trends in 30 Years of Public Funding for Global

Climate Change and Energy Research." *Energy Research & Social Science* 89 (July 1, 2022): 1–20. https://doi.org/10.1016/j.erss.2022.102645.
Sovacool, Benjamin K., Chux Daniels, and Abbas AbdulRafiu. "Science for Whom? Examining the Data Quality, Themes, and Trends in 30 Years of Public Funding for Global Climate Change and Energy Research." *Energy Research & Social Science* 89 (July 1, 2022): 1–20. https://doi.org/10.1016/j.erss.2022.102645.
Theys, Sarina. "Constructivism." In *International Relations Theory*, edited by Stephen McGlinchey, Rosie Walters, and Christian Scheinpflug, 36–41. Bristol, UK: E-International Relations Publishing, 2017. https://eprints.ncl.ac.uk.
Tosbotn, Roger A., and Eugenio Cusumano. "NATO in a Changing World." In *The Changing Global Order: Challenges and Prospects*, edited by Madeleine O. Hosli and Joren Selleslaghs, 321–36. United Nations University Series on Regionalism. Cham: Springer International Publishing, 2020. https://doi.org/10.1007/978-3-030-21603-0_16.
Trombetta, Maria Julia. "Environmental Security and Climate Change: Analysing the Discourse." *Cambridge Review of International Affairs* 21, no. 4 (December 1, 2008): 585–602. https://doi.org/10.1080/09557570802452920.
Turchetti, Simone. *Greening the Alliance: The Diplomacy of NATO's Science and Environmental Initiatives*. University of Chicago Press, 2018.
Uexkull, Nina von, and Halvard Buhaug. "Security Implications of Climate Change: A Decade of Scientific Progress." *Journal of Peace Research* 58, no. 1 (January 1, 2021): 3–17. https://doi.org/10.1177/0022343320984210.
Uexkull, Nina von, and Halvard Buhaug. "Security Implications of Climate Change: A Decade of Scientific Progress." *Journal of Peace Research* 58, no. 1 (January 1, 2021): 3–17. https://doi.org/10.1177/0022343320984210.
Waever, Ole. "Securitization and Desecuritization." In *On Security*, edited by Ronnie D. Lipschutz, 46–86. New York: Columbia University Press, 1995.
Walt, Stephen M. "The Renaissance of Security Studies." *International Studies Quarterly* 35, no. 2 (1991): 211–39. https://doi.org/10.2307/2600471.
Warner, Jeroen, and Ingrid Boas. "Securitization of Climate Change: How Invoking Global Dangers for Instrumental Ends Can Backfire." *Environment and Planning C: Politics and Space* 37, no. 8 (December 1, 2019): 1471–88. https://doi.org/10.1177/2399654419834018.
Wendt, Alexander. "Constructing International Politics." *International Security* 20, no. 1 (1995): 71–81. https://doi.org/10.2307/2539217.
Work, Courtney. "Climate Change and Conflict: Global Insecurity and the Road Less Traveled." *Geoforum* 102 (June 1, 2019): 222–25. https://doi.org/10.1016/j.geoforum.2018.11.004.
Xia, Yan, Antti Gronow, Arttu Malkamäki, Tuomas Ylä-Anttila, Barbara Keller, and Mikko Kivelä. "The Russian Invasion of Ukraine Selectively Depolarized the Finnish NATO Discussion on Twitter." *EPJ Data Science* 13, no. 1 (December 1, 2024): 1. https://doi.org/10.1140/epjds/s13688-023-00441-2.
Zhang, Yan, and Barbara M. Wildemuth. "Qualitative Analysis of Content." *Human Brain Mapping* 30, no. 7 (2005): 2197–2206. https://doi.org/10.1002/hbm.20661.

Appendix A

Tables

Table 1: Climate as Security Issue

Sub-category	Generic category	Theme
Long-term implications of climate	Environmental Impacts on Security	Climate as Security Issue
Sea-level rise affecting military bases		
Impact on energy security		
Terms like “climate risk,” “climate resilience,” and “threat multiplier”	Climate Conflict and Displacement	
Environmental refugees and instability		
Role of climate in regional conflicts		
Extreme weather impacting critical infrastructure	Resource Scarcity	
Increased competition over water		
Resource scarcity and migration		

Table 2: Operations

Sub-category	Generic category	Theme
Operational readiness in context of climate events	Operational Adaption and Logistics	Operations
Infrastructure resilience		
Renewable energy and reducing fossil fuels		
Logistic implications due to extreme weather		
Impact on supply chain resilience		
Adaptation of operational strategies to climate risks		
Setting a “gold standard” for reducing military emissions		
Changes in training requirements	Training and Deployment	
Challenges in deployment and operational areas		
Changes on military exercises and equipment due to extreme conditions		

Table 3: International Cooperation

Sub-category	Generic category	Theme
Joint initiatives to address climate security	Collaboration on Climate Security Initiatives	International Cooperation
Climate security dialogue with partner nations		
Coordinating international efforts for climate agenda		
Bilateral agreements on climate action	Partnerships and Agreements	
Collaboration with UN climate initiatives (e.g., UN Climate Change Convention).		
Collaboration with non-NATO actors		
Engagement with the EU on climate adaptation and sustainability		
Engaging IOs		
Capability improvements	Capacity Building	
Funding climate resilience projects		
Sharing of best practices for climate resilience		
Support for vulnerable nations		

Table 4: NATO's Role in Natural Disasters

Sub-category	Generic category	Theme
Support in natural disaster scenarios with military logistics	Humanitarian Assistance and Disaster Relief	NATO's Role to Natural Disasters
Humanitarian assistance during crises and following climate events		
Military support in broader international disaster efforts		
Providing expertise in disaster management		
Post-disaster reconstruction support	Natural Disaster Capabilities	
Coordination with civilian authorities		
Training member states for disaster preparedness		
Role in resilience building for member states		
Addressing and monitoring natural disasters		