Charles University

Faculty of Social Sciences

Institute of Political Studies

Department of Security Studies

MASTER'S THESIS

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Climate Security: An Analysis of Czech Media Discourse

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Declaration 1. I hereby declare that I have compiled this thesis using the listed literature and resources only. 2. I hereby declare that my thesis has not been used to gain any other academic title. 3. I fully agree to my work being used for study and scientific purposes. In Prague, 1 January 2023 Sára Kamberská

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References

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Abstract ENG

Climate change is increasingly being connected to security, both in rhetoric and in practice. This linkage, however, is not without controversy, especially as the science of what is known about the effects of climate change on security is far from settled – if it can ever be. Even when the language of security is used, climate change can pose a threat to many different objects in many different ways – there is no one meaning to 'climate security'. Given all this complexity, analysing how the climate-security relationship is formulated is crucial. This analysis has examined this issue in the Czech news media discourse, relying on the four climate security discourses as identified in the literature. Despite its methodological limitations, the study has found that in the Czech media context, the human security discourse is most prominent, followed by the discourse of ecological security. The national and international security discourses were much less prevalent. The prevalence of the discourses, as well as their specific content, differs in several significant areas to what has been identified in other contexts, suggesting the importance of studying these topics in a variety of settings.

Abstrakt CZ

Klimatická změna je stále více spojována s bezpečností, a to jak v rétorice, tak v praxi. Toto spojení ale není bez kontroverze, zejména proto, že snaha najít vědeckou shodu ohledně vlivů změn klimatu na bezpečnost není zdaleka u konce – pokud tedy taková shoda vůbec může existovat. Klimatická změna může představovat hrozbu pro velké množství subjektů mnoha různými způsoby – termín "klimatická bezpečnost" může mít mnoho významů. Vzhledem ke vší této složitosti je zásadní analyzovat, jak je vztah mezi změnami klimatu a bezpečností formulován. Tato analýza zkoumala tento problém v českých zpravodajských médiích, přičemž se opírala o čtyři diskurzy o klimatické bezpečnosti, jak byly identifikovány v literatuře. Přes svá metodologická omezení studie zjistila, že v kontextu českých médií je nejvýraznější diskurz lidské bezpečnosti, následovaný diskurzem ekologické bezpečnosti. Diskurzy o národní a mezinárodní bezpečnosti byly výrazně méně časté. Rozšířenost a konkrétní obsah jednotlivých diskurzů se v této analýze liší od toho, jak byly identifikovány v jiných kontextech, což poukazuje na důležitost zkoumání těchto témat v různých prostředích.

Keywords

Climate security, climate change, framing, media, discourse

Klíčová slova

Klimatická bezpečnost, změna klimatu, rámování, média, diskurz

Title

Climate Security: An Analysis of Czech Media Discourse

Název Práce

Klimatická bezpečnost: analýza českých mediálních diskurzů

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"If we can't say more than bad things go together, then what can we say about what to do [?]"

Joshua Busby (2020)

Introduction

As Shirley Scott writes, it has become 'somewhat trite' to argue that climate change is a challenge of unprecedented scale and complexity, the biggest challenge that humanity has ever faced (Scott 2017, 191). Indeed, it seems like no article or study on the subject starts with anything else. Nevertheless, it is impossible to discuss climate change without constantly referring back to this, as everything from scientific knowledge to public perceptions and policy responses is affected by the sheer magnitude of the issue - and by what we don't yet know about the magnitude. While the basic facts of climate change - that is, climate change is real, is happening, and is anthropogenic - seem to be broadly established, the question of what to do about it has no simple answers.

There's no shortage of descriptors that highlight just how difficult this issue is. Climate change has been labelled a 'super-wicked problem' as well as 'the ultimate tragedy of the commons,' referring to a situation whereby a common resource (now in dire straits) continues degrading as it is shared by self-interested actors with divergent goals and little motivation to sacrifice as others might benefit (Comsikey and Larrañaga 2019, 15; O'Gorman 2010). This 'tragedy' is further aggravated by the indisputable fact that the responsibility for climate change lies mostly with historical emitters, while the burden will be shouldered primarily by those whose economies have emitted little (Von Lucke et al., 2021) This makes climate change a 'perfect moral storm' (Gardiner 2006, 397). From a more critical standpoint, it is argued that to appropriately address climate change, it is necessary to transcend, at least cognitively, the divide between humans and the natural world, which has been at the core of what is considered 'modern' thinking (McDonald 2021, 8).

The key challenge of climate change lies in the issue that most of what we know is not based on facts that can be perceived by the everyday person, but on complex natural science modelling, incomprehensible to all but a small minority. There's a significant gap between what

is established by scientists, and what is being reflected in policy, as global emissions keep climbing - this phenomenon has been labelled 'the tragedy of climate science' (Glavovic et al., 2021). The role of scientific uncertainty is a particular source of headache for scientists, communicators and policymakers alike. At the core of the issue is the fact that most impacts of climate change have simply not yet materialized, as will be discussed further in later parts of this text. Even when - or perhaps because of being - faced with scientific evidence, the enormity of the climate crisis and the scale of the response required is essentially inconceivable for most individuals, and so what is considered by scientists as an appropriate response is simply not taking place. At the core of the climate crisis is thus a 'crisis of the imagination' (Mann and Wainwright 2018). In light of all this, Mary Pettenger fittingly observes that 'policymakers may long for an issue such as the role of chlorofluorocarbons and the destruction of the ozone hole' (2017, 19).

All of this dizzying complexity is further complicated, however, when the specter of 'security' is raised. Even just discussing climate change through the prism of security (at the expense of other formulations) can transform the issue and present a myriad of new normative and political challenges. However, the language of threat, of catastrophe and impending doom is omnipresent. The relationship between climate change and security is thus developing at great speed, both in the academia and in practice. However, as this thesis will explore, there's a significant disconnect between what is reliably known about this relationship, and how it is formulated and perceived (Rothe 2012). Furthermore, as the changing climate may affect all aspects of human life in a variety of ways, so can the ways that the climate-security link is formulated be diverse. In this diversity lie many potential opportunities, as well as challenges. Exploring how the climate-security nexus is shaped, to whose security or to what threats attention is being devoted to, is of utmost importance to understanding this fast-developing subject, not only from the perspective of the academia, but due to its practical importance as well, since climate security considerations are being increasingly included in policy responses (McDonald, 2021).

This thesis will attempt to contribute to this nascent field. It will be interested in how the relationship between climate change and security is formulated in the Czech news media. By analysing the media discourse during three separate years over the span of a decade, it will attempt to examine how the four discourses of climate security as identified by Matt McDonald – national

security, human security, international security, and ecological security – are represented. The results show that in the Czech news media, the human security and ecological security discourses are increasingly prominent, while the discourses of national and international security remain relatively underrepresented. The human security discourse saw an particular increase between 2016 and 2021, and the ecological security discourse rose steadily in importance. Furthermore, the content of the discourses has at times differed significantly from how they were proposed by McDonald – for example, in the pathways of the threats to national security, or the particularities of human security threats.

The thesis will be structured in the following manner – The first part will explore the theoretical background of the analysis, examining the key challenges of the subject at hand and the motivations for this research. This section will begin by briefly introducing the facts of climate change, and then explore the challenges of climate change communication, especially focusing on the role that the media play in this process. Then, a short background on the perception of climate change in the Czech context and the Czech media will be presented. The following chapters will discuss the literature on the climate-security nexus, particularly focusing on the topics the field has been most interested in, that is, the role of climate change in conflict and migration, and through these examples demonstrate methodological and practical issues that scientists face when trying to decipher these links. The potential consequences of linking these two matters in light of the lack of scientific consensus will be highlighted by a discussion on the critical literature on the subject. The text will then introduce the theoretical framework of the thesis, where the research question(s) will be formulated. The second part of the thesis will be devoted to the analysis – first exploring the chosen methodology and its (not insignificant) limitations, and then presenting its findings. The thesis will be concluded with a discussion of the results, as well as a brief summary in the conclusion itself.

Theoretical Background

Climate change

Variations in the Earth's climate are normal. However, in about the mid-18th century, humans have started burning fossil fuels, which has set these natural fluctuations on a very unnatural path. In fact, the climatic stability of the past 10 000 years is argued to be exactly what has allowed humanity to reach today's levels of development (National Aeronautics and Space Administration [NASA]) - a stability that is now being dramatically disrupted. The burning of fossil fuels emits greenhouse gases, such as carbon dioxide or methane - this has changed the atmospheric composition to an extent where the heat from the sun, which would normally be reflected away from the Earth's surface, gets trapped, raising global temperatures. Greenhouse gas concentrations have risen from an estimated 280 particles per million (ppm) in the pre-industrial era to 414 ppm in 2021, to levels that the Earth has last seen 3-5 million years ago (NASA, Environmental Protection Agency [EPA]). Currently, the Earth has warmed about 1,1 degrees Celsius from pre-Industrial levels. With the current policies, it is estimated that by the end of the 21st century, this is expected to rise to 2,8 degrees Celsius. Every little increase in global warming is argued to matter greatly for the future of humans on the planet (United Nations [UN]). As the climate warms, conditions around the world are changing in previously unexpected and incredibly varied ways. Even if current pledges to limit emissions are kept, it is indisputable that climate change will be increasingly more apparent and will affect essentially all aspects of life on the planet - in many ways that are now largely unpredictable (EPA; UN).

There has thus been an unprecedented global effort to try to curb climate change, characterised most prominently by the United Nations Framework Convention on Climate Changes' annual Conferences of Parties, bringing together global governments, but also by an intense cooperation and knowledge-sharing across all levels of human activity and governance. The responses to climate change have largely been divided into the categories of mitigation and adaptation. Mitigation is focused on limiting greenhouse gas emissions and attempting to draw existing emissions out of the atmosphere, while adaptation is concerned with how to live with the change that is already underway (NASA). Despite these efforts, the clock on climate action is indeed ticking. Leading scientists warn that there is now a 'brief and rapidly closing window of

opportunity' to address climate change and ensure that the Earth of the future is compatible with contemporary human requirements (Tollefson 2022).

Communicating Climate Change

The way climate change is discussed, from broad narratives to specific linguistic devices, has been of great interest to academics - from the outset, climate change communication has been considered an important 'challenge' that professionals engaged with this subject are faced with (Fløttum and Gjerstad 2017, 1). Because of the complexity of the issue, the way it is shaped and understood through language is of utmost importance. A variety of narratives and analogies is relied upon to help people understand this phenomenon - through a process that understandably carries numerous implications and opportunities for critique (Rothe 2012). This will be one of the key themes of this text.

Many studies have been devoted to the way climate change has been 'framed', and how specific frames are related to different actors and interests (Fløttum and Gjerstad). Framing, as a theoretical approach, is essentially the way information is structured in a text to emphasise a certain angle or perspective (Entman 1993). According to Matthew Nisbet, all information is framed somehow - frames are 'interpretive storylines that set a specific train of thought in motion' (2009, 15). How to appropriately frame the issue has been at the core of the debates about how to respond to climate change, as the following pages will discuss.

A little note on terminology for this thesis - in the literature, the terms 'frames', 'discourses' and 'narratives' have often been used to express the same meaning (Fløttum and Gjerstad, 1). While there is, of course, finer nuance, this will be also the approach adopted in this research when referring to the way that information is structured in a particular way – so that the text is aligned with as wide a spectrum of the literature as possible. Since framing will be the main methodological approach of this research, much of the text will rely on this term. As such, although the theoretical framework has labelled its units as 'discourses', they will (in line with McDonald's commentary) often be referred to as frames. This decision has been taken to increase clarity as

well, because the term 'discourse' will also be utilised to express a more general meaning, such as policy discourse or public discourse.

Climate Change in the Media

A part of the motivation for this research is the surprising lack of analyses on the representation of climate security in the media, which will be discussed later. However, as the media (and news media in particular) are a very particular context for analyses of frames, this thesis will lean on a more general debate on climate change in the media, in order to provide important background insights and motivations.

Research on media coverage of climate change has been steadily expanding over the last two decades, since news media reporting remains the main channel through which people receive information about climate change (Schäfer and Painter 2021). Despite the advent of social media and the increased focus on visual content, early research suggests that for example the frames emphasised in videos on climate change remain essentially the same as those in traditional media, which makes the analysis of news media outlets relevant even in the rapidly changing communication environment (Painter 2019).

Media coverage of climate change can play an instrumental role in shaping how the topic is understood – on a general level, the media are crucial actors in creating and adjusting the 'meaning' of climate change (Schäfer and Painter). The perspectives and points of view adopted in the media can shape public understandings and inform people's awareness of what can be done in addressing climate change, as well as help the public understand their own agency in these processes. While media coverage is affected by policy and elite discourses, it can also wield significant influence in this process - the media have an agenda-setting capacity, through which their coverage can also influence how climate policy is created (Carmichael and Brulle 2017; Carvalho 2010; Bolsen and Shapiro 2017; Keller et al., 2020). Given the complexity of the facts of climate change, these roles are perhaps even more important for climate change than other, more comprehensible subjects (Carvalho 2010, Diricks and Gelders 2010).

However, reporting on climate change is no simple matter - not least because the scale of the issue escapes easy practical categorization into topics and 'beats' (Schafer and Painter, 2). Criticisms of both exaggerating the urgency of the issue, as well as under-reporting on it, have been waged (Takahashi et al. 2017). Media reporting, even while attempting to adhere to journalistic norms such as objectivity and neutrality, is also prone to biases and distortions, which is even more complicate in this context because of the role of science (Brüggemann 2017). Chief amongst these concerns is that the complexity and uncertainty inherent to science isn't very 'newsworthy' - unless there is an element of threat or risk. However, through the process of making a topic more 'newsworthy', the issue can be simplified, and uncertainty comes to be presented as certainty (Weingart et al., 2000, 263). Journalists can also rely on 'visceral judgements' as opposed to purely making objective calls about the reliability of sources and stories, when choosing what to report as such, when choosing expert, scientific voices, it is not always the most reputable that make it on the news (Takahashi et al., 107). Furthermore, climate change coverage increasingly relies on non-scientific sources. Stories thus draw from a very wide coalition of potential sources - from scientists and think-tanks to international organizations, NGOs, policymakers, interest group and business representatives and even climate sceptics (Schafer and Painter, 15). There is a debate (although mostly US-centred) about the issue of attempting to create a 'false balance' by providing opposing perspectives from sources that lack scientific credibility, and thus artificially creating an environment where the uncertainty around climate change is given much more weight than appropriate (Brüggemann, 9; Anderson 2019). As is clear, the process of media reporting on climate change is far from neutral.

Journalists can't avoid framing climate change in a certain light – importantly, then, some frames can be more useful than others in constructing meaning in a way that points toward effective responses. Illuminating climate change from a certain angle can create more urgency, while a different perspective may lead to lessening of perceived pressure (Broadbent et al., 2016). An often criticised tendency of media reporting - not just relating to climate change - is the issue of sensationalism, of emphasising the shocking and fear-inducing aspects of a story. This can also lead to a sense of apathy and a tuning out of the issue altogether (Wicke and Taddicken 2021). On the other hand, some suggest that for example, framing climate change in terms of people's 'everyday concerns' leads to greater engagement (O'Neil and Nicholson-Cole 2009, 355). As such,

the media have a key role in shaping public and policy understandings of climate change, Analysing how the issue is presented in the media is thus an important avenue for research.

Climate Change in the Czech Context

In the Czech Republic – as in most contexts - the topic of climate change has come a long way over the past two decades. However, the development wasn't always linear. In 2007, interest in climate change was quite high - it was perceived as a serious issue by 83,6 percent of Czechs. The following years saw a rise of 'climate scepticism' – by 2011, only 63,5 percent of Czechs responded in this manner, and by 2015, the figure dropped even further to 52 percent (Vidomus 2013; Masarykova Univerzita 2015). This wasn't just a Czech phenomenon – factors such as the economic situation following the 2007-2009 financial crisis, or the rise of ideological polarization on the issue linked with intentional campaigns of climate denialism, have been argued to play a role in other national contexts (Vidomus). In the Czech Republic specifically, a crucial role was likely played by the former Czech president Václav Klaus (120). Klaus stated, for example, that he is 'more afraid [of environmentalism] than Al-Qaeda' (Stinglová 2011). However, this trend has changed towards the end of the second decade - by 2021, 84 percent of respondents agreed that climate change is happening, and the absolute majority agreed that it is, at least partly, anthropogenic (Centrum pro výzkum veřejného mínění 2021).

In terms of the media developments, Vávra et al. analysed the representation of climate change in Czech news media from 1997 to 2010. They have found that the broad trends in terms of the quantity of articles is similar to other countries, that is, coverage has risen steadily until about 2007. Besides international events related to climate change, topics related to the Czech context - including the prominent role of former president Klaus - have been strongly represented (2015). They have also found that the worldwide trend relating to sourcing is present in the Czech Republic as well - at first, the sources were mostly scientists, then politicians and sceptical voices have entered the arena, as climate change became a subject of broader discussions. According to their findings, 'sensationalist' and 'catastrophic' articles were most prominent, followed by 'tabloid' articles and 'serious' reporting (23). However, this wasn't the case at the beginning of the study, where serious articles were much more frequent - they thus point out that while climate

change is covered more, 'the quality of information is mostly declining' (24). According to Ondráš Přibyla, the founder of the online project Fakta o klimatu ('Climate facts') however, the way climate change is presented in the media is rapidly changing - reporting now is at a place that would have been 'unthinkable' even half a decade ago', in terms of the scope and intensity of the coverage (Vojtěchovská, 2022). This suggests that the media coverage of climate change is a very dynamic process in the Czech republic as well, and as such, studying its development over a longer period of time might lead to interesting insights.

Climate Security

Ever since climate change became a topic of conversation, even just in scientific circles, so did its potential negative consequences for the planet as well as for humanity (Pettenger). However, it wasn't until the late 20th century that the topic began being linked to questions of security more explicitly. The early writers focused on the global threat to the planet and humanity, largely in order to bring attention to the issue and raise its profile in the hierarchy of importance in politics (McDonald 2013). The debate then fully opened up in the mid-2000s - the year 2007 is considered a turning point, as several key events helped firmly establish climate security as a global topic. That year saw the United Nations Security Council (UNSC) hold its first ever debate on the topic, and the 4th report of the Intergovernmental Panel on Climate Change (IPCC), which highlighted the potential risks climate change might cause, was released. The United Nations Secretary General (UNSG) Ban Ki-moon also (in)famously connected the conflict in Darfur to climate change (Brzoska 2009; Dalby 2013, von Uexkull and Buhaug 2021). It was also around this period that the topic really gained traction in academic circles, where the debate has been expanding ever since not only in terms of volume, but in scope and the types of analytical approaches. Over the past 15 years, it has established itself not only as an academic field, but it has also been increasingly connected to practice (Busby 2020, von Uexkull and Buhaug, 2021). The literature is thus quite diverse, including insights from a variety of fields, and, importantly, linking natural and social sciences. From resource scarcity to the stability of energy grids, from the resilience of coastal communities to adaptation in military planning, the scope of what can be studied under the umbrella of climate security is very wide.

Here, a little terminological caveat is in order. This thesis will not define the term 'climate security' in any universal terms. Climate security is understood instead in relative terms — the meaning depends on whose security is prioritized, and from what perspective, in any given context. This can range from individual living beings or infrastructure to nation states or the entire planetary complex (Boas and Rothe 2016). This is also a reflection of the complexity of the term 'security' itself — security is an amorphous concept with no agreed upon definition, often labelled an 'essentially contested concept', although even this has been the subject of critique (Baldwin 1997). In this thesis, then, climate security will be used as an overarching term depending on the context in which it is used. The idea that climate security is inherently context-dependent is a crucial motivation for this thesis — if it isn't immediately clear and automatic whose security is being discussed, or what that 'security' even means, then understanding the process of how that is determined is crucial to understanding how the threat of climate change will be responded to, and who and how will be 'secured' (McDonald 2021; Charbonneau 2022).

To complicate matters further, as Matt McDonald writes, 'climate change ultimately sits uneasily with existing accounts and practices of security in international relations' (2021, 2). Although the field of security studies has long expanded beyond traditional security threats, dealing with climate change brings a novel set of issues – a non-intentional, mostly indirect, multifaceted potential threat of dizzying scale and no respect for national boundaries, it poses a uniquely complex challenge to security scholars and practitioners alike (2021). In fact, there's an active debate about the merits of understanding climate change in terms of security altogether. This is where the discussion of securitization comes in. Securitization, in very basic terms, is the process through which an issue becomes considered in terms of security, which arguably elevates the matter in order of importance - with all the implications that may bring. The main argument against the securitization of climate change is that the traditional security logic of an external threat that must be defeated or be defended against may lead to a militarization of the response. This is also connected to a fear that the measures taken may threaten democratic processes and human rights, and more appropriate responses will be side-lined, as securitization becomes 'the hegemonic discourse of our time' (Dayoudi 2014, 372). Furthermore, it might be altogether unhelpful in attempting to shore up support for actively dealing with the issue - as climate change

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¹ A more detailed discussion on securitization will follow on page 24.

becomes an overarching threat, however, one with no clear villain and no straightforward means of battling it, it may lead to a deep feeling apathy and insecurity instead of resolve (Albert; Lamain 2022; Pettenger 2017, Warner and Boas). However, securitization may not necessarily lead to such outcomes – that depends on what conception of security is used in the process, further highlight the ambiguity of this concept as well (Brzoska 2009). This brief discussion demonstrates that linking climate change with security is not without its controversy – which sets the trend for the rest of the climate security literature, as will be explored over the following pages.

Outside of these critical interventions, it is undeniable that the climate-security nexus is being increasingly established in the world of policy. Governments around the world, led by the Unites States and the United Kingdom, but also other Western European and Scandinavian countries, have sought to include climate security concerns in their strategic planning (Boas and Rothe; Busby 2021). It has been estimated that around 70% of countries with accessible national strategy documents have included concerns over climate security (Scott 2015). Major international organizations, including the European Union or the North Atlantic Treaty Organization, have been exploring how to incorporate climate security into their planning (Dellmuth et al., 2017). The United Nations and its various bodies in particular have also significantly expanded their agendas to include climate security concerns. Although interestingly, the UNSC remains resistant to full recognition of the problem, particularly because of the critical approach of Russia and China (Busby 2021). From UNSG António Guterres and the President of the Unites States Joe Biden calling climate change an 'existential threat,' to world-famous naturalist David Attenborough referring to climate change as the biggest threat to security that modern humans have ever faced,' security language is becoming much more common (The White House 2021; UN 2018; UN 2021)

As this trend demonstrates, then, the linking of climate change and security is a reality that must be dealt with - rather than 'escaping a security framing', McDonald claims, it is crucial to examine *how* the relationship between climate change and security is formulated (2021, 6).

Climate Security - Challenges and Insights

The idea that climate change must – at least eventually – lead to negative security consequences seems intuitively correct. After all, the impacts of natural disasters or resource availability are important human security concerns (Vivekananda 2022). However, in terms of the actual scientific knowledge on the issue, the goal of being able to ascertain concrete causal or even correlational mechanisms remains elusive. The following text will explore the challenges of establishing the relationship between climate and security. Firstly, it will examine the two subjects that have received arguably the most academic attention – climate-induced conflict and migration. It can thus be perceived as biased towards the more problematic areas of the literature – however, the goal is not to provide a comprehensive overview, but to use these two examples to demonstrate its potential pitfalls. For example, it is arguably not as controversial to claim that there might be a causal link between rising temperatures and struggling polar ecosystems. Similarly, the literature on climate change and human security is not as divided (Gemenne et al., 2014). However, as Jon Barnett and Neal Adger – authors of an oft-cited study on the issue – argue, trying to establish how climate change affects human security is a 'daunting task', since determining whether environmental changes are directly caused by climate change remains extremely difficult (2007, 642). Even attributing the severity or likelihood of current-day natural disasters to climate change is incredibly difficult, and some would argue, premature (Busby 2018, 339).

The possible effects of climate change on violent conflict have been a focal point of the early literature and continue to be in the spotlight even as the field advances. The aforementioned conflict in Darfur, the Syrian civil war or the regional insecurities in the Sahel region and the Lake Chad Basin have become important examples in the climate-conflict canon (Adams et al. 2018; Benjamisen 2016; Selby et al., 2022). However, despite the great number of studies, the climate-conflict (or more broadly climate-violence) literature remains divided. Most of the writing is in the form of large-N quantitative studies – according to Jan Selby, it is 'as if no other forms of research method were scientifically legitimate' (Selby 2014, 845). It is exactly this aspect that Selby takes issue with, arguing that these studies are problematic on several methodological fronts. Amongst the problems he identifies is the unreliability of the data (e. g. changes in rainfall patterns depend on the chosen baselines, which are often inconsistent), issues with temporality (causal arguments are often made within time spans that are too short to have a real effect on the dependent

variable), or, for example the 'methodological nationalism' of studying transboundary phenomena such as droughts within a given state only (836-837). Many have waged similar criticisms. Adams et al., for example, highlight the issue of 'sampling on the dependent variable' – that is, studying the impacts of climate hange in places where there already is conflict, and not why those same changes in environmental patterns have not (allegedly) aggravated the security situation in neighbouring areas (2018).

Moving to qualitative research, Hendrix identifies the issue of 'the streetlight effect' in climate conflict research – arguing that a significant portion of the studies are conducted in English-speaking colonies, or countries with 'stronger civil liberties' in Africa, mainly for reasons of practicality. As such, there is an expansive literature on the African continent, but very little research looks elsewhere (2017). The efforts of trying to establish these relationships are also complicated by the contested nature of the basic facts of environmental change – whether, for example, there is less or more rainfall in the Sahel, or whether the Lake Chad is even shrinking, remains a matter of debate (Benjaminsen, Selby et al., 301-303). On a more theoretical level, the question of whether these debates can ever be settled is posed. There is an incredible complexity of the potential impacts that climate change may have in any given climate or ecosystem, even if it could be argued that there is such a thing as an individual ecosystem, where links can reliably be studied. As Gemmene et al. point out, 'both increases and decreases in rainfall' can affect conflict (2014, 7). It may be unrealistic to assume that any solid theoretical causal links – that could be verified elsewhere – could ever actually be established (Selby 2014).

Another topic that has received a lot of attention, especially in connection to conflict and violence, is climate-induced migration. Migration has become 'a sort of a shorthand' in debates linking security and climate change (Baldwin et al.,122). There are, of course, issues with this idea – mostly based on that fact the migration itself is a complex phenomenon that depends on countless factors, and the importance of climatic variable is hard to ascertain in any given situation. Determining who is a climate migrant 'is not empirically possible in most, if not all, circumstances.' (Boas et al., 2019, 902). Criticism has also been targeted at the prominent use of predictive modelling - for Durand-Delacre et al., for example, quantitative methods cannot adequately predict something as multi-faceted as migration (2021). Others argue that relying on predictive models as the key means of knowledge production reinforces ideas of 'mass'

migrations, and that other types of research should be encouraged (Boas et al., 902). The concept of 'climate refugees' has also garnered a lot of attention, as it is a term that currently holds no legal meaning, although it is widely utilised, which is argued to have the capacity to endanger those who currently seek protection under the refugee label (Hartmann 2010).

This hints at a core issue of climate security debates – the simple fact that most of the threats that are discussed lie in the future. Much of the climate security (and climate conflict in particular) research has focused on past and present insecurities, for obvious practical reasons– however, the broader climate change debate, including the debate on increasing severity of threats and risks, is oriented into the future. For this reason, many academics have argued that the field has to become better at looking ahead in order to stay relevant (Albert; Charbonneau; Uexkull and Buhaus). This will, understandably, be very difficult. Current predictions about how the climate-security nexus will shape up in the future are derived from past patterns – however, it is not clear whether these (already controversial) patterns will hold in the future, as the changing climate might create new conditions in which now-formulated mechanisms 'will have declining explanatory power' (Gemmene et al., 8). The issue of positive feedback-loops and effects that we simply can't yet imagine could throw today's findings and theories into question.

As the above discussion has shown, the climate security literature faces significant challenges when it comes to being able to discuss this relationship with any sort of confidence. Of course, this is a broader problem that is faced by climate change research, not just that focusing on security. However, as discussed in connection to securitization, formulating issues in security terms can have significant impacts on how they are addressed as a whole, and as such, it's all the more important to point out the uncertainty underlying these formulations. To quote Jeroen Warner and Ingrid Boas, 'the burden of proof to legitimize securitization is especially tricky' in this context (1475).

Aware of these challenges, academics and experts alike seem now more conservative when it comes to making any claims, particularly about conflict, migration, and making quantitative predictions (Baldwin). Climate change is most commonly understood as being a 'threat multiplier,' possibly exacerbating a variety of complex social, political and economic conditions that shape insecurities - however, saying very little about the specifics of how climate change could pose a threat, and thus, how these potential threats may be responded to (Busby 2020). There has thus

been an increased focus on the role of governance - in a similar vein, the concept of resilience has gained a lot of traction, as it is based around the complicated interactions of different causes of vulnerability, as opposed to claiming direct causality or relying on eco-determinism (Boas and Rothe). Resilience has been a core part of the ever-growing focus on human security (Busby 2018). Despite this progress, the above-discussed ideas remain influential, even if they are less represented in policy, expert or academic discourse (Baldwin et al.; Gemenne et al.; McDonald 2021).

Although, as demonstrated, the specific pathways may not be clear, it would be hard to argue the other side - that climate change will not negatively influence security in any way. Due to this paradoxical nature of the threats – threats that are 'uncertain, diffuse, difficult to quantify and yet potentially catastrophic' (Trombetta 2008, 599), the way they are shaped in public and policy discourse is absolutely crucial, as the formulations also shape how climate change is to be responded to. As Joshua Busby writes (not uncritically), practitioners cannot afford to wait for academic consensus (Busby 2018; Lamain; McDonald 2013; Pettenger).

Climate Security - Discursive Perspective

Unsurprisingly, then, a significant portion of the academic writing on the climate-security nexus is concerned with its discursive construction. Arguably due to all the above-discussed issues, much of the writing is critical in nature. The following paragraph will provide a broad overview of the main critiques, in order to make a case for the importance of discursive framing.

The common thread that connects critiques is a warning against the tendency to overemphasize climate change at the expense of other, more influential factors. Selby et al. comment, 'even the Darfuri farmer depends more on cheap diesel and remittances than on good rains' (2022, 318-319). Social, economic and political contexts, matters of power or history, are omitted in favor of raising the overpowering argument that climate change is to blame (Selby et al.; Charbonneau). Assigning responsibility to the ambiguous concept of climate change can thus have depoliticizing effect. Climate change can be used as an 'argumentative weapon', an overarching narrative that manages to shut down conversations about other possible causes of insecurity (Rothe, 244; Selby et al., 321). Relating to the phenomenon of apocalyptic narratives, Erik Swyngedeouw argues that these

'imaginaries' create a reality where catastrophic events are already set in motion as they 'foreclose a proper political framing' (Swyngedouw 2011, 263).

An important strand of critique focuses on how the debate on climate security perpetuates stereotypes about the Global South. This was already alluded to in the discussion of the streetlight effect of the climate-conflict research. A prominent feature of public representations of the threats of climate change – especially on climate conflict and migration – are argued to be orientalist and often racist Northern stereotypes, particularly about the African continent. These narratives are argued to be based on long-engrained ideas of 'Malthus meeting Hobbes' in the 'climatevulnerable' continent (Verhoeven 2014, 802). These stereotypes are argued to overshadow structural issues and political agency and to be more about Western imagination than African realities (Charbonneau, Verhoeven). Hartmann, discussing climate migration, argues that this is precisely the reason why these discourses have become so widespread, since they feed on already existing 'deep-seated fears' (238) – similarly, Chaturvedi and Doyle write about the 'geopolitics of fear', as these ideas carry influence on the international political scene as well (2010). These images can then be appropriated by political actors in the Global North and used to justify disproportionate responses to perceived threats (Durand-Delacre et al.; Meyer 2018). A prominent example is that the idea of climate migration can threaten the national security of countries in the Global North, a notion that can be used to strengthen restrictive border management, particularly on the EU's southern border (Boas et al.; Methmann and Oels 2015; Meyer). Others discuss the issue of how this imaginary can lead more pragmatic issues, such as the lack of investment in areas (incorrectly) considered as climate insecure (Meyer). This is of course also linked to the effect of depoliticization, in that it ignores local structures and contexts, or the adaptive capacity of the concerned populations.

This overview of the critiques demonstrates that the way climate security is framed is very normatively and politically charged, and thus important to examine. Significant attention has also been devoted to less critical perspectives - much of this literature revolves around the concept of securitization and the potential implications thereof. Securitization, as mentioned, is essentially the study of how an issue comes to be discussed in security terms. Developed by what is now referred to as the Copenhagen School, and at first introduced in the 1990s, securitization is an argumentative process by which securitizing agents discursively link an issue to security through

'speech acts', and thus raise its importance from business-as-usual politics to being considered as an 'existential' issue that requires exceptional responses (Buzan et al. 1998). Though securitization will not be relied upon in this thesis in methodological terms (and thus the mechanistic perspective will not be explored further), the basic notion, that is, studying how an issue becomes framed in security terms, is highly relevant for this thesis. Furthermore, insights such as the problematization of securitization and the importance of risk is insightful in guiding the analysis. As such, a short discussion of the literature is in order.

The securitization of climate change has been studied in various national and institutional contexts (Diet et al., 2016). The normative implications of securitizing climate change have already been discussed – another important debate has developed around the question of whether climate change has been successfully securitized. For a successful securitization, its acceptance by an audience, as well as the application of exceptional measures, is necessary. However, that has historically not been the case for climate change. As such, the appropriateness of this requirement for a successful securitization has been questioned (Diez et al.).

As the concept of security itself, then, the securitization approach does not sit comfortably with climate change. In fact, climate change has been widely used to point out flaws in the initial conceptualization of securitization (Detraz and Betsill 2009; Floyd 2008; Trombetta). Diez et al. argue that expanding securitization into 'threatification' and 'riskificiation' is more appropriate for the challenges that climate change poses (Diez et al., 13). The logic of risk is also highlighted by Trombetta in her argument about the tension between the 'uncertain' yet 'catastrophic' impacts of climate change (2008). According to Christo Odeyemi, the logic of risk avoids the potential of militarization of responses – on the other hand, it can also lead to a marginalization of the issue (2021, 80). Similarly, Olaf Corry argues (though in 2012, and the discourse has developed greatly since then) that what has been happening with climate change is more akin to riskification than strictly securitization (2012). An interesting argument is proposed by Angela Oels, who argues that there has also been a 'climatization' of the field of security – that is, that practices and ideas more connected to climate management have become naturalized in the security arena (Oels 2012). More specific studies focus for example on the implications of the discourse of 'climate emergency' (Albert 2022), or on the role that deploying 'cataclysm discourses' plays in international negotiations on climate change (Rothe, 243).

Some authors have attempted to identify overarching trends to come up with a typology of climate security discourses. Detraz and Betsill introduced a two-fold typology of environmental security (focusing on the impacts of degradation on human security) and environmental conflict (focusing on national security and the military) (2009). Diez et al., in a comparative examination of various national securitizations, have presented a sixfold 'matrix' (14) – where risk and threat are respectively connected to the planetary, territorial, and individual levels. They find that the way climate change is securitized is highly individual in each national context – which is relevant in this thesis, as it provides impetus to explore the issue in the Czech national context.

Theoretical Framework

Arguably the most comprehensive typology of climate security discourses was offered by Matt McDonald, an associate professor at the University of Queensland, in a 2013 article, and further expanded upon in a 2018 article and a 2021 book. In his oft-cited 2013 article, McDonald identifies four overarching categories in what he calls a 'taxonomy of the climate change-security relationship in practice' (43) - national security, human security, international security and ecological security. McDonald bases his study on an examination of the way the climate-security relationship is articulated by a wide spectrum of actors, from the realms of policy and academia, but also by lobbyists and environmental activists (ibid). This thesis will rely on McDonald's approach as the theoretical grounding for the analysis, and as such, a more detailed exploration is in order.

McDonald's motivation for identifying the four discourses lies in the already-presented argument that that different framings of the issue define 'whose security is at stake' (42). Furthermore, he focuses on how theses framings provide a 'philosophical anchoring' to different practical solutions – and who should provide them (44). For example, focusing on the threat caused by climate-induced migration implies very different solutions than focusing on the threat of declining biodiversity in far-away ecosystems. The human and national security discourses reflect the larger debates in security studies, while the international and ecological discourses are more novel. His approach is thus quite broad, which is why the previous pages have explored the climate security debate broadly as well, to provide a background for the formulation of the discourses.

Given the type of data relied upon in the analysis, this thesis will focus on the referent objects and the general themes of the discourses – it will, however, not necessarily engage with the responses proposed or the actors meant to provide security.

Before the individual discourses are explored, it is important to note that McDonald's typology is not neutral, and he doesn't consider all discourses as equal. The ethical implications of the frames are crucial for the author. McDonald argues, for example, that the discourses that are argued to be the most prevalent, meaning that of national and human security, 'are unlikely to inform a progressive or effective response to global climate change' (42). Furthermore, he discusses the turn away from the nation-state towards other referent objects (and so discourses) as 'the most obvious response to the potentially perverse implications' of deploying the frame of national security (46). Furthermore, as elaborated to great lengths in the 2021 book Ecological Security, this discourse is explicitly formulated in response to the first three, partly in order to address some of their shortcomings, especially when it comes to their ethical implications. Referring to the motivation for focusing on the ecological approach, he writes that 'if some discourses are, to put it bluntly, better than others - then we need to explore what an ethically defensible climate security discourse looks like' (2021, 5-6). While this research strove to be as objective as possible, and will not directly engage with the normative implications, it is also aware that when choosing a valueladen theoretical framework - in combination with an often-subjective method - it is necessary to at least point out the possibility of a being influenced by the rhetorical framing of the normative implications in McDonalds' writing.

National Security Discourse

According to McDonald, the most prominent discourse has been focused on national security. The discourse has roots in the 'classics' of the early climate security literature, particularly on the studies focusing on resource scarcity-induced conflicts and population movements. The discourse is interested primarily in how the effects of climate change can pose a threat to the 'sovereignty and territorial integrity of the nation state' or to its 'economic interests' (2021, 56; 2013, 49). The threats are proposed to come through three specific pathways. Climate change may aggravate or induce violent conflict, or it may have the same effect on mass migration, which can, in turn, also affect conflict. Thirdly, it may undermine 'the capacity of the state and security apparatus' (2021,

58). The threats are thus indirect and secondary. This discourse has been primarily articulated by US institutions, such as the Department of Defense or various think tanks.

McDonald's criticism of this approach mirrors those within the broader critical security literature when dealing with a focus on national security - he fears that it can be 'potentially overexpansive' and that the remedies it suggests 'risk being partial, limited and even perverse' (66-67). Not only in, for example, understanding migration as a threat, but in promoting solutions that do not seek to address climate change itself, since it is perceived as an already existing, external threat to be adapted to, and mitigation plays essentially no role in this debate (68).

Human Security Discourse

Once again reflecting the broader security studies literature, the perspective of human security is conceptualized in part as a response to the focus on the nation-state. This discourse, views climate change as a threat to the lives and livelihoods of people around the planet. It is drawn primarily from the interventions at the level of the United Nations, or for example the Canadian or Norwegian governments.

Climate change is thus viewed as a direct threat to populations, from individuals to communities and further. However, it also pays attention to the complex contexts that make some people more vulnerable than others, from specific social settings to broader global inequalities. People's ability to make choices about their lives freely is an essential part of what is understood as human security. Even issues such as conflict and migration can be the focus of this discourse - however, instead of focusing on it as a threat to the state to be addressed at the border, it is understood as a direct threat to the people concerned. A focus on resilience - particularly on the adaptation of individuals and communities, as well as mitigation of the problem itself, are the proposed responses. This approach is thus very broad, the complexity of which - again reflecting the broader literature on human security - can be perceived as a limitation, as the reference objects and the specifics of the threat can be less clear. This narrative, argues McDonald, is 'increasingly prominent' (81).

International Security Discourse

The nternational security discourse sits - uneasily - between the national and human security discourses, with the added broader referent object of the international system. It redresses the

isolating effect of national security by focusing on the international community as a whole, and adds a global dimension to the issues of human security. The international security discourse thus rests on a spectrum from a 'minimalist' focus on how climate change can pose a threat to the (liberal international) global order, defined by non-intervention, to a more 'maximalist' focus on how climate change can threaten the core norms and universal conventions of the international system - 'to imperatives and principles associated with human rights, development and health' (72). Both ends of the spectrum are primarily concerned with international stability and its norms. This division becomes complicated when identifying what is to be secured – McDonald writes that he doesn't 'attempt to settle or categorically define 'the international' as a referent object' (70). Unsurprisingly, international cooperation is seen as the main means of addressing the threats posed by climate change, with both mitigation and adaptation playing a role. While the discourse is drawn from debates at the level of the United Nations or from academic circles, it has been presented as not being particularly prominent.

Ecological Security Discourse

The final discourse stands apart from the previous three. It was conceptualized by McDonald largely in response to the previous framings and as such, was not found organically in expert or policy discourses with the same prominence as the previous three. Responding to the anthropocentrism of the other discourses, it seeks to focus on the security of whole ecosystems, and thus on living beings other than the current-day human inhabitants of the planet. Entire ecosystems and their resilience are thus the referent objects, defined as 'communities of interacting organisms in a given space' (6). However, it strives to avoid falling into the traditional dichotomy of many ecological approaches, which separate humans and nature. Its approach is much more holistic, focusing on the complex interdependence and the necessary balance of the relationships between humans, the natural environment (including other populations, from animal and plant species to pathogens), as well as future generations. These are threatened by contemporary anthropogenic processes. This discourse perceives the impossibility of separating human agency from the natural world – one of the 'rationales' for this focus is argued to be the 'the arrival of the Anthropocene' (7), a new geological era where human impact on the planet has been so great that it necessitates a new framework of understanding the world we live in. Given this ambitious

reasoning, a proposed solution is a complete shift in the way societies conduct themselves in this new context

McDonald draws this typology from a wide variety of actors, all within their specific contexts and individual agendas. As such, attempting to use this typology to conduct a broad news media analysis may seem like an awkward fit. It is however important to note that, as McDonald admits, even his categorization is based on approximations - it is inherent to these types of analyses that there are no clear divisions. McDonald highlights that distinctions between frames such as these are 'inevitably partial, reductionist and imperfect' (2021, 45) – he argued that they are chiefly meant to provide the 'key contours and emphases' (2013, 49).

However, there is a greater motivation to studying how the discourses are represented in other spheres. According to McDonald, the fact that much of the writing formulating the link between climate change and security is based on analyses of government and policy documents can be viewed as a 'double-edged sword', as it guarantees a ''built-in' policy relevance' whereby the way the discourses are formulated automatically corresponds to the way these circles understand climate security, and how they would respond to it (2021, 53). This leaves no space for alternative articulations or 'nuance' within those identified (53).

This issue is also identified by Schäfer et al., authors of a rare study securitization of climate change in the media. They note that (with most of the works on this subject being theoretical), empirical research on the securitization of climate change 'has not yet ventured far beyond institutional politics' (Schäfer et al. 2016, 80). They argue that this is especially 'surprising' with an issue like climate change, where the focus on engaging audiences in the process is even more important due to the scale of the necessary response (80). While their article is mainly concerned with securitization, they also rely on different frameworks, including McDonald's conceptualization of national and human security. They analyse the media discourse in nine different countries - Australia, Canada, India, New Zealand, Singapore, South Africa, Thailand, the United Kingdom and the United States (US). They find that climate change is indeed increasingly securitized, and this is not only a function of the fact that it is being covered with more frequency (86). Similarly to Diez et al., they find that securitization varies significantly between countries. Furthermore, their results show that the national security discourse is by far the

most prominent, particularly in the US and Australia. The human security discourse was more frequent only in one country – Thailand.

As McDonald and Schäfer et al. suggest, discourses of climate security have not really been explored outside of the environments they were formulated in. Analysing them in a different context may yield unexpected results as to their prevalence or the specific attributes of the discourses, and thus provide further insights to understanding the way that the climate security relationship is formulated. Relying on the broad outlines of McDonald's typology, this thesis will examine how these discourses are represented in the context of the Czech news media. For this purpose, it has identified the following overarching research question, and then two subquestions that will focus the analysis:

RQ: How is the climate-security nexus framed in the Czech news media?

RQ1: How prevalent are the individual climate security discourses, and how has this developed over time?

RQ2: How does the character of the discourses differ from the attributes identified by McDonald in other contexts?

Analysis

Methodology

Deductive Content Analysis and Framing

The analysis will be conducted by combining a deductive content analysis with insights from the analytical approach of framing. As such, it will combine a quantitative and qualitative approach. This mixed methodology was chosen due to the smaller size of the sample, the relatively uncomplicated coding requirements, and the fact that the analysis is interested not only in the frequency of the discourses, but also in how their character and focus may or may not change over time and in comparison to their conceptualization. This was also the reason why the analysis was conducted manually, as there was significant interest in the qualitative content. Deductive analyses are carried out when the studied categories have already been identified in theory. According to

Semetko and Valkenburg (2000), authors of what was referred to as a 'seminal deductive study' (Matthes and Kohring 2008, p. 262), this approach can be used to ascertain the prevalence of different pre-identified frames in news media. As discussed, McDonald's discourses can be also interpreted as frames – indeed, he even refers to them as 'frameworks of meaning' (2021, 4). Understanding these discourses as frames permits this analysis to draw from the rich literature on framing.

The theoretical basis of framing was already discussed. The basic benefit of this approach is that it is quite intuitive (Reese 2007). Framing is a wide 'paradigm' that also includes a variety of methodological approaches (Entman 1993). These can be particularly insightful for this research, as much of the framing literature is focused on media analyses – it can thus provide a clearly actionable guide for research. Other observations from the framing literature can also provide important context. For example, it has been noted that information that easily corresponds to a frame is 'more likely' to be used in news reporting than information that can't easily fit in a frame (Entman et al., 2009, 180).

Framing, as a holistic approach, can create a 'bridge' between 'quantitative and qualitative, empirical and interpretative' aspects of research, and the research field more broadly (Reese, 148). This is very important, as the approach adopted in this research is quite far from the norm of content analyses - especially because of the role that subjectivity may play in the analysis, as it is conducted manually and the frames are often not immediately explicit. The question of subjectivity is an important challenge in framing analyses – some go as far as to point out that a frame should not be 'a figment of a researcher's imagination' (Linstorm and Marais 2012, 30). This is the benefit of deductive (as opposed to inductive) analyses – the frames are derived from existing literature, which gives the approach some automatic theoretical relevance.

Van Gorp points to this tension between content analysis and framing - frames are connected to structures of meaning not clearly and reliably expressed in the texts (2007). This is why the research was guided more by insights from framing literature than that on content analysis. A qualitative framing approach can help avoid the inherently reductionist tendency of quantitative research and explore the specifics of frames beyond just identifying them (Linstorm and Marais). When conducting a deductive frame analysis, de Vreese writes, the key question to ask is 'what?' - what aspects of the unit of analysis point to a given frame? (2005, 54). This question can be

answered in many ways. Linstorm and Marais have synthesized insights from various scholars and identified rhetorical and technical devices used to locate frames. Rhetorical devices can be for example choices of wording, the use of metaphors, 'catch phrases', stylistic choices and 'sentences that provide thematically reinforcing clusters of facts or judgement' or the concluding parts of the article (32-33). In terms of technical devices, headlines and subheadings can be particularly important when identifying a frame, as is the selection of sources and quotes (32).

Sample and Data Selection

The goal of the research is to identify broad patterns in news media over time – as such, the objective when choosing the sample was to capture the most widely read units of analysis globally. The choice of time frame – three separate years spanning a decade - was taken as the relevance of climate change in the public discourse has changed quite significantly over those ten years. For the purposes of gathering a sample that could cover the general media discourse, the ten most read outlets for each year were selected – however, as sensationalist language could significantly skew the analysis, a tabloid outlet (blesk.cz) was removed, as was an outlet that has been linked to disinformation (parlamentnilisty.cz) (Česká televize, 2019). As a result, the list of outlets was adjusted. For 2011 and 2016, the readership for December was ascertained by aggregating data from PC, tablet and mobile (Netmonitor 2011, Netmonitor 2016). For 2021, the information was drawn from an already aggregated overview (Vojtěchovská 2022). The sample is thus intentionally broad, spanning different political leanings and ownership of the outlets.

Figure 1 - Media Outlets (websites)

2011	2016	2021
novinky.cz	novinky.cz	seznamzpravy.cz
idnes.cz	aktualne.cz	novinky.cz.
aktualne.cz	tn.cz	idnes.cz
denik.cz	idnes.cz	denik.cz
tn.cz	lidovky.cz	iPrima.cz
lidovky.cz	info.cz,	aktualne.cz
tyden.cz	ihned.cz	tn.cz
ihned.cz	eurozpravy.cz	iRozhlas.cz
ceskenoviny.cz	tiscali.cz	ct24.cz
eurozpravy.cz	echo24.cz	forum24.cz

(Netmonitor 2011; Netmonitor 2016; Vojtěchovská 2022)

The analysis was then conducted by using Newton Media Search, an online archive of Czech news media. After selecting the sources and the years of interest, the following keywords were entered (in Czech): "climate change" or "changing climate" or "climate" or "warming" or "global warming" and sorted by relevance (also accounting for varying conjugation). This is to reflect the changing dynamic of the use of the terms global warming and climate change, as well as the variety of possible formulations. Since the research terms were very broad, this made the selection of appropriate units of analysis quite time-consuming, as the majority of results were not actually relevant and were concerned with other climate change topics, such as international negotiations, economics or debates on the energy transition. Units of analysis were then identified according to the following criteria:

The article clearly identifies climate change, or the secondary effects of climate change, as a source or an amplifier of either threat or risk to the referent objects in question. If climate change or its secondary effects aren't mentioned in the title, the headline or first paragraph have to include language relating to threat or risk, or other potential negative consequences, for the article to be considered further. This is arguably where subjectivity comes in the most, as it depends on the researcher to identify that an article might be relevant, even if it is implied rather than immediately obvious. It thus presupposes the researcher's previous knowledge of the issues and of possible causalities, which is clearly problematic, as the researcher is unlikely to be informed about all possible linkages, and so the sample is inevitably subjectively skewed. Furthermore, the role of climate change has to be discussed, not just listed as one of many possible causes or contributors. If there were more articles relating to the same story in different outlets (e. g. the publication of research or a political event), only the first results (sorted by relevance) are included. This is because the frequency of certain discourses was so low that including more articles on the same issue would disproportionately affect the results. However, this was only an issue in a handful of cases.

Once the units have been identified, the articles were then analysed in depth in order to ascertain the predominant discourses. The discourses were identified based on the referent objects as discussed by McDonald – the one other condition that needed to be set was that articles would only be categorized as featuring the ecological security discourse if they featured a discussion of the interdependence of the ecosystem. For example, if an article discussed how climate change

threatens one species, but the connection to the ecosystem as a whole wasn't sufficiently explored, it wasn't included. Linström and Marais' suggestions of rhetorical and technical devices were relied upon here. In many cases, the frame was clear from the title or first paragraph. However, there were some cases where it was much more difficult, as will be discussed further. In cases where similar attention was given to two or more competing frames, the one alluded to in a more prominent place in the article, such as the title, the subheading or the first paragraph, was chosen.

Limitations

The main limitations of this study relate to its scope and the role of subjectivity in the method. The analysis only examines three separate years over the course of a decade, so it cannot claim to be representative of the news media discourse as a whole. It offers only a very partial glimpse into the way these issues are framed in the media. Even such a cursory glance might be enough to identify several trends, and in two of the three chosen years, results were analysed until their relevance started significantly waning — so the sample was also objectively limited by the lack of articles framed in these ways. Nevertheless, the small size of the sample is a serious issue and limits what can be gleaned from the analysis with any measure of confidence.

This is also a general issue of deductive studies – by relying only on what was already identified in theory, many other possible formulations are beyond the scope of the analysis, which again limits the extent to which it can claim to be representative of the discourse as a whole. As a result of these two issues, this analysis only offers a surface-level look into a very complex issue, which is sure to leave many questions unanswered. This was reflected across all parts of the research.

When starting the research, it was also clear that the match between the four discourses and news media analyses was not going to be very straightforward. Sometimes, articles were focused on a different issue, and the framing of a threat towards a specific referent object was not the preeminent theme of the article. In general, then, the expectation that the fit was not going to be perfect was proven correct. This will be elaborated in the Findings and Discussion sections when the content of the discourses will be examined.

Another drawback of the research, as already discussed, was that at many points, subjective judgments had to be made about the relevance of articles or about the most prominent frames. As an overarching discourse is not something that can be judged purely based on the number of characters devoted to each frame, a different researcher might look at one of the units that were more difficult to determine and make a different judgement based on their personal biases. Matthes and Kohring point this out - content analyses of frames have faced criticisms based on their 'reliability and validity', since frames are largely amorphous and their identification depends greatly on the researchers (258). This is another point where the low frequency of some frames becomes complicated – if a different researcher would classify some articles into other categories, this may significantly impact how the general trends are presented. Furthermore, it is also unclear how many potentially relevant units of analysis were omitted because their security or risk framing may not have been clear. As the majority of search results were at first glance concerned with issues not connected to security, it wasn't feasible to comb through all of them in detail. As such, it is quite possible that some potentially relevant articles were not included in the analysis. Aware of all of these limitations, the thesis does not claim to be representative of the climate security discourse as a whole, rather, it may serve as a first exploration of an area arguably deserving much more attention.

Findings

Based on the above-discussed criteria, 78 articles were chosen as relevant for the analysis. This was out of a total of 1300 results – the initial goal was to examine 500 most relevant articles for each year, however, for both 2011 and 2016, the results stopped being pertinent around the mark of 300 - 350 articles, and thus only 400 results were investigated. Despite the relatively small size of the sample, several trends are immediately observable.

However, before the findings can be presented, a short commentary on the validity and reliability of the research is necessary. Besides these inherent limitations of the research method, there were specific aspects of the sample that complicated the matter further. Many articles talked of threat and danger but were so general that they didn't end up being included in the final selection. In the cases where the theme was general, but a frame was eventually identified, the

framing was often derived only from a small portion of the article. Furthermore, there was sometimes a strong dissonance between the framing of the title and the main body of the text. For example, the headline of one article opened with the question ,are we going to burn to death? ² however, the article itself had no mention of human suffering caused by heatwaves, and it fit instead into the category of ecological security discourses (1).³

This all contributes to the uncertainty in the research results – especially as the frequency of some frames is very low, this is potentially quite problematic. Aware of these challenges, the following chapter will thus not refer to precise frequencies as much as to the general trends that have been identified. Nevertheless, the following charts demonstrate the distribution of the different discourses across the studies time periods.

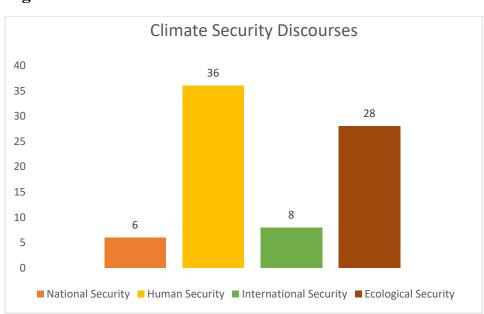


Figure 2 Discourse Prevalence

² All citations were translated by the author.

³ In order to increase the clarity of this section, the cited sources (unit of analysis) will be numbered, instead of referenced with traditional in-text citations. The sources will be references in the first section of the bibliography - Bibliography (a) – on page 47.

Climate Security Discourses

Climate Security Discourses

Climate Security Discourses

National Security Discourses

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Figure 3 Discourse Prevalence Over Time

Figure 4 Total Discourses

	2011	2016	2021
Analysed Search Results	400	400	500
Relevant Articles	14	16	48
National Security Discourse	1	1	4
Human Security Discourse	6	5	25
International Security Discourse	3	3	2
Ecological Security Discourse	4	7	17

These tables demonstrate a few broad trends. While the total number of articles is comparable (and comparably low) in 2011 and 2016, it more than doubles for 2021. Interestingly, this increase is comprised mainly of articles featuring the human security or ecological security discourse, while articles featuring the national or international security discourses remain relatively infrequent throughout the time period (although relatively to previous years, the

frequency of a national security framing has increased significantly between 2016 and 2021). The only frame that saw a steady increase across the three observed time points was the ecological security discourse. The rest of the chapter will explore each of the discourses in more detail, observing their change over time, but mostly focusing on the qualitative trends (and challenges in identifying them).

National Security Discourse

Despite the great academic focus on the links between climate change and national security, the limited analysis conducted here suggests that the Czech news media don't reflect this trend. One article that fits within this narrative is a 2021 text referencing a US-based study that is presented as stating that climate change will lead to an increase in tensions and conflicts worldwide – the study was concerned directly with 'national security' (2). A different article discusses, from the perspective of Russian national interests, the consequences of the melting Arctic ice sheets (3). Multiple articles, however, are devoted to the existential threat to small island nations in the Pacific, that are at the risk of completely disappearing due to the threat of rising sea levels – one article reads that ,the very existence of Tuvalu is under threat' (4). As the survival of these nation-states is uncertain due to the threat to their territorial integrity (and it can be safely assumed that the states' critical infrastructure is also at risk), these articles were included within the national security discourse. However, this perspective is quite far away from the traditional conceptions of national security discourses. Overall, it is striking how non-frequent the national security frame is. This is also due to the problematic overlap with the international security discourses, which will be discussed later.

Human Security Discourse

The human security discourse, on the other hand, was the most prominent discourse overall. In 2011 and 2016, the articles followed a more classical perspective of human security, focusing mainly on the threat posed by melting icebergs or rising sea levels to human populations and settlements, or, for example, to the potential of widespread famine caused by rising food prices (5). In one article, the country of Pakistan was argued to have 'all the ingredients of a ticking time bomb' due to the potential of melting icebergs in the high mountain ranges (6). While these issues remained the subject of a significant portion of articles, 2021 saw a widening in the types of issues

covered. Beforehand, the focus was mostly on general worldwide threats, or threats outside of Europe. 2021 saw a significant focus on how climate change could affect the human security of people in the Western world or the Czech Republic specifically. There was a significant focus on the potential of climate change in affecting welfare and health - from the threat rising temperatures to, for example, the spread of dangerous tropical viruses to northern latitudes (7). A different article focused on these health threats and argued that climate change is a 'potential catastrophe' that could 'undermine the healthcare system' (8). A prominent point of focus were extreme weather events, such as heatwaves, droughts and storms and their rising frequency. As an example, on article presented a study arguing that around a third of all heat-induced deaths can now be directly linked to climate change (9).

International Security Discourse

As was alluded to in the theoretical section, identifying the international security discourse is no easy feat as 'the international' has not really been conceptualised specifically and can thus be interpreted in different, often more implicit, ways. Nevertheless, this research has located several articles where this frame is arguably the most prominent. For example, an article referring to the influential 2011 debate of the United Nations Security Council discussed how climate change may be a threat to peace worldwide, as climate-induced population movements or food shortages could 'lead to the emergence of conflicts' (10). Similarly, five years later, an article presenting a study on the link between climate change and conflict started with the statement that 'scientists have proven that global warming is one of the reasons why people fight wars' (11). Oftentimes, the threat to 'the international' wasn't explicit in any way – for example, an article discussing the intense heatwaves gripping the Middle East in 2016 argued that they could lead to an unprecedented migration crisis and discussed how the states in the region aren't prepared for such crises (12). To provide an example from a different perspective, there was also a focus on the conflict potential of the Arctic region – although at the core of the issue were national economic interests, it was discussed in security language - such as that the 'final stage for the battle' for resources has started, or that the 'the battle for borders and zones of influence is escalating' (13). As is apparent from these examples, there is a clear overlap with the traditional logics of the national security discourse. However, in these cases, it wasn't the state that was at risk, but international stability or security. This was however not necessarily stated in concrete terms, further highlighting the amorphous nature of the international security discourse.

Ecological Security Discourse

While McDonald argues that ecological security hasn't reached the popularity of the previous three discourses, this is definitely not the case for the Czech media landscape. A wide variety of perspectives was adopted, as is to be expected from a frame that's focused on interconnectedness and complexity. Many articles were devoted to discussions of how the complex changes in a particular environment may affect certain species' resilience, as is the case for example in the unfortunate fate of the penguins in the Arctic (14). The dire situation of the coral reefs, unable to withstand the changing oceanic conditions, was the focus of a number of articles that often underlined the crucial roles of corals in the oceanic ecosystem (15). Several articles were interested in the potential threat of climate change aggravating the spread of, or allowing the return of, viruses and other pathogens – one article discussed how climate change has contributed to the covid-19 pandemic (16). In keeping with the holistic theme of this discourse, this category also includes articles concerned with the fate of future generations in the context of intensifying climate change – one article discussed, for example, how future generations will live in a world where natural disasters are a much more common occurrence (17). A significant theme was also a more overarching discussion on the various effects that climate change can have on different ecosystems. To wrap up this section, it seems appropriate to quote one such article from 2016, that cites a professor of meteorology as saying that the current situation is like 'injecting steroids' into an already unstable climatic system (18). As is clear, the ecological security discourse offers an exploration of a variety of topics, all with the common denominator of ecosystem stability being challenged by climate change.

Discussion

This study has explored the development of climate security discourses in the Czech news media. As climate change is being increasingly discursively linked to security, it is important to explore the *how* of this trend, as different discourses have different implications for whose security

is prioritized (and how) - 'if climate security is a political contest', it's important to see how the competitors are faring (Charbonneau, 102). Furthermore, it sought to explore the specifics of these discourses – as this hasn't really been explored in the context of news media, it was interested in seeing whether the character and prevalence of the discourses corresponds to their conceptualization by McDonald. For this reason, the analysis was conducted with a focus on the threatened referent objects, not on the specific mechanisms and features. The research has found that there is, indeed, a rise in the number of articles representing climate security discourses over time, with a particular jump from 2016 to 2021. This corresponds to the worldwide trend of increasing attention being paid to climate change, as well as the rising importance of the topic amongst the Czech population. The frequency with which the discourse were found, however, doesn't entirely correspond to the frequency in the contexts that McDonald was studying. Furthermore, while Schafer et al.'s analysis differs greatly from this in terms of methodology and scale, their finding that the national security discourse is the most prominent is at odds with the results of this research. This might be partly exaplined because they do not include the international security discourse, which overlaps greatly with national security, as the findings of this research have suggested. Nevertheless, this only serves to highlight the importance of the differences in national contexts (as well as differing time periods), as other research on the securitization of climate change has demonstrated.

This research corroborates McDonald's argument that human security is an increasingly common frame. The threat to human lives, livelihoods and welfare was even more commonly discussed in 2021, arguably as the threats started being less distant and abstract. Besides the more theoretically common notions of natural disasters, droughts and so on, the potential effects on health were particularly in focus. Although threats to health weren't explicitly identified by McDonald in his conceptualization, it is clear that heatwaves, threats to water supply or extreme weather events can have a negative impact on human lives and welfare. The original conceptualization developed in the 1994 Human Development Report includes 'health security' as one of its main components – along with many others, from food security to community security (as well as environmental security) (United Nations Development Programme 1994, 24). This points to the broader issue of human security – this approach is so all-encompassing that there are very few threats that do not, somehow, threaten human security. Therein lies the challenge – if the possible threats and mechanisms of threat are so wide, it is not clear how, and particularly by

whom, the threats should be addressed (McDonald 2021). As mentioned, McDonald even argued that the human security discourse is unlikely to generate the type of response necessary. Nevertheless, the value of a human security approach is in shifting the focus of security away from the traditional focus on the state to a more holistic view – and a holistic response.

The fact that the national security discourse did not feature prominently is arguably surprising. This could be because – as mentioned in the theoretical section – there is a general move away from the securitized rhetoric concerning climate conflict and climate migration, which are the main components of the traditional national security frame. This could suggest that the general discursive trend might be shifting, as media representations depend greatly on their sources. However, this is purely speculative, and further research would be needed to examine this. Another possible explanation lies in the rhetorical overlap with the international security discourse, particularly when it comes to issues such as the potential of climate-induced conflicts or migration threatening stability.

These problems are acknowledged by McDonald. The national security frame offers one further implication for the use of this typology in analyses. As was already alluded to in the findings, half of the articles don't follow the classical lineage of national security threats. While it is clear that their territorial integrity and sovereignty is being threatened, for island nations disappearing due to rising sea levels, it is a matter of direct existential threat, not a secondary, indirect threat. The third logic by which national security could be threatened – a threat to the critical and defense infrastructure - might be closer to this phenomenon. However, it still doesn't seem to encapsulate the immediacy and scope of the threat. That being said, McDonald was quite critical of the potential implications of this frame, a sentiment which is echoed by other critical writers. As such – for critical writers, at least – the low occurrence in this sample might be seen as a 'positive' sign for the overall development of the climate security discourse.

Ecological security being so common is an intriguing result. A possible explanation may lie in the findings of a 2021 study, whereby 71 percent of Czechs (or rather, the Czech respondents) consider themselves to be environmentalists (a literal translation would be closer to 'protector of nature') (Krajhanzl et al. 2021). Even more relevant for this study is that 'nature' is the most popular topic that Czechs follow in the media. In 2015, 79,9 percent of Czechs claimed interest in nature as a media topic, and in 2021, it rose further to 81,0 percent. Interestingly, the environment

featured in third place, with 67,9 percent and 68,8 percent interested in the subject in the respective years. Just for the sake of comparison, only 41,4 percent of Czechs claimed that they are interested in politics when interacting with the media (ibid). These striking findings imply that these topics are close to the heart of the Czechs, and as such, could contribute to explaining the prominent role of the ecological discourse. Since the discourse wasn't argued by McDonald to be that prevalent in the expert fields that he was drawing from, this hints at the value of studying climate security discourses in different contexts. It might be an interesting issue for future research to explore this phenomenon more closely, especially how the prominence in media (and arguably amongst the population) interacts with how matters of ecology and the environment are treated in the realm of policy. As McDonald considers this discourse largely as a remedy to the problems of the first three discourses, the author might perceive this result as a positive sign as well.

Overall, the application of the four discourses has allowed an exploration that, while still only cursory, was able to identify a number of interesting trends, suggesting that studying these discourses outside of expert and policy fields may be a productive avenue for future research. In relation to the framework itself, it is clear that when identifying the discourses based on the objects under threat, the content of the discourses often differs from the specific mechanisms identified in the theory. The theoretical framework allows for this nuance, as the frames are presented as fluid and more so as providing the general outlines. As such, this research may contribute to an expansion of the understanding of climate security discourses, which would be a valuable subject for more focused research. Furthermore, a study that would analyse a longer period of time and more points within that period – perhaps a computer-assisted analysis, or relying on a team of researchers - could build on the basis of these findings and provide a more robust picture of the development of climate security discourses in the Czech media context, given the importance of the media in shaping how the issue is understood in other areas. In relation to this, an inductive analysis might remedy some of the issues of this approach in being able to identify other discourses that have not fit within these confines. More generally, however – and coming back to McDonald's focus on suggested policy responses – it would be interesting to see how these representations relate to policy or policy proposals in a given national context, and whether this aligns with the expectations of responses formulated by McDonald.

Conclusion

As this thesis has examined, the study of climate security is mired with challenges that have nevertheless not hampered the expansion of this linkage from the academia to the highest echelons of international politics, as well as everyday media discourse. Climate change is now increasingly framed in terms of security, despite the critiques that this might not be the most productive perspective.

This thesis has attempted to contribute its small part in helping to understand how the relationship between climate change and security is formulated, by examining how it is framed in the context of the Czech news media. The text began by discussing the difficulties of climate change communication, focusing especially on the role that the news media play in shaping how the issue is understood. The role of scientific uncertainty and complexity was highlighted. This was followed by a brief overview of how climate change has been perceived by the Czech public and how it has been presented in the media. It was demonstrated that this area has seen very dynamic developments. The rest of the theoretical section was concerned with the academic debates on climate security. After introducing the development of the field, the complexities of even linking climate change to security were explored, focusing mainly on arguments against securitization. This was further highlighted in a discussion of the prominent issues of climateinduced conflict and climate-induced migration, which were used to examine the challenges that the field faces in attempting to identify causal or even correlational relationships between climate change and negative security outcomes. This was supplemented by a brief discussion on the role of predictions. The contrast between the limited knowledge of the climate-security nexus and the fact that climate change is increasingly argued to pose a security threat, was demonstrated. This is further complicated by the fact that a phenomenon as complex as climate change can arguably pose a threat to many possible referent objects in many different ways. These issues highlight the importance of interrogating how the climate-security nexus is formulated, as this is crucial in establishing whose security is privileged and how the 'threat' will be addressed.

With this motivation, the analysis examined how the four main climate security discourses as identified by Matt McDonald are represented in the Czech news media. The research was conducted on the ten most read online news media outlets in the years 2011, 2016 and 2021.

Despite the methodological challenges, the findings demonstrate several trends. The human security discourse was overall the most frequent, followed by the ecological security discourse. The national and international security discourses were much less prominent. The ecological security discourse saw the steadiest rise, while the human security discourse saw the most significant increase between 2016 and 2021. While the general contours of the discourses were maintained, the specific pathways through which the referent objects were argued to be threatened weren't always in line with those identified by McDonald in the literature. Furthermore, the frequency of the discourses also doesn't fully correspond to what is has been argued by McDonald to be the case in elsewhere. This points to the importance of studying the climate security link the media context, or other contexts outside of policy and expert arenas. As climate change shows no signs of slowing down, this area of study is likely only to increase in importance and is thus crucial not only from an academic point of view, but also in terms of helping to make sense of real-world developments in addressing - if the cliché may be forgiven – humanity's greatest challenge.

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