

Weathering Words: A Cross-linguistic Analysis of Metaphorical Frames of Climate Change Discourse in English and German Online News Outlets

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Abstract

Climate change is undeniably a major challenge of the 21st century and those to come. While scientists agree on this, the public does not as opinions range from climate change deniers to those who devote their lives to fighting it. News media play a crucial role in shaping the public's opinion on climate change and as they have a significant influence on the public discourse. This paper offers a cross-linguistic comparison of conceptual climate change metaphors in online news outlets from four different countries and two languages. Using conceptual metaphor analysis, I identified prevalent source domains to conceptualize the causes, effects, and responses to climate change. Overall, I found three shared metaphorical frames: war, destination, and construction, as well as additional metaphors in each language. The analysis revealed war and destination as most dominant source domains through which effects and responses are framed. This suggests news media emphasize the severity of effects and urgency to respond through creating a threatening image of climate change, which we do have the power to fight. The pervasive use of these two metaphors in both languages suggest a common understanding climate change.

Keywords: Climate change, Ecolinguistics, Conceptual metaphor analysis, News discourse

1. Introduction

“As the defining issue of our time” (United Nations, 2024), climate change is all over the news and for good reason. A complex phenomenon, climate change is visible through changing weather patterns, which have already serious effects on our ecosystems and food chains. These effects are amplified by extreme weather phenomena such as flooding, extreme

heat, or rising sea levels (United Nations, 2024). “Global in scope and unprecedented in scale” (United Nations, 2024), the world must respond urgently to mitigate its effects, before we have reached a point of no return. This study acknowledges the critical role of news media outlets in global and local public climate change discourse, and offers an in-depth analysis of the its metaphorical expressions, one of the most effective linguistic instruments to shape our understanding of climate change (Al-Shboul, 2023). Through critical metaphor analysis, this paper puts the spotlight on the role of language in in news media discourse and draws attention to metaphors as linguistic features to express and create sociocultural views within specific ideologies between the reader and the writer. Previous studies on climate change metaphors in different writing genres have been conducted and found a prevalence of the war metaphor (Adam & Wahyuni, 2020; Flusberg et al., 2017; Hidalgo-Downing & O’Dowd, 2023) to express threate, an object in motion, directionality, a vehicle, a destination (Adam & Wahyuni, 2020) to express change of the situation, a race (Flusberg et al., 2017) to express urgency, or a tipping point to express the irreversibility of climate change effects (van der Hel et al., 2018).

1.1 Climate Change and News Media

News media is relevant to the climate change discourse as they are a main source of information and education, and thus have strong potential to frame public discourse and shape public opinions. Through (extensively) covering events and information related to climate change, they provide information to the public about the state of climate change, its causes, effects, and responses. With this, news outlets can guide the frames through which we see climate change by focusing on economic, humanitarian, political, scientific, or other perspectives and foci. In the same vein, news media can shape and influence not just public opinions but public discourse through the way they report on and frame climate change issues.

The importance of media for the climate change discourse is visible in its growing coverage on national and global levels, which has been at an all-time high since 2011 (Katzung et al., 2023). In fact, the IPCC’s Sixth Assessment Report highlights that climate change has gone up across all 59 surveyed countries as articles have almost doubled between 2016 to 2021 (IPCC, 2023). Another study found that a little over 50% of the average population across eight surveyed countries access climate change news and information weekly (Ejaz et al., 2023). In the same study, close to 60% of respondents expressed a belief in the important role that news media play in influencing decisions about climate change actions by large businesses and government policies, as well as their impact on public attitudes. They further expressed strong interest in climate change news about latest developments, positive news, and coverage, among other topics. It is important to note that climate change – as other issues – is highly political and its coverage is much more prominent in left-wing news media, compared to right wing outlets (Watson, 2023a). Political stance also affects peoples’ perception of climate change news coverage, especially when it comes to ‘direct climate action’ (Ejaz et al., 2023).

While the coverage of and engagement with climate change in the news is at an all-time high,

Earthday.org warns that excessive climate change reporting may even be damaging if media focus on the wrong elements (Russell, 2022). They highlight the importance of focusing on solutions and progress over ‘fear-mongering clickbaits’. This is visible in news media consumption and ways in which people engage with climate change reporting. Fig. 1 shows documentaries are the only source for climate change information more popular than ‘major news organizations’ (Watson, 2023b). At the same time, a lack in focus on solutions is cited as one of the main reasons for people to not consume news about climate change (Watson, 2023a). It is also important to note that news media do not make it to the top three of trusted sources of information according to a 2022 study surveying eleven countries (Watson, 2023c).

When studying reports on climate change, the Media and Climate Change Observatory further found that the rhetoric around climate change has become more emotionally charged, framing the situation in terms of an emergency or catastrophe rather than the more scientific and neutral term ‘global warming’ (Katzung et al., 2023). In fact, the use of the term ‘climate catastrophe’ has doubled in the UK and tripled in the US between 2020 and 2021 (Simpkins, 2021). While they deem this effective in communicating the severity of the situation, the Media and Climate Change Observatory criticize that it does not provide context nor solutions. Instead, to “catalyze meaningful action against climate change” we need real-life examples blended with scientific background information (Russell, 2022).

Overall, news media play a crucial role in information the public about climate change related content and encouraging, stimulating, and shaping their discourse and actions. While major news organizations are the second most popular news source, they are not the most trusted and people have become more reluctant to consuming news media about climate change due to their lack of focus on solutions. Similarly, the increasingly emotionally charged language used to report about climate change adds to this feeling of hopelessness perceived by the public. Against this backdrop, this study dives into German – and English language news discourse by analyzing and comparing the metaphorical frames used to present climate change and related issues.

1.2 Conceptual Metaphors and News Media

Considerable research about metaphors in news media has been carried out with respect to specific sub-sections. By and far, most of such studies are evaluations of a select sample of metaphors, providing in-depth insight into specific contexts (Trčková, 2011). Most recently, the pandemic and COVID19 have dominated metaphor-related news media research (Ho, 2022; Kazemian & Hatamzadeh, 2022; Zhang et al., 2022), especially with respect to the use of particular metaphorical frames, such as the war metaphor. At the same time, political discourse or the discussion of political issues and debates as a genre have also received much attention (Al-Shboul, 2023; Otieno et al., 2016). In a quantitative review, Krennmayr (2011) compared metaphor across different registers, and found news media to rank third, lower than academic texts and conversations, but slightly higher than fiction. Within news media the author further found almost twice as many metaphors in news about commerce and world affairs as well as arts and leisure, compared to natural, social, applied sciences.

While metaphors are commonplace in everyday language, we need to understand metaphors in news media within their socializing role. News media go beyond the accumulation of facts and reproduction of scholarly or political discourse but play a role in creatively shaping discourse and images of certain topics (Bratu & Kažoka, 2018). As a cognitive device to frame, explain, and persuade, cognitive metaphors are thus a crucial tool in establishing public news media communication (Al-Shboul, 2023). For one, metaphors draw on our experience and understanding of certain areas to make other, more complex topics, more accessible and are thus a successful tool to organize and communicate large amounts of information in an accessible way (Komatsubara, 2024).

This paper, however, is interested in their use as a conceptual structure to convey and shape systematic ideology (Al-Shboul, 2023). That is, metaphors are broadly employed as a cognitive tool to frame a specific issue or topic and thus have the potential to ‘construct reality’ by shaping public opinion and discourse (Al-Shboul, 2023). As an effective framing tool, metaphors thus have a persuasive function by directing the way readers perceive certain issues.

Considering the potential of metaphors in framing complex issues, they are especially interesting when diving into the depths of news media discourse on climate change. Such a focus on the connection of language and environment is the topic of interest in ecolinguistics (*The International Ecolinguistics Association*, 2024). Despite its growth, Al-Shboul (2023) emphasizes that this research area lacks an understanding of how stories are used to shape our understanding of the social world. This is where this paper adds to the existing body of research by offering new perspectives on sociocultural views and underlying ideologies of English and German news media. Specifically, this paper aimed to identify the ways in which climate change is framed in English vs German online news media by identifying the metaphorical expressions that conceptualize causes, effects, and responses to climate change, and evaluating the ways in which they stress an urgency to respond and carrying out critical metaphor analysis (Al-Shboul, 2023). A cross-linguistic analysis is taken to enhance our understanding of climate change-related meta imagery (Bratu & Kažoka, 2018) and bring to the front a shared understanding of this global phenomenon.

2. Method

This comparative analysis explores commonalities and differences in the use of metaphors to frame narratives on climate change. Specifically, I investigated how metaphors are to frame and convey effects, causes, and solutions of climate change in German and English language news media. Metaphors are linguistic tools that construct meaning and signal messages to its addressees, and this paper aims to uncover this through in-depth analysis (Al-Shboul, 2023).

2.1 Sampling

For this comparison, I sampled articles from four different newspapers: two German language newspapers and two English language newspapers. The two English language newspapers are the BBC News (England) and The New York Times (USA), based on their extensive reach. I chose the BBC News as they lead the UK in monthly visits to their website

and The New York Times as they have the highest number of subscriptions among online news media in the US (Watson, 2024b). The two German language news are T-Online News for Germany and (Watson, 2024c) and Der Standard for Austria (Watson, 2024a).

To sample suitable articles, I prioritized the publication year and the article focus. That is, I selected articles that directly addressed the concept of climate change, described effects of climate change, or discussed causes of or responses to climate change. Either of those had to be the focus of the article, otherwise it was considered not suitable. To provide an example, the article *The ski resorts saving snow*, which covers direct effect of climate on a specific economic sector and its response, was included, the article *These tricks make wind farms more bird-friendly* indirectly focused on climate change response, as the emphasis was on a negative effect of a particular climate change response. Through process of elimination, I sampled the 10 latest articles directly addressing one of the above-mentioned areas from each of the news portals.

2.3.1 Sample Size, Power, and Precision

2.2 Research Design

This research draws on conceptual metaphor theory to explore news media discourse of climate change, its effect and causes, and responses to climate change. Conceptual metaphor theory refers to the process of mapping source domains to target domains as described in Kövecses (Kövecses, 2003, 2010). The source domain refers to a concrete domain that is used to explain, clarify, or describe the source domain a usually more abstract target domain. However, metaphors are equally used to express ideologies or viewpoints, to evaluate, or to entertain (Knowles & Moon, 2005).

There are different ways to identify metaphors within a text, this research followed the MIP approach created through the so-called Praggeljaz Group (2007, p. 3):

1. Read the entire text–discourse to establish a general understanding of the meaning. 2. Determine the lexical units in the text–discourse
3. (a) For each lexical unit in the text, establish its meaning in context, that is, how it applies to an entity, relation, or attribute in the situation evoked by the text (contextual meaning). Take into account what comes before and after the lexical unit. (b) For each lexical unit, determine if it has a more basic contemporary meaning in other contexts than the one in the given context. For our purposes, basic meanings tend to be —More concrete [what they evoke is easier to imagine, see, hear, feel, smell, and taste]; —Related to bodily action; —More precise (as opposed to vague); —Historically older; Basic meanings are not necessarily the most frequent meanings of the lexical unit. (c) If the lexical unit has a more basic current–contemporary meaning in other contexts than the given context, decide whether the contextual meaning contrasts with the basic meaning but can be understood in comparison with it.
4. If yes, mark the lexical unit as metaphorical.

Once the final list of conceptual metaphors was established, they were analyzed based on Kövecses (2003) 10 components of conceptual metaphors:

- (1) Experiential basis which determines the source and target mappings,
 - (2) Source domain and (3) Target domain mappings can be multiple
 - (4) Relationship between the source and the target, whose pairings result in the specific (5) Metaphorical linguistic expressions,
 - (6) Mappings are the basic conceptual correspondences between the source and target domains,
- (p. 311ff.).

Metaphors carry meaning through they ways their source domain maps onto a target domain and the key to understanding them is to analyze just that (Al-Shboul, 2023). Critical metaphor analysis orients itself towards a critical discourse analysis and is thus concerned with the writer's construction of the social world (Al-Shboul, 2023). That is, (critical) metaphor analysis uncovers the systematic mappings between a source and a target domain by revealing so-called "source-to-target cross-domain mappings" (Kövecses, 2017). Such analysis is done by identifying and discussing the correspondences between the two domains, as metaphor conceptualize one target (TARGET) through the source (SOURCE) domain by drawing on addressees' understanding and experience of the source domain, thus making the target domain more accessible (Kövecses, 2017). Kövecses (2017) cautions, however, that not all characteristics of the source domain map onto the target domain, which is why detailed analysis is critical. We also need to consider why certain specific source domains are used, especially when they bear no objective similarities. Take the two examples below. In example 1, both domains share common characteristics, i.e. a start -and endpoint, or a variety of activities stories along the way. Example 2, on the other hand, is less clear as on a surface level, anger and heat do not share the same characteristics. However, Kövecses (2017) explains that their cross domain mapping is based on a conceptualization of the intensity of anger through the intensity of fire. In that sense, the level of intensity, that is, the quality of one characteristic is what brings these two together.

Example 1: LIFE (TARGET) is a JOURNEY (SOURCE)

Example 2: ANGER (TARGET) is FIRE (SOURCE)

Understanding these mappings allows us to understand how metaphors create meaning (Kövecses, 2018). In that sense, understanding the source-to-target cross-domain mappings in English and German-language climate change news outlets will allow us to understand how climate change issues are framed and shape our common understanding of this urgent topic.

3. Results

The use of metaphors to frame climate change was prevalent in both languages, though German news media showed more variety when it came to source domains. As visible in table 1, the WAR metaphor is the predominant metaphor to conceptualize CAUSE, EFFECTS, RESPONSE in both languages. Further, both language news media share the DESTINATION source domain to frame the EFFECTS and RESPONSES as well as

CONSTRUCTION to conceptualize RESPONSES to climate change. While English-language news media only utilized one further metaphor, INJURY, German-language news media drew on a variety of additional source domains, namely NATURE, SPORTS, BALANCE. We can further see from table 1 that across all news media, metaphors are mainly used to conceptualize the effects of and responses to climate change rather than causes.

Table 1. Source and target domains English and German news

Target Domain	Source Domains	
	English news	German news
Cause	WAR	WAR
Effects	WAR	WAR
	DESTINATION	DESTINATION
	INJURY	GAME BALANCE
Response	WAR	WAR
	DESTINATION	DESTINATION
	CONSTRUCTION	CONSTRUCTION

3.1 Climate Change Is War

The war metaphor is predominant in both languages and across all target domains. War as a concept invokes ideas of threat, fight, danger and, as such, is used in a variety of contexts. There were two main readings of this metaphor:

(climate change) is an act of WAR

(climate change) RESPONSES are acts of WAR

Table 2. Source-to-target cross-domain mappings climate change is war

Mapping 1: (climate change) EFFECTS are acts of WAR		
	Basic lexical units	
Theme	English media	German media
Threat	threat, endangered, dangers	Klimakiller, Warnschuss
Control	locked up, (to) trap	
Confrontation	(to) face, challenge	k ämpfen
Mapping 2: (climate change) RESPONSES are acts of WAR		
	Basic lexical units	
	English media	German media
Threat		Alarmstufe Versch ärfung
Target	target, aim for	
Confrontation	fight, tackle, take on, victory, muscle through, hammer out, cut	k ämpfen

3.1.1 War Metaphor Mappings in English News Media

As a source domain, the war metaphor conceptualizes all three target domains by drawing on different inferences, which can be grouped into four themes in total: threat, control, target, and confrontation, the last of which being the only theme with examples from both metaphor readings.

The first theme, threat, draws on our understanding of war as a threat or danger. This is expressed directly through the use of the word threat or danger, as visible in example 1. In this sentence, climate change is positioned as an opponent, one that is a threatens society as a whole.

1. The stance taken by the tribunal, which is sometimes called the Oceans Court, is also likely to affect how other international and national courts address the growing dangers posed by climate change.

The second theme is that of control, which is exercised through confinement. In example 2, particular gases are portrayed as an adversary, one that confines the Sun's energy in a negative way. The use of 'trap' invokes a feeling of being held against one's will, an expression commonly used to describe war-like situations, in which there is no way out for one side. In that sense, this example of the war metaphor frames climate change as an act of war. Similarly, example 3 frames 'carbon' as a threat to the climate. The specific lexical item 'lock up' is commonly used to express the confinement of someone or something dangerous or threatening, usually a criminal. In this sense, a gas being locked up evokes the sense of it being a dangerous threat. Both of these examples use the idea of control to confine an adversary in the context of a fight or war-like situation.

2. These gases trap the energy from the Sun within the atmosphere, heating up the planet.
3. The main reason is that the industrial revolution was the time when Britain, followed by the rest of Europe, North America, Japan and other nations, began emitting large quantities of fossil carbon – carbon that would otherwise have remained locked up in oil, gas and coal deposits underground.

A war is commonly understood as two or more sides opposing or confronting each other, an inference drawn on for both readings of the war metaphor. Example 4, 'nations' are positioned at one side of the war front, while 'rising sea levels', an effect of climate change, is described as the enemy. To 'face' something or someone not only evokes the idea of an unpleasant, difficult, or dangerous task but also expresses the imminent nature of the confrontation. Once we face something, it is directly in front of us, and we are forced to deal with the situation. On the other hand, examples 5 and 6 express the idea that our responses to climate change confront its harmful effects. The word 'fight' in example 5 is a very direct reference to confrontation, as fighting is the most violent way to confront someone or something. Similarly, example 6 frames the successful implementation of a bill in response to climate change as a victory. A victory in this sense is a successful confrontation, the result of having confronted an opponent.

4. Nations suffering from frequent droughts and floods and facing the looming threat of rising sea levels have been calling for funding to help them cope with the impacts of climate change.
5. What is carbon capture and how does it fight climate change?
6. "It was a great victory after the I.R.A. was passed, and we got plaudits all around, but I knew even as I was standing up smiling that our work wasn't done," Mr. Schumer said last week in an interview.

A last theme that emerged from the reading of (climate change) RESPONSES are acts of WAR is that of a target. In war-like situations, a target is often used to describe the strategy and objective of the particular situation. With this, hitting or missing the target is further considered as measurement for success or victory. Example 7 expresses the idea of setting a measurement for success by framing the agreement on specific goals in the reducing climate change effects in terms of 'aims' to target. That is, the Paris Agreement represents a strategic goal in the war against climate change.

7. Before the Paris Agreement there wasn't really a focus point for the world to aim for, to reduce the climate change process.

3.1.2 War Metaphor Mappings in German News Media

In the German news media, the war metaphor is used extensively, to conceptualize causes, effects, and responses to climate change. The metaphor analysis revealed similar themes to those used in English news media, however, with differences in the absence of control and target as themes.

The first theme, threat, is used to discuss the causes, effects, as well as responses, another difference to the English news media. As a cause of climate change, CO₂ is named a 'climate killer', the ultimate threat as it kills the climate, as shown in example 8. Example 9 is a bit less extreme, as it refers to a shot fired as a warning, a tactic used in fight or combat situations to emphasize threat. In this example, extreme weathers, a climate change effect, are considered such a warning shot, that is, they are conceptualized as a sign of immediate threat. By the same token, alert red (example 10) is the highest possible level of alert in response to an imminent threat.

8. Kohlendioxid gilt als Nummer eins unter den "Klimakillern".
9. Carbon dioxide is considered the number one "climate killer."
10. Alarmstuf Rot
11. Red Alert

As was the case with the English metaphors, confrontation is a theme commonly found to conceptualize both sides of this war, the cause and effects as well as the responses. Most examples of this metaphor referred to the confrontation rather directly through the lexical item 'kämpfen' (to fight). For instance, example 11 refers to the fight of the seabed to withstand the increased wave pressure wave pressure connected to climate change. Example 12, on the other hand, expresses the second mapping of this metaphor, as politicians are called to respond more strongly by confronting or fighting climate change.

12. Der Meeresboden hat schwer zu kämpfen.
13. The ocean floor is struggling hard.
14. Wir müssen mehr tun und eine stärkere Politik machen.

The war metaphor frames climate change as a conflict – a war-like battle – with two opposing sides, that is, the effects of climate change on the one, and our response to it on the other. In that sense, effects and responses are considered aggression, i.e. acts of war. Framing climate change as war invokes imagery of threat, danger, urgency, and crisis through which we are called to action if we do not want to lose this war.

The first mapping emphasizes the threat of climate effects as and our needing to control these through confrontation. Through lexical items such as 'threat', 'endanger', 'or 'killer', both, German and English news media stress the threatening presence of climate change which we need to respond to in a confrontational manner, expressed in both languages through words such as 'to face' or 'fight'. Here, we have a first difference between German and English

media, as the English media further express specific causes of climate as an act of control (i.e. locked up, (to) trap), this theme is not present in the German media. This hints at different ways through which each language expresses the dangers of climate change within the same frame of reference, that is, war.

The second mapping draws attention to the need for strategic action to achieve our goal in mitigating the effects of climate change as a combatting climate change. Again, the German news media foregrounds the threat of climate change by using lexical items that invoke immediate danger, such as ‘alert red’. This, in connection with their use of ‘climate killer’ to describe the effects suggest a heightened awareness of the menacing nature of climate change, which is likely to trigger a response from readers. The English news media, on the other hand, takes up the idea of confrontation again by position climate change effect mitigation as an aim to target.

3.2 Climate Change Is Movement Towards Destination

The destination metaphor was prevalent in all four sets of news media. At the most general level, destination indicates a particular outcome, either good or bad. Destination as a source domain is used to conceptualize effects of as well as responses to climate change, which leads to two source-to -target cross-domain mappings:

(climate change) EFFECTS are movement towards undesired DESTINATION

(climate change) RESPONSES are movement towards desired DESTINATION

The same source domain is thus used to express either or both ore one of the target domains, creating a complex net of metaphorical connections and inferences expressed in table 3.

Table 3. source-to-target cross-domain mappings climate change is movement towards destination

Mapping 1: (climate change) EFFECTS are movement towards undesired DESTINATION		
	Basic lexical units	
Theme	English media	German media
Directionality	on track	
Progress		Highway, Abgrund, überschreiten, Engp ässe
Mapping 2: (climate change) RESPONSES are movement towards desired DESTINATION		

	Basic lexical units		
	English media	German media	
Timeline	road, journey		
Directionality	shift away, turning point, tipping point, pathway	Pfad, Ausstieg, Ausfahrt	Weg,
Progress	milestones, step(s), take off, speed up, accelerate, rush, race, boost, 'green light'	kämpfen Klimaziele, Begrenzung	Zielpfad,

3.2.1 Destination Metaphor Mappings in English News Media

The table shows that the examples of destination metaphor could be grouped according to four characteristics: timeline, directionality, progress, and difficulty.

The first reading of the destination metaphor conceptualizes the negative effects of climate change as an undesired destination towards which we are moving. This metaphor draws on readers' understanding of the directionality of movement, that is, we can move into a certain, a good, or a bad direction. The expression 'on track' refers to a running sport, in which runners follow a certain path, the track, to finish the race. This indicates that humanity is currently following a particular path or direction towards an undesired outcome.

The second reading of the destination metaphor uses a positive, desired, destination to describe success in combating climate change, that is, activities and responses to revert the damages of climate change are conceptualized as movement towards this desired destination. This is done by drawing on four different conceptual congruences between movement towards an undesired destination and (specific) responses to climate change: timeline, directionality, progress, difficulty.

Timeline refers to the extended period before we will be able to reach success in combating climate change, expressed in example 13. The 'road ahead' suggests a significant distance between our current location and our destination, without adding further details to the manner in which the destination will be reached. Directionality was also evident in the conceptualization of climate change effects and refers to the direction being 'right' or 'wrong'. The turning point in example 14 is commonly used to express a state in which someone or something has moved into the wrong direction for some time but has changed towards a more appropriate direction. In this example, the 'turning point' refers to the moment when energy from renewable sources grew faster than the energy demand, indicating a change in direction towards the destination. Similarly, example 3 uses the lexical item 'pathway' to indicate the route towards the desired goal of combating climate change. Most destination metaphors draw on the idea that responses to climate change can progressively

bring us closer to the desired destination. In example 4 this is done through the use of ‘milestones’, an indicator for the distance between you and another point. That is, reaching a milestone expresses the idea of moving closer to the destination. Example 17 indicates accelerated movement towards the destination as rushing refers to carrying out an activity at a higher-than-normal pace. Lastly, two of the identified metaphors emphasize the difficulty of combating climate change by explaining the way the destination is reached. A bypass is an alternative route to a desired destination, which often allows people to avoid certain difficult areas. Similarly, a push suggests a certain level of energy needed to move towards the desired destination.

15. The road ahead.
16. A turning point in power emissions.
17. That has got the most potential in the next five years to get us onto a one and a half degree pathway and anything close to it.
18. In a tumultuous year, the positive milestones for the climate and nature might well have gone under your radar.
19. The move comes as President Biden rushes to push through a slew of major environmental rules ahead of November’s presidential election.
20. At the same time, the new rules released by the White House Council for Environmental Quality would allow projects that have a demonstrated long-term environmental benefit to receive expedited environmental reviews or bypass them altogether.

3.2.2 Destination Metaphor Mappings in German News Media

Looking at the German news media, the destination metaphor is used extensively to conceptualize effects of and responses to climate change, as illustrated in table 2. As with the English media, the two source-to-target cross-domain mappings are used. Most of the themes used in the destination metaphor are similar as well, though the lexical units are quite different.

The progress theme refers to the idea that we can move towards an undesired destination at different paces and that there may be certain markers of progress along the way. For instance, example 19 draws on this as it refers to significant negative developments as critical borders we have passed. Example 8 also expresses progress but does so by indicating how close we are towards the undesired destination by positioning humanity ‘at the edge’ meaning right before reaching the destination.

21. Kritische Grenzen sind überschritten
22. Critical borders have been passed.
23. Er betrachte die zahlreichen Hitzerekorde als Zeichen eines "Planetens am Rande des Abgrunds"
24. He views the many heat records as indicative of a planet at the brink of collapse.

The idea that climate change response is movement towards a desired destination is

expressed in two themes, directionality and again progress. Directionality, as with the English examples, employs the idea that movement can be in different directions, and this will determine the destination we reach. That is, certain activities to combat climate change are considered moving in the right direction, leading towards the desired destination. This destination is frequently described in terms of a goal or aim to be reached through particular activities, as in examples 21 and 22. Commonly, the desired destination to be reached is expressed lexically as ‘climate goal’, which can be targeted, hit, or missed. Specifically, example 22 expresses the idea of being unsuccessful in combating climate change as missing a target one had aimed to reach. Progress is further expressed through the lexical item ‘goal path’, which in German refers to the last part of a race, where the runner is very close to the end of the race. With this example, the author wonders if we are close to our desired destination, combating climate change by conceptualizing our progress towards this destination as being on the ‘right track’. Lastly, I want to point out example 24, which draws on the directionality of the destination metaphor in two ways. Expressing that we are currently on a ‘highway to climate hell’ suggests movement towards an extremely undesired destination at an accelerated speed, while also implying that we can combat climate change by changing our current practice that has caused climate change and its effects. The use of ‘exit’ to conceptualize a change in practice further indicates that we have the control to make a conscious choice to move towards a different destination.

25. Die neue Studie fordert Regierungen dazu auf, ihre Klimaziele vor der COP30 im Jahr 2025 zu überdenken.
26. The new study calls on governments to reconsider their climate goals ahead of the COP30 in 2025.
27. Verkehrssektor verfehlt Klimaziele deutlich.
28. Traffic sector clearly misses climate goals.
29. Auf Zielpfad?
30. On the right track?
31. Wir brauchen eine Ausfahrt vom Highway in die Klimahölle.
32. We need an exit off the highway to climate hell

The destination metaphor frames climate change, its effects, and our responses as a dynamic interplay of choices and actions. This is expressed through the directionality theme and the two mappings of movement either towards an undesired or a desired destination. In that sense, climate change effects or responses are not isolated incidents but steps in a continuous movement towards an endpoint, a destination.

As for the first mapping, directionality is only expressed in the English language news media, whereas German media heavily accentuates the progress we have made towards said undesired goal through expressions such as ‘highway’ or ‘at the brink of’. This aspect implies an idea of climate change effects as forces to move us towards an undesired destination, which is intensified through the conceptualization of the endpoint as ‘collapse’ in the German news.

The second mapping, for which there were significantly more examples, expresses actions and responses to climate change as movement towards a desirable outcome or destination. Such a frame spotlights the the goal-oriented nature of our responses and implies our transformative potential to decide the endpoint we move towards. This transformative potential is specifically emphasized through the directionality theme in both languages. Specifically, expressions such as ‘tipping point’ or ‘turning point’ suggest that crucial actions in response to climate change are critical in putting us towards one of the two destinations. Similarly, the progress theme in both languages puts spotlight on advancements we have made towards the desired outcome, i.e. long-term sustainability and mitigation of climate change effects. Especially the use of ‘milestone’ conveys this positive image as we commonly use this expression to frame major achievements and developments.

3.3 *Climate Is a Construct*

Though evident in both languages, the construction metaphor was rather rare, with one example only in the English news media and two examples in the German-language media. As such, only one reading emerged, in which effects of and responses to climate change are considered building parts of a construction.

Table 4. Source-to-target cross-domain mappings climate change is a construct

Mapping 1: climate is a construct		
Basic lexical units		
Theme	English media	German media
Building	Cornerstone	Bauen, Baustein

3.3.1 Construction Metaphor Mapping in English and German News Media

The basic lexical units to identify the construction metaphor in English and German are rather similar, as all three of them referred to the activity of building or ‘cornerstones’ as the key material to do so. While example 25 considers extreme heat as an effect of climate change by conceptualizing climate change as a cornerstone. A cornerstone is an important element in the building of any construction as it denotes an element that is fundamental and the base of said construction. In that sense, this metaphor frames climate change as the fundamental reason for extreme heat. Similarly, ‘Elektrifizierung’ (electrification) in example 17 is considered an important Baustein (building block) for a successful response to the harmful effects of climate change. While a building block is not the main base, it is a necessary and important element of any construction. Lastly, example 18 uses the same concept of building a response to climate change through the expression ‘auf etwas bauen’ (lit. ‘to build on something’). In German, this expression can be used to express reliance on something and expresses that governments rely on removal of CO₂ from the atmosphere, in the same way that the different levels of a building rely on each other.

1. Climate change is “the cornerstone” of the extreme ocean heat.
2. Elektrifizierung als wichtiger Baustein.

Electrification as an important building block.

3. Viele Regierungen bauen in der Bekämpfung des Klimawandels auf die Entfernung von Kohlenstoffdioxid aus der Atmosphäre.

Many governments rely on the removal of carbon dioxide from the atmosphere in combating climate change.

Another, smaller, metaphor was that of climate as a construct, something that is built, which conceptualizes causes as well as responses to climate change as foundational elements in the construction of climate. The basic lexical units draw on construction language of the building theme, such as ‘building blocks’ or ‘cornerstones’. In the English media, the lexical item ‘cornerstone’ denotes one of the crucial elements of climate change thereby emphasizing its contribution to it. Similarly, the German news media draws on construction language to describe the ways in which different actions work together in building our response to climate change.

The first mapping describes the effects of climate change as damage and injuries to the planet, as if the planet was a human body. Especially the use of ‘wide scars’ draws attention to the severity and permanent nature of the lasting effects of climate change. By triggering our experience of injury and pain, this mapping is likely to prompt reader’s empathy, our feelings of responsibility and urge to care. As an extension, the second mapping builds on this metaphor through the lexical item ‘lifeline’. This does not only reiterate the severity of climate change but also suggests that we can respond in a way to mitigate the effects, much in the same way medication mitigates the symptoms of a disease.

3.4 Climate as a Living Being

Mapping 1: (climate change) EFFECTS cause harm

Mapping 2: (climate change) RESPONSE is medicine

The INJURY metaphor was used to describe effects of climate change as well as responses. As such, we have two target source mappings: EFFECTS cause INJURY and RESPONSE heals INJURY. Conceptualizing effects and responses as injuries and their remedies evokes concern and worry for our planet and underscores the severity of climate change. This conceptual metaphor was found in both English news outlets used indirectly through a variety of lexical items as listed in table 4. As a whole, it is utilized to frame climate change as a harmful force that causes damage to the planet’s health and well-being. This is intensified through our understanding of injury as something that can only be caused to a person or animal. As such, this metaphor further invokes concern but also compassion for our planet by conceptualizing it as a living being.

Table 5. Source-to-target cross-domain mappings climate is a living being

Mapping 1: (climate change) EFFECTS cause harm	
Theme	Basic lexical units English media
Injury	scars, whiplash, symptoms, scorching, hit, vulnerable
Mapping 2: (climate change) RESPONSE is medicine	
Theme	Basic lexical units English media
Death	lifeline

33. The worst wildfire in Texas' history is leaving wide scars on the landscape.

34. The state is beginning to experience what scientists are calling 'hydroclimate whiplash'

35. Circular sanitation systems could be lifelines on a water-stressed planet, but there are big barriers to overcome.

In example 1, the effects of wildfires on the planet are described in terms of scars, which suggest the long-lasting and severe effects of wildfires on the planet. While scars may be small, 'wide scars' are highly visible and often irreversible damage, emphasizing the severe and permanent effect of wildfires on the planet. Example 2 explains a complex weather pattern of abrupt changes between extreme dry and wet weather (Tan, X., Wu, X., Huang, Z. et al., 2023) as 'whiplash', a commonly understood neck injury caused by rapid back and forth movements. Drawing on the readers' understanding of whiplash, this metaphor emphasizes the rapid nature of weather changes as well as the potentially severe damage. Both examples, 1 and 2, thus emphasize the severity, damaging, and harmful nature of climate change effects, eliciting concern for the health of our planet. This reference to our planet's well-being is also evident in example 3, the only example of the INJURY metaphor used to conceptualize a possible RESPONSE. Using the term lifeline to describe a specific circulation system that saves water prompts the reader to view our planet in grave danger, close to death in need of saving. That is, they draw on the positive elements of a 'lifeline' in this metaphor, whereas all EFFECT metaphors have highlighted the negative elements.

Framing climate change as a living being conceptualizes the climate system and the planet as a living organism, a body, which makes it more relatable to people and evokes the idea of fragility. This metaphor puts the spotlight on the severity of climate change but also the healing powers that our responses may have.

3.5 Climate Is a Game

The climate as a game metaphor was found only in the German news media with two

mappings:

Mapping 1: Climate is a sport.

Mapping 2: Climate change is a GAME.

Table 6. Source-to-target cross-domain mappings climate is a game

Mapping: Climate is a sport	
Basic lexical units German media	
Success	Streak, Rekord, Rekordwerte, Hitzerekord, jagen, Negativrekord, Rekordtemperaturen, Klima-Rekorde, Höchststände, Rekordkurs
Time	Halbzeit, Verlängerung
Mapping 1: Climate is a game	
Basic lexical units German media	
Gamble	Spielen

36. Most commonly the metaphor is expressed through lexical items that invoke the idea of success, such as ‘streak’, or record. A record is commonly used to describe achievements better than previous ones, especially in sports. Sentences 31 and 32 exemplify this by using the term ‘record’ to describe effects of climate change, namely greenhouse gas emissions and extreme heat as higher than ever before. Similarly, example 32 uses the word ‘streak’ to describe a continued period of extreme heat. For all three examples, the idea of a record being an uncomparable achievement is used to conceptualize extreme effects of climate change. The second theme within the sports reading of the game metaphor is that of time, wherein temporal lexical items are employed to express responses to climate change. For instance, example 35 uses the term ‘Halbzeit’ (half time) to express the progress of the world climate conference.

37. Treibhausgase weltweit nach wie vor auf Rekordkurs.

38. Greenhouse gases still on record course worldwide.

39. 2023 war das bisher heißeste Jahr in der gesamten Messgeschichte, und nach wie vor jagt ein Hitzerekord den nächsten.

40. 2023 was the hottest year in the entire history of measurements, and heat record after heat record is still being set.

41. Der zwölfmonatige Streak fällt zusammen mit dem von der Weltwetterorganisation

WMO veröffentlichten Bericht.

42. The twelve-month streak coincides with the report published by the World Meteorological Organization (WMO).
43. Es sei praktisch ausgeschlossen, dass der Dezember daran noch etwas ändere, hatte Copernicus am 6. Dezember zur Halbzeit der Weltklimakonferenz mitgeteilt.
44. It is practically impossible for December to change this, Copernicus announced on December 6 at the halfway point of the World Climate Conference.
45. The second reading of the game metaphor considers our current response to climate change a gamble. Specifically, the example names Russian Roulette, a game based on luck entirely, which potentially damaging results. In that sense, this example expresses the idea that we are gambling with our planet, without and strategic or effective response and will end up killing our planet.
46. Wir spielen russisches Roulette mit unserem Planeten
47. We play Russian roulette with our planet.

The metaphor of climate as a game conceptualizes the effects of climate change as a sport or gamble, drawing on parallels in terms of success, competition, and timing. The first mapping in which climate change effects are understood through sports-related lexical items to express the gravity of effects, the urgency, and the effort needed to diminish. The frequency of ‘record’ specifically alludes to the gravity of the situation as records describe an achievement that surpasses previous ones. Further, this invokes the idea of competition, in which we need to urgently respond. This urgency is even more visible in the second mapping of this metaphor which conceptualizes climate change as a gamble, Russian roulette to be precise. Russian roulette is a highstakes game in which death is a likely outcome.

3.6 *Climate Is Balance*

The balance metaphor is that last metaphor to have come out of the analysis of German news outlets with one mapping:

Climate is BALANCE

As only a few examples were found, there were no discernable themes. This metaphor was identified based on the following lexical items: *Waage, Lot, Bilanz, Summe, ausgleichen*, all of which conceptualize climate as something that can be balanced or out of balance. Sentence 37 exemplifies this by positioning ‘Freisetzung’ (natural release) and ‘Abbau’ (decomposition) at the two opposing parts that keep climate balanced out. However, as the man-made imbalance is described as one of the causes of climate change. This is also evident in example 38, in which a possible response to climate change is conceptualized as equalizing this imbalance.

48. Normalerweise halten sich natürliche Freisetzung und Abbau weitgehend die Waage, doch seit der Mensch in den Stickstoffkreislauf der Erde eingreift, ist das System aus

dem Lot.

49. Normally, natural release and decomposition largely balance each other out, but since human intervention in the earth's nitrogen cycle, the system has been out of kilter.
50. Es müssten also die vom Menschen verursachten Treibhausgasemissionen zur Gänze wieder ausgeglichen werden.
51. The greenhouse gas emissions caused by humans would therefore have to be offset in full.

The metaphor frames climate as balance between nature and human action. In that sense, climate change is considered an imbalance in the climate caused by human disruption.

4. Discussion and Conclusion

This paper investigated the metaphorical expressions in English and German news outlets to gain insight into the dominant media discourse on this complex issue. That is, I identified dominant source domains in climate change metaphors and their source-to-target cross-domain mappings to analyze the ways in which they create meaning and shape the public climate change narrative. By using one metaphor over another, authors can focus their readers' attention on specific characteristics of any target domain and thus give meaning to complex issues. In other words, framing climate change content through particular source-to-target cross-domain mappings and the inherent correspondences invokes specific ideas and evaluations, which in turn can emphasize, highlight, and affect the way we talk and think about climate change.

The metaphors in this analysis revealed a shared understanding of climate change as a threat which – if not stopped – will force us to an undesired endpoint, evident in the prevalence of war and destination metaphors, which is in line with previous research (Adam & Wahyuni, 2020; Flusberg et al., 2017; Hidalgo-Downing & O'Dowd, 2023). The war metaphor was dominant in both languages and indicates a shared worldview, in which humanity is under attack and at need of defending themselves. Using such imagery naturally stresses the severity and urgency of the situation. Wars are dangerous, imminent threats that require urgent and coordinated action, which further communicates the need for humanity to work together. Positioning climate change and its effects as the enemy on one side of the conflict automatically positions humanity as a whole on the other side, emphasizing an understanding of climate change as a shared global issue that needs to be addressed together. This is particularly interesting if we consider the frequent use of destination metaphors as they highlight our collective ability to mitigate climate change. The two mappings of the destination metaphor put the spotlight on the potential we have as humanity to reduce the effects of climate change if we make appropriate choices. While directionality is crucial to understand the importance and ideology behind the destination metaphor, we also need to acknowledge the progress theme through the lexical items 'tipping point'. Van der Heel et al. (2018) already discussed the prevalence of this metaphor to express the irreversibility of climate change, however, this study also included examples tipping points that express crucial steps towards mitigating the effects, giving this metaphor more depth.

As much as we have learned, such an analysis has clear limitations with regards to sample size and insight into the effect of such metaphorical use. An in-depth analysis of metaphorical conceptualizations of climate change requires detailed focus on a small selection of news articles, which may cause the researcher to miss themes that have been – or still are – relevant and prominent due to the sampling. More importantly, while one can interpret the potential messages that certain metaphors send, it is only that, an educated guess. Therefore, the next step in this research requires engagement with readers reactions, for example through comments sections of online news portals, which will open new avenues to explore the effect of metaphorical conceptualizations of climate change.

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