Metonymy in climate change discourse by King Charles III: A cognitive-linguistic perspective

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Abstract. The current British monarch King Charles III is a staunch supporter of climate change mitigation (O'Neill et al. 2013, 413). Whereas he has delivered numerous speeches on climate change both domestically and internationally, currently, however, there are no studies that investigate his speeches on the issue of climate change through a linguistic lens in general and through a cognitive-linguistic prism in particular. Furthermore, there seems to be no published research on such a ubiquitous cognitive-linguistic device as metonymy (Hart 2011) in his speeches on climate change. In order to address the gap in scholarship, the article presents a study that aims to identify the types of metonymy in a corpus of speeches on climate change delivered by King Charles III. The corpus was analysed qualitatively by means of applying a cognitive-linguistic approach to metonymy developed by Radden and Kövecses (1999). The results of the corpus analysis revealed the presence of the following types of metonymy, namely (i) PLACE FOR A CLIMATE CHANGE-RELATED EVENT, (ii) PLACE FOR A CLIMATE CHANGE-RELATED ACTIVITY, (iii) PLACE FOR THE GOVERNMENT INVOLVED IN A CLIMATE CHANGE-RELATED ACTIVITY, (iv) THE GENERIC COMPANY NAME FOR AN ACTOR INVOLVED IN A CLIMATE CHANGE-RELATED ACTIVITY, (v) THE SPECIFIC COMPANY NAME FOR AN ACTOR INVOLVED IN A CLIMATE CHANGE-RELATED ACTIVITY, (vi) THE DEFINING PROPERTY OF THE CATEGORY "CLIMATE CHANGE ACTOR" FOR THE WHOLE CATEGORY, and (vii) THE DEFINING PROPERTY OF THE CATEGORY "CLIMATE CHANGE GOALS" FOR THE WHOLE CATEGORY. The findings are further discussed and illustrated in the article.

Keywords: climate change discourse, cognitive linguistics, conceptual metonymy, King Charles III

1 Introduction

The issue of climate change as a threat to humanity (Thompson 2024) has drawn attention of political and societal leaders, inclusive of the current British monarch King Charles III (O'Neill et al. 2013, 413). Widely known in the United Kingdom (the UK) for his environmental and climate change-related contribution, King Charles III has acquired a solid reputation as a vocal supporter of climate change mitigation (Lovelock & Lovelock 2013). Furthermore, King Charles III has delivered multiple speeches on the issue of climate change domestically, in the UK, and abroad (Anderson 2011). In this regard, it should be mentioned that his speeches on climate change are freely available on www.royal.uk, the official website of the British royal family.

Whilst King Charles III's speeches on climate change are easily accessible on www.royal.uk, research on his climate change discourse is scarce (Kapranov 2024a). Moreover, there are no published studies that focus on such cognitive-linguistic phenomenon as conceptual metonymy in his speeches on the issue of climate change (Kapranov 2024b). Given the current cognitive turn in discourse studies (Hart 2023), it seems topical to apply the methodological apparatus of cognitive linguistics to the discourses on climate change (Augé 2022) in order to investigate King Charles III's speeches on climate change through a cognitive-linguistic lens. Arguably, a cognitive-linguistic investigation of metonymy in King Charles III's speeches on climate change can provide an invaluable insight into his discursive space, which can be similar, or alternatively, dissimilar to the discourses on climate change by other influential actors. On the note of influential actors who are known for their stance on climate change, it should be observed that King Charles III's voice on climate change is attended to by the British political mainstream parties, which take his position on climate change into consideration in their policy-making (Averchenkova et al. 2021).

In light of the above, the present article introduces and discusses a study that seeks to elucidate King Charles III's speeches on climate change through the cognitive-linguistic prism. The study factors in a number of cognitive-linguistic investigations, which have established that climate change discourses are marked by the presence of conceptual metonymy (Augé 2022, Dancygier 2023, Hidalgo-Downing & O'Dowd 2023, Kapranov 2015a, O'Neill 2022). Informed by the prior scientific inquiries, the study aims to analyse a corpus of King Charles III's speeches on climate change in order to answer the following research question (RQ): What types of conceptual metonymy occur in the corpus of King Charles III's speeches on climate change?

Further, the article is organised as follows. First, a cognitive-linguistic approach to metonymy is outlined in section 2. Second, a review of prior studies on metonymy in

climate change discourse is provided in section 3. Third, in section 4, the present study is introduced, inclusive of the corpus, methodology, results and their discussion. Finally, the summary of the major findings, the limitations of the study, and possible avenues of future research are given in section 5.

2 Theoretical considerations: A cognitive-linguistic approach to metonymy

Prior to reviewing the studies on conceptual metonymy in climate change discourse, it seems pertinent to provide the readers with the general theoretical postulates of metonymy in the cognitive-linguistic paradigm. In contrast to the traditional view of metonymy as a trope that harkens back to Aristotle (Oleniak 2018), the cognitive-linguistic approach to metonymy problematises it as one of the fundamental mechanisms of human cognition (Fauconnier & Turner 1999, Oleniak 2022). Cognitive linguistics posits that metonymy partakes in structuring the mental world by providing a roadmap of perceiving, conceptualising, and expressing the reality as people know it (Barcelona 2000, Brdar 2009, Mizin & Ovsiienko 2020). Furthermore, cognitive linguists seem to agree that metonymy is ubiquitous in conceptual as well as linguistic representations (Barcelona 2019, Kapranov 2018), which are manifested, inter alia, in various types of discourses (Barcelona 2003, Panther 2006).

In cognitive linguistics, metonymy is problematised as a cognitive phenomenon that permeates human conception of the world (Lakoff & Johnson 1980). In particular, Lakoff and Johnson (1980, 35) regard metonymy as the use of one entity in the reference to another that is related to it. Furthermore, they define metonymy as having a referential function that allows the speaker to use one entity to stand for another (Lakoff & Johnson 1980, 36). Notably, Lakoff and Johnson (1980, 37) argue that

> *metonymy serves some of the same purposes that metaphor does, and in somewhat the same way, but it allows us to focus more specifically on certain aspects of what is being referred to. It is also like metaphor in that it is not just a poetic or rhetorical device. Nor is it just a matter of language. Metonymic concepts (like* THE PART FOR THE WHOLE*) are part of the ordinary, everyday way we think and act as well as talk.*

Importantly, Lakoff and Johnson (1980, 37) emphasise that "metonymies are not random or arbitrary occurrences, to be treated as isolated instances. Metonymic concepts are also systematic". According to Lakoff and Johnson (1980, 36–39), the systematicity of metonymic concepts is manifested by the recurring types of metonymy, which are illustrated by Table 1 below.

#	Types of Metonymy	Examples
1	THE PART FOR THE WHOLE	There are a lot of **good heads** in the university (Lakoff & Johnson 1980, 36).
2	THE FACE FOR THE PERSON	We need some **new faces** around here (Lakoff & Johnson 1980, 37).
3	PRODUCER FOR PRODUCT	He bought a **Ford** (Lakoff & Johnson 1980, 38).
4	OBJECT USED FOR USER	The **buses** are on strike (Lakoff & Johnson 1980, 38).
5	CONTROLLER FOR CONTROLLED	**Napoleon** lost at Waterloo (Lakoff & Johnson 1980, 38).
6	INSTITUTION FOR PEOPLE RESPONSIBLE	**Exxon** has raised its prices again (Lakoff & Johnson 1980, 38).
7	THE PLACE FOR THE INSTITUTION	**Paris** is introducing longer skirts this season (Lakoff & Johnson 1980, 38).
8	THE PLACE FOR THE EVENT	**Watergate** changed our politics (Lakoff & Johnson 1980, 39).

Table 1. The recurrent types of conceptual metonymy according to Lakoff and Johnson (1980)

Lakoff and Johnson's (1980) cognitive approach to metonymy, as well as to metaphor, is described as the cognitive revolution in linguistics (Gibbs 1999, Steen 2014). In this regard, Gibbs and Ferreira (2015) indicate that

> *The most important consequence of the "cognitive revolution" in metaphor and metonymy studies is the empirical study of language regarding what it reveals about human thought, as well as cultural and ideological influences on the ways people reason and imagine.* (Gibbs & Ferreira 2015, 305)

In the wake of Lakoff and Jonson's cognitive revolution or cognitive turn in linguistics and discourse studies, there have been multiple attempts at providing a cognitive-linguistic definition of metonymy (Croft 1993). In this respect, Barcelona (2000, 32) posits that "as for metonymy, there is no definition yet on which cognitive linguists agree in every detail". Furthermore, Barcelona (ibid.) argues that whilst cognitive linguists converge on the point that metonymy consists in a mapping between the concepts within the same domain of experience, they, however, diverge on the question of domains and subdomains, in which metonymic mappings eventuate. Barcelona (2000) illustrates his reasoning by citing the definition of metonymy by Kövecses and Radden (1998, 39) and drawing parallels with his view of metonymy. It should be specified that Kövecses and Radden (1998, 39) define metonymy as "a cognitive process in which one conceptual entity, the vehicle, provides mental access to another conceptual entity, the target, within the same domain, or ICM".

In contrast to the approach to metonymy by Kövecses and Radden (1998, 39), Barcelona (2000, 32–33) suggests that metonymy should be defined as "the conceptual mapping of a cognitive domain onto another domain, both domains being included into the same domain or ICM, so that the source provides mental access to the target". It should be specified that an ICM stands for an Idealised Conceptual Model (Lakoff & Johnson 1980). An ICM can be conceived of as a knowledge network (Littlemore & Tagg 2018) or an organised conceptual structure (Ruiz De Mendoza & Díez Velasco 2003) in the human conceptual system for particular concepts or events. In other words, an ICM represents an abstract structure in the knowledge domain (Ruiz De Mendoza & Díez Velasco 2003, 189) that (i) involves culture and shared background knowledge (Kövecses 2005) and (ii) encapsulates people's encounters with a particular concept (Littlemore & Tagg 2018). Similarly to ICMs, domains are thought to be a knowledge configuration that is comprised of several concepts, such as the base of a domain and a specific profile to the base, respectively (Croft 1993). In this regard, Croft (1993, 340) notes that "a particular semantic structure can be a concept in a domain (when it is profiled), or a domain itself (when it is functioning as the base to other concept profiles)".

In addition to the aforementioned definitions of metonymy, it seems relevant to refer to the definitions of metonymy formulated by Ruiz De Mendoza and Díez Velasco (2003) and Littlemore and Tagg (2018), respectively. Notably, whilst the definition of Ruiz De Mendoza and Díez Velasco (2003) relies on the construal of a domain, the latter conceptualises metonymy without referring to domains or ICMs for that matter. Specifically, Ruiz De Mendoza and Díez Velasco (2003, 189) contend that metonymy is defined as the mapping between the source and target domains, which "is always based on a domain-subdomain relationship". However, Littlemore and Tagg (2018, 481) define metonymy as "a cognitive and linguistic process whereby we use one entity, process or event to refer to another related entity, process or event, so for example, we might use 'Hollywood' to refer to mainstream American films".

Whilst cognitive linguists seem to propose different definitions of metonymy, they, nevertheless, appear to view metonymy as a useful means of gaining insight into the mental and discursive spaces of a speaker and a writer in a broad range of discourses (Panther 2006, Panther & Thornburg 2017), inclusive of climate change discourse. Further, in section 3 of the article, an outline of the literature on metonymy in climate change discourse is provided.

3 Metonymy in climate change discourse: A review of the prior studies

Research studies on metonymy in climate change discourse seem to be well-represented in linguistics and cognitive linguistics (Augé 2019, Cabezas-García & León-Araúz

2022, Dancygier 2023, Deignan 2017, Hidalgo-Downing & O'Dowd 2023, Kahambing 2021, O'Dowd 2024, O'Neill 2022, Vermenych 2020). In a number of recent studies, metonymy in climate change discourse is argued to involve iconic climate change-related images that embody several types of metonymy (Dancygier 2023, O'Neill 2022). Specifically, O'Neill (2022, 1108) posits that the image of a polar bear that drowned in the ice-free sea represents a metonymic mapping between CAUSE and EFFECT, in which CAUSE is associated with the melting of sea ice due to the rising global temperatures, and EFFECT is represented by the dead animal whose habitat has been destroyed as the result of climate change.

Similarly, Dancygier (2023) as well as Hidalgo-Downing and O'Dowd (2023) demonstrate that iconic imagery in climate change discourse may be indicative of metonymic mappings between the concepts CAUSE and EFFECT. In particular, Dancygier (2023) argues that the imagery of petrol-run cars with exhaust fumes encapsulates a CAUSE of climate change, which contributes substantially to air pollution and global warming (i.e., the EFFECT of climate change). Comparably, Hidalgo-Downing and O'Dowd (2023) show that the imagery of plastic epitomises a CAUSE of environmental pollution that, in turn, leads to climate change-related problems (i.e., the EFFECT of climate change).

Informed by the role of imagery in climate change discourse, Vermenych (2020) implies that the image of heat gives rise to the type of metonymy HEAT FOR CLIMATE CHANGE. Vermenych (2020) maintains that the rise in temperature and, in particular, heat act as the manifestation of climate change and its negative consequences. Likewise, the rise in global temperature and the concept GLOBAL WARMING are interpreted by Cabezas-García and León-Araúz (2022) as the metonymic relationship between GLOBAL WARMING and GLOBAL CLIMATE CHANGE. Specifically, Cabezas-García and León-Araúz (2022) regard GLOBAL WARMING as a prototypical aspect of GLOBAL CLIMATE CHANGE. They contend that GLOBAL WARMING forms part of GLOBAL CLIMATE and, consequently, the relationship between them can be understood as the type of metonymy GLOBAL WARMING FOR GLOBAL CLIMATE CHANGE. Moreover, Cabezas-García and León-Araúz (2022), as well as Hidalgo-Downing and O'Dowd (2023), Augé (2019), Dancygier (2023), and Vermenych (2020) indicate that metonymy, which is based upon iconic imagery, facilitates the construction of discursive tonalities that may influence the way people conceptualise and react to the topic of climate change and its negative consequences.

As noted by O'Dowd (2024), people's reaction to the negative consequences of climate change may be manifested by climate change activism. In this regard, O'Dowd (2024) posits that climate change activism seems to use multimodal discursive means that involve metonymy. Particularly, O'Dowd (2024) has found that metonymy is pivotal in digital

banners that are used by climate change activists who take part in the Global Climate Strike movement. It is inferred from O'Dowd's research (2024) that the banners used by the Global Strike Movement are regarded as metonymic symbols of climate change protest. Furthermore, a well-known climate change activist Greta Thunberg is reported to employ metonymy in her Facebook communication with the members of Fridays For Future (also known as the School Strike for Climate), which is an international climate change protest movement (Kapranov 2022). In particular, Thunberg appears to employ several types of metonymy, such as THE PLACE OF A CLIMATE CHANGE DEMONSTRATION FOR THE DEMONSTRATION (Kapranov 2022).

In addition, it is argued that metonymy is present in climate change- and health-related discourses (Kahambing 2021). Particularly, Kahambing (2021) states that metonymy in the aforementioned discourses shows a deep connection between the environment and human body. Specifically, Kahambing (2021) contends that metonymy seems to cast light onto the CAUSE and EFFECT relationship that has eventuated between the pandemic world (i.e., CAUSE) and the humans, as well as the nature in general that have suffered immense consequences of the COVID-19 pandemic (i.e., EFFECT). Furthermore, Kahambing (2021) indicates that

> *The metonymic role ascribed to nature has been that of attaching the metaphor of a mother. 'Mother Nature' persists as the metonymy of life-giving, care and sustenance of the environment. First, human activity made it possible for ecological sustenance difficult to keep up. Second, it is not that mother nature is no longer stable due to human activities, but that mother nature herself was unstable from the start through inherent climatic changes. The language considerations of pointing to mother nature here resonate with the indirect links of the pandemic, but it can provide direct messages for sustainable prospects*. (Kahambing 2021, 753)

Having reviewed the recent studies on metonymy in climate change discourse, let us proceed to the present study in the subsequent section of the article, which aims at identifying the types of metonymy in climate change discourse by King Charles III.

4 The present study: Its research aims, corpus, and methodology

The present qualitative study forms part of a larger project that investigates discursive, linguistic and cognitive-linguistic peculiarities of King Charles III's speeches on climate change (Kapranov 2024b). The study is informed by the prior research reviewed in section 3 of the article, which reports the presence of metonymy in climate change discourses. Moreover, the study factors in the seminal publications by Nerlich (2010), Koteyko and Atanasova (2016), Fløttum and Gjerstad (2017), and Nerlich and Jaspal (2024), who

indicate that climate change discourses are permeated with metonymy. In light of the aforementioned studies, it is assumed in the present investigation that metonymy is bound to occur in climate change discourse by King Charles III, particularly, in his speeches on the topic of climate change. Guided by this assumption, the RQ is formulated (see introduction).

In line with the RQ, the study sought to (i) collect a corpus of the King's speeches on the issue of climate change, (ii) identify instances of conceptual metonymy, and (iii) classify the to-be-identified instances of conceptual metonymy through the cognitive-linguistic prism. The corpus of the study was comprised of King Charles III's speeches on the issue of climate change that were accessed on the official website of the British royal family www.royal.uk. The website was searched for King Charles III's speeches on climate change by means of the following keywords: *anthropogenic climate change*, *climate change adaptation*, *climate change demonstration*, *climate change event*, *climate change mass media coverage*, *climate change mitigation*, *climate change policy*, *climate change protest*, *climate risk/risks*, *CO2 absorption*, *CO2 capture and storage*, *CO2 emission/emissions*, *CO2 emission reduction/reductions*, *extreme weather event/events*, *extreme drought*, *extreme rain/rainfall*, *global warming*, *green energy*, *greenhouse gasses/GHG*, *green technology*, *net zero*, *rise in sea level*, *wind energy*, *wind farm*, *the consequences of climate change*, and (*the*) *health effects of climate change*. The choice of the aforementioned keywords was motivated by the prior studies (Koteyko & Atanasova 2016, Fløttum & Gjerstad 2017, Kapranov 2015b, Nerlich & Jaspal 2024), in which similar keywords were applied. The search returned 20 speeches on the issue of climate change (the total number of words = 36 272) delivered by King Charles III within the period from 2005 to 2023.

The corpus was examined manually for the presence of conceptual metonymy. The manual search for conceptual metonymy in the corpus was informed by the definition of metonymy formulated by Kövecses and Radden (1998, 39), who defined it as "a cognitive process in which one conceptual entity, the vehicle, provides mental access to another conceptual entity, the target, within the same domain, or ICM". The corpus was analysed qualitatively in unison with Kövecses and Radden's (1998) definition of metonymy and their typology of metonymic relationships. The qualitative analysis involved the following considerations. Firstly, it was established whether or not the aforementioned keywords were associated with the ICM CLIMATE CHANGE. Secondly, the typology of metonymy developed by Kövecses and Radden (1998) was applied to each potential case of conceptual metonymy within the ICM CLIMATE CHANGE. Kövecses and Radden's (1998) typology of metonymy was summarised in Table 2 below.

#	High-Level Conceptual Configurations	Types of Metonymy-Producing Relationships
1	Whole ICM and its part(s)	WHOLE THING FOR A PART OF THE THING
2	Whole ICM and its part(s)	PART OF A THING FOR THE WHOLE THING
3	Whole ICM and its part(s)	OBJECT FOR MATERIAL CONSTITUTING THAT OBJECT
4	Whole ICM and its part(s)	THE MATERIAL CONSTITUTING AN OBJECT FOR THE OBJECT
5	Whole ICM and its part(s)	SUCCESSIVE SUBEVENTS FOR COMPLEX EVENT
6	Whole ICM and its part(s)	CO-PRESENT SUBEVENTS FOR COMPLEX EVENT
7	Whole ICM and its part(s)	A CATEGORY FOR A MEMBER OF THE CATEGORY
8	Whole ICM and its part(s)	A MEMBER OF THE CATEGORY FOR THE CATEGORY
9	Whole ICM and its part(s)	CATEGORY FOR DEFINING PROPERTY
10	Whole ICM and its part(s)	DEFINING PROPERTY FOR CATEGORY
11	Parts of an ICM	INSTRUMENT FOR ACTION
12	Parts of an ICM	AGENT FOR ACTION
13	Parts of an ICM	ACTION FOR AGENT
14	Parts of an ICM	OBJECT INVOLVED IN AN ACTION FOR THE ACTION
15	Parts of an ICM	ACTION FOR OBJECT INVOLVED IN THE ACTION
16	Parts of an ICM	RESULT FOR ACTION
17	Parts of an ICM	ACTION FOR RESULT
18	Parts of an ICM	MEANS FOR ACTION
19	Parts of an ICM	MANNER OF ACTION FOR THE ACTION
20	Parts of an ICM	TIME PERIOD OF ACTION FOR THE ACTION
21	Parts of an ICM	DESTINATION FOR MOTION
23	Parts of an ICM	TIME OF MOTION FOR AN ENTITY INVOLVED IN THE MOTION
24	Parts of an ICM	PERCEPTION FOR THINGS PERCEIVED
25	Parts of an ICM	THINGS PERCEIVED FOR THE PERCEPTION
26	Parts of an ICM	STATE FOR THE THINGS/PERSON THAT CAUSED IT
27	Parts of an ICM	EMOTION FOR CAUSE OF EMOTION
28	Parts of an ICM	MENTAL STATE FOR OBJECT/PERSON CAUSING IT
29	Parts of an ICM	PSYCHOLOGICAL/BEHAVIOURAL EFFECT FOR EMOTION
30	Parts of an ICM	SOUND CAUSED FOR THE EVENT THAT CAUSED IT
31	Parts of an ICM	PRODUCER FOR PRODUCT
32	Parts of an ICM	AUTHOR FOR THE WORK
33	Parts of an ICM	PLACE FOR PRODUCT MADE THERE
34	Parts of an ICM	CONTROLLER FOR CONTROLLED
35	Parts of an ICM	CONTROLLED FOR CONTROLLER
36	Parts of an ICM	POSSESSOR FOR POSSESSED
37	Parts of an ICM	POSSESSED FOR POSSESSOR
38	Parts of an ICM	CONTAINER FOR CONTAINED
39	Parts of an ICM	CONTAINED FOR CONTAINER
40	Denominal verbs	OBJECT OF MOTION FOR THE MOTION
41	Denominal verbs	DESTINATION OF THE MOTION FOR THE MOTION
42	Denominal verbs	TIME PERIOD FOR A CHARACTERISTIC ACTIVITY
43	Denominal verbs	AGENT FOR A CHARACTERISTIC ACTIVITY OF THAT AGENT
44	Denominal verbs	EXPERIENCER OF AN EVENT FOR THE EVENT
45	Denominal verbs	RESULT FOR THE ACTION THAT BRINGS ABOUT THAT RESULT

Table 2. Metonymy-producing relationships according to Kövecses and Radden (1998)

It should be emphasised that the choice of Kövecses and Radden's (1998) typology as the methodological foundation of the present investigation was explained by its acceptance by a number of eminent cognitive linguists. For instance, Littlemore and Tagg (2018, 485) posited that Kövecses and Radden's (1998) typology was "used in a great deal of metonymy research. This is unsurprising given its comprehensibility and originality, and we draw on this taxonomy throughout our analysis". Furthermore, Barcelona (2000, 33) referred to Kövecses and Radden's (1998) typology as rigorously systematic and "elaborated on the basis of a series of principles commonly held in cognitive linguistics".

It should be borne in mind, however, that the typology of metonymic relationships by Kövecses and Radden (1998) was modified in the present study in order to accommodate the specifics of the ICM CLIMATE CHANGE. Each of the King's speeches was read several times in order to locate the stretches of discourse with potential candidates of metonymy. Furthermore, each potential candidate of metonymy was examined for its association with a high-level conceptual configuration and a type of metonymy-producing relationship in accordance with Kövecses and Radden's (1998) typology of metonymy (see Table 2). In this regard, it should be specified that each case of metonymy in the corpus was established on the basis of metonymic mappings within the ICM CLIMATE CHANGE. Specifically, the ICM CLIMATE CHANGE was assumed to be involved in the activation of certain contiguous metonymic relationships between the concepts within particular syntactic-semantic constructions (Brdar 2015, Salamurović 2020). The analysis could be further illustrated by the following two sentences taken from the corpus:

(a) *The fifteenth Conference of the Parties of the United Nations Framework Convention on Climate Change (thankfully abbreviated to COP 15) in* **Copenhagen** *in December will be an historic occasion.* (The Prince of Wales 2009)

(b) *I believe that a memorandum drawing together the wisdom and authority of this extraordinary group here could, and should, have a real influence on key decisions taken before, during and after* **Copenhagen***.* (The Prince of Wales 2009)

In (a), *Copenhagen* did not embody any metonymic meanings, since it conveyed the literal meaning. In (b), however, *Copenhagen* represented a case of metonymy, given that it was manifested by a contiguous mapping from the concept PLACE (i.e., Copenhagen as the capital of Denmark) onto the concept EVENT, which was associated with a CLIMATE CHANGE-RELATED CONFERENCE that was held in *Copenhagen*. As seen in (b), *Copenhagen* could be argued to represent the result of the mapping from *Copenhagen* as the PLACE onto the conference on climate change (i.e., a CLIMATE CHANGE-RELATED EVENT), thus revealing the type of metonymy PLACE FOR A CLIMATE CHANGE-RELATED EVENT.

Having outlined the procedure of the present analysis, two important remarks should be made. Firstly, the so-called dubious cases associated with metaphtonymy, i.e. a conflation of conceptual metonymy with conceptual metaphor (Goossens 1990), were factored out from the corpus analysis. Secondly, in light of the qualitative nature of the present study, the statistical analysis (for instance, the distribution of the types of metonymy in the corpus) was not undertaken. However, it should be noted that a quantitative analysis of conceptual metonymy in King Charles III's speeches on climate change could provide a feasible research direction for future studies. The results of the present qualitative investigation were summarised and discussed in subsection 4.1.

4.1 Results and discussion

The qualitative analysis has revealed that the corpus of King Charles III's speeches on climate change is characterised by several types of conceptual metonymy. These findings are further presented in Table 3 below.

#	High-Level Conceptual Configurations	Types of Metonymy
1	Parts of an ICM	PLACE FOR A CLIMATE CHANGE-RELATED EVENT
2	Parts of an ICM	PLACE FOR A CLIMATE CHANGE-RELATED ACTIVITY
3	Parts of an ICM	PLACE FOR THE GOVERNMENT INVOLVED IN A CLIMATE CHANGE-RELATED ACTIVITY
4	Parts of an ICM	THE GENERIC COMPANY NAME FOR AN ACTOR INVOLVED IN A CLIMATE CHANGE-RELATED ACTIVITY
5	Parts of an ICM	THE SPECIFIC COMPANY NAME FOR AN ACTOR INVOLVED IN A CLIMATE CHANGE-RELATED ACTIVITY
6	Whole category and its part	THE DEFINING PROPERTY OF THE CATEGORY "CLIMATE CHANGE ACTOR" FOR THE WHOLE CATEGORY
7	Whole category and its part	THE DEFINING PROPERTY OF THE CATEGORY "CLIMATE CHANGE GOALS" FOR THE WHOLE CATEGORY

Table 3. The types of conceptual metonymy in the corpus

Prior to discussing the findings in more detail, it seems pertinent to refer to the assumption in the study. To reiterate, the assumption is based upon the prior publications (Nerlich 2010, Koteyko & Atanasova 2016, Fløttum & Gjerstad 2017, Nerlich & Jaspal 2024), which point to the presence of metonymy in climate change discourses. In this regard, it can be argued that the occurrence of metonymy in the corpus supports the assumption. It can safely be posited that each speech in the corpus is marked by the presence of conceptual metonymy (the total number of cases = 69, mean = 3.5, standard deviation = 1.9), which is manifested by the types of metonymy that are outlined in Table 3.

Let us discuss and illustrate the types of metonymy identified in the corpus (see Table 3). As shown in Table 3, there are several types of metonymy that are associated with the concept PLACE, in particular, (i) PLACE FOR A CLIMATE CHANGE-RELATED EVENT, illustrated by excerpt (1), (ii) PLACE FOR A CLIMATE CHANGE-RELATED ACTIVITY, which is exemplified by excerpt (2), and (iii) PLACE FOR THE GOVERNMENT INVOLVED IN A CLIMATE CHANGE-RELATED ACTIVITY, which is represented by excerpt (3).

(1) *Regarding COP21, I have been immensely touched by President Hollande's invitation to attend and speak at the opening of the Conference. **Paris** will be an absolutely crucial milestone in the long overdue international effort to keep to a 2 degree world, although I think that everyone realizes that this C.O.P. will be the beginning of a new phase in the process, not the end in itself.* (The Prince of Wales 2015)

(2) *I am particularly glad to be able to join you today for this important meeting on Mexico's energy future within the context of global climate change. For a long time, **Mexico** has played an important leadership role in the global effort to broker a serious, binding, and ambitious climate deal.* (The Prince of Wales 2014)

(3) *It is hugely gratifying that we are being assisted in our work by the World Bank and the European Union, together with the Coalition for Rainforest Nations and, indeed, by Lord Stern who sits on my Steering Committee. I am also delighted to be able to say that this whole Project is having very constructive discussions with a number of **Governments**, including **the United States, France, Brazil, Papua New Guinea, Indonesia** and now, by virtue of the Project's African Task Force, with many African countries too.* (The Prince of Wales 2008a)

In (1), King Charles III describes his preparation to the UN Climate Change Conference in Paris (France) on 12 December 2015 and refers to the conference as *Paris*. In (1), the concept PLACE (i.e., *Paris*) stands for the CLIMATE CHANGE-RELATED EVENT, i.e., the UN Climate Change Conference, thus giving rise to the type of metonymy PLACE FOR A CLIMATE CHANGE-RELATED EVENT. Whilst in (1) the concept PLACE is associated with a city, in (2) PLACE represents the whole country (e.g., *Mexico*), which stands for the concept CLIMATE CHANGE-RELATED ACTIVITY. In other words, in (2) PLACE involves the whole country that partakes in the stand-for relationship with the concept CLIMATE CHANGE-RELATED ACTIVITY, thus resulting in the type of metonymy PLACE FOR A CLIMATE CHANGE-RELATED ACTIVITY. In addition, in (2) King Charles III refers to *Mexico* as a PLACE whose societal actors are involved in a series of activities to mitigate the negative consequences of climate change (e.g., *played an important leadership role in the global effort to broker a serious, binding, and ambitious climate deal*). In (3), however, the metonymic mapping of PLACE onto the concept GOVERNMENT INVOLVED IN CLIMATE CHANGE-RELATED

ACTIVITY is manifested by the type of metonymy PLACE FOR THE GOVERNMENT INVOLVED IN CLIMATE CHANGE-RELATED ACTIVITY. In other words, whereas the metonymic mapping in (3) liaises PLACE as a country with the government representatives, who are engaged in climate change-related activities, the metonymic mapping in (2) connects PLACE as a country with the representatives of civil society, who participate in climate change-related activities.

It should be noted that the aforementioned three types of metonymy associated with PLACE find their analogies in the prior cognitive-linguistic studies (Brdar 2015, Ioannou 2019), which describe the stand-for mapping from PLACE onto EVENT (Radden & Kövecses 1998, Salamurović 2020). However, it appears that the research investigations of metonymy in the context of climate change discourses conducted by Augé (2022), Dancygier (2023), Hidalgo-Downing and O'Dowd (2023), and O'Dowd (2024) do not seem to report the presence of the types of metonymy associated with the concept PLACE.

Continuing the discussion of the findings, it is evident from Table 3 that there are two closely related types of metonymy that involve the stand-for relationship between COMPANY NAME and AN ACTOR INVOLVED IN A CLIMATE CHANGE-RELATED ACTIVITY. These types of metonymy are (iv) THE GENERIC COMPANY NAME FOR AN ACTOR INVOLVED IN A CLIMATE-CHANGE RELATED ACTIVITY (see excerpt 4) and (v) THE SPECIFIC COMPANY NAME FOR AN ACTOR INVOLVED IN A CLIMATE CHANGE-RELATED ACTIVITY (see excerpt 5), respectively.

(4) *This conclusion has also been reached by an increasing number of companies worldwide and I know many of these are in the audience today. **That progressive companies are realizing** that action on climate change makes good business sense is both important in its own right and a direct challenge to all the business organizations who have been saying more or less the opposite!* (The Prince of Wales 2005)

(5) ***BT** and **Vodafone** have both continued to promote their flexible and home-working models, thereby reducing carbon emissions. **Royal Mail** has pioneered an innovative payroll-giving scheme with **The Woodland Trust** that encourages employees to reduce emissions and then offset what is left. And **Chess PLC**, a small business providing communications services, has rewarded employees who car-share with free parking. Improving energy efficiency and cutting back on the appalling levels of waste are the kind of simple things we can all do.* (The Prince of Wales 2008b)

The major difference between the types of metonymy in excerpts (4) and (5) consists in the following. Whereas in excerpt (4) King Charles III refers to the companies that

are engaged in climate change-related activities without providing their names (e.g., *an increasing number of companies worldwide*), he names them in (5), for instance *BT*, *Vodafone*, *Royal Mail*, *The Woodland Trust*, and *Chess PLC*. Both in (4) and (5), the metonymic relationship eventuates between a name of the company (specific or generic) and the company's role as an actor that is engaged in the activities associated with climate change mitigation. Clearly, it is not the name of the company (e.g., BP) per se that is engaged in climate change amelioration but the company's staff members who are engaged in climate change mitigation (i.e., AN ACTOR INVOLVED IN A CLIMATE CHANGE-RELATED ACTIVITY).

Finally, let us discuss the types of metonymy (vi) THE DEFINING PROPERTY OF THE CATEGORY "CLIMATE CHANGE ACTOR" FOR THE WHOLE CATEGORY, which is further illustrated by excerpt (6) and (vii) THE DEFINING PROPERTY OF THE CATEGORY "CLIMATE CHANGE GOALS" FOR THE WHOLE CATEGORY, which is exemplified by excerpt (7). It should be observed that both of these two types of metonymy eventuate in the high-level conceptual configuration WHOLE CATEGORY AND ITS PART.

(6) *I believe the answer is simple: we have failed to understand the problem we are trying to solve, and we have failed to explain the benefits of the necessary solutions. We have also been led to believe that the whole problem revolves around **CO2** when in fact it is infinitely more complex than that.* (The Prince of Wales 2010)

(7) *Ladies and gentlemen, for twenty years I have been making speeches warning about climate change and I remain in no doubt that it is the greatest threat facing Mankind. While I am enormously encouraged that it is has now become a subject which occupies **the minds of most Governments, international organizations, companies, and individuals**, I, for one, don't think we are doing enough or that we are doing it sufficiently quickly, that is the real problem.* (The Prince of Wales 2008c)

In (6), CO2 metonymically represents the concept THE DEFINING PROPERTY that pertains to the category CLIMATE CHANGE GOALS. As is well-known, the industrial level of CO2 emissions is deemed responsible for the rise in global temperature and, as such, is thought to represent a prototypical feature that defines the category CLIMATE CHANGE GOALS, given that one of the principal goals of climate change mitigation involves CO2 reduction (Dancygier 2023, Hidalgo-Downing & O'Dowd 2023, Koteyko, & Atanasova 2016, O'Neill 2022). Assuming that CO2 manifests a salient and defining property of CLIMATE CHANGE MITIGATION (Kapranov 2015a), it appears plausible that King Charles III by virtue of mentioning CO2 in (6) evokes the whole category CLIMATE CHANGE MITIGATION.

Similarly, King Charles III refers to the defining property of the category CLIMATE CHANGE ACTOR, namely, *the minds of most Governments, international organizations, companies and individuals* (see excerpt (7)), which stands for the whole category, thus giving rise to the type of metonymy THE DEFINING PROPERTY OF THE CATEGORY "CLIMATE CHANGE ACTOR" FOR THE WHOLE CATEGORY. It should be remarked that based upon Kövecses and Radden (1998), THE DEFINING PROPERTY OF THE CATEGORY "CLIMATE CHANGE ACTOR" FOR THE WHOLE CATEGORY could be subsumed under the high-level conceptual configuration "whole category and its part", given that in (7) *the minds* could be interpreted to stand for the whole body, both an individual human body and a collective government body.

5 Conclusions, limitations, and suggestions for future research

The article has presented a qualitative study that examines the types of metonymy in the corpus of speeches on climate change delivered by King Charles III. By means of applying a cognitive-linguistic analysis, the study has discovered that there are several types of metonymy in the corpus, such as (i) PLACE FOR A CLIMATE CHANGE-RELATED EVENT, (ii) PLACE FOR A CLIMATE CHANGE-RELATED ACTIVITY, (iii) PLACE FOR THE GOVERNMENT INVOLVED IN CLIMATE CHANGE-RELATED ACTIVITY, (iv) THE GENERIC COMPANY NAME FOR AN ACTOR INVOLVED IN A CLIMATE CHANGE-RELATED ACTIVITY, (v) THE SPECIFIC COMPANY NAME FOR AN ACTOR INVOLVED IN A CLIMATE CHANGE-RELATED ACTIVITY, (vi) THE DEFINING PROPERTY OF THE CATEGORY "CLIMATE CHANGE ACTOR" FOR THE WHOLE CATEGORY, and (vii) THE DEFINING PROPERTY OF THE CATEGORY "CLIMATE CHANGE GOALS" FOR THE WHOLE CATEGORY. The presence of metonymy in the corpus lends support to the previous studies conducted by Augé (2022), Cabezas-García and León-Araúz (2022), Dancygier (2023), Hidalgo-Downing and O'Dowd (2023), O'Dowd (2024), O'Neill (2022), and Vermenych (2020), who report on the occurrence of metonymy in a variety of climate change discourses. Concurrently, however, the present findings appear in contrast to the prior research on metonymy in climate change discourse. Firstly, in contrast to O'Neill (2022), it has been found that metonymy in the corpus of speeches on climate change by King Charles III does not involve any instances that are associated with the iconic representatives of wildlife, such as, for instance, polar bears, that are used as a potent symbol of the negative consequences of climate change. Secondly, unlike the findings reported in Dancygier (2023), as well as Hidalgo-Downing and O'Dowd (2023), there are no types of metonymy in the corpus that involve the imagery associated with plastic and petrol-run cars as the contributors to the negative consequences of climate change. Thirdly, in contrast to Kahambing (2021), the study has revealed that there are no instances of metonymy in King Charles III's speeches on climate change that are related to health issues. Fourthly, in contrast to O'Dowd (2024) there are no indications in the corpus that metonymy is used in order to refer to climate change activism or climate change protest movements. In this regard, it should

be noted that the aforementioned contrast with the prior studies may, arguably, stem from the fact that the literature often examines a multimodal mode of expression in climate change discourses rather than a monomodal one, as in the present study. Presumably, the monomodal modal of King Charles III's speeches on climate change impacts upon the range of metonymy manifestation quite substantially. Hence, the medium of expression can be argued to represent a critical variable to consider in future studies on King Charles III's discourse on climate change.

It can be concluded that the types of metonymy in King Charles III's speeches on climate change are associated with the concepts PLACE, COMPANY NAME, and THE DEFINING PROPERTY. The emphasis on the aforementioned concepts in the corpus of King Charles III's speeches seems to be in line with the prior studies (Deignan 2017, Kapranov 2017, Koteyko & Atanasova 2016), which have discovered the presence of metonymic relationships that involve PLACE, COMPANY NAME, and less so, THE DEFINING PROPERTY in the context of political and corporate discourses on climate change. In this regard, it seems reasonable to indicate that King Charles III's use of metonymy in his speeches on climate change helps to articulate his stance on climate change that tends to be associated with locations (i.e., PLACE), corporate actors (for instance, COMPANY NAME), and salient features of climate change mitigation (e.g., THE DEFINING PROPERTY). Furthermore, these findings can be interpreted from a broader perspective that is indicative of King Charles III's manner and style of climate change communication. As far as the types of metonymy in King Charles III's speeches on climate change are concerned, it follows from the present findings that he clearly prefers a concrete and rather utilitarian manner of using metonymy that involves PLACE, COMPANY NAME, and THE DEFINING PROPERTY of a climate change-related category. His metonymic utilitarianism, as it were, may just as well be found in his speeches on other topics, even though separate investigations are needed to ascertain that claim. Apparently, in his speeches on climate change, King Charles III relies on the aforementioned types of metonymy, whilst the types of metonymy that involve imagery are underrepresented. Indeed, the absence of the imagery-related types of metonymy in the corpus may constitute a "signature" mark of King Charles III's authorial style, at least as far as his climate change discourse is concerned. It can be concluded that the presence of the aforementioned types of metonymy in the corpus reveals a discursive dimension that is specific to King Charles III's speeches on climate change. As mentioned earlier, the observed tendency regarding the types of metonymy may also be influenced by the oral medium of delivery of his speeches and its affordances.

In conclusion, it can be posited that the novelty of the study consists in unpacking several types of metonymy that are interwoven in the discursive fabrics of the King Charles III's speeches on climate change. As shown, these types of metonymy revolve around the concepts PLACE, COMPANY NAME, and THE DEFINING PROPERTY. This finding may serve

as a benchmark in future studies that will, for instance, compare the types of metonymy in King Charles III's climate change discourse with other discursive genres. Moreover, the findings in the study may be further employed in the future investigations of political discourses on climate change in the UK and the Anglophone world.

Finally, it should be specified that the present study has several rather obvious limitations. First of all, the corpus of the study is limited by the orally delivered speeches. The study could have benefitted from a comparison with a parallel corpus of King Charles III's written articles and/or written reflections on the topic of climate change. In addition, the study is limited by its exclusive focus on conceptual metonymy, ignoring other important aspects of cognitive and discursive means, such as conceptual metaphor. Hopefully, the limitations of the study will be taken on board in future research, which could involve a more comprehensive corpus. Notwithstanding the aforementioned limitations, the study has gained a deep understanding of the types of conceptual metonymy in King Charles III's speeches on the issue of climate change, which still remains a challenge to the whole of mankind and, in particular, to the British royal family.

Acknowledgements

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