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ABSENCE REVISITED. IN SEARCH OF CLIMATE-RELATED HUMAN MOBILITY ACROSS TIME AND SPACE: WHAT'S MISSING

CITATION

Bevitori, C. & Johnson, J.H. (2024).
Absence revisited. In search of climate-
related human mobility across time and
space: What's missing. *Journal of Corpora
and Discourse Studies*, 7:152–173

ABSTRACT

The paper re-examines the concept of absence by building on our longstanding research interest in the linguistic and discursive representations of human mobility in the context of anthropogenic climate change (Bevitori & Johnson, 2017, 2022). It draws on research into discursive absence as discussed by Duguid and Partington (2018), Partington (2014), Schröter and Taylor (2018), Taylor (2012), in order to provide some discussion about the methodological and interpretative challenges these absences may prompt within this particular context. While as early as 2011 the UK Foresight Report was highlighting vulnerabilities due to the impact of environmental change and the potential inability of 'trapped' populations to move (2011, p. 9), our recent research suggests that there is little mention of the fact that some people do not, or cannot, move. Given the importance of this topic, one would expect it to be present in climate change and migration discourse in the media. While most studies have tended to focus on migration as an adaptation strategy, research into why some people do not move has received scant attention (but see Ayeb-Karlsson et al., 2018; Zickgraf, 2019). It is our contention that the study of im/mobility may provide fertile ground to further explore the issue of absence/presence on different levels in spite of its complexity, not least because immobility is the lack (or absence) of mobility itself. In order to answer our research question, we adopt a two-branched approach to trace dominant and absent discourses by comparing two diachronic specialized corpora from two different genres: news articles and COP speeches.

KEYWORDS

absence; climate mobility; climate
immobility

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ISSUE DOI

10.18573/jcads.v7

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Absence revisited: in search of climate-related human mobility across time and space: What's missing

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1. Introduction

Human language is [...] a network of bonds and obligations
(J.R. Firth [1937] 1964, *The Tongues of Men*)

1.1. Premise

This paper in honour of a dear colleague, Professor Alan Scott Partington, contributes to the field of corpus-assisted discourse studies (henceforth CADS) by providing some reflection on one of the several areas in which Partington has so greatly contributed to advancing research in the field, and ultimately, to deepen our understanding of human language. Indeed, Partington's work at the interface of corpus linguistics and discourse analysis has been largely inspirational for a younger generation of scholars who have been striving to cross methodological, theoretical, and epistemological boundaries in their own work.

More particularly, in order to respond to the kind invitation of the Editors of this Special Issue, our overarching research question(s) will tackle some theoretical and methodological issues of how the use of corpora can best assist the researcher in tracing meaningful absence in discourse (Partington 2014) — a topic that alongside silence has recently attracted some degree of attention from different theoretical perspectives (see Schröter & Taylor, 2018). The paper attempts to critically re-examine the concept of absence by building on our longstanding research interest in the linguistic and discursive representations of human mobility in the context of anthropogenic climate change (Bevitori & Johnson, 2017, 2022).

1.2. Background of this study

Over the years, many of the reports published on climate change, migration, and displacement have speculated or made projections about the scale of population movements and their consequences. Although the First Assessment Report¹ from the Intergovernmental Panel on Climate Change (IPCC) mentioned for the first time in the 1990s the 'threatening short-term effects of climate change on migration and resettlement', it was only 20 years later, at COP16 held at Cancun in 2010 that 'climate change-induced migra-

1 <https://www.unep.org/resources/report/climate-change-ipcc-1990-and-1992-assessments#:~:text=The%20IPCC%20First%20Assessment%20Report,of%20the%20IPCC%20Special%20Committee>. Last accessed 15/01/2024.

tion, displacement and relocation' was formally recognized.² Yet, while most studies from different theoretical and disciplinary perspectives have often tended to focus on people's climate-induced mobility as an adaptation strategy, research into why some people do not move has received scant attention. Indeed, our recent research (Bevitori & Johnson, 2022) suggests that there is little mention of the fact that some people do not, or cannot, move.

Some development in theorizing about migration decision-making practices is the 'aspirations and capabilities framework' (Carling and Schewel, 2018), which posits that people move when/if they perceive it is in their interest to move (aspirations), and when/if they are (cap)able of doing so.³ The effects of climate change can thus result in different types of 'immobility'—either voluntary or involuntary but also 'acquiescent' immobility (Schewel, 2019); for instance, people might choose to stay and/or refuse to leave their homes and properties in spite of all circumstances, or cannot afford to migrate. As Zickgraf (2019) poignantly put it, '[n]ot all people have the same *capabilities*—or *desires* for that matter—to leave their homelands for "greener pastures"' (2019, p. 228, emphasis ours; see also Ayeb-Karlsson et al., 2018). In this light, voluntary, forced, or 'acquiescent' immobility, and the risks it entails, also need to be considered vis-à-vis development policy.⁴

The idea of immobility first gained traction through the release of the *Foresight Report on Migration and Global Environmental Change* (2011), which focused on increased vulnerabilities due to the impacts of environmental change, and highlighting for the first time the potential inability of 'trapped' populations to move (2011, p. 43). This finds some renewed echo only in the latest IPCC report (2022) on climate change impacts, vulnerabilities, and adaptation, which acknowledged that some people, 'in the near future',⁵ will be unable or unwilling to move away from locations in which they may nevertheless be vulnerable to the impacts of climate change. Indeed, similarly to patterns of mobility in the context of climate change, patterns of immobility are diversified; as Schewel (2019, p. 20) argues, 'far from the neutral backdrop or passive alternative to migration, immobility is dynamic and differentiated.' Hence, far from straightforward, the relationship between mobility and immobility is a highly articulated and complex phenomenon that is permeated with power and difference in defining historical and socio-political contexts.

Taking stock of the so-called 'mobility bias' paradigm in communication studies related to human migration, according to which (representations of) people's mobility is privileged over their immobility (Baldwin et al., 2019; Black et al., 2013; Boas et al., 2022; Farbotko & McMichael, 2019; Zickgraf, 2021), an alternative perspective, to which we

2 Paragraph 14(f) of the Cancun Framework for Adaptation.

3 It should be mentioned that the capability approach has its roots in the work of the economist and philosopher Amartya Sen, and is further elaborated by a number of scholars, amongst which Martha Nussbaum. See Nussbaum (2011) for a discussion.

4 *Frontiers Climate*, 24 March 2023, Sec. Climate Mobility, Volume 5, 2023
<https://doi.org/10.3389/fclim.2023.1092264>

5 The representation of the Future in climate change non-fiction was the topic of a recent paper by the authors presented at the Corpus-Assisted discourse Studies (CADS) conference in 2023.

subscribe, is thus offered. Here ‘mobility’ and ‘immobility’ are not to be seen in dichotomous terms but rather in a reciprocal and, perhaps, symbiotic relationship. They are ‘dynamic constellations’ (Cresswell, 2010) of concurrent practices, embedded in ongoing patterns and histories, of movement and stasis within their environmental contexts (Salazar, 2021; Sheller, 2018). According to these scholars, practices of (im)mobilities should be interpreted within the material and political conditions under which they take place vis-à-vis acts of resistance; for instance, via forms of voluntary immobility resisting relocation pressures (Boas et al., 2022). Moreover, these practices are part of a ‘multi-scalar’ system connecting not only people as individuals, households, and communities but also the flow of goods, technology, and information (Zickgraf 2021, p. 126).

1.3. Aims and research questions

In light of these insights, the aim of this exploratory and speculative study is to map absence/presence across time and space by taking a corpus-assisted methodological and analytical approach. In fact, in spite of its complexity, the study of im/mobility may provide fertile ground to further explore the issue of absence/presence on different levels; for example, by fostering awareness and thus helping mobilize action against climate change. At the same time, the study will raise some methodological concerns, which we will address in due course. By addressing these issues, we hope to provide an original contribution both to the study of absence in CADS as well as to the growing interdisciplinary literature of im/mobility in the social sciences. Our Research Questions (RQs) are then as follows:

1. Whether and, if so, how climate-related human (im)mobility is articulated in time and space.
2. How taking a corpus-assisted approach to discourse analysis can help us detect absence of movement vis-à-vis movement within specialized domains.

The remainder of the paper is organized as follows. Section 2 provides a brief literature review of the notion of absence from different perspectives. Section 3 describes the corpus, methods, and procedure. Section 4 presents and discusses select findings. Section 5 briefly introduces a different analytical perspective as a way of triangulating across data-sets, and is followed by final concluding remarks.

2. Literature review

It is superfluous in this Journal to list the ‘impressive arsenal’ of tools that corpus linguists can rely on (Taylor, 2012) to investigate absence. Taylor (2012) distinguishes between absence about the corpus, absence in the corpus, and absence from discourse. In the first instance, she notes that absence in the corpus does not suggest absence in language itself, since corpus data and possible language are distinct (McEnery & Hardie, 2012). The second instance refers to absence in the corpus, in that corpus tools easily identify words which appear, but not words which do not (cf. also Baker, 2006). Finally, absence from the discourse may point to hidden and non-obvious meanings (Duguid &

Partington, 2018; Partington, 2014). As Partington (2014, p. 146) points out, absence can be identified, located, and quantified using corpus methods with more precision than using non-corpus approaches. A useful starting point in investigating absence may be the expectation of the presence of certain items across different set of data/corpora (Taylor 2012), which might reveal absences as well as differences in collocations, keywords, key clusters, and Word Sketches.

Partington distinguishes various types of absence (2014, p.123). Those found in our study include the categories of known or searchable absence; unknown absence; relative versus absolute absence; absence from a sizeable corpus; absence from a limited set of texts or portion of corpus; absence from a certain position in a text or location in a phrase; and absence hidden from open view. These categories — often not mutually exclusive — will be delved into further in section 4 and we shall only provide an outline here.

The analyst might already know what to search for, and be interested in exploring the significance of the absence or presence of a certain element, in a particular position in a phrase, in a section of text or in an entire corpus. These may be described as known or searchable absences (Partington, 2014, p.123). Alleged absences may also be investigated, perhaps by comparing findings from non-corpus-based studies with corpus data to prove or disprove results. Unknown absences can be revealed often through comparison with other corpora. These may then be tracked in the data, over time and around particular events (p. 126). The same applies to relative as well as absolute absences: elements that might not appear quite as often in one corpus as might be expected, or indeed which might be missing completely in one set of data in relation to another. Where something is absent from a sizeable corpus, this might cast doubt on the representativeness of the corpus (Duguid & Partington, 2018, p. 40), whereas when absence is noted in a limited set of texts or portion of corpus, other interpretations are likely. The language system itself might not permit inclusion, leading to deliberate absence, the ‘meaningful, systematic absence of items from certain syntactic positions and their avoidance of certain semantic roles’ (Partington, 2014, p. 123).

Aspects to be explored include whether the absence is relevant, salient or meaningful in the first place (Duguid & Partington, 2018, p. 39), whether the absence is intentional or not and not just a product of the analyst’s primings (Hoey, 2005), and whether, once found, it should be explained, and if so, how (Taylor, 2012). Of course, absence from a corpus is not the same as absence from the real world (Duguid & Partington, 2018, p. 55), and sometimes ‘meanings absent from the text are simply absent’ (Partington, 2014, p. 135) and should not be overinterpreted. Particularly in the case of news or comment pieces, these might not be linguistic absences at all, but absences of content (p. 136), and as such, may be revealed by comparison with other sources, in the tradition of CADS.

Both absence and the related concept of silence in discourse are the topic of Schröter and Taylor’s (2018) edited volume, representing a variety of approaches to the empirical analysis of absences which are meaningful ‘in that they can be interpreted, and this is only possible if they are relatable to an alternative presence that can be spelled out’ (p. 6). They

distinguish between absence as ‘an umbrella term for all forms of perceptible and meaningful absences in discourse and communication’ (p. 7), and silence where it is the individual speaker who makes a conscious and intentional choice about what not to say.

A different categorisation of forms of absence was described by Stibbe (2015) who articulates absence in terms of erasure of information from texts. This categorisation was applied by Venkatamaran (2017, 2018) in her examination of absences in climate change discourse. She explores textual and thematic silences in newspaper discourse about environmental refugees, showing how ‘presupposition, implicature, metaphor, nominalisation and transitivity patterns produce the effect of silencing aspects of climate change and, as a consequence, environmental refugees’ (Schröter & Taylor, 2018, p.12). Her analysis reveals that certain issues are framed in a selective way which may marginalise or even mute them (Venkatamaran, 2018, p. 242). While this might be the result of a consciously manipulative strategy on the part of the news writers (Venkatamaran, 2017, p. 111), such absences could also be due to the choices made, in the interests of newsworthiness, lack of space, political orientation, or the journalist’s own value system (Bednarek & Caple, 2014).

3. Data and Method

In the following sub-sections, we describe our corpus and rationale for the procedure and finally a quantitative analysis in searching for mobility and absence of mobility within our domain of analysis.

3.1. *Corpus and rationale*

The study is based on analysis of a section of a specialised corpus we compiled for previous research into climate change and human migration (Bevitori & Johnson, 2017, 2022). For the initial Climate Change and Human Migration (CC&HM) corpus, newspaper articles were collected from the time of the 16th Conference of Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC) in November 2010 in Cancun, with material collected across various ‘critical discourse moments’ (Carvalho, 2008; Bevitori & Johnson, 2017). For the present study, we extended and amplified this specialised corpus according to three dimensions. A diachronic dimension involved adding more recent material; a geopolitical dimension included a division into material from the Global North and the Global South; and across two different genres: newspaper articles and institutional speeches.

Material for the newspaper subcorpus was collected from six quality English-language newspapers from the Global North and Global South. The rationale for selection of these newspapers was based on circulation, location within representative areas of the Global North and Global South, and availability via the Lexis-Nexis platform. Though political orientation is also an important variable in newspaper discourse, lack of available material from all areas represented prevented us from taking this element into consideration in compiling the subcorpus. We were also limited in choosing to consider only English-lan-

guage newspapers, a determining factor in data selection. The newspaper subcorpus thus consisted of newspapers from the Global North: *The Guardian* (UK: abbreviated GUA), the *New York Times* (US: NYT), and the *Australian* (Australia: AUS), while representative of the Global South were *The Nation* (Thailand: NTHAI), *The Daily Nation* (Kenya: DNAT), and *The Times of India* (India: TOI).

Our aim with this study was to focus on two distinct time periods, the first coinciding with COP21, the site of the Paris Agreement⁶ in 2015, a historic turning point in global action on climate change, while the second period covered the most recent negotiations in November 2021 at COP26 in Glasgow. Our data covers the three-month period spanning COP21 and COP26,⁷ including the periods both before and after the Conference of the Parties, in other words between 1st October and 31st December of 2015 and 2021. All newspaper articles containing the search words ‘climate’ and ‘human mobility’ or displac* or *migra* or refugee*⁸ were selected, to create a specialized subcorpus on the interrelated issues of the climate-migration nexus. Duplicates were then removed, and articles downloaded and saved in separate subfolders. The articles were then checked manually for relevance, retaining news reports and comment pieces and removing all those that contained fiction, film reviews, or other irrelevant material. The total word count of the newspaper subcorpus amounts to 469,027 tokens.⁹

The speeches subcorpus of official statements¹⁰ given at COP21 and COP26 by government leaders and representatives was compiled from the most representative and readily available speeches from both periods, attempting to keep some consistency in the selection of countries across the Global North and Global South. 120 speeches were collected: sixty from each COP evenly divided between the Global North and Global South. The total word count of the speeches subcorpus amounts to 84,851 tokens.

Corpus details as regards numbers of tokens and texts (in brackets) in the News and Speeches subcorpora are given in Table 1.

Genre	Global North	Global South	Total tokens/(texts)
News			

6 The Paris Agreement reaffirmed the obligations of developed countries to provide financial assistance to developing countries under the principle of ‘common but differentiated responsibility and respective capabilities’ set out in the Rio Convention in 1992.

7 COP21 was held between 30th November and 12th December 2015; COP26 between 31st October and 12th November 2021.

8 Words within quotation marks ‘...’ must appear as a single string, while the asterisk* is a wildcard representing any letter/s appearing in this position.

9 See Bevitori & Johnson (2022, p. 6) for details about running words per individual newspaper.

10 The speeches selected for our corpus are all in English. The official statements of COP21 are available at <https://unfccc.int/process/conferences/past-conferences/paris-climate-change-conference-november-2015/statements-and-resources/statements-made-during-the-leaders-event>. Those for COP26 are available at: <https://unfccc.int/cop-26/speeches-and-statements#List-of-Speakers-for-the-First-Part-of-the-High-Level>. Last accessed 15/01/2024.

Genre	Global North	Global South	Total tokens/(texts)
COP21	150,940 (133)	35,879 (54)	186,819 (187)
COP26	251,796 (192)	30,412 (26)	282,208 (218)
Total news	402,736 (325)	66,291 (80)	469,027 (405)
Speeches			
COP21	18,022 (30)	22,831 (30)	40,853 (60)
COP26	18,884 (30)	25,114 (30)	43,998 (60)
Total speeches	36,906 (60)	47,945 (60)	84,851 (120)

Table 1: Number of tokens and (texts) in COP21 and COP26 News & Speeches subcorpus across the Global North and Global South

With regard to the data, some initial observations are in order. While speeches by representatives of the Global South made up 58% of the total speech tokens, newspaper articles from the Global South make up just 15% of newspaper tokens and less than 20% of the texts in the newspaper subcorpus. This latter finding, which may be surprising since the same criteria were used for gathering the articles, is clearly an indication of the degree of attention paid by media to aspects of the climate-migration nexus in the different outlets. In line with corpus linguistics methodology, our analysis will make use of relative frequencies, allowing figures to be compared across subcorpora of different sizes. We will also be comparing figures against reference corpora, namely a newspaper corpus (SiBol),¹¹ and a general corpus of English language material gathered from the web (ENTenTen2021).¹²

3.2. Tools and procedure

As mentioned in Section 1.3, our research questions are twofold. The first concerned whether and, if so, how climate-related human (im)mobility is articulated in time and space and across genres. To address this issue, we made use of corpus queries in the form of frequent collocates and Word Sketches to uncover patterns of usage, attempting to trace the systematic and replicable ways in which expectations of presence and absence may be generated (Duguid & Partington 2018, p. 39).

Our second question was methodological, since we asked (how) taking a corpus-assisted approach to discourse analysis can help us detect reference to movement vis-à-vis reference to immobility; in other words, absence of movement, within specialized domains, with reference to previous research into absence and presence (Duguid & Parting-

11 SiBol: The Siena-Bologna corpus of English Broadsheets 1993-2021. Available via Sketch Engine.

12 ENTenTen2021. An all-purpose English corpus covering a large variety of genres, topics, text types and web sources. Available via Sketch Engine.

ton, 2018; Partington, 2014; Taylor, 2012). Our findings from the first research question enable us to address the second.

In this case-study, we adopt a two-branched approach by focusing on two initial search words reflecting our expectations of what should be present (Taylor 2012), the lemmas *PEOPLE* and *MOVE*, in terms of presence/absence vis-à-vis the categories described by Duguid & Partington (2018) and Partington (2014) (see Section 2). In fact, while choosing *people* as a way into the data may obscure other participants, which may be expressed by nouns other than *people*, the material process indicating the act of moving – and indeed not moving – can be realized by a wide range of processes or lexicalized resources, which instead might be gleaned through different kinds of searches (Mautner, 2009, pp.41–42; Partington, 2014). We then make use of different search techniques, using Sketch Engine (Kilgarriff et al., 2004)¹³ to investigate the patterns and collocates of these lemmas, using logDice (Rychly, 2008; see also Brezina, 2018) as an association measure to indicate typicality. Our approach involves careful exploration of the lemmas and selected alternatives in extended concordances.

4. Analysis and discussion

In this section we now discuss both quantitative and qualitative findings emerging from the analysis of the lemmas *PEOPLE* and *MOVE* as our select candidates to explore absence/presence, beginning by comparing the relative frequencies of the lemmas in the various partitions of our subcorpora as well as the reference corpora. Given our focus of people (not) moving, we will then seek to identify and interpret possible co-occurrences of the two lemmas.

4.1. Quantitative analysis

The lemma *PEOPLE* occurred 3.28 times per thousand words (ptw) in the newspaper and speeches subcorpora combined (COP21 and COP26; GN and GS), 3.37 times ptw in our specialised newspaper subcorpus alone, and 2.35 ptw in the speeches subcorpus. As Figure 1 illustrates, the lemma *PEOPLE* has a higher relative frequency in our specialized subcorpora than in general newspapers (SiBol 93–2021: 1.62 ptw), or general English from the web (ENTenTen2021: 1.31 ptw).

Within the different diachronic and geopolitical partitions, the highest frequency of *PEOPLE* in the newspaper subcorpus was found in the later COP26 partition with similar figures for the Global North (3.58 ptw) and Global South (3.55 ptw), with slightly lower figures in COP21 (GN: 3.01 ptw; GS: 3.30 ptw). In the speeches subcorpus, the highest frequency of *PEOPLE* occurred in the earlier COP21 speeches, slightly more in the Global South (3.07 ptw) than the Global North (2.44 ptw). In the later speeches (COP26), there was little difference between the Global North (1.91 ptw) and Global South (1.95 ptw) as regards frequencies of *PEOPLE*.

13 <http://www.sketchengine.eu/>

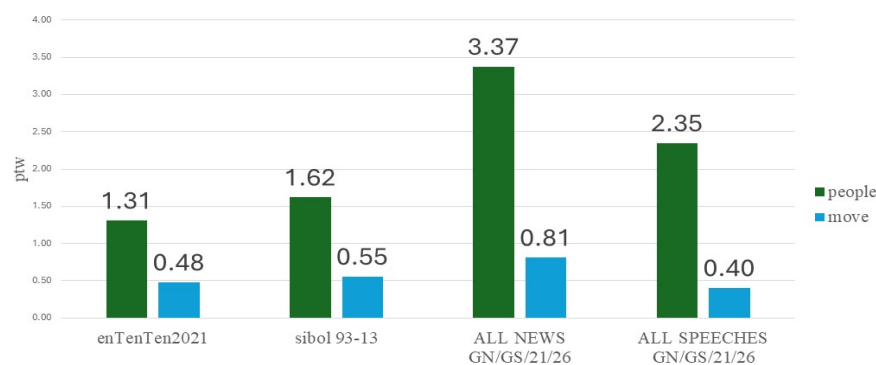


Figure 1: Relative frequencies (ptw) of the lemmas *PEOPLE* and *MOVE* across corpora

To sum up, *PEOPLE* occurs more frequently in news articles around the later COP26 in both the Global North and South, while more mention of *PEOPLE* was made in the earlier speeches, and slightly more in speeches from the Global South than the Global North.

The lemma *MOVE* occurred more frequently in our combined Newspaper and Speeches corpus (0.76 ptw) than in general newspapers (SiBol: 0.55 ptw), or the general English web corpus ENTenTen2021 (0.48 ptw). The higher frequency in our corpus however was due to occurrences in our specialised newspaper subcorpus (0.81 ptw) rather than the speeches subcorpus (0.40 ptw). Within the newspaper subcorpus, the Global North had higher frequencies of *MOVE*, particularly in the later COP26 (1.02 ptw) compared to COP21 (0.66 ptw). Similarly, the relative frequency of *MOVE* was slightly higher in newspapers from the Global South in the later COP26 (0.53 ptw) than in COP21 (0.39 ptw), though these figures were both lower than in the Global North. Frequencies of *MOVE* across the geopolitical divisions were closer in the speeches subcorpus from COP26 (Global North: 0.64 ptw; Global South: 0.52 ptw) than in COP21, where the Global South had a higher relative frequency (0.35 ptw) than the Global North (0.06 ptw).

To sum up, the frequency of the lemma *MOVE* is higher in our specialised news subcorpus than a general newspaper corpus and a more general reference corpus. Within our specialised news and speeches subcorpora, the origin of texts and the time period also makes a difference, *MOVE* being more frequent in the Global South than the North in the earlier COP21, but only slightly more frequent in the Global North than the Global South in the later period of COP26.

4.2. Qualitative analysis

Having established the relative prominence of both *PEOPLE* and *MOVE* in our specialised corpus in comparison with our reference corpora on the basis of the frequency data, we now focus further on the presence or absence of relevant co-occurrences of these two lemmas. In the first subsection (4.2.1) we focus on the news subcorpus, looking closer at the relatively more frequent mentions of *PEOPLE* in news articles particularly around the

later COP26 in both the Global North and South. In the second subsection (4.2.2) we focus on possibly salient absences and presences in the speeches subcorpus.

4.2.1 News

To investigate whether people are mentioned together with (the lack of) movement, we tested for co-occurrence of PEOPLE with MOVE as well as other lexical items from the semantic area of movement in the News subcorpus. The top 50 collocates of PEOPLE in a 5L/5R span, where ‘people’ were either the subject or object of the clause, were extracted. The verb collocates of PEOPLE for NEWS and SiBol are compared in Table 2.

Lemma (NEWS)	logDice	Lemma (SiBol)	logDice
live	10.070	do	9.020
move	9.786	do	9.020
have	9.768	have	9.014
be	9.763	think	8.986
leave	9.735	get	8.784
kill	9.467	be	8.755
will	9.374	can	8.751
help	9.154	know	8.734
do	9.131	say	8.661
force	9.067	see	8.576
		live	8.548

Table 2. Verb collocates of PEOPLE (5L/5R span) in NEWS and SiBol

As Table 2 shows, there is an absence in the general SiBol corpus of verbs collocating with PEOPLE from the semantic area of movement, whereas PEOPLE is typically found with both *move* and the near synonym *leave* in our newspaper subcorpus overall. The relative frequency of the co-occurrence of PEOPLE and *move* within a span of 5L/5R is the same (0.06 ptw) for both periods of the newspaper subcorpus, COP21 and COP26. However, differences are found within the geopolitical partitions, with patterns of co-selection reaching 0.10 in news from the Global South for COP26, while PEOPLE and MOVE co-occur in the Global North newspapers much less frequently in COP21 (0.07 ptw) and COP26 (0.05 ptw), with just one co-occurrence of *people* and *move* in a span of 5L/5R in the Global South in COP21 (ex 1). It should be noted that while we also searched the corpus for occurrences of negated forms of move, e.g. *people + don't/didn't/cannot + move* in a

span of up to five words, only one occurrence was found. Nevertheless, these results need to be considered with caution as we do not mean to imply or suggest that the issue of moving or not moving is absent. As we see in Examples 2 and 3, alternative lexicalisations (e.g. *flee*, *leave*) occur.

- (1) [...] and where the economies are too dependent on agriculture or mining, and so cannot provide work for people if they are forced to **move**. In such countries or worse, in clusters of such countries a spike in food prices, a severe drought or a ravaging flood can provide a harsh test of government. Nat Thai 02/12/15
- (2) People living on low-lying islands such as the Maldives or the Philippines could become climate refugees, forced to **flee** their homes due to rising seas. DNAT 09/12/15
- (3) With the response from government agencies extremely poor, the role of people who come to the aid of 'climate refugees' will hold the key in the near future as freaky weather conditions will be more frequent under the impact of climate change. Climate refugees are people who have to **leave** their cities or localities due to various effects of climate change. TOI 8/12/15

A Word Sketch of PEOPLE (see Table 3), focusing only on verbs relating to movement¹⁴ in the newspaper subcorpus across time suggests an absence at the grammatical level; i.e. absence of certain syntactical structures in different periods and geopolitical divisions of the NEWS subcorpus, with *people* tending to be the grammatical Subject of *move* in the later COP26 NEWS, but the grammatical Object of *move* in COP21. Without wanting to 'over-read, over-claim and over-dramatise when the evidence is limited' (Partington, 2014, p. 135), the absolute absence of people as the Subject of *move* in COP21 perhaps denotes a lack of agency of *people* in the earlier period.

	COP21 NEWS		COP26 NEWS	
	Collocate	LogDice	Collocate	logDice
Verbs with <i>people</i> as Object	displace	12.00	displace	11.34
	move	9.50	force	10.55
	force	9.04	leave	10.00
	leave	8.22	resettle	8.70
Verbs with <i>people</i> as Subject	live	11.3	live	10.48
	escape	8.64	move	8.98
	flee	8.57	flee	8.85

14 We do not further investigate verbs such as *displace* or *migrate*, as they were used as search terms in our initial query words for corpus building.

	COP21 NEWS		COP26 NEWS
	arrive	8.50	come 8.81
	come	8.27	go 8.72
	migrate	7.99	migrate 8.36
	leave	7.94	arrive 8.28
			leave 7.79

Table 3. Word Sketch of people in COP21 NEWS and COP26 NEWS with verbs relating to movement

As in Examples 1, 2 and 3, in the Global South newspapers in COP21, *people* often co-occur with ‘forced movement’, and *force* was a strong collocate both of *move* and of *people* in COP NEWS (but not in SiBol), relating to involuntary migration and somehow typical of the discourse of climate-induced migration, and at the same time hinting at the victimisation and once again the lack of agency of the people concerned.

The verb *live*, found in the list of top 50 verb collocates of *people* in our newspaper subcorpus as well as SiBol, emerges as a stronger collocate with *people* than *move* in COP26 (though practically absent in COP21), and often implicitly refers to the desire to remain or stay in one place rather than moving, as in Example 4:

- (4) The megadrought gripping the Southwest is testing that **resilience**. MOENKOPI, Ariz. On the bone-dry plateau where the Hopi people have lived for well over a thousand years, Robinson Honani pulled his truck to the side of a dirt road and pointed to a carcass. "This is where the cows come to die" NYT 3/10/21

As we see in Example 5 from the Times of India in COP21,¹⁵ *people* are often co-selected with *live* in a semantic motif of life under threat, typically co-selected with resources expressing probability (*likely*, *will*) co-occurring with items such as *land*:

- (5) China will suffer the worst in case of a 4-degree rise since 145 million **people** today **live** on land that will be inundated. India and Bangladesh come next with 55 million and 48 million **people under threat**. TOI 13/11/15

Once again in the Global South but this time in COP26 (Example 5) we see probability in the form of likelihood of moving, a frequent semantic motif in conjunction with refer-

15 Although not the focus of this study, it should also be mentioned that example 5 is also representative of a discourse which is typically construed in the linear manner either as cause-problem-solution OR cause-effect, much in line with many studies on media representations of migration, and highlighting the threats and risks of climate change and the consequential movement.

ence to large numbers (Gabrielatos & Baker, 2008), with reporters routinely emphasizing how a 'huge number' of migrants may be the greatest consequence of climate change:

- (6) Over 35.56% of the migrants have migrated due to climate shocks and the experts believe that more **people are likely to move** in the coming years. The report said 28% of the migrants had gone out due to repeated droughts TOI 01/12/21

As Partington (2014) notes, absences (and presences) may be confined to certain parts of a corpus. Our newspaper subcorpus consists of six different newspapers but our study shows that the UK Guardian has more mention than the other newspapers on the issues involved in moving or staying, over both periods of time. Though we are aware that the Guardian represents a much larger slice of our newspaper subcorpus, consisting of 42% of the newspaper tokens and 40% of all articles, these references tend to occur not so much in news reports but in personal stories, typically found in the Guardian but possibly absent in other newspapers, as in Example 7:

- (7) Last year the Kiribati government bought 20 sq km of land on Vanua Levu, one of the Fiji islands, in case its **people cannot be moved** internally. It has a policy called "migration with dignity" if its cluster of 33 coral atolls becomes inhabitable. Maria Tiimon, who moved to Australia from Kiribati in 2006, said **people** in her homeland were scared but did not want to become climate migrants. "I speak to the young **people** there and they say **they don't want to move**. This is where our ancestors came from," said Tiimon, who is a Pacific outreach officer at the Edmund Rice Centre in Sydney. GUA 30/11/15

The use of personalized storytelling focussing on both individual and collective experiences related to environmental / climate disasters may be seen as strategic tools eliciting an emotional response which, as some scholars argue (Meier et al., 2017) can help mobilize action. This is very much in line with the stance of a left-leaning liberal newspaper such as the Guardian.

Two methodological issues should be noted in our search for the presence or absence of mentions of movement. The first is that restricting the span of words to the standard co-occurrence of five words left and five words to the right might conceal other relevant co-occurrences which would not otherwise have been noted, as in Example 7 with the second occurrence of *people + move*. The second issue is evident in Example 8:

- (8) Everyone in the Pacific has a story of when the climate crisis became real for us. I've spent the last few months doing interviews with people for the Guardian's podcast series, An Impossible Choice, exploring the decision **Pacific communities, families and entire countries** have to make whether to **leave or stay** on their land, and I've heard story after story of the moment that people realised climate change had hit their home. GUA 14/10/21

This example features participants other than *people* (e.g. *Pacific communities, families and entire countries*) and alternative lexicalisations to *move* (*leave* and *stay*), providing evidence of how our two-branched approach to investigating people (not) moving may lead away from the initial search words *people* and *move*, revealing an absence of certain preferred

lexicalisations but the presence of other alternatives. An interesting co-occurrence of *people* and *stay*, in a wider span, may be seen in Example 9:

- (9) But the government is determined the population will not migrate. "**People** are worried but they want to **stay**, our priority is to save our country," Manuella said. GUA 01/11/15

Not moving in Example 9 is reported through an affective response by an external source, Manuella, the health minister of Tuvalu. In Bednarek and Caple's (2014) terms, therefore, both elite and local resident voices are heard, followed by the contrastive *but* alongside lexical resources expressing the desire to stay (e.g. the modal auxiliary *want*) as well as linguistic devices expressing reasons for *not* moving; in other words, staying rather than moving is evaluated positively, in spite of the worries. As mentioned, similar reporting is absent in most of the other newspapers.

4.2.2. Speeches

The comparative analysis of unknown absences starts with the lemma *MOVE* in the COP speeches. Data show that 97% of all instances of the lemma are verbs - material processes (3.27 ptw). A closer inspection, however, reveals that amongst its most frequent collocates are adverbs such as *forward* and *towards*, pointing to the metaphorical meaning of the verb, i.e. making progress, change. Only in two instances does the term relate to the moving of villages and communities; a meaning that is synonymous with relocation as an adaptation strategy to reduce/avert disaster risk:

- (10) To illustrate what this means, last year our government was asked to assist a Pacific nation with the massive task of **moving** 42 villages inland, away from the rising waves. For some this isn't even an option. Villages in low-lying countries like Tuvalu, Tokelau and Kiribati have nowhere inland to go. COP26 GN (New Zealand)
- (11) We have strengthened building codes; built new coastal defences; and **moved to relocate** vulnerable communities – all through use of our national resources. COP26 GS (Bahamas)

As noted, participants of *move* in the clause are 'villages' (Example 10) and 'vulnerable communities' (Example 11); unlike in the newspaper subcorpus, the term *people* is never co-selected with *move* in the usual span of 5L/5R. While the scarce presence of the co-selection pattern *participant* plus *move* may be interpreted as a relative absence in the speeches subcorpus, by looking at *people*, the absence is absolute. Indeed, the list of the top 15 collocates of *people* in the whole speeches subcorpus reveals that the lemma *LIVE* is instead particularly frequent, occurring 17 times (relative frequency: 1.97 per thousand words). Word form collocates are as follows: *lives* (all nouns) (logDice: 10.38), *living* (logDice: 9.82), *livelihood* (logDice 9.61).

A comparative analysis of the datasets across geopolitical and diachronic variables shows that the co-selection of *people* and the lemma *LIVE* tends mostly to occur in the later COP speeches - COP26 at Glasgow - and, particularly, in the Global South partition. The following extracts illustrate this:

- (12) Failure to provide this critical finance and that of loss and damage is measured in lives and livelihoods being lost in our communities. It is immoral and unjust. If Glasgow is to deliver on the promises of Paris, it must close these three gaps. So I ask - what must we say to our **people living** on the frontline in the Caribbean, Africa and the Pacific when both ambition and some of the needed faces are absent? COP26 GS (Barbados)
- (13) The water tower of the world is the worst hit and with the slightest temperature rise can have detrimental effects on its glaciers and downstream, as confirmed by the latest IPCC report. We need regional cooperation and global support in saving the Himalayas and the livelihoods of 240 million **people living** within these mountain ecosystems. COP26 GS (Bhutan)

The reference to people here is to those who are deeply affected by climate change effects: i.e. people living in countries that are most at risk of disappearing due to the rising sea levels (Example 12), or as in Example 13, people living in multi-hazardous environments. This is a clear indication of the undoubtedly complex relations between place attachment, sense of belonging, identity, and perceived risk in disaster-prone areas by vulnerable residents.

The category of ‘unknown/unexpected’ absence of the (in)voluntary movement of people in our specialized corpus seems thus to point to a discursive landscape featuring people not moving/staying as a dominant theme/frame in the COP speeches compared to the COP news subcorpus. While news articles tend to emphasize the dramatic impacts of movement as a negative value, in the COP speeches (and especially in the GS), the representation of lives and livelihood of the people, and their lack of movement seems to prevail. Although this absence may cast doubts on the representativeness of the subcorpus itself – which in turn would suggest an overlap between the two Partingtonian categories – it may also be interpreted as a lack of aspiration and/or refusal to move as an adaptive strategy in the face of climate/environmental threats. In line with studies in the aspiration/capability framework, staying put then becomes a choice, either in terms of aspiration or incapability, or ‘acquiescent’ immobility, as discussed in the introductory section.

5. Envoi: Triangulating between textual and visual representation. Absence in the interstices

In this final, necessarily short, section, we provide a different analytical perspective on the analysis of absence by looking at the visual representation of one of COP26’s key speeches. As a form of triangulation between data sources (Baker & Egbert, 2016; Denzin, 1970), the delivery of the speech ‘We are sinking’ by Tuvalu’s former foreign minister, Simon Kofe, represents a highly symbolic event in the fight against the calamitous impacts of climate change on low-lying Pacific Island nations.

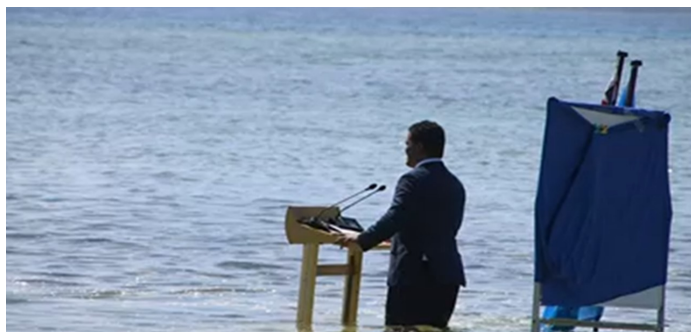


Figure 2. COP 26 ‘Underwater speech’ delivered by Tuvalu’s former foreign minister

On that occasion, the former foreign minister delivered his speech in a video message released online through social platforms, of which Figure 2 provides a still image, standing knee-deep in seawater in an area that, as he mentioned, used to be dry land. The unusual setting in which this communicative event took place drew considerable attention to the island’s struggle against rising sea levels worldwide.

Although not the focus of this study, this performative practice lends itself to a many-layered interpretation from a multimodal and multi-semiotic perspective, amongst which is the reality of rising sea levels as a threat to small islands in the Pacific. As argued by Rafiee et al., (2021), the process of re-mediation has the potential to trigger a strong emotional response and thus raise awareness ‘with an immediacy that text cannot easily achieve’ (2021, p. 515). If immediacy is one of the key features of re-mediation in Bolter and Grusin’s (2000) theory, the co-articulation of *people* and *home* in Kofe’s speech is of utmost interest for our purposes here:

- (14) “We are sinking [...] In Tuvalu our islands are sacred to us they were the **home** of our **ancestors**, they are the **home** of our **people** today and we want them to remain the **home** of our **people** into the future”

As Example 14 shows, *home* is constructed as a sacred space. The word is not only repeated three times in this short extract but *people* appears as one strong collocate (*home of our people*, and here also *home of our ancestors*) in the speech. By contrast, a quick look at the word *home* in the speeches subcorpus tells us that the item *people* does not appear amongst its collocates, or, at least, in the usual 5L/5R span. This seems to suggest that the identity-building process through the concept of ‘home’, as a sacred land and its meaningful bond with ‘people’, is perhaps the missing link that is made visible and present and, indeed, *utterly* powerful in Kofe’s speech. With the help of CADS, though, we could, in principle, explore more systematically how this event was taken up discursively across media and therefore made more present textually in public discourse. From the perspective of interdisciplinary research on human im/mobility, this would imply that migration and relocation away from home territories is not always the desired outcome, and that a ‘liveable locality’ (Capisani, 2021) within a framework of mobility justice should be promoted instead.

6. Conclusions

The study set out to engage with forms of absence in discourse through a corpus-assisted approach. It is informed by many invaluable contributions to an often-neglected topic, amongst which Partington's work features prominently. In particular, our focus on human mobility provides a unique and highly context-sensitive case study as the notion incorporates both human movement and lack of movement in the context of climate change. As noted, a growing body of scholarly work has recently started to acknowledge forms of human im/mobility as the ways in which people may either be encouraged or prevented from moving from territories that a changing climate threatens to render uninhabitable.

In our search for absence as regards people's climate-related mobility across genres, geopolitical areas and periods of time, we adopted a two-branched approach providing possible entry points into the data. As mentioned, in the awareness that the issues of im/mobility may be explored in different ways or by considering other lexical items, lack of space prevents us considering further lexicalisations in more detail. In our exploration here, we have come across different types of absences as described in Partington (2014) and Duguid and Partington (2018). These include the presence of movement in alternative lexicalisations to our original expectations, absence in certain parts of the corpus, as might be suggested by the prevalence of *people* co-occurring with *live* in both the speeches and news subcorpora in the later period (COP26) rather than the earlier period (COP21), which might be a reflection of a growing perception of the problem as time goes by. We have also noted an absence of forced movement co-occurring with *people* in the general newspaper corpus SiBol, whereas this is present in our specialised newspaper subcorpus. Moreover, findings show that linguistic resources expressing obligation of movement (forced), probability or likelihood of moving, and the predominance of *people* as objects of *move* tend to prevail over other syntactic positions in one particular partition (COP21 news), suggesting that people are represented as victims lacking agency in COP21 news but less so in the later COP26 news.

We have also observed both relative and absolute absences in the speeches subcorpus with regard to alternative lexicalisations of *people*, as well as within certain partitions of the newspaper corpus, with the Guardian leading the way with mentions of *people* (not) moving within personal stories, possibly because these are absent in the remaining newspaper corpus. Moreover, we have emphasized that searching for collocates relating to movement of *people* within the standard span of 5L/5R might somehow skew the data pointing to absence of movement, whereas this may instead be present within a wider span. Finally, we argued that interpretation is central when investigating absence of movement within this context since implicit cues and messages need to be considered, as one of the examples with implicit references to home and land (for example, 'where people have lived for thousands of years') well illustrates.

To conclude, while the strengths of corpus-assisted methodologies in the investigation of discourse lie in unearthing evidence by *identifying*, *locating* and ultimately *quanti-*

fying absence/presence (Partington, 2014, p. 142) of socio-political and cultural phenomena through rigorous, empirical research methods triangulating tools and data, analysing the video performance of Simon Kofe's COP26 speech through a multimodal lens would certainly be instrumentally valuable in contributing to our understanding of the world and how this may be represented. At its heart is not *typicality* but an absence of it; *i.e.* its uniqueness. This is perhaps just one of the meaningful lessons of CADS to which Partington's work has so impressively contributed in the advancement of a burgeoning field of academic study.

Competing interests

The authors have no competing interests to declare.

References

- Ayeb-Karlsson, S., Smith, C.D., Kniveton, D. (2018). A discursive review of the textual use of 'trapped' in environmental migration studies: the conceptual birth and troubled teenage years of trapped populations. *Ambio*, 47 (5), 557-573, <https://doi.org/10.1007/s13280-017-1007-6> PMID:29435732 PMCID:PMC6072639
- Baker, P. (2006). *Using corpora in discourse analysis*. London: Bloomsbury Publishing. <https://doi.org/10.5040/9781350933996>
- Baker, P. & Egbert, J. (Eds.) (2016). *Triangulating methodological approaches in Corpus Linguistic research*. New York/Abingdon: Taylor and Francis. <https://doi.org/10.4324/9781315724812>
- Baldwin, A., Fröhlich, C., & Rothe, D. (2019). From climate migration to anthropocene mobilities: Shifting the debate. *Mobilities*, 14(3), 289-297, <https://doi.org/10.1080/17450101.2019.1620510>
- Bednarek, M., & Caple, H. (2014). Why do news values matter? Towards a new methodological framework for analysing news discourse in Critical Discourse Analysis and beyond. *Discourse & Society*, 25(2), 135-158, <https://doi.org/10.1177/0957926513516041>.
- Bevitori, C. & Johnson, J.H. (2017). *Human mobility and climate change at the crossroad: A diachronic Corpus-Assisted Discourse Analysis of the nexus in UK and US newspaper discourse*. In K.E. Russo & R. Wodak (Eds.), Special Issue: The representation of 'exceptional migrants' in media discourse: the case of climate-induced migration. *Anglistica AION an Interdisciplinary Journal*, 21(2), 1-19.

- Bevitori, C. & Johnson, J.H. (2022). Risk and resilience in a changing climate: A diachronic analysis in the press across the globe. *Text & Talk*, 42, 1-23, <https://doi.org/10.1515/text-2020-0076>.
- Black, R., Arnell, N.W., Adger, W.N., Thomas, D., & Geddes, A. (2013). Migration, immobility and displacement outcomes following extreme events, *Environmental Science and Policy*, 27, S32–S43, <https://doi.org/10.1016/j.envsci.2012.09.001>.
- Boas, I., Wiegel, H., Farbotko, C., Warner, J., & Sheller, M. (2022). Climate mobilities: migration, im/mobilities and mobility regimes in a changing climate. *Journal of Ethnic and Migration Studies*, 48(14), 3365-3379, <https://doi.org/10.1080/1369183X.2022.2066264>.
- Bolter, J.D. & Grusin, R. (2000). *Remediation. Understanding new media*. MIT Press.
- Brezina, V. (2018). *Statistics in corpus linguistics. A practical guide*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/9781316410899>.
- Capisani, S. (2021). Livability and a framework for climate mobilities justice. *Philosophy and Public Issues* (New Series), Luiss University Press, 11(1), 217-262
- Carling, J., & Schewel, K. (2018). Revisiting aspiration and ability in international migration. *Journal of Ethnic and Migration Studies*, 44(6), 945–963, <https://doi.org/10.1080/1369183X.2017.1384146>.
- Carvalho, A. (2008). Media(ted) discourse and society. *Journalism Studies*, 9(2), 161-177, <https://doi.org/10.1080/14616700701848162>.
- Cresswell, T. (2010). Towards a politics of mobility. *Environment and Planning D: Society and Space*, 28(1), 17-31, <https://doi.org/10.1068/d11407>.
- Denzin, N. K. (1970). *The research act: A theoretical introduction to sociological methods*. Chicago, IL: Aldine.
- Duguid, A. & Partington, A. (2018). Absence: You don't know what you're missing. Or do you? In C. Taylor & A. Marchi (Eds.), *Corpus approaches to discourse: a critical review* (pp. 38-59). Abingdon & New York: Routledge. <https://doi.org/10.4324/9781315179346-3>.
- Farbotko, C., & McMichael, C. (2019). Voluntary immobility and existential security in a changing climate in the Pacific. *Asia Pacific Viewpoint*. 60, 148–162. <https://doi.org/10.1111/apv.12231>.
- Firth, J.R. [1937] (1964). *The Tongues of Men*. London: Watts & Co.
- Foresight: Migration and Global Environmental Change (2011). Final Project Report. The Government Office for Science, London.

- Gabrielatos, C. & Baker, P. (2008). Fleeing, Sneaking, Flooding: A Corpus Analysis of Discursive Constructions of Refugees and Asylum Seekers in the UK Press, 1996-2005. *Journal of English Linguistics*, 36 (1), 5-38, <https://doi.org/10.1177/0075424207311247>.
- Hoey, M. (2005). *Lexical priming. A new theory of words and language*. London: Routledge.
- Kilgarriff, A. Rychlý, P., Smrž, P., & Tugwell, D. (2004). The Sketch Engine. Proceedings of the 11th EURALEX International Congress, 105-116.
- Maier, S. R., Slovic, P., & Mayorga, M. (2017). Reader reaction to news of mass suffering: assessing the influence of story form and emotional response. *Journalism* 18(80), 1011-1029, <https://doi.org/10.1177/1464884916663597>.
- Mautner, G. (2009). Corpora and critical discourse analysis. In P. Baker (Ed.), *Contemporary Approaches to Corpus Linguistics* (pp. 32-46). London: Continuum,
- McEnery, T. & Hardie, A. (2012). *Corpus Linguistics. Method, theory and practice*. Cambridge: CUP. <https://doi.org/10.1093/oxfordhb/9780199276349.013.0024>.
- Nussbaum, M. (2011). *Creating capabilities*, Cambridge, MA: Harvard University Press. <https://doi.org/10.4159/harvard.9780674061200>.
- Partington, A. (2014). 'Mind the gaps': the role of corpus linguistics in investigating absence. *International Journal of Corpus Linguistics*, 19(1), 118-146, <https://doi.org/10.1075/ijcl.19.1.05par>.
- Rafiee, W., Spooren, J., & Sanders, J. (2021). Framing similar issues differently: a cross-cultural discourse analysis of news images, *Social Semiotics*, 33(3), 515-538, <https://doi.org/10.1080/10350330.2021.1900719>.
- Rychlý, P. (2008). A Lexicographer-Friendly Association Score, in P. Sojka, A. Horák (Eds.): *Proceedings of Recent Advances in Slavonic Natural Language Processing, RASLAN 2008*, 6-9. Masaryk University, Brno.
- Salazar, N. B. (2021). Immobility. the relational and experiential qualities of an ambiguous concept. *Transfers*, 11(3), 3-21, <https://doi.org/10.3167/TRANS.2021.110302>.
- Schewel, K. (2019). Understanding immobility: Moving beyond the mobility bias in migration studies. *International Migration Review*, 54(2), 328-355, <https://doi.org/10.1177/0197918319831952>.
- Schröter, M. & Taylor, C. (eds.) (2018). *Exploring silence and absence in discourse. Empirical approaches*. Basingstoke: Palgrave Macmillan. <https://doi.org/10.1007/978-3-319-64580-3>.

- Sheller, M. (2018). *Mobility justice. The politics of movement in an age of extremes*. London: Verso.
- Stibbe, A. (2015). *Ecolinguistics: Language ecology and the stories we live by*. London: Routledge. <https://doi.org/10.4324/9781315718071>.
- Taylor, C. (2012). And there it isn't: (How) can we access the absent using CADS? Talk given at CADSConf 2012, September 13–14, University of Bologna.
- Venkatamaran, N. (2017). The role of absences in framing environmental refugees in The New York Times. In K.E. Russo & R. Wodak (Eds.), Special Issue: The representation of 'exceptional migrants' in media discourse: the case of climate-induced migration. *Anglistica AION an Interdisciplinary Journal*, 21(2), 93-112, doi:10.6093/2035-8504/8582
- Venkatamaran, N. (2018). What's not in a frame? Analysis of media representations of the environmental refugee. In M. Schröter & C. Taylor (Eds.), *Exploring silence and absence in discourse. Empirical approaches* (pp. 241-279). Basingstoke: Palgrave Macmillan.
- Zickgraf, C. (2019). Keeping people in place: Political factors of (im)mobility and climate change. *Social Sciences*, 8(8), 228, <https://doi.org/10.3390/socsci8080228>.
- Zickgraf, C. (2021). Theorizing (im)mobility in the face of environmental change. *Regional Environmental Change*, 21, 126, <https://doi.org/10.1007/s10113-021-01839-2>.