
HERMES

Journal of Language and Communication in Business

Thematic Section (issue 66-2026)

**Phraseology and communication –
Formulaic language in communication**

Editors:

Erla Hallsteinsdóttir / Jan Engberg /

Anke Heier / Ermina Menzilovic

Published by the School of Communication and Culture, Aarhus University

ISSN: 1903-1785

Antoinette Fage-Butler

Environmental Sustainability Communication and Evolutions in Formulaic Language

Abstract

This paper underlines the value of phraseology as a perspective on the current crisis of environmental sustainability. While existing narratives, frames and discourses used to communicate about sustainability have often been critically examined, there is increasing awareness of the need to identify new narratives, frames and discourses that may reset the ways in which sustainability is conceived. The same is true of the phrases used to communicate about sustainability, where societal understandings of sustainability are reflected in and maintained by phrases, while new phrases may indicate new cultural directions. This paper will elaborate on these points, drawing on existing research on the language of sustainability before outlining directions for future research in phraseology and cultural change.

Keywords

environmental sustainability, language change, formulaic language, discourse, culture, methods

1. Introduction

Societally, globally, it seems we are at a critical juncture regarding the natural environment (Beck, 2015; Haase et al., 2022; Pelling, 2011; Pryshlakivsky & Searcy, 2013). This provokes questions regarding how linguists (phraseologists, discourse analysts and the like) can engage with the topic of the natural environment, as language both reflects and maintains meanings, as well as reveals new developments in thinking. For example, what was once referred to as “global warming” became “climate change” and then “climate crisis” and more recently, “climate catastrophe” and “climate emergency” (Carrington, 2019). It is likely that “global warming” fell out of favour as it was deemed more political and threatening than “climate change”. On the other hand, “climate change” has also been criticised for normalising the current environmental crisis as some would use the expression to argue that climate change has always happened. An expression that is currently in favour is “global climate change” (Abbass et al., 2022) as it emphasises the planetary dimension and, with that, responsibility for fellow human beings and other life forms. In other words, changes in knowledge about, values regarding and attitudes towards the environmental situation are evident via words. Words, with their semantics, pragmatics and histories, reflect changes in knowledge, values and attitudes, and in the process, words often become a site of contention.

The aim of this paper is to outline various ways in which linguists (including phraseologists and discourse analysts) can play a valuable role in environmental sustainability research. It is structured around three parts: 1) an introduction to sustainability and the need for systemic change which is likely to be evident at the level of language; 2) more specific considerations regarding how phraseology can contribute to research on sustainability discourse; and 3) a short conclusion on prospects for future phraseological research.

* *Antoinette Fage-Butler*
School of Communication and Culture, Department of English
Aarhus University
fage-butler@cc.au.dk

2. Language Matters to Sustainability

Language matters to sustainability as language is potent and can bring about change, catalysing cultural transformation. An example of this happened in Denmark during COVID-19, when politicians used the word *samfundssind* to remind Danes of their civic duties to minimise the risk of spreading the disease to others through actions such as staying at home (Fage-Butler, 2024b). *Samfundssind* translates literally as “societal mind” – and it relates to the need to show community spirit and put others’ needs first. The Danes largely heeded this appeal to responsibility and changed their behaviours accordingly. Phrases are also used to express political targets for the environment, informing policies and practices globally, an example being the “1.5 degree Celsius climate threshold” of the Paris Agreement (United Nations, 2015a). Phraseologists can thus contribute valuable knowledge both of nodal points of cultural significance in sustainability discourse, as well as where and when changes in sustainability discourse take place.

2.1. The Hard Sciences – and Some Phrases

Language reveals changes in discourses about sustainability even in the “hard” or “physical” environmental sciences. In the metaphoric language of Johan Rockström, we are living at a time of “planetary boundaries” (Rockström et al., 2013). Nine planetary boundaries (Rockström et al., 2024) associated with the biophysical systems that regulate planetary health have been identified: climate change, change in biosphere integrity, stratospheric ozone depletion, ocean acidification, biogeochemical flows, land-system change, freshwater use, atmospheric aerosol loading, and introduction of novel entities. Currently, six of the nine planetary boundaries are estimated to have been transgressed through human activities, resulting in the conclusion that “Earth is now well outside of the safe operating space for humanity” (Richardson et al., 2023, p. 1). The metaphor of “boundaries” indicates the planet’s natural limits, but it also conveys that it may still be possible for humanity to navigate within these boundaries responsibly.

Another metaphor often mentioned in relation to the planetary boundaries is “tipping point” (Russill, 2008). Tipping points are defined as occurring “when a small change sparks an often rapid and irreversible transformation” (Stockholm Resilience Centre, 2026). The phrase “tipping point” makes clear that human activities are rendering the earth’s planetary systems increasingly unstable, and that unless the needed actions are taken in a timely fashion, the situation can become impossible to reverse.

Again, drawing on Rockström’s metaphoric language to express the planetary crisis, we “overdraw on our planet’s accounts” (Rockström & Raworth, 2015 [2026]), and are “deep in the red” (Rockström, 2024). These metaphors emphasise that action is urgently needed to rebalance the accounts between humankind and Nature. With such corrective action can come a reality of greater balance, frugality and care.

In other words, the language of environmental science is replete with phrases and metaphors that communicate complex environmental risks. This is not surprising: language is central to both the communication of risks (Boholm, 2016; Fage-Butler, 2024b) and the conduct of science (Barad, 2007). While other modes, such as visual, are highly important for communicating knowledge of various kinds (Kress & van Leeuwen, 1996; Maier et al., 2007), language is a key medium of knowledge communication (Engberg et al., 2024).

2.2. An Interdisciplinary Meta-Study and the Focus on Language

Language can do more than describe or characterise the scientific nature of the problem of unsustainability. The monumental interdisciplinary study of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES, 2022), explored societal valuations of nature. The study consisted of 563 pages, drawing on 11 review editors and 84 experts whose backgrounds

spanned the social sciences, biological sciences, technology and humanities. One of the study's main findings was the attribution of the current biodiversity crisis to the dominance of an economic view of nature. Although humans' relationship with nature is far more complex than that and can take (and has taken) many forms, the primacy of the economic view has led to the normalisation of an extractivist relationship with the planet. In this economic logic, Nature is a resource to be used – as encapsulated in the expression “natural resources”. However, other valuations of Nature also exist. Worldviews on Nature can be anthropocentric and extractivist, but they can also be bio- or ecocentric or pluricentric, even cosmocentric (IPBES, 2022, p. xxiv). Indeed, by broadening the terminological resources used to communicate about humankind's relationship to Nature, other, less exploitative understandings of connections between people and Nature can result.

A closer inspection of language highlights the importance of prepositions within phrases in our valuations of nature. According to IPBES (2022), we can live “from, in, with and as Nature” (p. xxii). Each of these phrases connects with different worldviews, knowledge systems and values. In the case of fishing, for example, IPBES (2022, p. xxii) explain:

- With living *from* Nature, Nature provides fish for people's consumption
- With living *in* Nature, Nature is important for people's lives and livelihoods
- With living *with* Nature, fish are understood as having a right to live in Nature, just as people do
- With living *as* Nature, Nature is intertwined with what it is to be a person; thus, a river may be sacred, supporting kinship and interdependence.

When it comes to sustainability, what is required is not just a recalibration of humanity's relationship with Nature, but a reconnection and, with that, the formation of new roles and identities (IPBES, 2022). As such, linguists, discourse analysts and the like have a critical role to play in what is called the “green transition” – not least because of increasing awareness of the value of considering the material and the cultural as ontologically inseparable and entangled (Barad, 2007).

2.3. The Importance of Evolving the Language of Sustainability

Language is at the forefront of societal change and can even prompt or promote it. In the case of sustainability, the need for updating language resources is recognised. For example, a terminology project for the environmental humanities where I contributed a glossary entry on “sustainability” (Fage-Butler, 2025) articulates the need for greater focus on language. Under the heading “Terminology matters matter”, the organisers of the glossary, Daniel Irrgang and Ulrik Ekman, state that:

“the glossary remaps and redefines solid parts of existing relevant terminology and debates on what is at stake in the Anthropocene. [...] Terms and concepts for ways in which to inhabit a common planet must be generated and understood to be critically deployed, in transformative scientific and everyday discourses, artistic interventions, and activist practices, among others” (Ekman & Irrgang, 2026).

As humanity's relationship with the planet is under pressure and evolving, it is necessary to keep up to date with language and possibly invent new words and phrases where cultural and epistemic gaps appear. Thus, an updated terminological awareness may be key to addressing the challenge of sustainability.

It is also pertinent to inspect the word “sustainability” itself more closely. “Sustainability” has been criticised for being an empty signifier (Brown, 2016), whose many meanings can be co-opted for various (even unsustainable) purposes. “Sustainability” has, for example, been associated with greenwashing (de Freitas Netto et al., 2020) and for projecting the semblance of engaging in sustainable practices, allowing business-as-usual to continue (Blühdorn, 2017). It has, moreover, been

criticised for not being ambitious enough. In Fage-Butler (2024a), I describe how risk communication and sustainability could both be considered to be predicated on maintaining the status quo, rather than producing transformative change. Risk communication is motivated by a concern with avoiding future dangers which means that the present can continue as before, while the term “sustainability” suggests the need to keep sustaining and maintaining. As such, “sustainability” could be considered an unambitious term; however, achieving greater environmental sustainability will require fundamental changes in values and practices (Bennett et al., 2019; IPBES, 2022). Thus, the language of sustainability needs to be scrutinised, and close attention paid to identifying paradoxes and sugar-coating.

Sustainability has often been investigated using discourse analytical methods. Within this tradition, Eckert and Kovalevska (2021), employing Critical Discourse Analysis (CDA), concluded that language was often used as a smoke screen: “We conclude that sustainability discourse and its keywords, lexicon, and phraseology have become a channel through which political institutions in the EU such as the European Commission sideline crucial environmental issues and endorse their own presence” (p. 1). There can also be contradictions between research and practice; as Eckert and Kovalevska (2021) go on to state: “sustainability research, on the one hand, and the politically motivated discourse of sustainability, on the other, do not correlate and often actually contradict each other” (p. 2).

The outputs of CDA research are, by definition, generally critical in nature, highlighting problematic assumptions. However, a new programme for humanities researchers working with sustainability could also gainfully revolve around creativity. Bruno Latour (2010) in his article “An Attempt at a Compositionist Manifesto” declared that, as critique had run out of steam, he hoped to promote compositionism rather than deconstruction and critique. He wrote: “It is time to compose – in all the meanings of the word, including to compose with, that is to compromise, to care, to move slowly, with caution and precaution” (p. 287). One potential entry point to such a programme of research could be through language.

2.4. Sustainability and Choices Around Language

As argued in the last section, sustainability is a real-world problem that requires action, not just words (Blühndorn, 2017; de Freitas Netto et al., 2020). However, the distinction between action and words is far from clear-cut. Focus on the communication of sustainability is relevant for action, as political and ideological debates inform how societies should practically address the crisis of environmental sustainability (Teixeira et al., 2025; Torgerson, 1994), as evident in the various – often competing – societal framings, narratives and discourses of sustainability (Litofcenko et al., 2023). Moreover, because language is also sensitive to developments in science (Caso, 1980; Kragh, 2024), new scientific knowledge of sustainability brings with it new words and phrases, resulting in terminology about sustainability being in a state of flux.

Thus, although science may be rigorous, in communicating scientific knowledge to publics, choices are made with respect to language. Regarding the question of biodiversity (one of the planetary boundaries that is currently most challenged), environmentalist and film producer David Attenborough stated in his film *Ocean* that all is not lost. He expressed optimism that his film would encourage leaders to take the needed action at the forthcoming UN ocean conference and that the change could be revolutionary. This is because of a striking research finding: “The ocean can bounce back to life [...]. If left alone it may not just recover but thrive beyond anything anyone alive has ever seen” (Rowlatt, 2025). And this, he asserts, is the greatest message he has ever told; there are still grounds for hope.

3. How Can Phraseology Contribute to Sustainability Research?

This paper has referenced many traditions within language science. Besides phraseology, discourse analysis, narrative analysis, framing analysis, pragmatics and semantics were also mentioned.

However, phraseology has certain advantages for the study of the evolving language of sustainability in the context of the sustainability crisis.

Sinclair, writing in (2008), stated: “phrases have never had a proper status in linguistic theory, and, as a consequence, are anomalous in descriptions” (p. 407). This complexity has been evident in the literature since then. However, phrases, whether they are defined as multiword units (MWUs) (Granger & Meunier, 2008), multi-word expressions (Buerki, 2020), formulaic word strings (Wray, 2002, p. 263), lexical bundles (not necessarily full phrases) (Sidtis, 2021) or other – offer a valuable way of identifying key expressions in sustainability discourse.

Biber et al. (1999), for example, define lexical bundles as “sequences of word forms that commonly go together in natural discourse” (p. 990). Tursunova (2025) similarly notes how “certain phraseological units [such as idioms] resist modification and function as indivisible elements within the language system” (p. 59). The commonplace and formulaic quality of phrases is key to the potential contribution of phraseology to sustainability discourse research. A study of phrases allows us to spot those lexical nodes or clusters that have semantic weight and durability in discourses relating to sustainability.

Methodological traditions within phraseological research also lend themselves to making contributions to empirical studies of sustainability discourse. Phraseological research can, for example, be undertaken on conversational language as well as longer stretches of online data. Both data sources are very valuable for identifying significant phrases in a culture. Within phraseological research, there is the tradition of analysing phrases both qualitatively and quantitatively. However, corpus analytical tools applied to phrases in large data sets may be particularly valuable as they make it possible to make observations, for example, about the frequency, keyness and distribution of phrases (Gries, 2021; Paquot & Gries, 2020), thus helping to shed light on (evolving) cultures relating to sustainability.

Phraseology can usefully complement qualitative discourse analytical methods such as Foucauldian discourse analysis (Fage-Butler, 2015, 2017, 2021; Fage-Butler & Anesa, 2016). Granger and Paquot (2008) have also connected phraseology with discourse analysis, stating that “Phraseology has close links with discourse, a field which centres on the organisation of language above the sentence or above the clause, and therefore studies larger linguistic units, such as conversational exchanges or written texts” (p. 34). In terms of evidencing the usefulness of combining different methods, also known as methodological triangulation, a paper I co-wrote (Fage-Butler & Gorbahn, 2020) combined the qualitative and more deductive approaches to Foucauldian discourse analysis with inductive approaches of corpus linguistics-inspired analyses (specifically, coupling NVivo with AntConc, Voyant Tools and Sketch Engine), providing a richer and more comprehensive analytical approach.

Wood (2015) encouraged combining phraseology and discourse analysis, suggesting new research vistas as follows:

“A final area ripe for research is to examine the ways formulaic language works with discourse analysis [...]. In empirical discourse analysis such as conversation analysis, there are some obvious roles for formulaic language to play, but we have not yet examined them. In critical discourse analysis and the systemic-functional linguistic ways of deconstructing text and determining ideologies, there seem to be many ways that research can incorporate knowledge of formulaic language. [...]. Collaborative and multifaceted research projects can help to push formulaic language into the forefront and help us all to create an unlimited amount of new knowledge in a wide range of fields.” (p. 172)

Corpus analysis of phrases is not just useful for providing snapshots of a culture; it can also show how phrases trend over time. Computational tools help to visualise and reveal phraseological stories. In Nisbeth Brøgger et al. (2021), we analysed the viral spread of a hashtag #detkuhaværetmig

[#itcouldhavebeenme] in Twitter data. This hashtag was employed by healthcare professionals in support of a junior doctor who was charged with not writing down an instruction where the patient subsequently died, but of other complications. The hashtag #detkuhaværetmig [#itcouldhavebeenme] was a way of expressing that not writing down an instruction, though the doctor had asked another health professional to perform the medical task, could have been committed by any doctor due to their working conditions. Computational analyses of the frequency and distribution of the hashtag over time made it possible to identify moments where the expression – #detkuhaværetmig – was particularly prevalent on Twitter. The identified peaks could be correlated with developments in the story on the media. The hashtag represented a powerful statement of solidarity from healthcare professionals to the doctor in question. Extrapolating from this example to potential learnings for phraseological research, the frequency of occurrence of certain phrases over time may indicate the temperature of a culture, as well as make it possible to identify significant events, such as, in the case just mentioned, verdicts of legal cases and more intense media coverage.

In another study (Fage-Butler et al., 2022), we used computational approaches to explore the novelty and resonance of news stories regarding the measles-mumps-rubella vaccine. The study explored evidence in Danish newspaper data of references to spurious research by Andrew Wakefield and colleagues which contended that there was a connection between the MMR vaccine and autism in children, claims that were made in an academic paper that was subsequently discredited and withdrawn. In our analysis, we looked for combinations of “Wakefield” and “autism” to identify possible alternative accounts to mainstream vaccine discourses in newspaper data. A similar method could be used to identify phraseological novelty and resonance in sustainability discourses, as phrases may indicate new cultural directions and perspectives that either gain momentum or are sidelined.

Another study I undertook illustrates how sustainability-related neologistic phrases can be generated (Fage-Butler, in review), in keeping with the compositionist approach of Latour (2010). The methodology for discourse production was a participatory workshop where students from three European universities were asked to generate new thinking about sustainability. The students who took part in the participatory workshop came from seven different degree programme areas across Medicine, Science, Humanities and Social Sciences disciplines, spanning both Bachelor and Masters’ levels. The aim was to promote the students’ critical and creative thinking on the themes of risk, future narratives and sustainability, and to support new ideas generation relating to sustainable futures. Among other things, the students were asked to produce alternative sustainability goals for the year 2040, given that the current sustainable development goals (SDGs) will expire in 2030 (United Nations, 2015b). Interestingly, and without prompting, the groups wanted to rename the SDGs. One group proposed “Actions for Equitable Sustainability”, replacing “goals” with “actions” to help ensure the achievement of these goals, while another group suggested calling the SDGs “Sustainable Guidelines for All Nations” or “Actions for Sustainability”, emphasising inclusion and commitment. One group suggested “homeostasis” as a way of conceptualising a path to more sustainable futures. “Homeostasis” is a biological term that refers to self-regulating processes by which an organism (even at cellular level) maintains its internal stability while adjusting to changes in external conditions in order to optimise functioning. “Homeostasis” metaphorically highlights the interrelatedness of and delicate balance in all systems, so that if more sustainable futures are to be achieved, it is necessary to take seriously and work with this interconnectedness. It may be that the students who suggested “homeostasis” were inspired by academic literature, such as Lovelock’s (2009) *Gaia* hypothesis. In any case, friction was evident at the level of language when young people were asked to think out of the box regarding sustainable futures, as they clearly deemed some terms and phrases to be obsolescent and in need of replacement.

This raises the question of where phrasal novelty comes from. I suggest that the spark for innovation can come from many places. The movement of the term “homeostasis” between disciplines – from biology to global sustainability – highlights the value of cross-fertilisation between disciplines

for innovative thinking. The example of “homeostasis” illustrates a concept travelling from one field into another – a borrowing or appropriation. “Homeostasis” is thus resituated to convey new meanings that could provide an alternative basis for future relationships between people and the planet.

4. Conclusion

Phrases inevitably look backwards, connecting us with the past. We learn phrases; like other linguistic units, they generally predate our usage. Phrases are multi-word units that have stabilised, at least for a while. Buerki (2020) investigated the connection between formulaic language and the culture of a speech community, combining this with an investigation into motivations for language change. As Buerki (2020) observed, since language is a crystallisation of culture, even formulaic language will evolve in keeping with cultural changes. He called for further research on the interface between formulaic language and culture – specifically “the reintegration of the study of language into its proper context of the study of history and culture” (p. xiii).

While phrases are – at best – relatively stable, discourse is always evolving. This is also certainly true of discourses related to sustainability, as Evans (2024) underlined: “the word ‘sustainability’ is now so integrated into everyday vocabulary we might assume an accepted definition. And therein lies the problem, and indeed the difficulty with all normative, generalized, agreed upon phrases; it gives sense [*sic*] of stability to something in constant flux” (p. 27). As outlined in this paper, this relates to an interesting, perennial tension in the field of phraseology. New phrases emerge or new uses of existing words and phrases take place that reflect evolving societal conditions and forms of knowledge, attitudes and values, such as those seen in relation to sustainability.

Although the question of (un)sustainability is pressing and this may expedite processes of change at the phrasal level, change is also common and inevitable in other areas of discourse, and as such is evident in other empirical cases we might choose to engage with as scholars. The two-way interplay between phrases and cultures, coupled with the fact that cultural innovation is visible at the phrasal level, indicates rich scope for further research exploring the tension between sedimentation and change in the field of phraseology and developing methods fit for investigating that tension. At this time of multiple global challenges and indications of rupture, there is an abundance of material to which phraseologists might apply their efforts.

References

- Abbass, K., Qasim, M. Z., Song, H., Murshed, M., Mahmood, H., & Younis, I. (2022). A review of the global climate change impacts, adaptation, and sustainable mitigation measures. *Environmental science and pollution research international*, 29(28), 42539-42559. <https://doi.org/10.1007/s11356-022-19718-6>
- Barad, K. (2007). *Meeting the universe halfway: Quantum physics and the entanglement of matter and meaning*. Duke University Press.
- Beck, U. (2015). Emancipatory catastrophism: What does it mean to climate change and risk society? *Current Sociology*, 63(1), 75-88. <https://doi.org/10.1177/0011392114559951>
- Bennett, N. J., Blythe, J., Cisneros-Montemayor, A. M., Singh, G. G., & Sumaila, U. R. (2019). Just transformations to sustainability. *Sustainability*, 11(14), 3881. <https://doi.org/10.3390/su11143881>
- Biber, D., Johansson, S., Leech, G., Conrad, S., & Finegan, E. (1999). *Longman grammar of spoken and written English*. Pearson Education.
- Blühdorn, I. (2017). Post-capitalism, post-growth, post-consumerism? Eco-political hopes beyond sustainability. *Global Discourse*, 7(1), 42-61. <https://doi.org/10.1080/23269995.2017.1300415>
- Boholm, M. (2016). *Risk, language and discourse [Doctoral thesis]* Stockholm. <https://www.diva-portal.org/smash/get/diva2:894163/FULLTEXT02.pdf>
- Brown, T. (2016). Sustainability as empty signifier: Its rise, fall, and radical potential. *Antipode*, 48(1), 115-133. <https://doi.org/10.1111/anti.12164>
- Buerki, A. (2020). *Formulaic language and linguistic change: A data-led approach*. Cambridge University Press.
- Carrington, D. (2019, 17 May 2019). Why The Guardian is changing the language it uses about the environment. *The Guardian*.

- <https://www.theguardian.com/environment/2019/may/17/why-the-guardian-is-changing-the-language-it-uses-about-the-environment>
- Caso, A. L. (1980). The production of new scientific terms. *American Speech*, 55(2), 101-111. <https://doi.org/10.2307/3050500>
- de Freitas Netto, S. V., Sobral, M. F. F., Ribeiro, A. R. B., & Soares, G. R. d. L. (2020). Concepts and forms of greenwashing: A systematic review. *Environmental sciences Europe*, 32(1). <https://doi.org/10.1186/s12302-020-0300-3>
- Eckert, E., & Kovalevska, O. (2021). Sustainability in the European Union: Analyzing the discourse of the European Green Deal. *Journal of risk and financial management*, 14(2), 1-22. <https://doi.org/10.3390/jrfm14020080>
- Engberg, J., Fage-Butler, A., & Kastberg, P. (2024). Introduction. In J. Engberg, A. Fage-Butler, & P. Kastberg (Eds.), *Perspectives on knowledge communication: Contexts and settings*. Routledge.
- Evans, S. (2024). Stability in the heart of chaos; (Un)sustainable refrains in the language of climate crisis. *The Journal of Environmental Education*, 55(1), 26-37. <https://doi.org/10.1080/00958964.2023.2259845>
- Fage-Butler, A. (2015). Investigating interdiscursivity in hospital strategic plans using Foucauldian discourse analysis. *Hermes*, 54(2), 35-47.
- Fage-Butler, A. (2017). Risk resistance: Constructing home birth as morally responsible on an online discussion group. *Health, Risk & Society*, 19(3-4), 130-144. <https://doi.org/10.1080/13698575.2017.1327038>
- Fage-Butler, A. (2021). Applying Foucault's tool-box to the analysis of counter-narratives. In K. Lueg & M. W. Lundholt (Eds.), *Routledge handbook of counter-narratives* (pp. 85-98). Routledge.
- Fage-Butler, A. (2024a). Rethinking risk communication about climate change: Reflexive approaches and metamodernist public participation. *Communication & Language at Work*, 10(1), 24-32.
- Fage-Butler, A. (2024b). *Risk and responsabilisation in public communication: The global challenges of COVID-19 and climate change*. Routledge.
- Fage-Butler, A. (2025). *Sustainability*. In U. Ekman & D. Irrgang (Eds.), *Environmental humanities: Emergent key terms*. Department of Arts and Cultural Studies, University of Copenhagen. <https://artsandculturalstudies.ku.dk/research/art-and-earth/environmental-humanities-glossary/sustainability/>
- Fage-Butler, A. (in review). Thinking beyond the United Nation's Sustainable Development Goals (SDGs): Learnings from a participatory workshop with international students. *TBA*.
- Fage-Butler, A., & Gorbahn, K. (2020). Europeanness in Aarhus 2017's programme of events: Identity constructions and narratives. *Culture, Practice & Europeanization*, 5(1), 16-33. <https://doi.org/10.5771/2566-7742-2020-1-16>
- Fage-Butler, A., Hvidtfelt Nielsen, K., Ledderer, L., Tørring, M. L., & Nielbo, K. L. (2022). Exploring public trust and mistrust relating to the MMR vaccine in Danish newspapers using computational analysis and framing analysis. Digital Humanities in the Nordic and Baltic Countries Conference (DHNB 2022), Uppsala.
- Fage-Butler, A. M., & Anesa, P. (2016). Discursive construction and negotiation of laity on an online health forum. *Pragmatics and Society*, 7(2), 196-216. <https://doi.org/10.1075/ps.7.2.02fag>
- Granger, S., & Meunier, F. (2008). Introduction: The many phases of phraseology. In S. Granger & F. Meunier (Eds.), *Phraseology: An interdisciplinary perspective* (pp. xix-xxviii). John Benjamins Publishing Company.
- Granger, S., & Paquot, M. (2008). Disentangling the phraseological web. In S. Granger & F. Meunier (Eds.), *Phraseology: An interdisciplinary perspective* (pp. 27-50). John Benjamins Publishing Company
- Gries, S. T. (2021). A new approach to (key) keywords analysis: Using frequency, and now also dispersion. *Research in Corpus Linguistics*, 9(2), 1-33. <https://doi.org/10.32714/ricl.09.02.02>
- Haase, A., Koprowska, K., & Borgström, S. (2022). Green regeneration for more justice? An analysis of the purpose, implementation, and impacts of greening policies from a justice perspective in Łódź Stare Polesie (Poland) and Leipzig's inner east (Germany). *Environmental Science & Policy*, 136, 726-737. <https://doi.org/10.1016/j.envsci.2022.08.001>
- IPBES. (2022). *Methodological assessment report on the diverse values and valuation of nature of the intergovernmental science-policy platform on biodiversity and ecosystem services*. <https://doi.org/10.5281/zenodo.6522522>
- Kragh, H. (2024). *The names of science: Terminology and language in the history of the natural sciences*. Oxford University Press. <https://doi.org/10.1093/9780198917472.001.0001>
- Kress, G., & van Leeuwen, T. (1996). *Reading images: The grammar of visual design*. Routledge.
- Latour, B. (2010). An attempt at a "compositionist manifesto". *New Literary History*, 41(3), 471-490. <https://doi.org/10.1353/nlh.2010.a408295>
- Litofcenko, J., Vogler, A., Meyer, M., & Mehrwald, M. (2023). From controversy to common ground. *Journal of Language and Politics*, 22(5), 661-686. <https://doi.org/10.1075/jlp.22124.lit>
- Lovelock, J. (2009). *The vanishing face of Gaia: A final warning*. Basic Books.
- Maier, C. D., Kampf, C., & Kastberg, P. (2007). Multimodal analysis: An integrative approach for scientific visualizing on

- the web. *Journal of Technical Writing and Communication*, 37(4), 453-478.
- Nisbeth Brøgger, M., Nielbo, K. L., & Fage-Butler, A. (2021). #detkuhaværetmig: How Twitter enabled the expression and propagation of solidarity among healthcare professionals. *Conjunctions*, 8(1), 1.
<https://doi.org/10.7146/TJCP.V8I1.123040>
- Paquot, M., & Gries, S. T. (Eds.). (2020). *A practical handbook of corpus linguistics*. Springer.
- Pelling, M. (2011). *Adaptation to climate change: From resilience to transformation*. Routledge.
<https://doi.org/10.4324/9780203889046>
- Pryshlakivsky, J., & Searcy, C. (2013). Sustainable development as a wicked problem. In S. F. Kovacic & A. Sousa-Poza (Eds.), *Managing and engineering in complex situations* (pp. 109-128). Springer Netherlands.
https://doi.org/10.1007/978-94-007-5515-4_6
- Richardson, K., Steffen, W., Lucht, W., Bendtsen, J., Cornell, S. E., Donges, J. F., Drüke, M., Fetzer, I., Bala, G., von Bloh, W., Feulner, G., Fiedler, S., Gerten, D., Gleeson, T., Hofmann, M., Huiskamp, W., Kummu, M., Mohan, C., Nogués-Bravo, D., . . . Rockström, J. (2023). Earth beyond six of nine planetary boundaries. *Science advances*, 9(37), eadh2458.
<https://doi.org/10.1126/sciadv.adh2458>
- Rockström, J. (2024). Exceeding Earth's Safe Limits with Johan Rockström | TGS 134 In *The Great Simplification*. N. Hagens. <https://www.youtube.com/watch?v=JaboF3vAsZs>
- Rockström, J., Donges, J. F., Fetzer, I., Martin, M. A., Wang-Erlandsson, L., & Richardson, K. (2024). Planetary Boundaries guide humanity's future on Earth. *Nature Reviews Earth & Environment*, 5(11), 773-788.
<https://doi.org/10.1038/s43017-024-00597-z>
- Rockström, J., & Raworth, K. (2015 [2026]). *Planetary boundaries and human prosperity*. <https://www.project-syndicate.org/commentary/environment-boundaries-human-prosperity-by-johan-rockstr-m-and-kate-raworth-2015-04>
- Rockström, J., Sachs, J. D., Öhman, M. C., & Schmidt-Traub, G. (2013). *Sustainable development and planetary boundaries: Draft for discussion*. <https://files.unsdsn.org/Sustainable-Development-and-Planetary-Boundaries.pdf>
- Rowlatt, J. (2025, 6 May 2025). *Attenborough at 99 delivers 'greatest message he's ever told'*.
<https://www.bbc.com/news/articles/cn0wjxg0ex1o>
- Russill, C. (2008). Tipping point forewarnings in climate change communication: Some implications of an emerging trend. *Environmental communication*, 2(2), 133-153. <https://doi.org/10.1080/17524030802141711>
- Sidtis, D. (2021). *Foundations of familiar language: Formulaic expressions, lexical bundles, and collocations at work and play*. Wiley.
- Sinclair, J. (2008). The phrase, the whole phrase, and nothing but the phrase. In S. Granger & F. Meunier (Eds.), *Phraseology: An interdisciplinary perspective* (pp. 407-410). John Benjamins Publishing Company.
- Stockholm Resilience Centre. (2026). *New report: Tipping point threats and opportunities accelerate*.
<https://www.stockholmresilience.org/research/research-news/2023-12-06-new-report-tipping-point-threats-and-opportunities-accelerate.html>
- Teixeira, N., Rodrigues, R., & Rodrigues, A. (2025). Economic growth and environmental sustainability in more and less sustainable countries. *Discover sustainability*, 6(1), 618-615. <https://doi.org/10.1007/s43621-025-01546-6>
- Torgerson, D. (1994). Strategy and ideology in environmentalism: A decentered approach to sustainability. *Industrial & Environmental Crisis Quarterly*, 8(4), 295-321. <http://www.jstor.org/stable/26162263>
- Tursunova, N. (2025). Stability of phraseological units: Structural, semantic, and morphological Aspects. *Acta Globalis Humanitatis Et Linguarum*, 2, 59-63.
- United Nations. (2015a). *Paris Agreement*. https://unfccc.int/sites/default/files/english_paris_agreement.pdf
- United Nations. (2015b). *Resolution adopted by the General Assembly on 25 September 2015. 70/1. Transforming our world: the 2030 Agenda for Sustainable Development*
https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_RES_70_1_E.pdf
- Ekman, U., & Irrgang, D. (Eds.). (2026). *Environmental humanities: Emergent key terms*.
<https://artsandculturalstudies.ku.dk/research/art-and-earth/environmental-humanities-glossary/>
- Wood, D. (2015). *Fundamentals of formulaic language: An introduction*. Bloomsbury Academic.
<https://doi.org/10.5040/9781474218771>
- Wray, A. (2002). *Formulaic Language and the Lexicon*. Cambridge University Press.
<https://doi.org/10.1017/CBO9780511519772>