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THE LANGUAGE(S)
OF SUSTAINABILITY

*A corpus-assisted critical discourse study
between ESP and popularisation*

PAOLO 
LOFFREDO

Volume pubblicato con il contributo del Dipartimento di Studi Letterari, Linguistici e Comparati, Università degli Studi di Napoli L'Orientale (progetto di ricerca dipartimentale di interesse strategico: Interazioni e transizioni critiche: dialoghi di lingue, letterature e culture per un modello inclusivo del sapere umanistico).

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INTRODUCTION

Defining ‘sustainability’ – a now ubiquitous buzzword in most fields of human activity and knowledge (Apetrei *et al.* 2021) – is no easy task if one wishes to capture the full extent of its meaning. In its general sense, the Cambridge Dictionary defines it as “the quality of being able to continue over a period of time” (2023). Such understanding of an otherwise complex, non-univocal concept helps clarify several points, such as the notion that sustainability is a quality or positive attribution of actions, resolutions, or policies that are long-term in nature and committed to enduring results. The emphasis on the future also characterises sustainability, as it is widely accepted that “[s]ustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED 1987: 43). Adopting a holistic view of this concept, the needs of the present can be more precisely defined as “the needs of all members of the biosphere” (Robertson 2017: 137) – since all living beings, organisms, and natural ecosystems should be integral of sustainable development plans.

In the last few decades, the word ‘sustainability’ has known unprecedented fame, rising in general English vis-à-vis a word such as ‘conservation’ or ‘environmental protection’, possibly as an effort “to reframe issues around anthropogenic activity” (Krieg and Toivanen 2021: 3), and serving “as an analogue for how concepts circulate apart from contexts” (Krieg and Toivanen 2021: 3). As will be seen in this volume, the dissemination of sustainability knowledge has led to popular uses of this term that extend beyond its more transparent conceptual meanings. Consequently, there is a significant risk of losing sight of the true essence of sustainability, given the various manipulations of this concept across numerous discourses and contexts. On the one hand, “knowledge remains an elusive concept, also because it requires a lot of qualifiers: what is knowledge about; who creates it, how, and for which purposes; when and by whom is it used?” (Apetrei *et al.* 2021: 1). On the other hand, “knowledge needs to be understood in relation to other factors, such as interests, values, beliefs, power structures and institutions, all of which play important roles in supporting or hampering change” (Apetrei *et al.* 2021: 1). Overall, it is the inherently composite nature of sustainability which makes it so appealing for discussions in various fields and for diverse purposes.

Sustainability, it seems, is a much-desired objective and a vision for

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the future for many individuals and organisations. However, its concrete realisation remains a complex societal challenge. When looking for sustainability, several practices are involved, including “the mobilization and use of material beings *as resources* to support those practices” (Krieg and Toivanen 2021: 1, emphasis in the original). Echoing the principles of material ecocriticism, both natural and artificial *beings* should be considered among these resources, including humans. The expression ‘natural capital’ (Ott *et al.* 2011), which describes renewable and non-renewable resources, is therefore problematic since it only accounts for the life-supporting potential of the natural environment, and positions humans in a dominant role. In contemporary times, all ecosystems are intricate conglomerations of people, artifacts, sentient machines, work equipment, and natural resources. Therefore, any sustainability endeavour relies on the conscious and responsible actions of human beings – rather than merely the availability and exploitability of natural resources.

To envision successful sustainability plans, it would be sensible to decompose the planetary needs into those of smaller (eco)systems with well-defined boundaries and identifiable components, typically characterised by significant internal interaction. This is in line with a basic principle of ecology, which recognises that the study of natural ecosystems is invariably influenced by specific constraints and contingencies that fluctuate over time and space (Boero 2009: 7). At the same time, it is undeniable that all ecosystems are interconnected, “as no measurable divisions exist in the global ecosystem, but each ecosystem stands in a continuum” (Niceforo 2019: 9). It would be futile, or even counter-productive, to plan and act for sustainability without large-scale policies and shared (global) objectives. And yet, harmonising individual needs and goals holistically and effectively represents perhaps the highest obstacle to achieving sustainable development.

Furthermore, three widely recognised dimensions of sustainability – economic, social, and environmental – must be considered when assessing the “scope, meaning, limitations, and implications” (Wilke *et al.* 2021: 20) of sustainability plans. As part of social and societal issues, sustainability proposals have been linked to the “ways in which our societies can stay within [planetary] boundaries” (Rockström *et al.* 2009), thus acknowledging the difficulties of planning for and implementing sustainable living in a way that is respectful of the global environment. The same can be said for national and international economic systems around the world: contemporary efforts and shifts toward economic and financial models prioritising environmental sustainability remain limited or partially effective. Regarding the

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environmental dimension and the difficult harmonisation of these three areas, it has been noted that:

1. social/symbolic and environmental processes [...] are mutually implicated. That is, environmental problems are both materially produced – through interactions between human actions and bio-physical processes – and are also socially or discursively constructed [...];
2. representations of nature or the environment [...] embody interested and/or consequential orientations [...] both reflect and influence our social, economic, or ideological interests;
3. further social, cultural, economic, and other contexts [...] may enable, sustain, and/or frustrate the production (sense-making) of interested representations of “environment” (Cox and Depoe 2015: 15).

These are some of the reasons why the different conceptualisations of sustainability often conflict with one another, creating fertile ground for critical studies of sustainability discourse(s), such as the present volume.

The same heterogeneity of issues and concerns exists within sustainability science, where multiple perspectives and aspects coexist, and theories influence one another to generate meaningful hypotheses and methodologically sound analytical procedures. Gaining recognition as a distinct discipline in the early 2000s (see Kates *et al.* 2001), sustainability studies have been defined as “applied research that spans and integrates multiple physical and social science disciplines and is directed toward the management of human-environment systems in ways that meet needs for human livelihoods while protecting ecosystem and environmental integrity” (Cox and Depoe 2015: 18). The interdisciplinarity of sustainability research is therefore both theoretical and practical, with obvious challenges for researchers engaged in organising topics and questions in this field. This complexity leads to linguistic and terminological considerations: as a matter of fact, “models and vocabularies from different fields are borrowed to become metaphors that illuminate phenomena and legitimate practices in others” (Krieg and Toivanen 2021: 8). Without delving into the numerous technical areas of sustainability, such as biology, law, or economics, the present study draws from the broad field of environmental humanities, with relevant literature on sustainability language, discourse, and communication informing the proposed analysis. Occasional reference to social sciences further expands the scope of this study. Overall, the idea that interdisciplinary contamination – occurring at all levels, from theory and methodology to critical analysis and interpretation of data – is essential “for

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the production of new knowledge and understanding” (Krieg and Toivanen 2021: 8) remains a key principle throughout this volume.

This study aims to explore previously unexamined aspects of sustainability discourse by addressing an existing research gap in the fields of language and English studies. Specifically, Chapter 1 introduces the language of sustainability in its lexical, terminological, and pragmatic features. It is postulated that sustainability language – encompassing terms from various specialised fields – can be considered part of English for Special Purposes (ESP). However, the presence of words from general English complicates its classification as ESP, making it somewhat ambiguous and subject to variations in usage. In the second part of the chapter, the processes of popularisation of sustainability knowledge are examined, along with possible steps for transferring information from scientific communities to policymakers, the industry sector, the media, and the general public. In addition to traditional top-down forms of communication, the chapter acknowledges the role of other actors, such as influential individuals or science communicators, in facilitating peer-to-peer popularisation processes. Finally, a reflection on the environmental perspective adopted throughout the book concludes the chapter.

In Chapter 2, sustainability discourse and texts are described through the lenses of genre, domain, and medium. First, an important distinction is made between *Discourse* and *discourse* following James Paul Gee (1999: see also Gee and Gee 1990), thus allowing to distinguish between the general features of sustainability discourse and specific instances found across different types of texts. In particular, four genres of sustainability texts, representing four sub-corpora, are considered for subsequent analysis: scientific, institutional, corporate, and media texts. Each genre is presented with its key features and communicative purposes.

The methodology for this study, along with the rationale for corpus design and collection, is illustrated in Chapter 3. In accordance with triangulation, both qualitative and quantitative methods are employed to integrate critical discourse studies (CDS) and corpus linguistics (CL) techniques. The investigation of the four sub-corpora includes software-assisted operations as well as close manual reading of texts. For the qualitative part of the analysis, Van Leeuwen’s social actor theory (2008, 2013), framing theory (beginning with Entman 1993 and including Lakoff 2008 and Van Dijk 2023 theorisations), and ecolinguistics (as elaborated, among others, by Stibbe 2014, and Alexander and Stibbe 2014) are used to critically analyse sustainability discourse across various genres and texts.

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The chapter concludes with a comprehensive overview of the corpus design and collection process.

Chapter 4 presents the results of the quantitative analysis, which includes keyword lists for the four sub-corpora, as well as collocations and concordances of the terms ‘sustainability’ and ‘sustainable’ in each sub-corpus, all retrieved via Sketch Engine software for corpus analysis. To complete the investigation and address the proposed research questions, thematic nodes retrieved through software for qualitative analysis NVivo 12 are also provided at the end of this chapter. Starting from limited preliminary hypotheses, the emerging quantitative data, discussed deductively, illustrate popularisation and framing across the four groups of texts.

The core of the entire volume, as intended by the author, is discussed in Chapter 5, which focusses on sustainability discourses through the analytical lenses of Critical Discourse Studies (CDS). This chapter specifically examines the recontextualisation of social actors and practices across different genres, as well as the framing of sustainability within the four subgroups of texts. To this purpose, the chapter presents and analyses extensive examples from the four sub-corpora, highlighting critical aspects and implications of role allocation and sustainability framing. In line with the ecolinguistic approach, the presence of the so-called ‘environmental frame’ within the texts is evaluated to enhance the analysis.

Final remarks summarise the results of the analysis and reflect on the purpose and scope of the entire study, concluding the volume.