
| RESEARCH ARTICLE

International Advances in Business Discourse Research (2013-2022): A *CiteSpace*-based Investigation and Analysis of WOS

Jialiang Chen

School of English for International Business, Guangdong University of Foreign Studies, Guangzhou, China

Corresponding Author: Jialiang Chen, **E-mail:** 20220320001@gdufs.edu.cn

| ABSTRACT

This paper provides a quantitative and qualitative visual investigation and analysis of the advances in international research on business discourse over the last decade via *CiteSpace*. Primary findings are: 1) Based on *Publication Trend*, business discourse research has undergone an upward tendency with few fluctuations; 2) Regarding *Keyword Clustering*, heated emphasis is laid on research areas encompassing different business scenarios, disciplinary fields (e.g., pedagogy, sociology), and information technological methods (e.g., natural language processing) due to the globalization and digitalization of business activities; 3) Grounding *Disciplinary Distribution* and *Co-occurrence*, the main theoretical perspectives in business discourse research comprise linguistics, the interdisciplinary orientation of management and economics, and other applications and extensive research; 4) Topics in *Keyword Timeline* and *Keyword Burst* emerge (e.g., *social media*, *systems*, and *impact*). Visualization of business discourse research is expected to offer implications and insights for future research and business practices.

| KEYWORDS

Business discourse research, international advances, *CiteSpace*, visualization, research trend

| ARTICLE INFORMATION

ACCEPTED: 01 December 2023

PUBLISHED: 15 December 2023

DOI: 10.32996/jpda.2023.2.2.4

1. Introduction

What business discourse concerns is “how people communicate using talk or writing in commercial organizations in order to get their work done” (Bargiela-Chiappini *et al.*, 2013:3). Business discourse research, thus, demonstrates the organizational and professional characteristics of the business context (Bargiela-Chiappini & Nickerson, 2002; Louhiala-Salminen, 2002), including but not limited to verbal communication and written texts, such as emoticons, body language, and other non-linguistic units. Different elements influence or construct how discourse is used in business settings to realize interactional goals. It is various approaches, methodologies, disciplines, and a combination (i.e., multi-perspectives and multi-methods) that enable business discourse research to be conducted in an interdisciplinary space (Bargiela-Chiappini, 2009) and to investigate how people talk or write in business contexts.

1.1 An overview

A brief overview of business discourse research lies in three aspects: theoretical construction, research methods, and practical significance, which are introduced as follows.

Firstly, theoretical construction assumes an indispensable role in business discourse research. Currently, most business discourse studies are conducted based on the paradigms of applied linguistics, business communication, intercultural communication, sociolinguistics, and anthropology (cf. Bargiela-Chiappini *et al.*, 2013; Bhatia, 2006; Doyle, 2012). Business globalization and information technology trigger diversified new business discourse scenarios and behaviors, such as the discourse of corporate

social media websites and cross-border e-commerce (e.g., Jorge, 2019; Kaun & Uldam, 2018). Therefore, it is crucial to construct theoretical systems to interpret new business scenarios and communicative behaviors, which assists in revealing how business communities use linguistic resources or communicative strategies to achieve different goals (transactional, interpersonal, or both).

Secondly, business discourse research displays a great emphasis on multi-perspectives and multi-methods. Various approaches are involved in business discourse research, such as (critical) discourse analysis, (critical) genre analysis, content analysis, and conversation analysis (cf. Bowles, 2012; Daniushina, 2010; Gollin-Kies, 2014; Bhatia, 2017), each of which has its advantages and limitations. Simultaneously, different linguistic disciplines contribute unique perspectives to business discourse research, including semantics, pragmatics, cognitive linguistics, corpus linguistics, and sociolinguistics (Bargiela-Chiappini *et al.*, 2013). Generally, it is highly advocated that business discourse research should be combined with methods of other disciplines or perspectives for multi-disciplinary exploration rather than solely focused on the linguistic level.

Thirdly, business discourse research is practice-oriented. It concentrates on the in-depth excavation of the discourse and context and highlights the application of research findings to professional practices and language teaching. Researchers have fully explored the language, structure, and other features of various business genres through in-depth and long-term investigation of companies or business practitioners (e.g., Carrió-pastor & Muiz-Calderon, 2015; Du-Babcock, 2013; Incelli, 2013; Warren, 2013; Zhu, 2013). Topics such as pragmatic strategies (e.g., Millot, 2017), cross-cultural contrast and adaptation (e.g., Du-Babcock, 2013), and corporate communication (e.g., Ngai & Singh, 2017) have also attracted much attention. One of the purposes of business discourse research is to explore how professionals construct, interpret, use, and appropriate linguistic resources to realize their professional goals and promote professional practices in a specific business context (Bargiela-Chiappini *et al.*, 2013). Very often, researchers on business discourse are also teachers in charge of business language teaching. Hence, research findings can also be applied to classroom teaching and professional practice.

1.2 The present study

The present study uses *CiteSpace*, a data visualization technology, to analyze recent international advances in business discourse research during the past decade. Those papers themed with "business discourse" were collected from *the Web of Science* (WOS) in terms of the core collection database for the period 2013-2022. Altogether, 3093 relevant papers were preliminarily obtained after accurate retrieval, 2921 of which proved valid and selected after excluding 172 papers with deficiencies in information completeness and qualification. *CiteSpace* 6.2.R2 was then used for a visualization of these collected papers. Keywords and co-cited references were used for node types, respectively, displaying pertinent information such as keyword clustering maps. Visualization and systematic analysis were conducted on the overall development of business discourse research.

This paper is accordingly divided into five parts. After a brief introduction in this section, *Publication Trend* and *Disciplinary Distribution* are shown in section two. The focus of the present study lies in both section three, *Keyword Clustering* and *Co-occurrence*, and section four, *Keyword Timeline* and *Keyword Burst*. Finally, section five concludes this paper with the main findings and some remarks.

2. Publication Trend and Disciplinary Distribution

This section analyzes the publication trend and disciplinary distribution of business discourse research over the past decade. The publication trend is mainly reflected by the variation in the number of published papers each year, while disciplinary distribution displays the number of published papers in different areas based on WOS literature classification.

2.1 Publication trend

The publication of literature in a specific discipline or field directly indicates the research level and popularity to a certain extent, as well as its development history and maturity. Based on the WOS literature database, this sub-section uses *Excel* to calculate the publication trend of business discourse research shown in Figure 2-1 (Page 24). It is manifested in Figure 2-1 that business discourse research has undergone a relatively steady upward trend, which can be further divided into three stages.

2.1.1 Steady progress (2013-2017)

During this stage, the number of published papers on business discourse research changed at a relatively low but increasing rate. Studies in this period are the continuation of those in the early 21st century, that is, an exploration of linguistic characteristics of different genres of business discourse. During the early stage, research focuses on business communication and texts: business communication research mainly centered around business correspondence (e.g., Incelli, 2013; Townley & Jones, 2016; Warren, 2016; Millot, 2017), business meetings (e.g., Aritz *et al.*, 2017; Du-Babcock & Tanaka, 2017), business interviews (e.g., Evans, 2013; Pyysiäinen & Vesala, 2013; Jones, 2017), while research on business texts involves the discursive characteristics of business documents, business textbooks, and other genres.

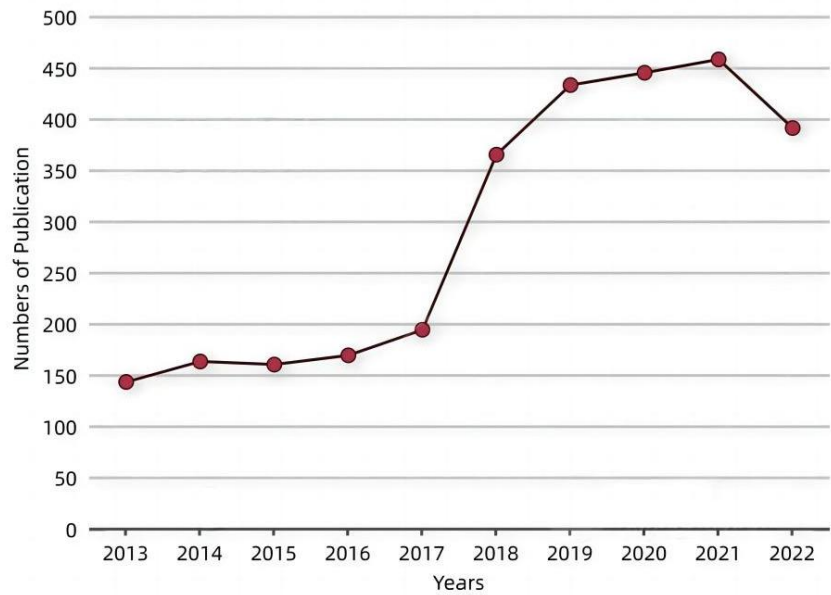


Figure 2-1. Publication trend of business discourse research (numbers of published papers per year)

There are also studies on business language teaching, especially business English training in non-English speaking countries (e.g., Mees *et al.*, 2016; Chan, 2017), where English is used and taught as a business lingua franca. Concurrently, business discourse research provides a theoretical basis for business communication in specific situations (e.g., Beangstrom & Adendorff, 2013; Ho, 2014; Labrador *et al.*, 2014). It is not uncommon that relevant research involves varying degrees of theories and perspectives of other disciplines, such as management, marketing, and pedagogy. However, most studies are grounded in linguistic theories with some ideas borrowed from other disciplines, whereas less research was extended to interdisciplinary application fields.

2.1.2 Leapfrog development (2017-2020)

There was a substantial increase in published papers on business discourse research from 2017 to 2019, marked by a considerable surge. A further investigation of the literature contributes to a summary of the following three main reasons.

The first reason points to the progress of multi-disciplinary research. With the application of theories and methods from various disciplines, frontier hot spots emerge frequently, triggering a continuously increasing publication of influential research. In this regard, business discourse research gradually evolves into multi-disciplinary fields referring to social science and natural science for specific discourse in different contexts, including but not limited to corporate discourse, business media discourse, business classroom discourse, economic discourse, management discourse, negotiation discourse, marketing discourse, and other genres (see section three for a more detailed presentation). Simultaneously, some studies are concentrating on the intersection of business discourse and computer science or information technology (e.g., Poole, 2017; Schriver, 2017; Zjagic *et al.*, 2017; Chan & Du-Babcock, 2019; Mak, 2019), using natural language processing for business discourse research and application.

The second reason is related to the globalization of business, i.e., global or international business. International business and trade facilitate an increase in business activities, rendering more diversified scenarios for business discourse research and reinforcing its significance and necessity in intercultural settings. On account of the globalization of business activities, different cultures also offer their perspectives for business discourse research (e.g., Ngai & Singh, 2017; Chan & Du-Babcock, 2019), as linguistic and cultural differences exert a remarkable effect on international or cross-cultural business communication.

The final reason stems from the digital turn of business discourse. Original data of early business discourse research are highly private, accounting for insufficient and limited data. However, in the digital economy era, open online platforms significantly increase the accessibility and quantity of data, and business discourse becomes both online and multimodal (cf. Handford, 2010). As business discourse becomes diversified, a vast number of naturally occurring interactions enrich issues of business discourse research, such as online consumer reviews and responses (e.g., Decock & Spiessens, 2017; Ho, 2017a, 2017b, 2018, 2019; Shrikant & Musselwhite, 2019), online crisis public relations (e.g., Cheng & Ho, 2017; Kaun & Uldam, 2018; Vonk, 2018; Furey *et al.*, 2019). In addition, some attention is also paid to the examination of business discourse on specific platforms and its application in different scenarios, such as official websites of enterprises (e.g., Chaiyapa *et al.*, 2018; Joachim & Schneiker, 2018;

Reuber & Morgan-Thomas, 2019), and social media (e.g., Matamoros-Fernandez, 2017; Cohen *et al.*, 2018; Pérez *et al.*, 2018; Hansson *et al.*, 2019; Jorge, 2019).

2.1.3 Slight decrease (2020-2022)

On account of the impact of the pandemic, global business activities during this period were significantly reduced. Due to a decrease in objectively high-quality business discourse scenarios, the number of published papers declined slightly. Despite the challenges posed by the pandemic, the demand for online business communication surged during the pandemic, providing a rich platform and corpus for business discourse research. Some scholars explore the discursive characteristics of digital business communication (e.g., Cenni & Goethals, 2020; Park *et al.*, 2021; Van Herck *et al.*, 2022), and relevant expanded studies are promoted accordingly. In rapid development, various issues of business discourse research, such as online business complaint responses, e-commerce live streaming, and social networking business-customer interactions, attract more academic attention (e.g., Ho, 2020, 2021; Shi & Dou, 2022). To a certain extent, the number of studies is high (see sections three and four for more details). Section 2.2 continues to introduce the disciplinary distribution of business discourse research.

2.2 Disciplinary distribution

Business discourse research is an emerging interdisciplinary field involving many disciplinary areas and solid multi-disciplinary attributes. Analyzing the disciplinary distribution in business discourse research is significant to expound on the focus. This subsection demonstrates the disciplinary distribution of the literature according to the database, as shown in Figure 2-2. It is manifested that business discourse research involves 21 disciplines, with the following at the forefront: *Business & Economics*, *Social Sciences (Other Topics)*, *Environmental Sciences & Ecology*, *Linguistics*, *Communication*, *Education & Educational Research*.

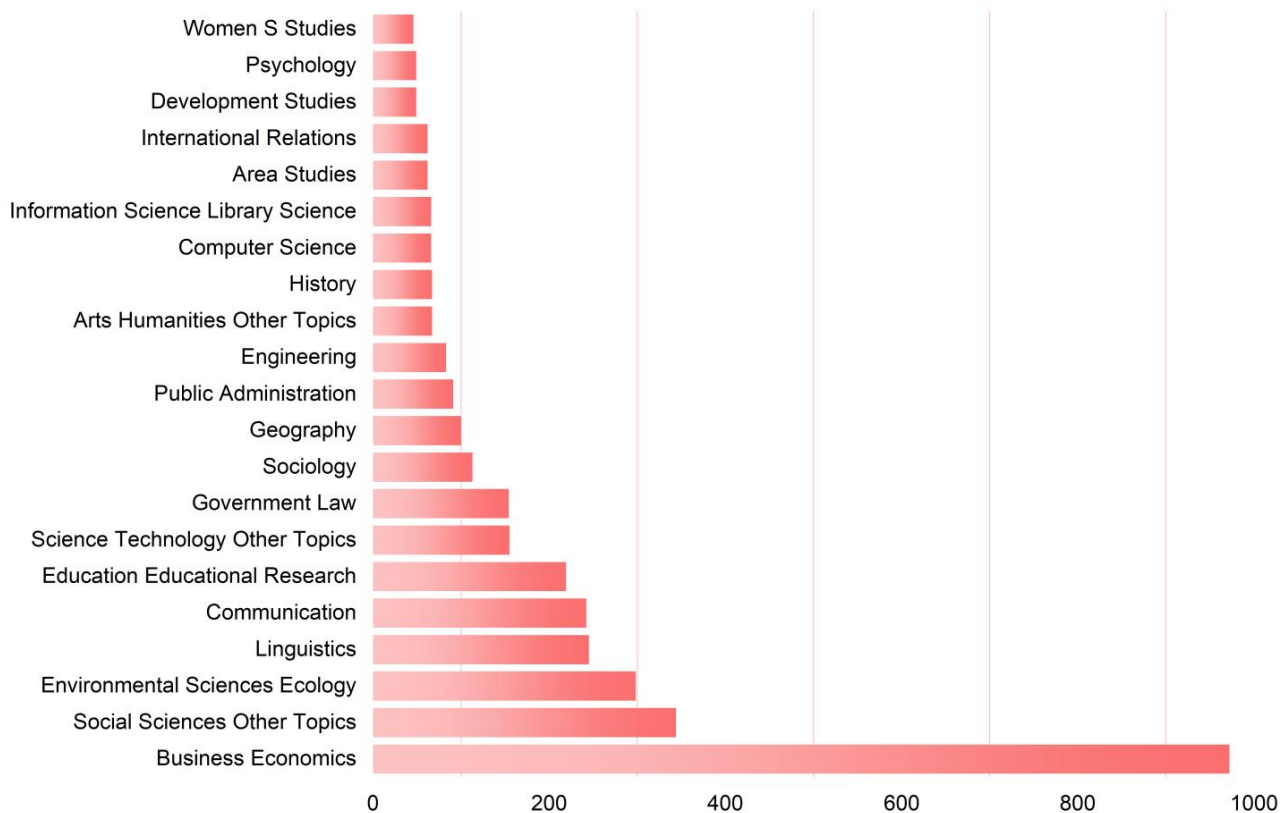


Figure 2-2. Disciplinary distribution of business discourse research

Based on different disciplinary areas, four categories are disclosed as follows.

- a) Economics: *Business & Economics*, *Public Administration*, *Development Studies*
- b) Language and discourse: *Linguistics*, *Communication*
- c) Other social sciences: *Social Sciences (Other Topics)*, *Education & Educational Research*, *Government & Law*, *Sociology*, *Arts & Humanities (Other Topics)*, *History*, *Area Studies*, *International Relations*, *Psychology*, *Women’s Studies*
- d) Information science and natural science: *Environmental Sciences & Ecology*, *Science & Technology (Other Topics)*, *Geography*, *Engineering*, *Computer Science*, *Information Science & Library Science*

Disciplinary distribution shows the classification and integration of business discourse research. *Business & Economics* ranks first in the number of papers published in business discourse research, serving as the foremost representative discipline. Business discourse, by definition, emerges in the business context relevant to various activities. As the economic value of language is the focus of linguistic economics (Darics & Clifton, 2019), pertinent research is mainly carried out under the paradigm of economics and management. Secondly, *Linguistics* stands out as another pivotal discipline as business discourse research focuses on the discursive level essentially, and linguistics and its relevant branches inevitably provide a primary perspective from which business discourse research is conducted.

Additionally, the disciplinary distribution covers ten other types of social sciences, which reveals that business discourse research also touches on the interrelationship and function of language in different contexts, especially the so-called social contexts (professional contexts if narrowed) (cf. Bhatia, 2006, 2017). Overall, research is conducted from different disciplinary perspectives and involves specific business practices in different contexts from multi-disciplinary perspectives. The following sections further discuss critical issues in detail.

3. Keyword Clustering Map and Co-occurrence Map

Keywords fulfill an indispensable function within research, possessing a high degree of generalization and comprehensiveness and carrying the most significant and core information. *CiteSpace* can be used to extract keywords from the literature and generate clustering and co-occurrence maps to reflect the research locus more specifically. Specifically, keyword cluster analysis aims to extract and summarize their representatives in the research field, while keyword co-occurrence emphasizes the connection between keywords and cross-research frequency. Based on the database, this section employs *CiteSpace* to conduct keyword clustering and co-occurrence for business discourse research and elucidate these two maps.

3.1 Keywords clustering map

CiteSpace clustering was conducted as follows. The timespan was set from 2013 to 2022, with a slice length of one year. The default value of *TermSource* is *Title*, *Abstract*, *AuthorKeywords*, and *KeywordPlus*. The default value of *NodeTypes* is *Keyword*. *Visualization* features *Static* and *ShowMergedNetwork* to get the keyword clustering map shown in Figure 3-1.

In the clustering map, the top 15 clusters are #0 discourse analysis, #1 sustainable development, #2 business discourse, #3 development, #4 higher education, #5 institutional theory, #6 csr, #7 knowledge, #8 natural language processing, #9 discourse network analysis, #10 foreign direct investment, #11 organizational discourse, #12 business ethics, #13 business case, #14 family firms, and #15 business purpose. It is signaled that the Q value of the graph is 0.7407 (>0.3) and that the S value is 0.8872 (>0.5), indicating the significance of the clustering structure with high reliability. Three key issues are presented based on Figure 3-1.

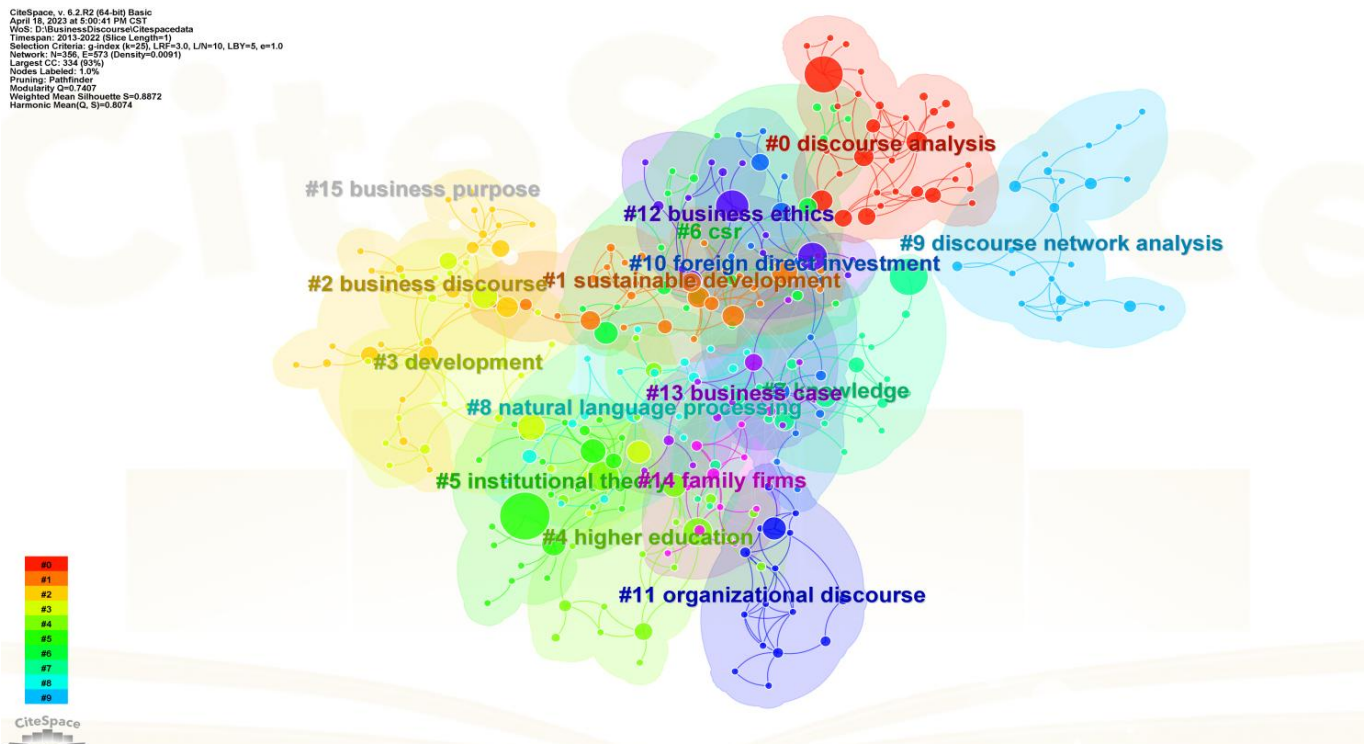


Figure 3-1. Keyword clustering map of business discourse research

3.1.1 Linguistic research (#0, #2, #9, #11)

Linguistics and discourse analysis lay the foundation of business discourse research without doubt. Many studies are based on discourse analysis with different linguistic theories and methods to address different needs. In the clustering map, studies closely aligned with linguistics involve methods or topics, such as #0 *discourse analysis*, #9 *discourse network analysis*, and #11 *organizational discourse*: a) Papers directly related to discourse analysis comprise synchronic and diachronic analysis (Kheovichai, 2014), interdisciplinary legal-business practice (Townley, 2019), and emails in English as a business lingua franca (Roshid *et al.*, 2022). b) Studies on discourse network analysis are associated with general data protection (Laurer & Seidl, 2021), corporate climate irresponsibility (Berglez & Olausson, 2021), and data of journalism (Dowling, 2021). c) Organizational discourse studies are relevant to organizational identity (Kopaneva & Cheney, 2019; Mak, 2019), communication strategies for product launch presentations (Zhang *et al.*, 2021), and the application of applied linguistics to business practice (Darics & Clifton, 2019). Different linguistic and discursive methods and studies are widely applied in business contexts.

3.1.2 Interdisciplinary fusion of language, business, and management (#1, #3, #5, #6, #10, #12, #13, #14, #15)

Business discourse literally refers to discourse in business contexts or activities, so relevant studies can rarely be separated from the perspectives of management and economics. Within business and management, sustainable development refers to the feasibility of the development duration of the enterprise. To a large degree, keywords of business discourse research can be extended to the application of business discourse to the development and advancement of enterprise: a) Studies related to (sustainable) development contain consumption sustainability in the media (Diaconeasa *et al.*, 2022), corporate identity in social responsibility reports (Fuoli, 2018), membership in business communities (Zhang, 2023), and metaphor in corporate environmentalism (Yu, 2020), to name but a few. b) Studies on CSR and business ethics are associated with vague language (Jin, 2022), legitimation strategies (Lin, 2021), and language testing and assessment (Taylor, 2023), etc. c) There are also some studies grounded in business cases, focusing on identity formation (Kopaneva & Cheney, 2019), impression management (DeJeu, 2022), and metaphorical constructions (Fielden-Burns & Piquer-Piriz, 2022). Other keywords include institutional theory (Lakhani & Herbert, 2022) and foreign direct investment (Marrone & Linnenluecke, 2020), which feature business expertise and knowledge, thus not expanded in this paper.

There are some representative studies from the perspectives of business and management. For example, Leung *et al.* (2015) proposed the theory of language management, which states that the fundamental theory influences corporate impression management. Specifically, it refers to how company management leverages linguistic information and corresponding regulations to manipulate the content and format, which may impact investment decision-making behavior (Leung *et al.*, 2015). Similarly, Ho (2014) explores the evaluation resources in workplace request emails and found that employees used a lot of evaluation language when writing workplace request emails to achieve relationship management. Another example is Beangstrom & Adendorff's (2013) investigation of the evaluation resources in the advertisements of real estate agencies to reveal how agents manage interpersonal relationships with potential customers. In general, business and management provide research scenarios and channels for business discourse research, especially in their integration with discourse analysis.

3.1.3 Other applications and extensive research (#4, #7, #8)

As an emerging independent research field, business discourse research extends its influence across many other interdisciplinary applications in extensive research. It is apparent that #4 *higher education* and #7 *knowledge* are related to pedagogical research, including but not limited to intercultural/cross-cultural communication education (Simpson *et al.*, 2022; Zhang *et al.*, 2022), workplace communication (Chan, 2019), technology-enhanced communication (Zhao *et al.*, 2022), and leadership communication (Doshi *et al.*, 2021). These studies reveal the application of business discourse in higher education and the construction of knowledge systems that have practical significance for cultivating students in the digital era.

In addition, a more cutting-edge aspect is #8 *natural language processing* (NLP). One of the critical directions of business discourse research and application is to explore interdisciplinary research between business discourse and artificial intelligence and discuss how to handle and process natural language. Existing studies include multimodal resources (Räisänen, 2020), organizational culture (Pandey & Pandey, 2019), and model validation (Leopold *et al.*, 2014). To a certain degree, business discourse research has a multi-angle direction based on advanced technology development, revealing its characteristics of solid integration and high openness.

3.1.4 An intermediate summary

Business discourse research in the past decade reveals three distinct features: linguistic, multi-disciplinary, and practical orientations. Numerous studies employ various linguistic approaches, while some take a further step by integrating theories of other disciplines, such as management and education, to foster sustainable development within enterprises, build knowledge systems, and cultivate business-oriented practitioners. Moreover, artificial intelligence emerges as an emerging contributor to business discourse research, as it facilitates the extraction of linguistic features and promotes its overall advancement.

3.2 Keyword co-occurrence map

This sub-section conducts keyword co-occurrence analysis for business discourse research in the past ten years. Keyword co-occurrence analysis comprises three main aspects. a) Co-occurrence frequency analysis: each node represents a keyword, and the larger the node, the higher the keyword co-occurrence frequency; b) Centrality analysis: the higher the centrality of keywords, the richer the information between the connecting keywords and the more critical the position they occupy in the co-occurrence network; c) Novelty analysis: for each node, the more significant the proportion of warm color distribution, the more novel the research keywords.

Figure 3-2 shows that business discourse research is highly intersectional with great diversity. The co-occurrence map correlates highly with the clustering results in section 3.1. Since section 3.1 provides a comprehensive and systematic analysis of relevant literature, section 3.2 does not involve a series of studies but only discusses the results of the co-occurrence analysis.

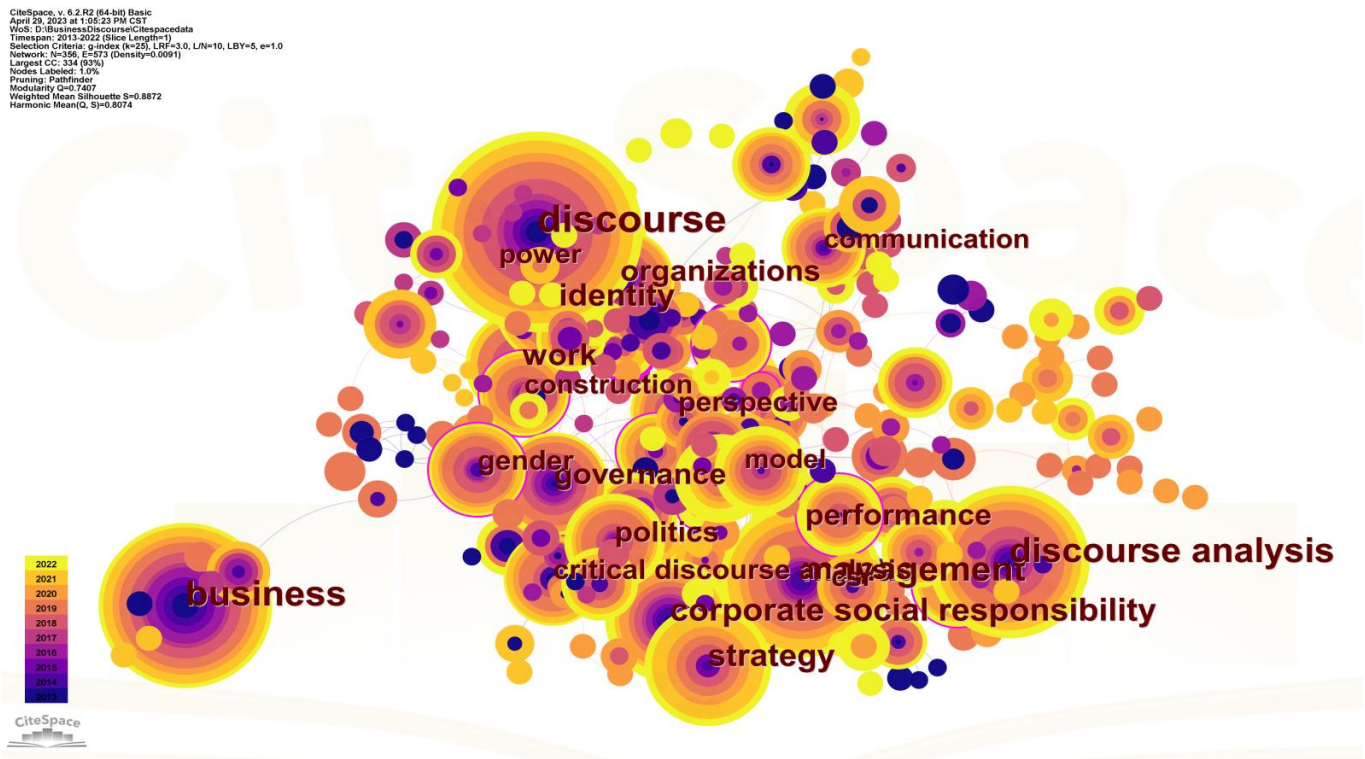


Figure 3-2. Keyword co-occurrence map in business discourse research

3.2.1 Co-occurrence frequency analysis

The results of co-occurrence analysis are highly consistent with those of keyword clustering in Figure 3-1, signaling its interdisciplinary solid nature. In Figure 3-2, keywords linked with management and economics, such as *business*, *strategy*, *construction*, *governance*, *communication*, and *performance*, exhibit high co-occurrence frequency. This observation reveals the convergence of business discourse research with business studies (e.g., see Pyysiäinen & Vesala, 2013; Kopaneva & Cheney, 2019; Twarog, 2022 for relevant studies on governance). For another, keywords, such as *gender*, *power*, and *politics*, which involve other fields, including but not limited to sociology, anthropology, and political science, similarly demonstrate a high co-occurrence frequency and strong interdisciplinary pluralism. On the whole, linguistics and management emerge as two primary fields in business discourse research, when sociology, anthropology, political science, and other disciplines also represent the direction of emerging issues in this field.

3.2.2 Centrality analysis

An analysis of nodes' centrality helps explain the correlation information richness of keywords in this field. Generally, richer associated information corresponds to stronger openness and integration of keywords, which manifests a positive correlation. As an emerging research area, business discourse research displays its keywords' openness and integration as shown in Figure 3-2. As for methodology, for example, the keyword *model*'s strong centrality reflects the vast and open application of models or modeling to business discourse research, such as Leopold *et al.* (2014) and Pandey & Pandey's (2019) research on natural language processing.

3.2.3 Novelty analysis

The novelty of nodes reveals the research hotspot and direction. It can be found that *model*, *strategy*, *politics*, *gender*, *construction*, and other keywords possess strong novelty. Representative studies include DeJeu's (2022) impression management strategies, Zhang *et al.*'s (2021) discursive communication strategies, and Kaur & Birlık's (2021) explaining strategies and other business communication strategies in different business scenarios. Additionally, there are also some construction-based studies, like Kheovichai's (2014) discursive construction of employer organization, Tessema's (2019) discursive construction of employer organization, and Zhao *et al.*'s (2022) subject knowledge co-construction. This finding aligns with the intersectionality and practicability of current business discourse research. Increasingly, scholars are paying attention to the practical aspect of business discourse research from the theoretical standpoint. In line with the trend of diversification, business discourse research gradually transitions from the single analysis of business communicative strategies to multi-cultures and intercultural, thereby enriching and diversifying research data in this field.

4. Keyword Timeline and Burst Analysis

In order to further investigate the status quo and trend of business discourse research, grounding two keyword maps in section 3, this section continues to analyze the hot spots of business discourse research in the past decade by using the keyword timeline and burst chart generated via *CiteSpace*.

4.1 Keyword timeline analysis

The keyword timeline view indicates the process in the development of each subfield and visually displays the update of research topics as well as their impact. Figure 4-1 shows the timeline view via *CiteSpace* keyword co-citation clustering. The network community structure shown in Figure 4-1 is significant based on both the Q value (0.7407 > 0.3) and the S value (0.8872 > 0.5).

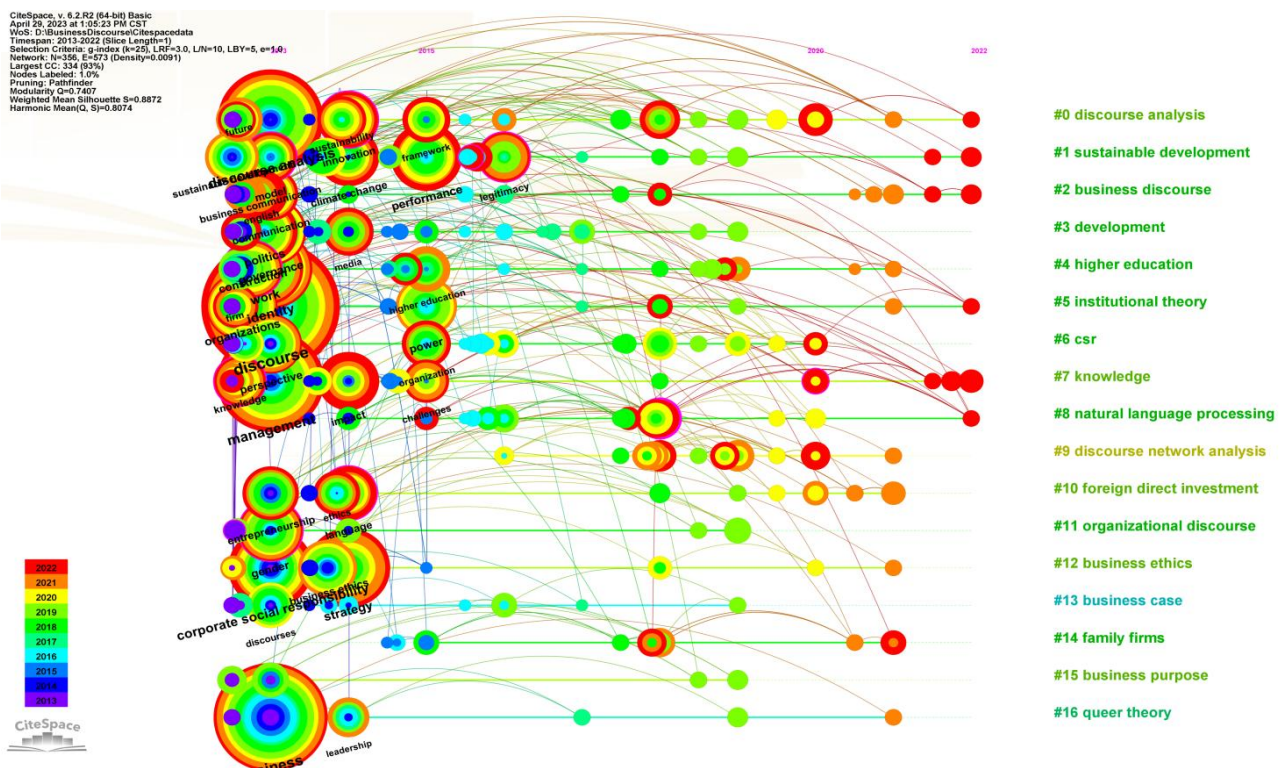


Figure 4-1. Keyword timeline view of business discourse research

Compared with the keyword clustering map and co-occurrence map in section 3, the keyword timeline view (Figure 4-1) reflects the development process and status quo of business discourse research in its sub-field. Based on the continuity and connectivity of the timeline view, #0 *discourse analysis*, #1 *sustainable development*, #2 *business discourse*, and #5 *institutional theory* are comparatively more extended and highly connected, which discloses their significance in business discourse research with depth and width. The emergence of #4 *higher education*, #7 *knowledge*, and #8 *natural language processing* has a long and well-established continuity, revealing that business discourse research is integrated with other disciplines and that theoretical findings are gradually applied to practical purposes (e.g., Chan, 2019). In addition, #3 *development*, #6 *CSR*, #10 *foreign direct investment*, #9 *discourse network analysis*, #11 *organizational discourse*, #12 *business ethics*, #13 *business case*, #14 *family firms*, and #15 *business purpose* appear relatively early, but their duration is short with weak linkage. This signals the intense research focus,

mainly on specific business topics or scenarios (e.g., Kopaneva & Cheney, 2019; DeJeu, 2022). Simultaneously, its variability also uncovers the diversification and multi-disciplinary characteristics of business discourse research.

4.2 Keyword burst analysis

CiteSpace provides burst detection, which extracts words that have surged in frequency in different periods to describe new topics emerging at the forefront of the field. The nodes where prominence word guidance undergoes abrupt fluctuation indicate the research tendency, i.e., the rise or decline in a particular research field. Figure 4-2 shows the top seven keywords with the strongest citation bursts in business discourse research, reflecting some popular and critical issues that draw attention in particular periods.

Top 7 Keywords with the Strongest Citation Bursts

Keywords	Year	Strength	Begin	End	2013 - 2022
women	2013	3.3	2013	2014	
business	2013	2.75	2013	2016	
behavior	2014	3.12	2016	2018	
talk	2019	2.62	2019	2019	
social media	2019	2.45	2019	2022	
systems	2020	2.93	2020	2022	
impact	2014	2.88	2021	2022	

Figure 4-2. Keywords with the strongest citation bursts in business discourse research

In Figure 4-2, the top seven keywords with the strongest citation bursts are ranked according to the year they appeared. Within the selected period, the initial burst keyword *women* demonstrates the influence of gender factors on business discourse when research focused on the similarities and differences in gender performance in different business scenarios (e.g., meetings, negotiations, and roles) (e.g., Hansson *et al.*, 2019; Twarog, 2022). Likewise, *behavior* emphasize organizational behaviors literally, such as marketing, advertising, crisis management, and other business activities. In 2019, *talk* briefly appeared as a prevailing word, indicating priority given to different communication genres, such as small talk (Mak, 2019) and workplace talk (Chan, 2017). More recent trends come in three bursts: *social media*, *systems*, and *impact*. With digital media constructing new scenarios for business discourse (e.g., Cohen *et al.*, 2018; Kaun & Uldam, 2018; Jorge, 2019), research associated with social media has gradually become prevalent in recent years. Besides, *systems* and *impact* emphasize the influence of business organization, organizational structure, and power relations on discourse, highlighting the discursive mechanism of discourse in different business settings.

5. Concluding Remarks

This paper conducts a visualized analysis of business discourse research in WOS in the past decade under the support of *CiteSpace*. To gain a more in-depth comprehension of business discourse, this study summarizes the status quo and development process of business discourse research from multiple perspectives. Regarding the development of research, the amount of literature on the whole displays an increasing trend. Also, due to the multi-disciplinarization of business discourse research as well as the globalization and digitalization of business activities, more recent studies gradually shed light on different new business scenarios (e.g., digital intercultural business communication), disciplinary fields (e.g., pedagogy, sociology), and information research methods (e.g., natural language processing), thus enabling a proliferation of topics to emerge. In addition, based on disciplinary distribution, keyword clustering, and co-occurrence analysis, the present study also elucidates popular issues or topics and significant directions of business discourse research. Finally, guided by the keyword timeline view and surge chart, new hot spots of business discourse research are presented, and future research directions are also predicted. The visualization of business discourse research can contribute theoretically by providing a nuanced understanding of communication patterns, power dynamics, and socio-cultural influences within business contexts. Meanwhile, its practical implementation is anticipated to elevate strategic decision-making processes and foster more effective communication strategies within business organizations.

Funding: This research received no external funding.

Conflicts of Interest: The author declares no conflict of interest.

Acknowledgments: Sincere gratitude undoubtedly goes to my research assistant, Ruixi Su, for his contributions to data visualization and analysis.

Publisher’s Note: All claims expressed in this article are solely those of the author and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers.

ORCID iD (if any)

References

- [1] Aritz, J., Walker, R., Cardon, P., & Li, Z. (2017). Discourse of leadership: The power of questions in organizational decision making. *International Journal of Business Communication*, 54(2), 161–181. <https://doi.org/10.1177/2329488416687054>
- [2] Bargiela-Chiappini, F. (ed.) (2009). *Handbook of Business Discourse*. Edinburgh: Edinburgh University Press.
- [3] Bargiela-Chiappini, F., & Nickerson, C. (2002). Business discourse: Old debates, new horizons. *International Review of Applied Linguistics in Language Teaching (IRAL)*, 40(4), 273–381. <https://doi.org/10.1515/iral.2002.013>
- [4] Bargiela-Chiappini, F., Nickerson, C., & Planken, B. (2013). *Business Discourse (the second edition)*. Basingstoke: Palgrave Macmillan.
- [5] Beangstrom, T., & Adendorff, R. (2013). An appraisal analysis of the language of real estate advertisements. *Southern African Linguistics and Applied Language Studies*, 31(3), 325–347. <https://doi.org/10.2989/16073614.2013.837608>
- [6] Berglez, P., & Olausson, U. (2021). Climate irresponsibility on social media: A critical approach to “high-carbon visibility discourse”. *Social Semiotics*. <https://doi.org/10.1080/10350330.2021.1976053>
- [7] Bhatia, V. K. (2006). Discursive practices in disciplinary and professional contexts. *Linguistics and the Human Sciences*, 2(1), 5–28. <https://doi.org/10.1558/lhs.v2i1.5>
- [8] Bhatia, V. K. (2017). *Critical Genre Analysis: Investigating Interdiscursive Performance in Professional Practice*. New York: Routledge.
- [9] Bowles, H. (2012). Analyzing languages for specific purposes discourse. *The Modern Language Journal*, 96(S1), 43–58. <https://doi.org/10.1111/j.1540-4781.2012.01296.x>
- [10] Carrió-Pastor, M. L., & Muiz-Calderón, R. (2015). Identification and causes of lexical variation in Chinese Business English. *English Today*, 31(1), 10–15. <https://doi.org/10.1017/S0266078414000480>
- [11] Cenni, I., & Goethals, P. (2020). Responding to negative hotel reviews: A cross-linguistic perspective on online rapport-management. *Discourse, Context & Media*, 13(3), 342–365. <https://doi.org/10.1016/j.dcm.2020.100430>
- [12] Chaiyapa, W., Esteban, M., & Kameyama, Y. (2018). Why go green? Discourse analysis of motivations for Thailand’s oil and gas companies to invest in renewable energy. *Energy Policy*, 120, 448–459. <https://doi.org/10.1016/j.enpol.2018.05.064>
- [13] Chan, A. C., & Du-Babcock, B. (2019). Leadership in action: An analysis of leadership behaviour in intercultural business meetings. *Language and Intercultural Communication*, 19(2), 201–216. <https://doi.org/10.1080/14708477.2018.1508291>
- [14] Chan, C. S. (2017). Investigating a research-informed teaching idea: The use of transcripts of authentic workplace talk in the teaching of spoken business English. *English for Specific Purposes*, 46, 72–89. <https://doi.org/10.1016/j.esp.2016.12.002>
- [15] Chan, C. S. (2019). Long-term workplace communication needs of business professionals: Stories from Hong Kong senior executives and their implications for ESP and higher education. *English for Specific Purposes*, 56, 68–83. <https://doi.org/10.1016/j.esp.2019.07.003>
- [16] Cheng, W., & Ho, J. (2017). A corpus study of bank financial analyst reports: Semantic fields and metaphors. *International Journal of Business Communication*, 54(3), 258–282. <https://doi.org/10.1177/2329488415572790>
- [17] Cohen, S. A., Hanna, P., & Gössling, S. (2018). The dark side of business travel: A media comments analysis. *Transportation Research Part D: Transport and Environment*, 61, 406–419. <https://doi.org/10.1016/j.trd.2017.01.004>
- [18] Daniushina, Y. V. (2010). Business linguistics and business discourse. *Calidoscópico*, 8(3), 241–247. <https://doi.org/10.4013/cld.2010.83.08>
- [19] Darics, E., & Clifton, J. (2019). Making applied linguistics applicable to business practice: Discourse analysis as a management tool. *Applied Linguistics*, 40(6), 917–936. <https://doi.org/10.1093/applin/amy040>
- [20] Decock, S., & Spiessens, A. (2017). Customer complaints and disagreements in a multilingual business environment: A discursive-pragmatic analysis. *Intercultural pragmatics*, 14(1), 77–115. <https://doi.org/10.1515/ip-2017-0004>
- [21] DeJeu, E. B. (2022). The ethics of delivering bad news: Evaluating impression management strategies in corporate financial reporting. *Journal of Business and Technical Communication*, 36(2), 190–230. <https://doi.org/10.1177/10506519211064618>
- [22] Diaconeasa, M. C., Popescu, G., Maehle, N., Nelgen, S., & Capitello, R. (2022). Media discourse on sustainable consumption in Europe. *Environmental Communication*, 16(3), 352–370. <https://doi.org/10.1080/17524032.2021.1999295>
- [23] Doshi, V., Turner, P. K., & Vohra, N. (2021). Challenging the discourse of leadership as knowledge: Knowing and not knowing. *Management Communication Quarterly*, 35(2), 201–225. <https://doi.org/10.1177/0893318920950462>
- [24] Dowling, D. O. (2021). Alternative media on the front lines: Unicorn riot and activist journalism’s new urgency. *Journalism Practice*, 17(7), 1393–1412. <https://doi.org/10.1080/17512786.2021.1987297>
- [25] Doyle, M. S. (2012). Business language studies in the United States: On nomenclature, context, theory, and method. *The Modern Language Journal*, 96(S1), 105–121. <https://doi.org/10.1111/j.1540-4781.2012.01276.x>
- [26] Du-Babcock, B. (2013). English as business lingua franca: A comparative analysis of communication behavior and strategies in Asian and European contexts. *Ibérica*, 26, 99–130. <https://revistaiberica.org/index.php/iberica/article/view/275>
- [27] Du-Babcock, B., & Tanaka, H. (2017). Leadership construction in intra-Asian English as lingua franca decision-making meetings. *International Journal of Business Communication*, 54(1), 83–98. <https://doi.org/10.1177/2329488416675451>
- [28] Evans, S. (2013). “Just wanna give you guys a bit of an update”: Insider perspectives on business presentations in Hong Kong. *English for Specific Purposes*, 32(4), 195–207. <https://doi.org/10.1016/j.esp.2013.05.003>
- [29] Fielden-Burns, L. V., & Piquer-Piriz, A. M. (2022). Personification and relationships in English as a Medium of Instruction business discourse: Crossing paths in metaphorical constructions. *Journal of Pragmatics*, 202, 145–159. <https://doi.org/10.1016/j.pragma.2022.11.002>
- [30] Fuoli, M. (2018). Building a trustworthy corporate identity: A corpus-based analysis of stance in annual and corporate social responsibility reports. *Applied linguistics*, 39(6), 846–885. <https://doi.org/10.1093/applin/amw058>
- [31] Furey, L. D., Cho, M., & Mohr, T. L. (2019). Is business news starting to bark? How business news covers corporate social responsibility post the economic crisis. *Journalism*, 20(2), 256–273. <https://doi.org/10.1177/1464884917731180>
- [32] Gollin-Kies, S. (2014). Methods reported in ESP research articles: A comparative survey of two leading journals. *English for Specific Purposes*, 36, 27–34. <https://doi.org/10.1016/j.esp.2014.04.001>
- [33] Handford, M. (2010). *The Language of Business Meetings*. Cambridge: Cambridge University Press.
- [34] Hansson, M., Gottfridsson, H., & Raanaes, S. (2019). The boss and daddy’s little girl: On the construction of gender in Swedish business media. *Gender in Management: An International Journal*, 34(1), 59–76. <https://doi.org/10.1108/GM-06-2018-0060>

- [35] Ho, V. (2014). Managing rapport through evaluation in grounder–A qualitative study. *Journal of Pragmatics*, 61, 63–77. <https://doi.org/10.1016/j.pragma.2013.11.019>
- [36] Ho, V. (2017a). Achieving service recovery through responding to negative online reviews. *Discourse & Communication*, 11(1), 31–50. <https://doi.org/10.1177/1750481316683292>
- [37] Ho, V. (2017b). Giving offence and making amends: How hotel management attempts to manage rapport with dissatisfied customers. *Journal of Pragmatics*, 109, 1–11. <https://doi.org/10.1016/j.pragma.2016.12.001>
- [38] Ho, V. (2018). Exploring the effectiveness of hotel management's responses to negative online comments. *Lingua*, 216, 47–63. <https://doi.org/10.1016/j.lingua.2018.10.004>
- [39] Ho, V. (2019). Hotel management's attempts at repairing customers' trust: The use of apology and denial. *Pragmatics and Society*, 10(4), 493–511. <https://doi.org/10.1075/ps.18008.ho>
- [40] Ho, V. (2020). Do hotels enhance and challenge rapport with customers with the same degree of commitment? *Journal of Pragmatics*, 166, 70–83. <https://doi.org/10.1016/j.pragma.2020.06.002>
- [41] Ho, V. (2021). Denial in managerial responses: Forms, targets and discourse environment. *Journal of Pragmatics*, 176, 124–136. <https://doi.org/10.1016/j.pragma.2021.01.030>
- [42] Incelli, E. (2013). Managing discourse in intercultural business email interactions: A case study of a British and Italian business transaction. *Journal of Multilingual and Multicultural Development*, 34(6), 515–532. <https://doi.org/10.1080/01434632.2013.807270>
- [43] Jin, B. (2022). A corpus-assisted study of vague language in corporate responsibility reports of the cosmetics industry. *Ibérica*, (43), 77–102. <https://doi.org/10.17398/2340-2784.43.77>
- [44] Joachim, J., & Schneider, A. (2018). Humanitarian NGOs as businesses and managers: Theoretical reflection on an under-explored phenomenon. *International Studies Perspectives*, 19(2), 170–187. <https://doi.org/10.1093/isp/ekx001>
- [45] Jones, N. N. (2017). Rhetorical narratives of black entrepreneurs: The business of race, agency, and cultural empowerment. *Journal of Business and Technical Communication*, 31(3), 319–349. <https://doi.org/10.1177/1050651917695540>
- [46] Jorge, A. (2019). Social media, interrupted: Users recounting temporary disconnection on Instagram. *Social Media + Society*, 5(4), 1–19. <https://doi.org/10.1177/2056305119881691>
- [47] Kaun, A., & Uldam, J. (2018). 'Volunteering is like any other business': Civic participation and social media. *New Media & Society*, 20(6), 2186–2207. <https://doi.org/10.1177/1461444817731920>
- [48] Kaur, J., & Birlık, S. (2021). Communicative effectiveness in BELF (English as a business lingua franca) meetings: 'Explaining' as a pragmatic strategy. *The Modern Language Journal*, 105(3), 623–638. <https://doi.org/10.1111/modl.12717>
- [49] Kheovichai, B. (2014). Marketized university discourse: A synchronic and diachronic comparison of the discursive constructions of employer organizations in academic and business job advertisements. *Discourse & Communication*, 8(4), 371–390. <https://doi.org/10.1177/1750481314537575>
- [50] Kopaneva, I. M., & Cheney, G. (2019). Organizational identity formation in alternative organizations: A study of three benefit corporations. *Management Communication Quarterly*, 33(4), 484–511. <https://doi.org/10.1177/0893318919858684>
- [51] Lakhani, L., & Herbert, S. L. (2022). Theoretical frameworks applied in integrated reporting and sustainability reporting research. *South African Journal of Economic and Management Sciences*, 25(1), 1–12. <https://doi.org/10.4102/sajems.v25i1.4427>
- [52] Laurer, M., & Seidl, T. (2021). Regulating the European data-driven economy: A case study on the general data protection regulation. *Policy & Internet*, 13(2), 257–277. <http://dx.doi.org/10.31235/osf.io/a6m8r>
- [53] Leopold, H., Mendling, J., & Polyvyany, A. (2014). Supporting process model validation through natural language generation. *IEEE Transactions on Software Engineering*, 40(8), 818–840. <https://doi.org/10.1109/TSE.2014.2327044>
- [54] Leung, S., Parker, L., & Courtis, J. (2015). Impression management through minimal narrative disclosure in annual reports. *The British Accounting Review*, 47(3), 275–289. <https://doi.org/10.1016/j.bar.2015.04.002>
- [55] Lin, Y. (2021). Legitimation strategies in corporate discourse: A comparison of UK and Chinese corporate social responsibility reports. *Journal of Pragmatics*, 177, 157–169. <https://doi.org/10.1016/j.pragma.2021.02.009>
- [56] Louhiala-Salminen, L. (2002). The fly's perspective: Discourse in the daily routine of a business manager. *English for Specific Purposes*, 21, 211–31. [https://doi.org/10.1016/S0889-4906\(00\)00036-3](https://doi.org/10.1016/S0889-4906(00)00036-3)
- [57] Mak, B. C. N. (2019). Doing business and constructing identities through small talk in workplace instant messaging. *Pragmatics and Society*, 10(4), 559–583. <https://doi.org/10.1075/ps.16064.mak>
- [58] Marrone, M., & Linnenluecke, M. K. (2020). Interdisciplinary research maps: A new technique for visualizing research topics. *PLoS ONE*, 15(11), e0242283. <https://doi.org/10.1371/journal.pone.0242283>
- [59] Matamoros-Fernández, A. (2017). Platformed racism: The mediation and circulation of an Australian race-based controversy on Twitter, Facebook and YouTube. *Information, Communication & Society*, 20(6), 930–946. <https://doi.org/10.1080/1369118X.2017.1293130>
- [60] Mees, I. M., Denver, L., Jensen, C., & Werther, C. (2016). Good enough to teach? A study of EMI lecturers' language skills and metadiscourse. *Moderna Språk*, 110(2), 46–72. <https://doi.org/10.58221/mosp.v110i2.7864>
- [61] Millot, P. (2017). Inclusivity and exclusivity in English as a business lingua franca: The expression of a professional voice in email communication. *English for Specific Purposes*, 46, 59–71. <https://doi.org/10.1016/j.esp.2016.12.001>
- [62] Ngai, S. B., & Singh, R. G. (2017). Move structure and communication style of leaders' messages in corporate discourse: A cross-cultural perspective. *Discourse & Communication*, 11(3), 276–295. <https://doi.org/10.1177/1750481317697860>
- [63] Pandey, S., & Pandey, S. K. (2019). Applying natural language processing capabilities in computerized textual analysis to measure organizational culture. *Organizational Research Methods*, 22(3), 765–797. <https://doi.org/10.1177/1094428117745648>
- [64] Park, S., Jeon, J., & Shim, E. (2021). Exploring request emails in English for business purposes: A move analysis. *English for Specific Purposes*, 63, 137–150. <https://doi.org/10.1016/j.esp.2021.03.006>
- [65] Pérez, A., García De Los Salmones, M. D. M., & López-Gutiérrez, C. (2018). Corporate social responsibility in the media: A content analysis of business news in Spain. *Journal of Media Ethics*, 33(2), 66–79. <https://doi.org/10.1080/23736992.2018.1440558>

- [66] Poole, R. (2017). "New opportunities" and "Strong performance": Evaluative adjectives in letters to shareholders and potential for pedagogically-downsized specialized corpora. *English for Specific Purposes*, 47, 40–51. <https://doi.org/10.1016/j.esp.2017.03.003>
- [67] Pyysiäinen, J., & Vesala, K. M. (2013). Activating farmers: Uses of entrepreneurship discourse in the rhetoric of policy implementers. *Discourse & Communication*, 7(1), 55–73. <https://doi.org/10.1177/1750481312466475>
- [68] Räisänen, T. (2020). The use of multimodal resources by technical managers and their peers in meetings using English as the business lingua franca. *IEEE Transactions on Professional Communication*, 63(2), 172–187. <https://doi.org/10.1109/TPC.2020.2988759>
- [69] Reuber, A. R., & Morgan-Thomas, A. (2019). Communicating moral legitimacy in controversial industries: The trade in human tissue. *Journal of Business Ethics*, 154, 49–63. <https://doi.org/10.1007/s10551-017-3480-z>
- [70] Roshid, M. M., Webb, S., & Chowdhury, R. (2022). English as a business lingua franca: A discursive analysis of business e-mails. *International Journal of Business Communication*, 59(1), 83–103. <https://doi.org/10.1177/2329488418808040>
- [71] Schriver, K. A. (2017). Plain language in the US gains momentum: 1940–2015. *IEEE Transactions on Professional Communication*, 60(4), 343–383. <https://doi.org/10.1109/TPC.2017.2765118>
- [72] Shi, X., & Dou, H. (2022). How broadcasters enhance rapport with viewers in live streaming commerce: A genre-based discourse analysis. *Pragmatics*, 33(4), 592–617. <https://doi.org/10.1075/prag.22009.shi>
- [73] Shrikant, N., & Musselwhite, J. (2019). Indexing neoliberal ideology and political identities in a racially diverse business community. *Discourse & Communication*, 13(1), 119–137. <https://doi.org/10.1177/1750481318801627>
- [74] Simpson, A., Dervin, F., & Tao, J. (2022). Business English students' multifaceted and contradictory perceptions of intercultural communication education (ICE) at a Chinese University. *International Journal of Bilingual Education and Bilingualism*, 25(6), 2041–2057. <https://doi.org/10.1080/13670050.2020.1840508>
- [75] Taylor, L. (2023). Reframing the discourse and rhetoric of language testing and assessment for the public square. *Language Testing*, 40(1), 47–53. <https://doi.org/10.1177/02655322221127421>
- [76] Tessema, K. A. (2019). Primacy of the leader, obscuration of followers: The discourse of leadership in the business media. *Discourse, Context & Media*, 29, 100295. <https://doi.org/10.1016/j.dcm.2019.04.001>
- [77] Townley, A. (2019). A pivotal interactional role to oversee contract negotiation activity: Insights into a key interdisciplinary legal-business practice. *Discourse & Communication*, 13(2), 228–248. <https://doi.org/10.1177/1750481318817622>
- [78] Townley, A., & Jones, A. (2016). The role of emails and covering letters in negotiating a legal contract: A case study from Turkey. *English for Specific Purposes*, 44, 68–81. <https://doi.org/10.1016/j.esp.2016.07.001>
- [79] Twarog, A. (2022). Journey to the stars program: The gendered and generational governance of professionalization on Wattpad. *Critical Studies in Media Communication*, 39(5), 353–366. <https://doi.org/10.1080/15295036.2022.2069279>
- [80] Van Herck, R., Decock, S., & Fastrich, B. (2022). A unique blend of interpersonal and transactional strategies in English email responses to customer complaints in a B2C setting: A move analysis. *English for Specific Purposes*, 65, 30–48. <https://doi.org/10.1016/j.esp.2021.08.001>
- [81] Vonk, L. (2018). Paying attention to waste: Apple's circular economy. *Continuum*, 32(6), 745–757. <https://doi.org/10.1080/10304312.2018.1525923>
- [82] Warren, M. (2013). "Just spoke to ...": The types and directionality of intertextuality in professional discourse. *English for Specific Purposes*, 32(1), 12–24. <https://doi.org/10.1016/j.esp.2012.07.001>
- [83] Warren, M. (2016). Signalling intertextuality in business emails. *English for Specific Purposes*, 42, 26–37. <https://doi.org/10.1016/j.esp.2015.11.001>
- [84] Yu, D. (2020). Corporate environmentalism: A critical metaphor analysis of Chinese, American, and Italian corporate social responsibility reports. *IEEE Transactions on Professional Communication*, 63(3), 244–258. <https://doi.org/10.1109/TPC.2020.3012728>
- [85] Zhang, H., Song, Y., Wei, Y., & Liu, J. (2021). Discursive communication strategies for introducing innovative products: The content, cohesion, and coherence of product launch presentations. *Journal of Business and Technical Communication*, 35(3), 369–400. <https://doi.org/10.1177/105065192111001123>
- [86] Zhang, Z. (2023). Becoming a member of the business community. *English for Specific Purposes*, 71, 48–50. <https://doi.org/10.1016/j.esp.2023.02.006>
- [87] Zhang, Z., Tan, S., & O'Halloran, K. L. (2022). Managing higher education and neoliberal marketing discourses on *Why Choose* webpages for international students on Australian and British university websites. *Discourse & Communication*, 16(4), 462–481. <https://doi.org/10.1177/17504813221074076>
- [88] Zhao, K., Zhou, J., & Zou, B. (2022). Developing subject knowledge co-construction and specific language use in a technology-enhanced CLIL programme: Effectiveness and productive patterns. *International Journal of Bilingual Education and Bilingualism*, 25(6), 2172–2185. <https://doi.org/10.1080/13670050.2021.1890688>
- [89] Zhu, Y. (2013). A cross-cultural analysis of English and Chinese business faxes: A genre perspective. *Ibérica*, 26(1), 35–54. <http://revistaiberica.org/index.php/iberica/article/view/272>
- [90] Zjadic, H., Han, C., & Liu, X. (2017). "Get fit!"—The use of imperatives in Australian English gym advertisements on Facebook. *Discourse, Context & Media*, 16, 12–21. <https://doi.org/10.1016/j.dcm.2017.01.002>