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Semantic Prosody of Lexical Bundles in Maritime Legal English Texts

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ABSTRACT

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This study examines the semantic prosody of lexical bundles in Maritime Legal English texts, a subset of English for Specific Purposes (ESP) that requires precise and discipline-specific expression. The research focuses on *provide*, *cause*, and *effect*, analyzing their evaluative meanings across Case Law, Document, Legislation, and Academic genres using the Maritime Legal English Corpus. Text dispersion-based keyword analysis and a keyword lexical bundle framework are used to compare semantic prosody of these words with general English patterns from the BNC Baby corpus. The findings reveal distinct differences between general English and Maritime Legal English, as well as those among the four genres. *Provide* and *effect* show positive or neutral prosody, while *cause* predominantly displays negative prosody. These insights enhance the understanding of evaluative meaning in legal discourse and carry important implications for ESP pedagogy, legal language instruction, and corpus-based research by highlighting genre-specific encoding of evaluative meaning.

KEYWORDS

semantic prosody, lexical bundles, text dispersion-based keyword analysis, Maritime Legal English, genre analysis

1. Introduction

The maritime legal domain relies heavily on precise language due to the complexity of international regulations and legal documentation. Therefore, understanding the linguistic features of this specialized field is essential, particularly for professionals involved in legal drafting, dispute resolution, and regulatory compliance. As maritime law plays a central role in regulating international shipping and ensuring maritime safety, understanding linguistic characteristics of Maritime Legal English is not only of academic interest but also of practical importance for effective communication and legal compliance in the maritime industry. In this context, the accurate use of standardized legal expressions facilitates mutual understanding among maritime professionals, policymakers, and international organizations. The 2021 Suez Canal obstruction caused by the *Ever Given* exemplifies this issue, as contractual ambiguities led to protracted arbitration proceedings (SMIT Salvage B. V. v. Luster Maritime S. A., [2023] EWHC 697), demonstrating how terminological imprecision can result in costly legal disputes (Zhang 2025). At a broader level, the real-world significance of Maritime Legal English extends far beyond individual disputes. As over 90% of global trade is transported by sea, the clarity and consistency of maritime legal language directly influence international commerce, port operations, marine insurance, safety management, and the resolution of cross-border disputes. Ambiguous wording in contracts, casualty reports, or regulatory provisions can disrupt supply chains, delay cargo movement, and generate substantial financial and operational risks for shipowners, charterers, insurers, and port authorities. Thus, the linguistic precision of Maritime Legal English is not merely a theoretical concern but a fundamental component supporting the stability, efficiency, and safety of the global maritime industry.

Lexical bundles constitute sequences of three or more words that demonstrate consistent co-occurrence patterns in authentic discourse (Biber et al. 1999). As formulaic linguistic structures, they facilitate both the cohesive organization and semantic interpretation of texts. In Maritime Legal English, typical examples include “caused by ships”, “with the provisions of”, and “pollution damage caused by ships”, which illustrate how such fixed combinations perform legal and referential functions in specialized contexts. Lexical bundles, widely examined in corpus-based studies, indicate linguistic patterning and discourse structure (Biber et al. 1999, Hyland 2008). These fixed sequences are prevalent in natural language use and are critical for achieving fluency and discipline-specific competence, especially in English for Academic Purposes (EAP) and English for Specific Purposes (ESP). While native speakers instinctively use lexical bundles, non-native speakers must consciously learn these patterns to improve their language fluency. Coxhead and Byrd (2007) outline three reasons why lexical bundles contribute to language learning: providing students with pre-existing sets through repetition, enhancing fluency and expertise in a specific domain, and illustrating how lexico-grammatical meanings are expressed within a particular community. The study of lexical bundles within Maritime Legal English offers a unique dimension, catering to the specialized language needs of professionals in the maritime legal domain. Building on the pedagogical importance of lexical bundles, the study further investigates how these recurrent expressions convey evaluative meanings through semantic prosody in maritime legal discourse.

Semantic prosody, first introduced by Louw (1993), refers to the attitudinal or evaluative meaning that a word or phrase acquires through its typical collocational environment. It has become a pivotal concept in corpus linguistics and has been widely examined in areas such as dictionary compilation, language pedagogy, and translation studies. In order to examine how semantic prosody functions within maritime legal discourse, this study conducts a comparative analysis of the node words *provide*, *cause*, and *effect* across four maritime legal genres and addresses the following research questions:

1. What are the distinctive characteristics of lexical bundles in terms of semantic prosody within maritime legal genres as compared to general English?
2. How does the usage of semantic prosody of specific items in keyword lexical bundles within Maritime Legal English vary across different genres?

However, few studies have investigated how semantic prosody operates within lexical bundles in specialized legal domains. When examined within lexical bundles, semantic prosody reveals how recurrent expressions convey implicit evaluative stances beyond their literal meaning. For instance, in Maritime Legal English, lexical bundles containing the node word *cause* typically exhibit a negative semantic prosody, reflecting notions of damage, loss, or liability. An examination of the data reveals that bundles such as "caused by the ship" and "damage caused by" consistently co-occur with terms denoting adverse outcomes, thereby constructing a negative evaluative framework.

This paper aims to examine frequently employed lexical bundles within four distinct maritime legal genres, utilizing the self-constructed Maritime Legal English Corpus. The study employs the text dispersion-based keyword analysis method proposed by Egbert and Biber (2019) to extract domain-specific lexical bundles, with keywords serving as efficient indicators of such bundles, as emphasized by Qi (2019). A comparative analysis will be conducted on the usage of three semantic prosody node words in keyword lexical bundles within the Maritime Legal English corpus and general English, elucidating the distinctive patterns of these words within the maritime legal field. Additionally, an examination of the usage of these three words in the four maritime legal genres will be undertaken to highlight the unique characteristics of each genre.

2. Previous Studies

Extensive research has been undertaken to investigate the role of lexical bundles in contributing to meaning construction in EAP. Numerous studies have explored lexical bundles across diverse genres, including history, biology, chemistry, applied linguistics, and medical research articles. Cortes (2004) compared the usage of lexical bundles in published and student writing within the fields of history and biology, revealing that students rarely employed commonly used bundles found in published work. Valipoor (2010) investigated lexical bundles in chemistry research articles, identifying their association with specific functions in different sections of the articles. Jalali (2009) conducted a study on lexical bundles in various genres within applied linguistics, including research articles, master dissertations, and doctoral theses.

Jalali et al. (2015) analyzed 790 research articles from 33 medical disciplines, finding that writers of medical research articles rely on text-oriented bundles to establish their written academic discourse. Nesi and Basturkman (2006) conducted a comprehensive analysis of lexical bundles in the spoken mode of academic lectures, while Chen and Baker (2010) focused on lexical bundles in academic writing. Salazar (2010) explored lexical bundles in two varieties of English, and Simpson-Vlach and Ellis (2010) identified frequently recurring word combinations across academic genres, leading to the development of the Academic Formulas List (AFL) with promising implications for language learning pedagogy. As for lexical bundle analysis in terms of semantic prosody, Shin (2020) conducted an investigation into the functions of five lexical bundles employed by both native and nonnative writers in academic writing domains, with an analysis of their semantic prosodies and preferences. These lexical bundles included one referential quantity specification expression (indicating numerous instances), two attitudinal/modality stance expressions (such as "it would be the" and "I would like to"), and two discourse-

organizer topic elaboration/clarification expressions (including “on the other hand” and “at the same time”). The findings revealed distinct semantic features specific to each language group. For instance, native writers predominantly used the bundle “it would be the” to convey negative prosody, whereas learners utilized the same bundle with a neutral prosody in the majority (68.7%) of instances. Furthermore, native writers exhibited a preference for negative lexical bundles, expressing disagreement (e.g., “disagree with the statement,” “do not agree with”), while learners favored positive lexical bundles, indicating agreement (e.g., “agree with the statement,” “so I agree with”).

Despite the extensive research in EAP, ESP, especially in maritime texts, has received limited attention regarding the investigation of lexical bundles (Jhang et al. 2018). Most studies have concentrated on academic texts, with only a few examining technical texts. Mudraya (2006) analyzed a corpus of engineering textbooks, emphasizing the need to address non-technical vocabulary due to its high frequency across various texts. Hyland (2008) explored lexical bundles in the domains of economics, linguistics, electrical engineering, and biology, finding distinct characteristics across different disciplines. As linguistic features appear discipline-specific, ESP instruction should prioritize specialized teaching materials that enable learners to comprehend discourse features and enhance their language production. There is a scarcity of literature on lexical bundles in maritime texts. Jhang et al. (2018) conducted a contrastive analysis of lexical bundles in marine accident investigation reports, revealing that Japanese professionals employ a broader range of four-word bundles compared to their English counterparts. The study observed an overuse tendency among Japanese professionals, employing different strategies to construct lexical bund

les and fulfill discourse functions. Hong (2012) conducted an n-gram analysis of maritime English, identifying distinctive features of specialized maritime English texts in terms of token, type, and Type-Token Ratio (TTR). The analysis showed that Noun Phrase (NP) is the most common 4-gram in the Maritime English Corpus. Jhang and Lee (2013b) focused on keyness in maritime English texts, while Jhang and Byun (2011) conducted a corpus-based lexical analysis of maritime English. Breeze (2013) examines four-word lexical bundles across four legal genres including Academic Law, Case Law, Legislation, and Documents. The research identifies major differences in both the structural patterns and the discourse functions of lexical bundles across the four genres. The findings show that the presence and use of bundles vary significantly according to the institutional purposes of each genre. Through these comparisons the study demonstrates that lexical bundles fulfil distinct communicative roles in different branches of legal discourse and that their distribution reflects the specialized functions of each legal genre. Garzone (2018) examines how scientific knowledge is reformulated within legislative discourse on surrogacy across English-speaking jurisdictions. Through discourse analysis of normative texts regulating assisted reproductive technologies, the study investigates how legal drafting recontextualizes scientific terminology and redefines kinship and parental categories to meet institutional and socio-cultural demands. The analysis shows that legislators reshape scientific concepts through strategically neutralized and legally functional language, illustrating how legal discourse mediates between scientific knowledge and bioethically sensitive regulatory frameworks.

Although extensive research has been conducted in both EAP and ESP on the role of lexical bundles, discussions concerning the evaluative meanings carried by such bundles remain relatively limited. In corpus linguistics, semantic prosody is regarded as an important theoretical construct for understanding how lexical items develop implicit evaluative stances through recurring patterns of co-occurrence. According to Sinclair (1991) and Hunston (2007), semantic prosody is not merely a matter of collocational patterns or typical lexical preferences. Instead, it represents evaluative meaning that is accumulated across broader contextual environments and can convey positive, negative, or neutral tendencies. Partington (2014) further notes that semantic prosody emerges from sustained patterns of meaning association within specific contexts and reflects the implicit attitudinal positioning of language

users toward events, actions, or entities.

Within the broader theoretical framework, semantic prosody is often discussed alongside semantic preference and collocational behavior, although these constructs differ substantially in nature. This distinction was first systematically articulated by Sinclair (1991), who identified three levels of lexical co-occurrence: collocation, which focuses on the formal co-occurrence of lexical items; semantic preference, which concerns the tendency to select items from particular semantic sets; and semantic prosody, which involves deeper evaluative meanings. Stewart (2010) later provided a detailed clarification and redefinition of the relationships among semantic prosody, semantic preference, and collocational behavior. He emphasized that these three constructs have often been conflated in previous research although their conceptual foundations and functions differ fundamentally. More specifically, semantic preference concerns the semantic fields or categories with which lexical items tend to co-occur. For example, the verb *cause* frequently appears with negative events, a pattern observed by Stubbs (1995). Collocational behavior, in contrast, concerns fixed surface-level co-occurrence patterns such as "cause damage to" or "take effect". These patterns highlight recurrent structural and syntactic relationships and have been described in detail in studies by Hunston and Thompson (2000) as well as Partington (1998). Semantic prosody differs from both of these constructs in that it reflects the evaluative meanings that arise from co-occurrence patterns accumulated across larger stretches of discourse. It represents a higher-level pragmatic and discourse-oriented meaning, as highlighted by Louw (1993). Partington (2004) observed that the essential distinction between semantic prosody and semantic preference lies in the former's attitudinal nature, whereas the latter primarily reflects semantic categorization. Morley and Partington (2009) further argued that semantic prosody reflects attitudinal and evaluative positioning at both social and discourse levels and cannot be reduced to semantic clustering or frequency-based co-occurrence alone. In other words, semantic preference indicates the semantic domains with which a lexical item is associated, and collocational behaviour reflects structural patterns of co-occurrence. Semantic prosody, however, arises from recurring discourse patterns that accumulate and project evaluative stances, a process Sinclair (2004) considers essential for identifying the underlying attitudinal meanings conveyed by particular lexical items. Louw (1993) further emphasized that semantic prosody is typically implicit and therefore requires large-scale corpus analysis for its identification. This feature reveals the ideological orientations and evaluative tendencies embedded in lexical choices.

Although existing research has examined the semantic prosody of lexical bundles in academic writing, systematic investigations remain limited in ESP contexts, particularly in maritime legal discourse. Since legal texts rely heavily on fixed expressions to encode obligation, responsibility, causation, and risk, the semantic prosodies associated with lexical bundles are especially salient in Maritime Legal English. Incorporating the theoretical framework of semantic prosody into the analysis of lexical bundles therefore provides deeper insight into the evaluative meanings constructed in maritime legal discourse and offers valuable perspectives for both professional language education and legal text drafting.

3. Data and Methodology

3.1 Data

The present research employs a study corpus comprising approximately one million words derived from English maritime law, which is categorized into four sub-genres, each containing around 250,000 words. The Case Law genre was compiled from three major admiralty jurisdictions and draws on authoritative institutional legal archives.

The texts were sourced from EU Maritime Law Reports (Comité Maritime International), U.S. Admiralty Court opinions from the Supreme Court and Circuit Courts (Admiralty Law Guide), and Admiralty and Maritime Cases published by the Federal Court of Australia (University of Queensland Maritime Law portal). These materials encompass admiralty and maritime cases, admiralty court opinions, and law reports, providing comprehensive judicial decisions and interpretations relevant to maritime and admiralty law. Admiralty and maritime cases present tangible instances of legal disputes and their resolutions, while admiralty court opinions offer expert interpretations and analyses of pertinent legal issues. Law reports compile and succinctly summarize pivotal judicial decisions, serving as invaluable resources for legal practitioners and researchers. The second genre, Document, consists of standardized BIMCO charterparty contracts obtained from the SmartCon platform. As BIMCO forms are internationally recognized templates in commercial shipping, they provide authoritative and representative contractual language central to maritime legal practice. These contracts play a pivotal role in regulating agreements for vessel leasing or hiring and meticulously outline the rights, obligations and operational duties governing maritime transactions. They also encode key mechanisms of risk allocation, such as laytime provisions, demurrage terms and deviation clauses, making them an essential source for examining the core legal functions embedded in maritime contractual discourse. The third genre, Legislation, encompasses crucial International Maritime Organization (IMO) Conventions, such as the Safety of Life at Sea (SOLAS), Standards of Training, Certification, and Watchkeeping for Seafarers (STCW), and the International Convention for the Prevention of Pollution from Ships (MARPOL), among others. These conventions establish global regulatory frameworks and standards for maritime safety, training, and environmental protection. Lastly, the Academic genre draws from 39 scholarly papers on maritime law published between 2007 and 2022. These academic publications provide comprehensive analyses, research findings, and theoretical perspectives, significantly contributing to the academic discourse and enhancing our understanding of maritime law. All texts were processed as raw, unannotated plain text for analysis.

For the purpose of comparison, the British National Corpus (BNC) Baby, a reference corpus, was employed in this study, extracted from the larger BNC totaling 100 million words. The BNC Baby consists of four genre-based subsets—Academic, Fiction, Newspaper, and Conversation—comprising 182 texts and containing a total of 3,961,706 running words. The general statistics of the study corpus and the reference corpus are detailed in Table 1. Descriptive statistical information, including text number, size, TTR, and Standardized Type/Token Ratio (STTR), was obtained using WordSmith Tools 8.0 for both corpora, facilitating a comprehensive analysis of the linguistic characteristics and properties of the datasets.

Table 1. General Statistics of Two Corpora

Corpora	Genres	Tokens	Types	TTR	STTR	STTR std. dev.
Study Corpus	Case Law	252,311	10,990	4.57	34.02	64.71
	Document	253,728	4,872	1.95	29.36	69.63
	Legislation	250,018	6,494	2.70	28.38	70.88
	Academic	254,255	14,430	5.85	38.86	59.76
	Total	1,010,312	21,568	2.21	32.77	66.33
Reference Corpus	Academic	1,022,942	31,960	3.18	40.07	58.82
	Conversation	958,135	16,854	1.76	29.79	70.18
	Fiction	1,000,195	31,740	3.18	43.59	55.63
	News	980,434	40,093	4.18	47.92	51.84
	Total	3,961,706	66,810	1.70	40.35	61.44

As is shown in Table 1 above, the analysis reveals that the STTR for the BNC Baby is 40.35, while the study corpus exhibits an STTR of 32.77. As anticipated, the BNC Baby, functioning as a representative corpus of general

English, demonstrates a diverse range of vocabulary in contrast to the specialized language found in the maritime legal texts, which serve as an instance of ESP. In the study corpus, it is noteworthy that the Academic genre boasts the highest ratio at 38.86, with the Case Law genre following closely. A noteworthy revelation emerges in relation to the remaining two genres. Specifically, the Document genre presents a TTR of 1.95, accompanied by a STTR of 29.36. In contrast, the Legislation genre displays a TTR of 2.70, with an STTR of 28.38. Notably, while the raw TTR of the Document genre is lower than that of the Legislation genre, its STTR surpasses the latter.

TTR is a measure of lexical diversity and is calculated by dividing the number of unique words (types) by the total number of words (tokens) in a given text or genre, while STTR in WordSmith Tools 8.0 is computed by calculating TTR for consecutive 1,000-word segments (default) and taking the running average across segments. Although the Document genre has a lower TTR, its higher STTR of 29.36 indicates that, when accounting for the text length, it has a relatively higher degree of lexical diversity compared to the Legislation genre with a STTR of 28.38. The Document genre may have a smaller vocabulary size overall (lower TTR), but when considering the text length (STTR), the lexical diversity is relatively higher. The Legislation genre, with a higher TTR, has a greater variety of unique words concerning the total number of words, but when normalized for text length (STTR), its lexical diversity is relatively lower. This observation suggests that when accounting for text length, the Document genre achieves a relatively heightened degree of lexical diversity compared to the Legislation genre.

3.2 Methodology

The methodology encompasses the three-step approach for identifying domain-specific lexical bundles within four genres. In the first step, WordSmith Tools 8.0 was employed to discern 2- to 5-word lexical bundles, setting a minimal frequency of five occurrences and a minimal text occurrence of one. Subsequently, a Text Dispersion-based Keyword Analysis, informed by the methodology outlined by Egbert and Biber (2019), was applied in the second step. This involved identifying words statistically overrepresented in the target corpus compared to a reference corpus, utilizing a *p*-value of 0.1, a minimal frequency threshold of three occurrences, and ranking by Bayesian Information Criterion (BIC) scores. The third step integrated a novel approach proposed by Qi (2019), focusing on Keyword Lexical Bundles extraction. This method combines frequency-based retrieval of bundles with keyword-oriented filtering, thereby enhancing precision and comprehension in identifying domain-specific lexical bundles. The decision to use a statistical keyword-based approach instead of a purely frequency-based method is primarily due to the relatively low frequency of occurrence of domain-specific keywords in specialized corpora. Setting a frequency threshold for keyword identification would inevitably exclude numerous potential target keywords, thereby decreasing the precision of the extraction process. In contrast, the statistical keyword-based approach prioritizes measuring the meaningful distribution and prominence of keywords within the corpus, rather than relying solely on raw frequency counts. Consequently, it was given higher priority than the frequency-based method for identifying domain-specific keywords in the study corpus.

Moreover, it has been recognized that many extracted word sequences do not necessarily constitute lexical bundles, and some may even be difficult to interpret (Biber et al. 2004, Hyland 2008). Therefore, the incorporation of linguistic information is essential to enhance the extraction performance. Specifically, keywords are used as detectors, as it is believed that domain-specific meanings are conveyed through lexical bundles centered around keywords (Qi 2019). The selection of keywords as node words was not arbitrary but based on their significant role in the corpus. Keywords are commonly used to identify the discourse topic and stylistic features of texts, making them effective for highlighting domain-specific words. The lexical bundles surrounding keywords provide contextual evidence for a comprehensive understanding of the meaning conveyed by these domain-specific

keywords. Overall, using keywords as filters within the extraction process is expected to enhance the efficiency of domain-specific lexical bundles extraction. The process of identifying domain-specific lexical bundles is depicted in Table 2, and the specific details of these steps are elaborated in the subsequent subsections.

Table 2. Procedures of Keyword-Bundles Identification

Step 1	Lexical bundles retrieval
Step 2	Keyword extraction
Step 3	Keyword-bundles identification

The initial phase of this analysis involved the compilation of a list of lexical bundles within the Maritime Legal English Corpus. The identification of these bundles represents a foundational and crucial step in empirical research on phraseology, not only offering a comprehensive portrayal of linguistic patterns within the corpus but also ensuring the reliability and validity of our research outcomes. As emphasized by Stubbs (2005), a systematic approach to extracting the most frequently recurring word sequences from the corpus is essential for obtaining a thorough understanding of phraseology. This methodical extraction process serves as valuable evidence supporting the existence of underlying phrasal units of meaning. The selection criteria encompassed considerations such as bundle length, the cut-off frequency threshold, and the dispersion threshold. Specifically, the extraction of two-five words lexical bundles was automated through the utilization of the cluster setting function in Wordsmith Tools 8.0 software. In terms of frequency thresholds, we established a minimal frequency of five occurrences and a minimal text occurrence of one. The selection of a minimum frequency value of five is not merely a default setting in WordSmith Tools 8.0; rather, it is a deliberate choice based on its widespread use as the lowest frequency threshold in numerous phraseological studies. This threshold ensures the recurrent nature of the expressions under scrutiny.

The list of lexical bundles, comprising 57,024 entries ranging from two to five words in the study corpus, is presented in Table 3.

Table 3. Number of All Lexical Bundles in Maritime Legal Texts

Genres	Clusters-2	Clusters-3	Clusters-4	Clusters-5	Total
Case Law	5,537	2,430	847	394	9,208
Document	6,630	6,766	6,069	5,261	24,726
Legislation	6,198	4,689	3,094	2,158	16,139
Academic	4,984	1,479	353	135	6,951
Total	23,349	15,364	10,363	7,948	57,024

Based on the lexical bundle list, the next step is the extraction of a keywords list from the study corpus. Keyword analysis serves as a widely adopted method for investigating textual attributes across diverse disciplines. Scott (1997) initially defined keywords as having an exceptional frequency in a study corpus when contrasted with a reference corpus. However, the initial frequency-based method has inherent limitations, treating the corpus as a whole without considering individual texts. To address this constraint, Egbert and Biber (2019) introduced the text dispersion keyword analysis, a novel approach that mitigates the shortcomings of the frequency-based method by considering the dispersion of keywords across individual texts. Prior research indicates that the text dispersion-based (TD) keyword analysis outperforms the corpus frequency-based (CF) method in extracting keywords. Building on these insights, TD keyword analysis was adopted to identify words that manifest statistically significant occurrences in a greater number of texts within a target corpus when compared with a reference corpus, aiming to enhance the precision and effectiveness of this process.

Table 4. Number of Keywords Extracted by Text Dispersion-based Keyword Analysis

Genres	Case Law	Document	Legislation	Academic	Total
TD Keywords	144	314	256	96	810

In this step, the extraction process was initiated by generating a list of keywords through a comparison between the study corpus and the BNC Baby corpora. The application of WordSmith Tools 8.0 (Scott 2020) involved setting a minimum frequency at three and a significance level at $p < 0.1$. Adhering to established practices in conventional keyword analysis, only keywords exhibiting a positive keyness value, indicative of a frequency surpassing expectations, were employed for the identification of keyword lexical bundles. Consequently, the finalized compilation comprised 810 keywords, detailed in Table 4, with Table 5 providing insights into both the top 10 and bottom 5 keywords. All keywords are systematically ranked based on higher BIC keyness scores.

Table 5. A List of Keywords Extracted by Text Dispersion-based Keyword Analysis

No.	Case Law	BIC	No.	Document	BIC	No.	Legislation	BIC	No	Academic	BIC
1	COURT’	101.	1	CLAUSE	131.	1	SHIP’S	100.	1	CANNOT	91.5
2	CANNOT	92.9	2	THEREOF	119.	2	PARAGRAP	89.7	2	MARITIME	85.7
3	CIR	86.4	3	VESSEL’S	116.	3	ANNEX	88.8	3	EU	42.6
4	PURSUA	77.5	4	CHARTE	114.	4	ACCORDA	81.4	4	MARINE	40.6
5	MARITI	64.8	5	INDEMNI	111.	5	SHIPS	78.2	5	IMO	35.2
6	VESSEL	61.1	6	ACCORD	100.	6	REGULATI	75.0	6	SHIPPING	34.0
7	JUDGME	59.3	7	HEREIN	94.9	7	CARGO	73.6	7	SHIPS	27.7
8	VESSEL’	50.8	8	VESSEL	93.1	8	AUTHORIZ	69.2	8	COASTAL	25.2
9	CORP	49.6	9	INCURRE	85.4	9	PARAGRAP	69.0	9	IMPACTS	24.8
10	LLOYD’	46.0	10	BIMCO	82.3	10	COMPLY	65.8	10	STAKEHOLD	24.6
…	…	…	…	…	…	…	…	…	…	…	…
140	AFFIRM	3.21	310	MALICIO	2.76	252	NAUTICAL	2.93	92	TONNAGE	2.73
141	CAUSAT	3.21	311	TRANSIT	2.66	253	DRILLS	2.66	93	MEPC	2.73
142	SHIPOW	3.21	312	LEVIED	2.63	254	DENOUNCE	2.66	94	CONNECTIV	2.73
143	STATUT	3.21	313	ENTITLE	2.63	255	LONGITUDI	2.66	95	FISHERY	2.72
144	PARAGR	2.50	314	BALLAST	2.63	256	APPLIANC	2.66	96	EMISSION	2.72

The final step in this study, aimed at identifying keyword lexical bundles, deviates from prior research methodologies where such bundles have been denoted as key clusters or key phrases, investigated across diverse discourse contexts. Earlier investigations, including those conducted by Jhang and Lee (2013a, 2013b), and Mahlberg (2007), explored key clusters within the ESP domain, encompassing corpora such as the Biomed Corpus and the Maritime English Corpus. However, their extraction procedures were largely based on surface repetition and corpus comparison, whereby the statistical prominence of each cluster was determined by evaluating its frequency in the study corpus relative to a reference corpus. In this approach, the cluster is treated as an indivisible unit, without giving prominence to the individual lexical items within it. As a result, clusters containing domain-specific keywords may be overlooked if the entire sequence does not reach statistical significance. In contrast, the present study introduces a distinctive approach by using keywords as the foundational element for identifying lexical bundles. Shifting the focus from the entire pattern to the central keywords within lexical bundles. This approach highlights central keywords as the starting point for identifying bundles, thereby enabling the extraction of keyword-lexical bundles that better capture domain-specific meanings.

Figure 1 clearly illustrates that a significant proportion of the keywords are linked to the maritime domain,

encompassing concepts associated with vessels, equipment, and related topics. This finding demonstrates that keywords can effectively identify domain-specific lexical bundles. The obtained keyword set was employed as a filter to search for all lexical bundles that contained these keywords.

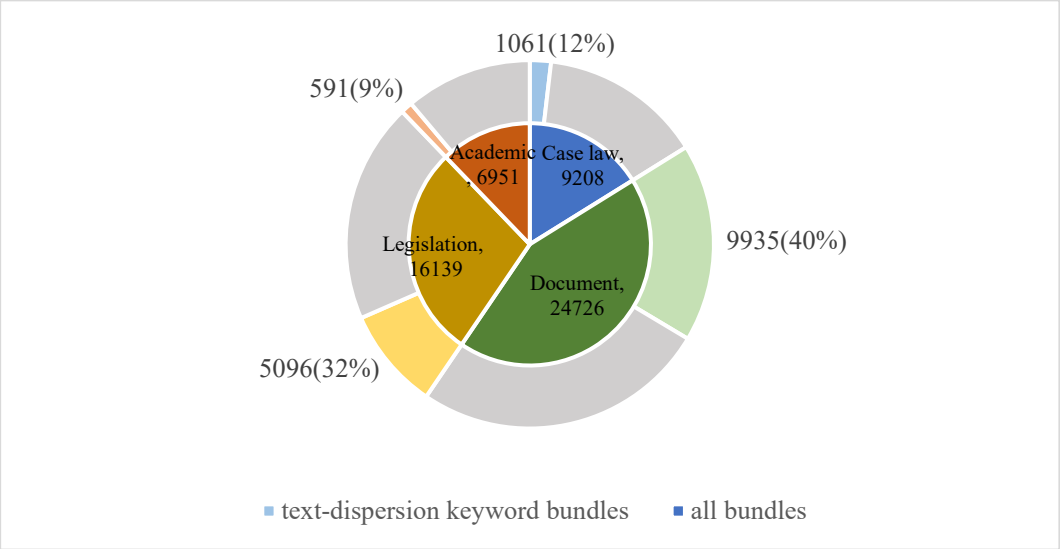

Figure 1. Proportion of Text Dispersion Keyword Bundles in All Lexical Bundles

Figure 1 provides a comprehensive overview of the distribution of keyword-bundles derived from the original lexical bundles. As depicted in this figure, the central pie chart depicts the original lexical bundles. In the larger peripheral pie chart, all the gray parts represent the excluded lexical bundles, while the lighter color parts within each genre signify the successfully extracted keyword lexical bundles that are highly relevant. The percentages for each genre are as follows: 12% in the Case Law genre, 40% in the Document genre, 32% in the legislation genre, and 9% in the Academic genre. This method demonstrated greater effectiveness compared to the exclusive use of a cut-off value for filtering lexical bundles.

Table 6 displays the top five keyword-bundles. The inclusion of these keyword-bundles in the tables offers compelling evidence supporting the assertion that keywords play a crucial role in the identification of domain-specific lexical bundles.

Table 6. Top Five Text Dispersion Keyword Bundles in Four Genres

Case Law									
No.	**2-Word**	**Freq.**	**3-Word**	**Fre**	**4-Word**	**Fre**	**5-Word**	**Fre**
51	ID AT	112	BILL OF LADING	98	STARBOARD SIDE OF THE	39	STARBOARD SIDE OF THE CHANNEL	36
53	PURSUANT TO	108	BILLS OF	66	BEYOND A MARINE LEAGUE	38	DILIGENCE TO MAKE THE VESSEL	19
85	DISTRICT	80	STARBOARD	46	BILL OF LADING HOLDERS	37	INTO THE BILLS OF LADING	15
94	VESSEL WAS	73	GIVE WAY	41	MAKE THE VESSEL	24	ON THE STARBOARD SIDE OF	13
116	INC V	66	BEYOND A	38	FED R CIV P	17	NAVIGATION ON THE HIGH SEAS	13
Document								
No.	**2-Word**	**Freq.**	**3-Word**	**Fre**	**4-Word**	**Fre**	**5-Word**	**Fre**
3	CHARTER	1,046	THIS CHARTER	838	UNDER THIS CHARTER	167	ARISING OUT OF OR IN	139
4	THIS CHARTER	892	STATED IN BOX	590	ARISING OUT OF OR	155	CONDUCTED IN ACCORDANCE WITH	111
7	CHARTERERS	692	ACCORDANCE	310	ON BOARD THE VESSEL	136	THIS CHARTER PARTY SHALL BE	97
8	STATED IN	670	BY THE OWNERS	243	THIS CHARTER PARTY	115	DISPUTE ARISING OUT OF OR	95
9	ACCORDANCE	628	BY THE	234	AS STATED IN BOX	114	ARBITRATION SHALL BE CONDUCTED	83

Legislation									
No.	**2-Word**	**Fre**	**3-Word**	**Fre**	**4-Word**	**Fre**	**5-Word**	**Fre**
7	PROVISIONS	423	BY THE	198	WITH THE PROVISIONS OF	158	ACCORDANCE WITH THE PROVISIONS	75
9	ACCORDANCE	403	ACCORDANCE	172	WITH THE REQUIREMENTS	126	RATIFICATION ACCEPTANCE	60
11	THIS	383	WITH THE	161	SATISFACTION OF THE	116	CONVENTION FOR THE SAFETY OF	60
13	PRESENT	338	PROVISIONS OF	146	INTERNATIONAL	94	INTERNATIONAL CONVENTION FOR	59
14	THIS ANNEX	327	WITH THE	140	ACCORDANCE WITH THE	76	WITH THE PROVISIONS OF THE	55
Academic									
No.	**2-Word**	**Fre**	**3-Word**	**Fre**	**4-Word**	**Fre**	**5-Word**	**Fre**
67	MARINE	85	BILL OF LADING	92	DAMAGE CAUSED BY SHIPS	53	POLLUTION DAMAGE CAUSED BY	53
70	MARITIME	79	CAUSED BY SHIPS	63	CRIME IN THE FISHERIES	20	CRIME IN THE FISHERIES SECTOR	20
85	BY SHIPS	72	BILLS OF LADING	37	ORGANIZED CRIME IN	19	ORGANIZED CRIME IN THE FISHERIES	19
96	MARITIME	69	MARINE PLASTIC	35	PROTECTION OF THE	17	PROTECTION OF THE MARINE	17
106	MARINE	65	THAT THE IMO	29	ELECTRONIC BILLS OF	16	PRESERVATION OF THE MARINE	12

In corpus linguistics research on semantic prosody, a set of representative core lexical items has been widely recognized, largely due to their stable co-occurrence patterns and salient evaluative tendencies. Sinclair (1991) was among the first to demonstrate that several lexical items consistently exhibit negative semantic prosodies. For example, he observed that the phrasal verb *set in* typically takes subjects denoting undesirable states such as rot, decay, malaise, or despondency; *break out* frequently occurs in the context of disasters or other adverse events; and *happen* is likewise predominantly associated with accidents and similarly unwelcome occurrences. Following Sinclair's work, Louw (1993) further showed that expressions such as *utterly*, *bent on*, and *symptomatic of* also display markedly negative evaluative tendencies. Table 7 summarizes the core lexical items commonly discussed in previous studies of semantic prosody.

Table 7. Summary of Items Investigated for Semantic Prosody in Previous Studies

Authors	Negative prosody	Positive prosody
Sinclair (1991)	*break out; happen; set in*	
Louw (1993, 2000)	*bent on; build up of*; *end up* V-ing; *symptomatic of*	*build up a*
Stubbs (1995, 1996)	*accost; cause; signs of*	*provide; career*
Partington (1998, 2004)	*commit; peddle*/*peddler; rife*	*impressive*
Schmitt and Carter (2004)	*bordering on*	
Wei (2002b, 2006)	*cause; commit; effect*	*career*
Wang and Wang (2005)	*cause*	
Pan and Feng (2003)	Summarized the lexical items previously studied: *cause, rife, set in, happen, utterly, days*	*provide, nurture, impressive*

In more systematic comparative research, Xiao and McEnery (2006) examined several semantic domains, including the "cause group", the "result group", and the "price group", demonstrating that semantically related lexical items may differ substantially in their semantic prosodies and collocational preferences. Among individual verbs, the negative semantic prosody of *cause* is one of the most well-established findings, documented extensively as early as Stubbs (1995), with typical collocates such as damage, harm, and problem. In contrast, *provide* exhibits a relatively stable positive prosody. As noted by Stubbs (1996), *provide* tends to co-occur with lexical fields relating to support, resources, or assistance—such as assistance, funds, opportunities, and relief—thereby conveying a favorable evaluative meaning.

Taken together, these repeatedly documented lexical items constitute the foundational set of core terms in semantic prosody research, encompassing both prototypical negative prosodies and representative positive ones. Building on this research tradition, the present study first searched all of these core lexical items across the

Maritime Legal English Corpus to assess their applicability within this specialized discourse domain. However, due to the highly specialized and domain-restricted nature of ESP corpora, many classical items occurred only infrequently in maritime legal texts. Consequently, the study selected *provide*, *cause*, and *effect* as the node words for semantic prosody analysis. These three items not only hold established status in the existing semantic prosody literature, but also play central functional roles in maritime legal discourse, particularly in expressing obligation, causation, and legal consequences.

The present study employed a context-based coding scheme to determine the semantic prosodies of the extracted lexical bundles. All bundles were restored to their original textual contexts, and semantic prosody was assessed using the sentence as the unit of analysis. Based on the evaluative meanings inferred from the immediate co-text and the semantic domains of their co-occurring items, each instance was categorized as exhibiting a positive, negative, or neutral semantic prosody.

To ensure consistency in the evaluative judgments, a subset of the data was independently coded by multiple annotators. Inter-coder agreement was assessed using Cohen's Kappa, and the resulting value ($\kappa = 0.86$) indicated substantial reliability. The following section provides examples illustrating the criteria used to distinguish positive, negative, and neutral semantic prosodies:

(a) Positive: *The **Owners shall provide** suitable provisions and requisites for such persons for which the Charterers shall pay at the rate as stated in Box 27 per meal and at the rate as stated in Box 28 per day for the provision of bedding and services for persons using available accommodation.*
(b) Negative: *Except as otherwise provided in this Charter Party, loss, **damages, expense or delay caused** by failure on the part of the Charterers to comply with this Clause shall be for the Charterers' account.*
(c) Neutral: *This Charter Party shall be governed by and construed in accordance with English law and any dispute arising out of or in connection with this Charter Party shall be referred to arbitration in London in accordance with the Arbitration Act 1996 or any statutory modification or re-enactment thereof save to the extent necessary to **give effect to the provisions** of this Clause.*

4. Results and Discussion

4.1 Semantic Prosody in Maritime Legal Genres

According to Firth (1957), certain words habitually occur together with specific words. Moreover, there is growing evidence that words can regularly form collocations with other words within a clearly defined semantic category (Stubbs 1995). Stubbs (1996) suggests that certain words exhibit a primarily negative prosody, some have a positive prosody, and a considerable number remain neutral in this regard. When the associated words attracted by a node word are largely characterized by strong negative semantics, the node word acquires a distinct negative prosody. Conversely, if the prevalent collocates are predominantly positive, the node word assumes a positive prosody. In contexts where both positive and negative collocates coexist, the node word is considered to possess a neutral or mixed prosody.

This study extends the scope of semantic prosody analysis applied to keyword lexical bundles within maritime legal genres. It aims to delineate distinctions between the maritime legal field and general English, as well as unique characteristics within the four maritime legal genres. The analysis focuses on the three node words *provide*, *cause* and *effect* to explore semantic prosody in Maritime Legal English.

In previous general English studies, the lemma *cause* predominantly appears in collocations with unpleasant connotations, exemplified by phrases like "cause of the trouble" and "cause of death". Its primary collocates are centered around issues, trouble, damage, death, pain, and disease (Stubbs 1996). While negative prosodies are likely more prevalent, positive prosodies are also evident. For instance, the act of causing work typically implies unfavorable outcomes, whereas providing work is generally considered beneficial. The primary collocates of *provide*, as identified in subsequent analyses, underscore its positive prosody. *Provide* is associated with offering facilities, information, services, as well as aid, assistance, help, support, care, food, money, nourishment, protection, and security. *Effect* is typically negative but can also be positive. Negative collocates include adverse, devastating, dramatic, harmful, ill, negative, profound, toxic. Medical associations are evident with collocates such as drugs, placebo, psychological, and vasodilatory. Based on previous researches, these three words with distinct semantic prosodies were chosen for investigation within the specialized corpus of maritime law: *cause* and *effect* with a predominantly negative semantic prosody, and *provide* with a predominantly positive semantic prosody.

After retrieving these three words, *provide*, *cause* and *effect* in the Maritime Legal English Corpus, the result is depicted in Figure 2.

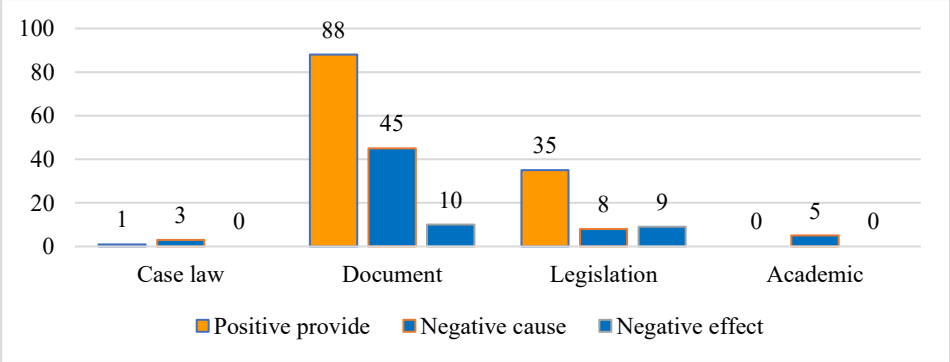

Figure 2. Distribution of Semantic Prosody Types Across the Four Genres

As illustrated in Figure 2, the three node words characterized by strong semantic prosodies are generally present in the Maritime Legal English Corpus. All three words appear in the Document and Legislation genres, while in the Case Law genre, the word *effect* is not retrieved. In the Academic genre, only the word *cause* is retrieved, while the positive prosody *provide* and negative prosody *effect* are not detected. Furthermore, in the Document and Legislation genres, the frequencies of occurrence for the three words are higher compared to the other two genres. This discrepancy may be attributed to the greater abundance of keyword lexical bundles in the former two genres, providing a larger retrieval base. In addition, Document and Legislation belong to highly institutionalized legal genres whose primary communicative purposes involve prescribing obligations, defining responsibilities, and mitigating potential risks. As noted by Bhatia (1993), such regulatory texts are typically obligation-driven, which makes them linguistically predisposed to expressions encoding duties, legal consequences, and causative relations. In this context, lexical bundles containing *cause* (associated with adverse events, responsibility, or damage), *effect* (denoting legal consequences), and *provide* (expressing obligations, entitlements, or mandatory requirements) occur more frequently in these two genres as a natural reflection of institutionalized legal discourse. In contrast, Case Law primarily performs functions of factual narration, evidence presentation, and citation of precedents rather than prescribing obligations or articulating legal consequences. Academic writing, similarly, is oriented toward analysis, argumentation, and conceptual discussion and therefore represents a non-directive and

non-operational type of legal discourse. As a result, lexical bundles containing these three node words appear far less frequently in these two genres. Overall, the uneven distribution of semantic prosodies across the four genres reflects their distinct communicative purposes and institutional functions within maritime legal discourse.

4.2 Semantic Prosody of Key Node Words in Maritime Legal English

4.2.1 PROVIDE

In the main collocates identified for the keyword lexical bundles with *provide* in Document genre and Legislation genre, the same positive collocates were observed in both the general English and maritime legal contexts, such as "information," "services," "security," and "facilities." However, beyond positive collocates, the node word *provide* in the Document and Legislation genres also revealed some neutral collocations, such as "transportation," "contact," "invoices," "loading," "cordage," which are predominantly associated with the maritime domain. Both positive and neutral collocates of *provide* are presented in Table 8.

Table 8. Positive and Neutral Collocates of *provide* in Document and Legislation

	Document	Legislation
Positive Prosody	authority	permits and/or licenses
	insurance	personnel
	information	engineer
	documentation	exceptions
	evidence	exemptions
	security	defenses
	provisions	immunities
	certificate	limitations of liability
	visas and working permits	indemnities
	equipment	
Neutral Prosody	transportation	invoices
	contact	documents
	plans or documents	installations
	schedule	cordage
	contract	manner
	hoses	

The following step conducts a comparative analysis of the node word *provide* in the Document genre and Legislation genre. A systematic count is performed to determine whether the semantic prosody of *provide* falls under positive or neutral collocates within each genre. The results of this analysis are depicted in Figure 3.

The left pie chart below illustrates the usage distribution of *provide* in the Document genre. The proportion of positive collocates for *provide* is 49%, while the proportion of neutral collocates is 51%, with both ratios being nearly identical. In the Document genre, *provide* exhibits both positive and neutral prosody. The right pie chart displays the usage distribution of *provide* in the Legislation genre. The majority of *provide* usages in this genre demonstrate neutral prosody, accounting for 99%, with only 1% exhibiting positive prosody.

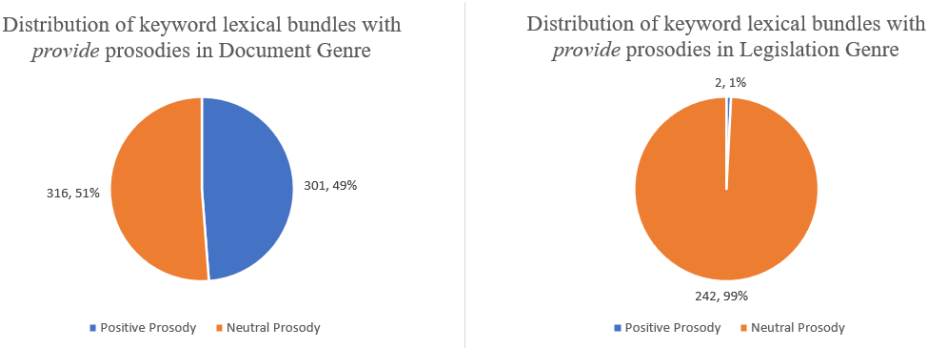

Figure 3. Distribution of *provide* Prosodies in Document and Legislation (Freq. >10)

Positive prosody in the Document genre:

(1) OWNERS SHALL PROVIDE (41)
*The **Owners shall provide** the equipment stated in Box 4.*
(2) CHARTERERS SHALL PROVIDE (39)
*The **Charterers shall provide** the Vessel with an IMO inhibitor certificate…*

The contextual analysis shows that positive semantic prosody primarily appears in lexical bundles such as "owners shall provide" and "charterers shall provide". These expressions typically involve the fulfillment of contractual obligations or the provision of equipment, services, or assistance—activities that are inherently constructive and action-oriented. Such usage aligns with Bhatia's (1993) characterization of contractual discourse as "obligation-driven", in which language functions to instantiate institutionalized acts of cooperation, performance, and compliance. At the same time, a substantial proportion of the neutral semantic prosody in the Document genre occurs in procedural or descriptive contexts, exemplified by structures such as "as provided for under clause". These bundles primarily serve functions of procedural reference or conditional specification and therefore do not encode evaluative meaning. This phenomenon of semantic prosody neutralization corresponds with Louw's (1993) observation that semantic prosody is context-dependent: evaluative meaning is not inherent to the lexical item but emerges through repeated co-occurrence patterns within specific discourse environments. In highly institutionalized legal genres, the language often adopts de-evaluated and impersonal forms to maintain objectivity and authority, which naturally leads to the attenuation or neutralization of prosodic meanings.

Neutral prosody in Legislation genre:

(3) PROVIDED WITH SEGREGATED BALLAST TANKS (15)
*Any oil tanker which is not required to be **provided with segregated ballast tanks** in accordance with paragraph (1).*
(4) AS PROVIDED IN PARAGRAPH (14)
*For each fireman's outfit which includes a self-contained breathing apparatus **as provided in paragraph (b).***

In contrast, *provide* displays an overwhelmingly neutral semantic prosody in the Legislation genre (99%). Legislative texts primarily perform definitional and prescriptive functions; expressions such as "as provided in paragraph" or "provided with segregated ballast tanks" specify statutory conditions or legal requirements rather

than interpersonal actions. As Hunston and Thompson (2000) note, institutional legal discourse relies heavily on formulaic and de-personalized expressions to construct objectivity, which minimizes overt evaluative meaning. Consequently, *provide* functions largely as a structural marker of legal provisions rather than an indicator of positive or negative attitudinal meaning, resulting in its predominantly neutral prosody.

The contrast between the Document and Legislation genres demonstrates the genre sensitivity of semantic prosody. The same lexical verb takes on different evaluative meanings depending on its institutional role. In contractual discourse it helps construct obligation-fulfillment and cooperative actions, which makes positive prosody more likely. In Legislative discourse it functions mainly as a structural and referential device, and its evaluative meaning becomes neutralized under the constraints of the genre.

4.2.2 CAUSE

During the retrieval of collocates for *cause* in maritime legal texts, it was observed that the usage of *cause* in the Maritime Legal English Corpus aligns with its usage in general English, displaying a consistent negative prosody, as shown in Table 9.

Table 9. *Cause* Bundle Collocates in Document and Academic

		Document		Academic
Negative prosody	loss or damage	pollutant	damage	oil pollution
	accident	danger	damage or disaster	oil pollution damage
	loss	expense or delay	damage or delay	marine pollution

As shown in Table 9, the collocational behavior of *cause* E in maritime legal discourse closely mirrors its pattern in general English, consistently exhibiting a negative semantic prosody. In both the Document and Academic genres, it collocates overwhelmingly denote adverse events, including damage, accident, danger, delay, and disaster, which are also widely recognized in the literature as prototypical negative collocates of *cause* (Louw 1993, Stubbs 1995). In addition to these general negatively-oriented collocates, the Maritime Legal English Corpus also displays a set of domain-specific terms such as loss, pollutant, oil pollution, and marine pollution, further reinforcing the association between *cause* and harm-related semantic fields. To illustrate how semantic prosody was identified, the following concordance lines present typical uses of *cause* within the Maritime Legal English Corpus:

(5) HOWSOEVER CAUSED (16)
…loss or damage of whatsoever nature, ***howsoever caused*** *to…*
(6) DAMAGES EXPENSE OR DELAY CAUSED (16)
Loss, damages, expense or delay (excluding consequential loss, ***damages, expense or delay) caused*** *by failure…*
(7) CAUSED BY SHIPS (63)
…in which the oil pollution ***caused by ships*** *is more interested…*
(8) POLLUTION DAMAGE CAUSED BY SHIPS (53)
The issues concerning the compensation for ***pollution damage caused by ships*** *accidents…*

These examples demonstrate that *cause* consistently co-occurs with lexical items denoting loss, harm, risk, or environmental damage. According to Louw's (1993) formulation of semantic prosody, evaluative meaning

emerges from repeated patterns of co-occurrence rather than from the lexical item itself. Thus, the persistent negative prosody of *cause* in maritime legal discourse is a natural outcome of its contextual embedding in harm-related semantic environments. From a genre-based perspective, this negative prosody is closely tied to the institutional function of *cause* in legal discourse. Maritime legal texts frequently employ *cause* in constructions that define liability or attribute responsibility, as in damage caused by ships or pollution caused by accidents. Such usage reflects the legal necessity of specifying the source of harm and delineating accountability, functions that inherently encode negative evaluative meaning. Consequently, unlike *provide*, which is often associated with facilitative or obligation-fulfilling actions, *cause* is structurally linked to risk, loss, fault, and legal responsibility, which reinforces its consistently negative prosody across genres.

4.2.3 EFFECT

The prosody of the final node word, *effect*, differs from its usage in general English within the Maritime Legal English Corpus. It exhibits both positive and neutral prosodies. Within the positive prosody, the most frequently occurring keyword lexical bundles include "give effect to + n./take effect", followed by additions such as provisions, receipt and insurance, which are terms related to the legal domain. Representative examples are shown below:

(9) GIVE EFFECT TO THE PROVISIONS (5)
…thereof save to the extent necessary to ***give effect to the provisions*** *of this Clause…*
(10) TAKE EFFECT ON RECEIPT BY (5)
Any notice given under this Agreement shall ***take effect on receipt by*** *the other party…*

These examples indicate that when *effect* is used to denote the activation, implementation, or operationalization of legal provisions, it tends to carry a positive semantic prosody. In both instances above, the verb participates in the construction of performative legal actions, as "give effect to the provisions" signals that the relevant clause is formally brought into force, while "take effect on receipt" specifies the point at which a notice begins to possess legal validity. Drawing on the theory of performative utterances developed by Austin (1962) and later refined by Searle (1969), expressions that "bring a provision into effect" constitute institutional acts that realize and operationalize legal authority. As such, they are commonly associated with meanings related to the proper functioning of legal mechanisms or the successful triggering of legal force, thereby giving rise to a positive semantic prosody.

In contrast, *effect* also occurs in procedural or temporal expressions where it simply marks the conditions or timing under which a clause becomes operative. In these contexts, the term functions descriptively and therefore exhibit a neutral prosody. Examples of these neutral patterns include the following.

(11) OWNERS MAY EFFECT WAR RISKS(N) (5)
The ***Owners may effect war risks*** *insurance in respect of the Hull and Machinery of the Vessel…*
(12) DENUNCIATION SHALL TAKE EFFECT TWELVE (5)
A ***denunciation shall take effect twelve*** *months after receipt of the notification…*

In these instances, EFFECT does not convey any evaluative stance, but functions as a procedural marker specifying the conditions or timing under which a legal provision becomes operative. Its use is therefore descriptive

rather than attitudinal, resulting in a neutral semantic prosody. As noted by Trosborg (1995), the rhetorical strategies characteristic of legislative and contractual discourse differs substantially from those of everyday conversation, as they are shaped by institutional constraints and by the need to manage professional face and authority relations. Such texts typically rely on impersonal, conventionalized, and de-evaluated forms of expression to maintain objectivity and institutional neutrality (Bhatia 1993). Within this discourse tradition, *effect* serves primarily a technical and procedural function, rather than expressing interpersonal attitudes, which accounts for its neutral prosody in these contexts. This pattern aligns with Sinclair's (2004) view of semantic prosody as a discourse-driven phenomenon: prosody is not an inherent emotional property of a lexical item, but is shaped by its recurrent uses and functional positioning within a specific genre.

5. Conclusion

This study, while examining the semantic prosody of the three key node words *provide*, *cause*, and *effect* within the Maritime Legal English Corpus, also contributes to the broader understanding of legal ESP and corpus-based legal discourse. First, by integrating semantic prosody with a keyword-driven lexical bundle extraction method, the study offers a methodological advancement that moves beyond traditional approaches based solely on frequency counts or surface collocational behavior, providing a more effective means of uncovering implicit evaluative meanings in specialized legal texts. Second, the findings demonstrate that semantic prosody displays clear sensitivity to genre, as the same node words show systematic variation across Case Law, Documentary texts, Legislation, and Academic discourse. This contributes new empirical evidence to the study of how evaluative meaning is shaped by the institutional purposes of different legal genres. Third, the results show that legal discourse may reinforce or neutralize prosodic tendencies depending on its communicative and regulatory functions, thereby deepening the theoretical understanding of how evaluative meaning is constructed within institutional legal language.

According to Stubbs (1996) classification of positive, negative and neutral prosodies, this study explored three words with semantic prosody in Maritime Legal English, namely *provide*, *cause*, and *effect*. The research findings revealed that these three words are also employed in the Maritime Legal English Corpus, with different semantic prosodies from those observed in general English. However, what sets maritime legal language apart from general English is that in the Maritime Legal English Corpus, both *provide* and *effect* have positive and neutral semantic prosodies, and *cause* only has negative prosody in maritime legal English.

Regarding these three words within the four genres of Maritime Legal English, all four genres have negative semantic prosodies, while the Academic genre lacks positive semantic prosody. Regardless of whether it appears in Document genre or Academic genre, the node word *cause* shows the same negative prosody. Notably, the node word *provide* exhibits obvious variation between the Document and Legislation genres. In the Document genre, *provide* is almost equally distributed between positive and neutral semantic prosodies (51% and 49%, respectively). In contrast, within the Legislation genre, *provide* primarily carries a neutral semantic prosody, accounting for 99%, with a mere 1% attributed to the positive prosody. As for the node word *effect*, the Document genre exhibits only positive prosody, whereas the Legislation genre only has positive prosody.

The findings of this study have both pedagogical and professional implications. For ESP and Maritime Legal English instruction programs, instructors can incorporate frequent legal lexical bundles and their associated semantic prosodies into classroom activities to help learners grasp the tone, stance, and implicit meanings characteristic of legal discourse. Corpus-based exercises that expose learners to authentic collocational patterns

can facilitate the internalization of these lexical bundles, thereby improving both receptive and productive competence in maritime legal communication. More specifically, in ESP classroom settings, the corpus-based findings of this study can be used to design targeted instructional activities. For example, instructors may employ concordance tasks to guide students in observing and analyzing how the semantic prosody of lexical bundles varies across different genres, thereby training them to identify implicit stance meanings in maritime legal discourse. Moreover, this corpus-driven approach to examining semantic prosody is not limited to the maritime legal domain; it can also offer pedagogical insights for lexical bundle instruction in other ESP contexts. Beyond pedagogy, the findings also hold practical significance for legal practitioners and maritime professionals. Understanding the semantic prosody of lexical bundles can help prevent ambiguity in contractual and regulatory expressions, which is crucial in the high-stakes context of maritime disputes. For translators and legal drafters, awareness of bundles that convey obligation or risk can enhance precision and consistency in maritime legal documentation, reduce misinterpretation in international transactions, and improve outcomes in liability allocation and dispute resolution. Moreover, the high-frequency bundles and their associated semantic prosodies identified in this study can be used to develop bundle checklists or language-use guidelines for shipowners, charterers, insurers, and P&I clubs, particularly for expressions that frequently encode risk- or obligation-related meanings. In addition, maritime law firms and arbitration institutions may incorporate these prosodic patterns into their document-review procedures to detect clauses that may contain ambiguity or carry unfavorable evaluative meanings, thereby preventing potential disputes from escalating in practical legal operations.

Despite these findings, this study has certain limitations. The corpus, though extensive, covers a limited range of maritime legal genres and relies on the BNC Baby as the general reference corpus. Future research could address these constraints through comparative analyses across other legal domains or between Maritime Legal English and general legal English to better identify distinctive linguistic features. Additionally, cross-linguistic or multimodal approaches could examine how semantic prosody operates in translation and legal drafting practices. From an applied perspective, future research should focus on developing corpus-informed teaching materials and professional training modules that integrate these findings into Maritime Legal English education and legal communication practice.

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Examples in: English
Applicable Languages: English
Applicable Level: Tertiary

