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**REGISTER-SPECIFIC SEMANTIC PROSODY
AND ITS APPLICATION INTO L2 TEACHING**

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TABLE OF CONTENTS

1. INTRODUCTION	1
1.1. OBJECTIVES	4
1.2. METHODOLOGY	4
2. CHRONOLOGICAL REVIEW OF SEMANTIC PROSODY	6
2.1. CONCLUSION OF CHAPTER 2	11
3. THE SCOPE & NATURE OF SEMANTIC PROSODY	11
3.1. THE SCOPE OF SEMANTIC PROSODY	12
3.2. THE NATURE OF SEMANTIC PROSODY	13
3.3. COLLOCATION, COLLIGATION, CONNOTATION, SEMANTIC PROSODY, SEMANTIC PREFERENCE, AND SEMANTIC TRANSFER	13
3.3.1. Collocation	14
3.3.2. Colligation	14
3.3.3. Connotation	15
3.3.4. Semantic Preference	16
3.4. CONCLUSION OF CHAPTER 3	17
4. INTUITION & THE HIDDEN ASPECT	18
4.1. IS SEMANTIC PROSODY INFERRABLE?	19
4.2. KNOWLEDGE OF SEMANTIC PROSODY — IMPLICIT OR EXPLICIT?	21
4.3. CONCLUSION OF CHAPTER 4	24
5. BEYOND POSITIVE-NEGATIVE POLARITY OF SEMANTIC PROSODY	26
5.1. POSITIVE-NEUTRAL-NEGATIVE	28
5.2. OTHER FRAMEWORKS	29
5.2.1. Appraisal Theory	29
5.2.2. Osgood’s Evaluative Scales & Dilts and Newman’s Quantitative Framework	30
5.2.3. Bednarek’s Evaluative Parameters	32

5.2.4. Other Evaluative Terms Found in the Literature.....	34
5.2.5. CONCLUSION OF CHAPTER 5.....	35
6. SEMANTIC PROSODY ACROSS LANGUAGES.....	36
6.1. ABSOLUTE AND NEAR-SYNONYMY.....	36
6.2. CROSS-LINGUISTIC STUDIES OF SEMANTIC PROSODY.....	37
6.3. CONCLUSION OF CHAPTER 6.....	40
7. REGISTER AND GENRE.....	41
7.1. THE EFFECTS OF REGISTER AND GENRE ON LINGUISTIC FEATURES.....	42
7.2. THE EFFECTS OF REGISTER AND GENRE ON SEMANTIC PROSODY.....	45
7.3. CONCLUSION OF CHAPTER 7.....	48
8. STUDY: SEMANTIC PROSODY OF THE NEAR-SYNONYMS TO CAUSE AND TO LEAD TO.....	50
8.1. RESEARCH OBJECTIVES.....	51
8.2. METHODOLOGY.....	51
8.2.1. Corpus Used: BNC2014 and its Subcorpora.....	51
8.2.2. Analytical Approach: Collocation & KWIC Analysis.....	52
8.3. TO LEAD TO.....	54
8.3.1. Results: collocates of TO LEAD TO (General corpus).....	55
8.3.2. Results: collocates of TO LEAD TO (Academic Prose).....	57
8.3.3. Results: collocates of TO LEAD TO (Elanguage).....	59
8.3.4. Results: collocates of TO LEAD TO (Fiction).....	61
8.3.5. Results: collocates of TO LEAD TO (Magazines).....	64
8.3.6. Results: collocates of TO LEAD TO (Newspapers).....	66
8.3.7. Results: collocates of TO LEAD TO (Official Documents).....	68
8.3.8. Discussion: collocates of TO LEAD TO across genres.....	70
8.4. TO CAUSE.....	72
8.4.1. Results: collocates of TO CAUSE (General corpus).....	73
8.4.2. Results: collocates of TO CAUSE (Academic Prose).....	75
8.4.3. Results: collocates of TO CAUSE (Elanguage).....	77
8.4.4. Results: collocates of TO CAUSE (Fiction).....	79
8.4.5. Results: collocates of TO CAUSE (Magazines).....	82
8.4.6. Results: collocates of TO CAUSE (Newspapers).....	84
8.4.7. Results: collocates of TO CAUSE (Official Documents).....	87
8.4.8. Results: collocates of TO CAUSE across genres.....	89

8.5. Comparative Analysis.....	90
8.5.1. TO LEAD TO vs. TO CAUSE (General).....	90
8.5.2. TO LEAD TO vs. TO CAUSE (Academic Prose).....	91
8.5.3. TO LEAD TO vs. TO CAUSE (Elanguage).....	92
8.5.4. TO LEAD TO vs. TO CAUSE (Fiction).....	93
8.5.5. TO LEAD TO vs. TO CAUSE (Magazines).....	95
8.5.6. TO LEAD TO vs. TO CAUSE (Newspapers).....	96
8.5.7. TO LEAD TO vs. TO CAUSE (Official Documents).....	98
8.5.8 Discussion of the Comparative Analysis.....	99
8.6. CONCLUSION OF CHAPTER 8.....	101
8.6.1. Limitations of the Study.....	101
8.6.2. Implications for L2 Pedagogy.....	102
8.6.3. Directions for Future Research.....	102
9. SECOND LANGUAGE ACQUISITION.....	104
9.1. HISTORICAL OVERVIEW.....	104
9.2. THE RATIONALE OF APPLYING SEMANTIC PROSODY TO SLA.....	111
9.3. CONCLUSION OF CHAPTER 9.....	112
10. RECOMMENDATIONS AND TOOLS.....	113
10.1. TIMELY CONSIDERATIONS OF INTRODUCING SEMANTIC PROSODY — WHEN TO TEACH SEMANTIC PROSODY?.....	113
10.2. OBJECTIVE CONSIDERATIONS — WHAT PRECISELY SHOULD BE TAUGHT?.....	114
10.3. METHODOLOGICAL CONSIDERATIONS — HOW SHOULD WE TEACH?.....	116
10.3.1. Textbooks and Dictionaries.....	118
10.4. SUBJECTIVE CONSIDERATIONS — WHOM TO TEACH?.....	119
10.4.1. L2 Educators.....	119
10.4.2. L2 Learners.....	120
10.4.2.1. Empowering Students to Investigate Semantic Prosody.....	122
10.5. FREE WEB-BASED CORPUS LINGUISTICS TOOLS.....	122
10.5.1. Lancaster University Online Concordancer.....	123
10.5.1.1. Exercise using Lancaster University Online Concordancer.....	124
10.5.2. WebCorp Concordancer.....	125
10.5.2.1. Exercise using WebCorp Concordancer.....	126
10.5.3. Sketch Engine for Language Learning (SKELL).....	127
10.5.3.1. Exercise using Sketch Engine for Language Learning.....	128
10.5.4. NoSKetchEngine.....	129
10.5.4.1. Exercise using NoSKetchEngine.....	130
10.5.5. KonText.....	130
10.5.5.1. Exercise using KonText.....	131

10.5.6. Corpuscle.....	132
10.5.7. Other Tools & Desktop Software.....	133
10.5.8. Summary of the Review of the Tools.....	133
10.6. CONCLUSION OF CHAPTER 10.....	134
11. CONCLUSIONS.....	135
BIBLIOGRAPHY.....	138
LIST OF LINKS.....	149
LIST OF FIGURES.....	151
LIST OF TABLES.....	152

ABSTRACT

This thesis, "The Register-Specific Semantic Prosody and its Application into L2 Teaching", examines the phenomenon of semantic prosody, together with its register-specific nature. Moreover, its applications in second language (L2) acquisition and its implications for teaching methodologies are explored.

Semantic prosody refers to the evaluative connotations that words or phrases acquire through habitual collocational patterns. While this phenomenon has been extensively studied in theoretical linguistics, there is a lack of unified perspective. Additionally, its practical applications in L2 teaching remain underexplored. This dissertation addresses this gap by providing a comprehensive, integrated view on the phenomenon of semantic prosody, integrating the findings of the last decades. As a secondary objective, the thesis investigates how the understanding of semantic prosody can enhance language pedagogy.

The thesis is structured into eleven chapters, beginning with an introduction to the theoretical framework. A chronological review of semantic prosody follows, tracing its development from early foundational studies to contemporary debates. The scope and nature of semantic prosody are examined in detail, including its definitional boundaries and its distinction from related concepts such as collocation and colligation. The paper also explores whether native speakers possess implicit or explicit knowledge of semantic prosody, utilizing psycholinguistic experiments and corpus-based evidence. Next, the frameworks for describing the evaluative load of lexis is explored. Subsequently, the phenomenon of semantic prosody is examined across languages and genres or registers.

Central to this thesis is the qualitative and quantitative analysis of semantic prosody across genres and registers, with a focus on the verbs *TO LEAD TO* and *TO CAUSE*. These verbs were selected for their frequent use and pedagogical relevance. Corpus methodologies, including collocational analysis, log-likelihood comparisons, and normalized frequency counts, reveal nuanced patterns of prosodic variation across academic, conversational, and literary contexts. These findings are used to propose teaching strategies that integrate semantic prosody into language curricula, aiming to develop learners' ability to interpret and produce contextually appropriate language.

The thesis concludes by emphasizing its contributions to linguistic theory and language pedagogy. It highlights the transformative potential of register-specific semantic prosody in enhancing L2 learners' comprehension and production skills. Recommendations

for future research include expanding cross-linguistic studies and further exploring prosodic patterns in underrepresented languages and registers. This work underscores the importance of bridging linguistic theory and practical teaching to foster deeper, more authentic language learning experiences.

Keywords: Semantic prosody, Register-specific, Genre-Specific, Cross-linguistic perspective, L2 teaching, Second language acquisition (SLA), Psycholinguistics, Corpus linguistics, Language pedagogy, Contextual language use.

RESUMEN

Esta tesis, “The Register-Specific Semantic Prosody and its Application into L2 Teaching” (“La prosodia semántica específica de registro y su aplicación en la enseñanza de L2”), examina el fenómeno de la prosodia semántica, junto con su naturaleza específica de registro. Además, se exploran sus aplicaciones en la adquisición de la segunda lengua (L2) y sus implicaciones para las metodologías de enseñanza.

La prosodia semántica se refiere a las connotaciones evaluativas que adquieren las palabras o frases a través de patrones habituales de colocación. Aunque este fenómeno se ha estudiado ampliamente en la lingüística teórica, falta una perspectiva unificada. Además, sus aplicaciones prácticas en la enseñanza de L2 siguen siendo poco exploradas. Esta tesis aborda esta carencia, proporcionando una visión global e integrada sobre el fenómeno de la prosodia semántica, integrando los hallazgos de las últimas décadas. Como objetivo secundario, la tesis investiga cómo la comprensión de la prosodia semántica puede mejorar la pedagogía de la lengua.

La tesis se estructura en once capítulos, que comienzan con una introducción al marco teórico. A continuación se hace una revisión cronológica de la prosodia semántica, siguiendo su desarrollo desde los primeros estudios fundacionales hasta los debates contemporáneos. Se examinan en detalle el alcance y la naturaleza de la prosodia semántica, incluidos sus límites de definición y su distinción de conceptos relacionados como la colocación y la coligación. También se analiza si los hablantes nativos poseen un conocimiento implícito o explícito de la prosodia semántica, utilizando experimentos psicolingüísticos y pruebas basadas en corpus. A continuación, se exploran los marcos para describir la carga evaluativa del léxico. Posteriormente, se examina el fenómeno de la prosodia semántica a través de las lenguas y los géneros o registros.

La tesis se centra en el análisis cualitativo y cuantitativo de la prosodia semántica en distintos géneros y registros, con especial atención a los verbos *TO LEAD TO* y *TO CAUSE*. Estos verbos se seleccionaron por su uso frecuente y su relevancia pedagógica. Las metodologías de corpus, como el análisis de colocaciones, las comparaciones de log-verosimilitud y el recuento de frecuencias normalizadas, revelan patrones matizados de variación prosódica en contextos académicos, conversacionales y literarios. Estos hallazgos se utilizan para proponer estrategias de enseñanza que integren la prosodia semántica en los planes de estudio de lenguas, con el objetivo de desarrollar la capacidad de los alumnos para

interpretar y producir un lenguaje contextualmente apropiado.

La tesis concluye destacando sus aportaciones a la teoría lingüística y a la pedagogía de la lengua. Destaca el potencial transformador de la prosodia semántica específica de registro en la mejora de las destrezas de comprensión y producción de los estudiantes de L2. Las recomendaciones para futuras investigaciones incluyen la ampliación de los estudios interlingüísticos y una mayor exploración de los patrones prosódicos en lenguas y registros infrarrepresentados. Este trabajo subraya la importancia de tender puentes entre la teoría lingüística y la enseñanza práctica para fomentar experiencias de aprendizaje de lenguas más profundas y auténticas.

Palabras clave: Prosodia semántica, Específica de registro, Específica de género, Perspectiva interlingüística, Enseñanza de L2, Adquisición de segunda lengua (SLA), Psicolingüística, Lingüística de corpus, Pedagogía de la lengua, Uso contextual de la lengua.

RESUMO

Esta tese, "The Register-Specific Semantic Prosody and its Application into L2 Teaching" ("A prosodia semántica específica do rexistro e a súa aplicación no ensino da L2"), examina o fenómeno da prosodia semántica, xunto coa súa natureza específica de rexistro. Ademais, explóranse as súas aplicacións na adquisición de segundas linguas (L2) e as súas implicacións para as metodoloxías de ensino.

A prosodia semántica refírese ás connotacións valorativas que adquiren palabras ou frases a través dos patróns habituais de colocación. Aínda que este fenómeno foi moi estudado na lingüística teórica, falta unha perspectiva unificada. Ademais, as súas aplicacións prácticas no ensino de L2 seguen pouco exploradas. Esta tese aborda esta carencia, aportando unha visión global e integrada do fenómeno da prosodia semántica, integrando os achados das últimas décadas. Como obxectivo secundario, a tese investiga como a comprensión da prosodia semántica pode mellorar a pedagogía lingüística.

A tese estrutúrase en once capítulos, que comezan cunha introdución ao marco teórico. A continuación faise unha revisión cronolóxica da prosodia semántica, seguindo o seu desenvolvemento dende os primeiros estudos fundacionais ata os debates contemporáneos. Examínanse en detalle o alcance e a natureza da prosodia semántica, incluíndo os seus límites de definición e a súa distinción de conceptos relacionados como a colocación e a coligación. Tamén se analiza se os falantes nativos teñen coñecementos implícitos ou explícitos da prosodia semántica, mediante experimentos psicolingüísticos e tests baseados en corpus. A continuación, explóranse marcos para describir a carga valorativa do léxico. Posteriormente, o fenómeno da prosodia semántica é examinado a través de linguas e xéneros ou rexistros.

A tese céntrase na análise cualitativa e cuantitativa da prosodia semántica en diferentes xéneros e rexistros, con especial atención aos verbos *TO LEAD TO* e *TO CAUSE*. Estes verbos foron seleccionados polo seu uso frecuente e relevancia pedagóxica. As metodoloxías de corpus, como a análise de colocación, as comparacións de logaritmo de verosimilitude e o reconto normalizado de frecuencias, revelan patróns matizados de variación prosódica en contextos académicos, conversacionais e literarios. Estes achados utilízanse para propoñer estratexias didácticas que integren a prosodia semántica nos currículos lingüísticos, co obxectivo de desenvolver a capacidade do alumnado para interpretar e producir unha linguaxe adecuada ao contexto.

A tese conclúe destacando as súas contribucións á teoría lingüística e á pedagogía da

lingua. Destaca o potencial transformador da prosodia semántica específica do rexistro para mellorar a comprensión e as habilidades de produción dos alumnos de L2. As recomendacións para investigacións futuras inclúen ampliar os estudos interlingüísticos e explorar máis os patróns prosódicos en linguas e rexistros infrarrepresentados. Este traballo destaca a importancia de construír pontes entre a teoría lingüística e o ensino práctico para fomentar experiencias de aprendizaxe de linguas máis profundas e auténticas.

Palabras clave: Prosodia semántica, Rexistro específico, Género específico, Perspectiva interlingüística, Ensino L2, Adquisición de segundas linguas (SLA), Psicolingüística, Lingüística de corpus, Pedagogía da lingua, Uso contextual da lingua.

1 INTRODUCTION

The study of semantic prosody has evolved significantly since its conceptual inception, shaping our understanding of language use, meaning, and evaluation in context. This dissertation seeks to bridge the gap between linguistic theory and language pedagogy by exploring the nuanced interplay of semantic prosody across genres and registers, with a particular focus on its applicability to second language (L2) acquisition.

Semantic prosody, as a linguistic phenomenon, highlights how certain words or phrases acquire evaluative meaning based on their habitual collocational patterns. Originally framed by studies such as Sinclair's analysis of *TO SET IN* in 1987¹ and Louw's seminal work in 1993², the concept has been expanded and refined over the decades. However, its application to practical fields such as L2 teaching remains underexplored. This thesis argues that incorporating register-specific semantic prosody into L2 curricula can provide learners with deeper insights into native-like language use, enhancing both their comprehension and productive skills.

The rationale for this study stems from the recognition that language learners often struggle with subtle, context-driven aspects of meaning, such as the evaluative "aura" of words and phrases. By investigating how semantic prosody varies across registers, this work aims to provide educators with tools to elucidate these subtleties, fostering learners' ability to use language in authentic and contextually appropriate ways. An additional objective of this thesis is to offer an integrated and consolidated perspective on the multifaceted phenomenon of semantic prosody.

This dissertation is organized into eleven chapters, each contributing to the overarching aim of integrating semantic prosody into L2 teaching methodologies.

Chapter 1 (Introduction) sets the stage by presenting the research questions, objectives, and significance of the study. It introduces key concepts, such as semantic prosody, register, and evaluative meaning, while outlining the methodology and theoretical framework adopted in the thesis. The chapter also addresses the interdisciplinary nature of the dissertation, connecting corpus linguistics, applied linguistics, and pedagogy.

Chapter 2 (Chronological Review of Semantic Prosody) provides a comprehensive

¹ Sinclair, J. M. 1987. *Looking Up: An Account of the COBUILD Project in Lexical Computing and the Development of the Collins COBUILD English Language Dictionary*. HarperCollins Publishers Limited.

² Louw, B. 1993. 'Irony in the text or insincerity in the writer? The diagnostic potential of semantic prosodies', in M. Baker, G. Francis and E. Tognini-Bonelli (eds), *Text and Technology: In Honour of John Sinclair*. Amsterdam: John Benjamins, pp.157–175

historical overview of semantic prosody research, starting with early foundational studies and progressing to contemporary debates. Key contributions by scholars such as Sinclair, Louw, Stubbs, and Hoey are discussed, with an emphasis on their methodologies, findings, and theoretical implications. The chapter also hints at the limitations and unresolved issues in the field, such as the scope of prosodic analysis and the interplay between semantic and pragmatic dimensions.

Chapter 3 (The Scope and Nature of Semantic Prosody) delves into definitional and conceptual boundaries of semantic prosody. It addresses questions about its scope—whether it applies to individual words, multi-word units, or entire constructions—and examines its pragmatic versus semantic dimensions. The chapter provides examples of lexical items and constructions with varying prosodic tendencies, supported by data from corpus analyses. Additionally, it disambiguates related concepts such as collocation, colligation, and semantic preference, using illustrative cases to clarify overlaps and distinctions.

Chapter 4 (Intuition and the Hidden Aspect of Semantic Prosody) investigates whether native speakers possess implicit or explicit knowledge of semantic prosody. Drawing on psycholinguistic and corpus-based studies, it explores how language users process and infer prosodic patterns. The methodologies include experimental designs, such as priming tasks and judgment tests, alongside corpus evidence of implicit prosodic tendencies. Implications for teaching strategies are highlighted, emphasizing how intuitive and data-driven approaches can complement each other in L2 instruction.

Moving beyond the binary framework of positive and negative prosody, chapter 5 (Beyond Positive-Negative Polarity of Semantic Prosody) examines more nuanced evaluative dimensions. It explores instances of dual prosody, genre-specific variations, and emerging theoretical perspectives. Detailed examples, such as verbs with both positive and negative prosodies depending on syntactic structures, are analyzed to illustrate the complexity of prosodic patterns. The chapter proposes a multidimensional evaluative framework as a more accurate representation of semantic prosody.

Cross-linguistic comparisons form the core of chapter 6 (Semantic Prosody Across Languages), which investigates how semantic prosody manifests in different languages and cultural contexts. Special attention is given to contrasts between languages, supported by examples of verbs and phrases with distinct prosodic tendencies across languages. The chapter explores comparative corpus analyses and examines how cultural and linguistic factors influence prosodic patterns. Strategies for addressing these contrasts in L2 teaching are suggested, highlighting the challenges and benefits of cross-linguistic awareness.

Chapter 7 (Register and Genre) explores the concepts of register and genre, highlighting their distinctions and interplay, particularly in the context of semantic prosody and language pedagogy. Register refers to language style tailored to specific communication contexts, while genre encompasses broader text types characterized by conventions and structures. The chapter examines how linguistic features like syntactic complexity, lexical patterns, and evaluative nuances vary across registers and genres, affecting semantic prosody. Studies reveal that semantic prosody can be genre-specific, with words adopting different evaluative meaning depending on context, such as scientific versus journalistic writing. These

insights underline the pedagogical value of integrating register- and genre-specific semantic prosody into second-language teaching to enhance learners' vocabulary and comprehension.

Chapter 8 (Study: Semantic Prosody of the Near-Synonyms *TO CAUSE* and *TO LEAD TO* Across Registers/Genres) presents the results of our corpus analyses, highlighting how semantic prosody varies across general, academic, newspapers, fiction, magazines, language, and official documents corpora of British National Corpus 2014 (BNC2014). Specifically, the verbs *TO CAUSE* and *TO LEAD TO* were analyzed to uncover their evaluative tendencies and contextual dependencies. Methods included collocational analysis, log-likelihood comparisons and normalized frequency counts, using subcorpora representative of distinct registers. The rationale behind selecting these verbs lies in their frequent use in evaluative contexts and the pedagogical significance of distinguishing near-synonyms for L2 learners. Additionally, the chapter discusses the interplay between register-specific factors and prosodic patterns, illustrating how these variations can inform tailored teaching approaches.

Chapter 9 (Second Language Acquisition and Language Pedagogy) provides an extensive overview of Second Language Acquisition (SLA) and its connections to language pedagogy, serving as a foundation for applying semantic prosody to L2 teaching. It explores the evolution of SLA theories, from structural linguistics and behaviorism to Chomsky's Universal Grammar, along with critiques and alternative approaches like Error Analysis and interlanguage theory. Krashen's hypotheses, which emphasize the importance of natural language exposure over conscious learning, offering insights into implicit and explicit language knowledge, are explored. The chapter highlights the significance of semantic prosody in L2 instruction, particularly for understanding lexical nuances and distinguishing near-synonyms, noting its underrepresentation in teaching materials. This discussion sets the stage for integrating register-specific semantic prosody into language education to improve learners' proficiency and contextual accuracy.

Chapter 10 (Recommendations and Tools for Incorporating Semantic Prosody into L2 Teaching) explores the application of register-specific semantic prosody into language pedagogy, emphasizing its importance for both educators and learners. It outlines how teachers can deepen their understanding of semantic prosody through interactive methods, while students benefit from explicit instruction and data-driven learning (DDL) to improve proficiency in collocations and lexical choices. The chapter also reviews several free, web-based corpus linguistics tools, highlighting their strengths and limitations in facilitating semantic prosody analysis. Although these tools offer valuable features like keyword searches and collocation analysis, few allow intuitive register-specific analysis or the creation of custom corpora. The chapter concludes by suggesting that AI-powered advancements could improve corpus tools, making them more accessible and effective for diverse language learning contexts.

By systematically analyzing the evaluative and contextual dimensions of semantic prosody, this thesis offers a dual contribution: advancing theoretical understanding and providing actionable insights for educators. Its interdisciplinary approach, combining corpus linguistics with applied linguistics, aims at a robust and impactful exploration of the topic. In essence, this work seeks to illuminate the subtle ways in which language conveys meaning,

aiming to equip learners and teachers with the tools to navigate and harness these complexities. The subsequent chapters will detail each aspect of this journey, culminating in a practical framework for integrating semantic prosody into L2 pedagogy.

1.1 OBJECTIVES

The primary objective of this dissertation is to examine how semantic prosody varies across different registers and to explore its implications for Second Language Acquisition (SLA). By analyzing corpus data, we seek to provide insights into how learners can develop a more context-sensitive understanding of lexical meaning and collocational patterns. The ultimate goal is to enhance their ability to use language in a more natural and pragmatically appropriate manner.

The secondary objective is to offer an integrated and comprehensive perspective on the phenomenon of semantic prosody. By synthesizing existing research and empirical corpus analyses, this thesis aims to bridge gaps in the literature and present a unified framework that accounts for both theoretical linguistic perspectives and pedagogical applications. In doing so, it provides educators with corpus-based tools and strategies to better illustrate these subtle meaning distinctions in language teaching.

1.2 METHODOLOGY

This dissertation employs a multi-stage research approach to investigate the phenomenon of semantic prosody and its implications for Second Language Acquisition (SLA). The methodology consists of three key components: (1) a theoretical examination of semantic prosody and the field of SLA based on existing scholarly literature, (2) an empirical corpus-based study of near-synonyms *TO CAUSE* and *TO LEAD TO* across different genres/register, and (3) an exploration of pedagogical applications through selected language-learning tools.

The first stage of the research involves a comprehensive review and comparison of prior studies on semantic prosody and the field of SLA. By analyzing the works of scholars who had contributed to these topics (see Chapters 2, 3, 4, 5, 6, 7 and 9), this dissertation identifies key theoretical frameworks, definitions, and debates surrounding semantic prosody. This theoretical foundation informs the corpus-based investigation by highlighting recurring methodological approaches and findings in the field.

The second stage focuses on the empirical study, the methodology of which is detailed in Chapter 8. This study applies corpus linguistic techniques to analyze a specialized corpus (BNC2014), incorporating both qualitative and quantitative methods. The qualitative aspect examines collocational patterns, while the quantitative analysis involves frequency distributions and statistical measures of word associations. This dual approach ensures a thorough examination of how semantic prosody manifests across registers and contexts.

Finally, the third stage of this research explores pedagogical applications, as discussed in Chapter 10. To provide practical recommendations for language instruction, various corpus tools and resources are examined to demonstrate their potential use in classroom settings. This part of the dissertation adopts an exploratory approach, showcasing different ways in which

corpus-based insights can be integrated into language teaching. By illustrating these applications, this research aims to bridge the gap between linguistic theory and educational practice.

Through this structured approach, the thesis offers both a theoretical and empirical contribution to the understanding of semantic prosody, while also providing practical guidance for its pedagogical implementation.

2 CHRONOLOGICAL REVIEW OF SEMANTIC PROSODY

The earliest works on the concept of semantic prosody may be traced back to Sinclair's study of the phrasal verb *TO SET IN* in 1987³. He discussed some of its distributional properties, such as its tendency to occur in clause- or sentence-final position, as well as the relatively short average length of the sentences in which it appears.

However, Sinclair did not use the term “semantic prosody” when he first discussed it. The popularization of this denomination is attributed to Louw’s 1993 work⁴ in which he draws on a parallel from Firth’s discussion of the phenomenon of prosody in phonology.

Firth noted that the way certain phonemes are realized (or pronounced) is influenced by the sounds adjacent to them. Louw illustrates it with the example of the phoneme /k/, which takes different realizations in the words *KANGAROO* and *KEEP* because the vocal apparatus is preparing for the following vowel. This process was referred to as “phonological coloring”. Similarly, Louw claims, the expression *SYMPTOMATIC OF* was supposed to prepare, or call for, the occurrence of “semantic coloring” — in this instance, words denoting something undesirable (e.g., *PARENTAL PARALYSIS, MANAGEMENT INADEQUACIES, NUMEROUS DISORDERS*).

Louw defines semantic prosody as “a consistent aura of meaning with which a form is imbued by its collocates”⁵ and he hypothesizes about the diachronic nature of this imbuing, referring to it as a “product of a long period of refinement through historical change”⁶. Other examples of words characterized by unfavorable prosody mentioned in Louw’s work are *UTTERLY* and *BENT ON*.

In 1996, Bublitz builds upon Louw’s idea and adds *CAUSE, HAPPEN, COMMIT, SOMEWHAT* and *PREVAIL* to the list of recognized semantic prosodies⁷. He claims that semantic prosody is “based on a semantically consistent set of collocates” which become “habitually associated” with the node itself⁸.

³ Sinclair, J. M. 1987. *Looking Up: An Account of the COBUILD Project in Lexical Computing and the Development of the Collins COBUILD English Language Dictionary*. HarperCollins Publishers Limited.

⁴ Louw, B. 1993. ‘Irony in the text or insincerity in the writer? The diagnostic potential of semantic prosodies’, in M. Baker, G. Francis and E. Tognini-Bonelli (eds), *Text and Technology: In Honour of John Sinclair*. Amsterdam: John Benjamins, pp.157–175

⁵ *ibid.* p.157

⁶ *ibid.* p.164

⁷ Bublitz, W. 1996. ‘Semantic prosody and cohesive company: somewhat predictable’. *Leuvense Bijdragen: Tijdschrift voor Germaanse Filologie*, 85/1–2: pp. 1–32.

⁸ *ibid.* p.9

Bublitz also makes a crucial remark that there exists variance in semantic prosodies of a given lexical unit, which is heavily influenced by the different basic meanings of it. For instance, the negative semantic prosody of the verb *HAPPEN* is not recognized in its “by-chance meaning”⁹ (e.g., I happen to know about this). We will return to the idea of variance in semantic prosody, especially the genre- and register-specific ones, which are key to this dissertation.

Bublitz also hypothesizes about the way in which semantic prosody emerges. He claims that “constantly using a word in the same kind of context can eventually lead to a shift in its meaning: the word adopts semantic features from an adjacent item”¹⁰. However, shortly after, he emphasizes the need for more evidence for such diachronic claims¹¹.

In his later work¹², Sinclair elaborates his model of a lexical item, which consists of:

- collocation,
- colligation,
- semantic preference,
- semantic prosody,

in which he places semantic prosody “on the pragmatic side of the semantics/pragmatics continuum”. He recognizes the semantic function of semantic prosody and stresses its attitudinal and pragmatic function, which often is the very rationale for uttering a sentence. An additional important remark Sinclair makes is the recognition of semantic prosody as an obligatory component of the unit of meaning, alongside the dictionary definition of a lexical unit¹³. We will return to this model in chapter 3 (The Scope and Nature of Semantic Prosody) and offer distinctions between the terms key to Sinclair’s work.

Another significant contributor to the field of semantic prosody was Michael Stubbs. Not only did he add numerous new examples of semantic prosody, but also underlined its role in (above all, but not exclusively) political and ideological discourse. This is best exemplified by the fact that in his 2001 work, he abandons the term ‘semantic prosody’ and adopts the term ‘discourse prosody’, stressing its attitudinal and pragmatic function¹⁴. He defines this new term as “a feature which extends over more than one unit in a linear string” and claims that discourse prosodies “express speaker attitude”¹⁵. We will come back to this idea in the chapter 4 (Intuition and the Hidden Aspect of Semantic Prosody).

Tognini-Bonelli also stresses the pragmatic dimension of semantic prosody¹⁶. She claims that “the choice that a speaker/writer will make when selecting a multi-word unit will involve the more local grammatical and lexical constraints around the word, but will also

⁹ *ibid.* p.17

¹⁰ *ibid.* p.11

¹¹ *ibid.* p.12

¹² Sinclair, J. 1996. ‘The search for units of meaning’. *Textus*, 9: 75–106

¹³ Sinclair, J. 1998. ‘The lexical item’, in E. Weigand (ed.), *Contrastive Lexical Semantics*. Amsterdam: John Benjamins, pp.1–24

¹⁴ Stubbs, M. 2001. *Words and Phrases: Corpus Studies of Lexical Semantics*. Oxford: Blackwell.

¹⁵ *ibid.* p.65

¹⁶ Tognini-Bonelli, E. 2001. *Corpus Linguistics at Work*. Amsterdam: John Benjamins

include a perhaps more remote semantic preference and its correspondent on the pragmatic side, semantic prosody”¹⁷. Tognini-Bonelli took up Sinclairian framework of the unit of meaning and contributed to the cross-linguistic investigations of semantic prosody, analyzing it across English and Italian (e.g., the lexical unit *PROPER*). Crosslinguistic considerations of semantic prosody will become our main focus in the chapter 6 (Semantic Prosody Across Languages), as they are vital to the rationale of introducing semantic prosody into language pedagogy, which is the main objective of this dissertation.

Generally put, most research on semantic prosody has focused on the properties proposed by Sinclair and/or Louw. Hunston and Francis¹⁸ reiterate the notion of the semantic consistency and claim that “a word may be said to have a particular semantic prosody if it can be shown to co-occur typically with other words that belong to a particular semantic set”¹⁹. Hunston and Thompson discuss the evaluative quality of semantic prosody (which is claimed to “express evaluative meaning covertly”) and the idea that lexical units acquire meaning from their surroundings²⁰.

Many authors seem to subscribe to the view of positive-negative polarity of semantic prosody, focusing more attention on the latter. For instance, Louw’s 2000 Contextual Prosodic Theory, which is seen as a recalibration of his views on semantic prosody (with regard to his 1993 article), is no exception²¹. We shall return to this notion in chapter 5 (Beyond Positive-Negative Polarity of Semantic Prosody), as it strongly influences the applicability of semantic prosody into L2 teaching. For now, we aim merely at invoking the notion that semantic prosody is most often described either as *positive*, *neutral*, or *negative* by the scholars.

A notable area of the application of semantic prosody into the political discourse analysis can be found in Partington’s examination of newspapers (e.g., expressions such as *GREEN FUNDAMENTALIST*)²². For instance, he finds that “the more frequently *GREEN* collocates with *FUNDAMENTALIST*, the more tainted the former is likely to become”²³, showing how words can acquire connotative load in a certain genre. In his 2004 article²⁴, he investigates a number of lexical items, underlying some of their differences, inter alia, regarding the register- and genre-specificity of semantic prosody.

One of the major works in the field of semantic prosody is Hoey’s 2005 theory of lexical priming²⁵. It attempts to systematize corpus-linguistic concepts (such as collocation, colligation, semantic prosody) and the experimental results of psycholinguistic studies. Hoey

¹⁷ *ibid.* p.111

¹⁸ Hunston, S. and Francis, G. 1999. *Pattern Grammar: The Principles and Practice of Corpus-driven Grammar*. Amsterdam: John Benjamins.

¹⁹ *ibid.* p.137

²⁰ Hunston, S. and Thompson, G. (eds). 1999. *Evaluation in Text: Authorial Stance and the Construction of Discourse*. Oxford: Oxford University Press.

²¹ Louw, B. 2000. ‘Contextual prosodic theory: bringing semantic prosodies to life’, in C. Heffer and H. Saunston (eds), *Words in Context: In Honour of John Sinclair*. Birmingham: ELR

²² Partington, A. 1998. *Patterns and Meanings: Using Corpora for English Language Research and Teaching*. Amsterdam: John Benjamins.

²³ *ibid.* p.76

²⁴ Partington, A. 2004. ‘“Utterly content in each other’s company”: semantic prosody and semantic preference’. *International Journal of Corpus Linguistics*, 9/1: pp. 131–156.

²⁵ Hoey, M. 2005. *Lexical Priming: A New Theory of Words and Language*. London and New York: Routledge

states that “as a word is acquired through encounters with it in speech or writing, it becomes cumulatively loaded with the contexts and co-texts in which it is encountered, and our knowledge of it includes the fact that it co-occurs with certain other words in certain kinds of context”²⁶. Furthermore, he claims that this tenet also applies to sequences of words, recognizing the variance in the form that units of meaning take (from a single word to whole constructions). Key differences, or areas in which priming and semantic prosody don’t overlap, are:

- (i) the scope — while semantic prosody usually concerns a fairly restricted lexical window (around 6 words to the left and right of the lexical unit), priming can extend beyond the sentence and much longer (even entire stretches of text),
- (ii) the essence — semantic prosody is usually described as pertaining to the unit of meaning, priming on the other hand belongs to the brain of the individual. In Hoey’s words: “words are never primed per se; they are only primed for someone”²⁷.
- (iii) the occurrence — priming was said to apply to all lexical items, whereas semantic prosody was seen as a feature of a chosen set.

The last notion stands in opposition to Sinclairs view that semantic prosody is an obligatory component of the unit of meaning. We take a closer look at this issue in the subchapter 3.1 (The Scope of Semantic Prosody). It is worth mentioning here that Hoey advocated for a clear distinction between semantic prosody and semantic preference²⁸ — unlike Sinclair’s work, in which the boundary between these concepts was fuzzy.

Whitsitt’s 2005 and Hunston’s 2007 works represent a new wave of research on semantic prosody. This time, the emphasis was put on the controversies and/or inconsistencies in the literature and the attempts of consolidating this area of study.

Whitsitt²⁹ claims that semantic prosody has been described in three unconsolidated ways: as connotative (Partington), pragmatic (Sinclair, Stubbs) and diachronic (Louw, Bublitz) phenomenon. Moreover, he points out that in Louw’s 1993 work vague metaphors are used to talk about semantic prosody, and takes issue with the way intuition is addressed. The topic of intuition, crucial to L2 teaching, will be addressed in chapter 4 (Intuition and the Hidden Aspect of Semantic Prosody).

Hunston³⁰ presents a similar view on the inconsistency of the description of semantic prosody in the literature. She underlined what she termed as “sites of disagreement”³¹ which include:

- (i) the scope — should semantic prosody be seen as a feature of a word/expression or a longer sequence of words?

²⁶ *ibid.* p.8

²⁷ *ibid.* p.15

²⁸ *ibid.* p.23

²⁹ Whitsitt, S. 2005. ‘A critique of the concept of semantic prosody’. *International Journal of Corpus Linguistics*, 10/3: 283–305.

³⁰ Hunston, S. 2007. ‘Semantic prosody revisited’. *International Journal of Corpus Linguistics*, 12:2, 249–268.

³¹ *ibid.* p.250

- (ii) the description of attitudinal meaning — should it be referred to in binary terms (e.g., positive-negative) or more specific terms (e.g., Sinclair’s “reluctance”),
- (iii) the extrapolation — can semantic prosody “carry over” from one context to another?

The recognition of unconsolidated views on semantic prosody provides rationale for more scientific work in this area. As mentioned in the introduction, a secondary goal of this thesis is to provide a comprehensive framework, which would integrate the research done by those before us.

In recent years, semantic prosody has attracted attention of the researchers, who built on the ideas showed in this chapter. Main areas of more contemporary research include: cross-linguistic and cross-cultural studies (e.g., Wang³²), psychological implications, i.a., the influence of semantic prosody on judgement (e.g., Hauser & Schwarz³³), application to second language acquisition and pedagogy (e.g., Zhang³⁴), construction grammar (e.g., Wessweiler³⁵), theoretical frameworks and redefinitions (e.g., Begagic³⁶), diachronic analysis of semantic prosody (e.g., Lindquist & Levin³⁷), computational linguistics (e.g., Won³⁸) and corpus-based investigations of previously unrecognized semantic prosodies, or replication studies, often in specific registers (e.g., Lin & Chung³⁹).

2.1 CONCLUSION OF CHAPTER 2

This chapter outlines the evolution of the concept of semantic prosody, focusing on the various aspects identified over time. This overview is meant to lay the groundwork for the considerations of this dissertation.

The next chapters will revisit ideas mentioned in this overview, specifically those which are crucial to the considerations linked to applying the concept of semantic prosody to language pedagogy, which is the aim of our work.

As mentioned previously, semantic prosody is a phenomenon that causes controversy amongst scholars. In order for our considerations to be as well-grounded and clear as possible, the next chapter offers a series of disambiguations and definitions.

³² Zheng, Wang. 2019. Exploring Semantic Prosody in English and Chinese: Theories, Methods and Practice. *Australian Journal of Linguistics*, 39(4): pp. 533-535.

³³ Hauser, D. J., & Schwarz, N. 2016. Semantic prosody affects valence inferences about ambiguous concepts. *Journal of Experimental Psychology: General*, 145, pp. 882-896.

³⁴ Hong, Zhang. 2021. “What do you know about semantic prosody?” Teaching and evaluating implicit knowledge of English with corpus-assisted methods. *English in Education*.

³⁵ Weissweiler, L., Hofmann, V., Köksal, A., Schuetze, H. (2022). The better your Syntax, the better your Semantics? Probing Pretrained Language Models for the English Comparative Correlative.

³⁶ Begagic, M. 2018. Semantic preference and semantic prosody- a theoretical overview. *Journal of Education and Humanities*.

³⁷ Lindquist, H., & Levin, M. (2018). The development of semantic prosody in the history of English. *English Language and Linguistics*, 22(1), pp. 1–26.

³⁸ Kim, W. 2023. How can Artificial Intelligence be Employed for Semantic Prosody Analysis?. *Korean Journal of Applied Linguistics*, 39(2): pp. 3-34.

³⁹ Lin., Y, Chung, S. 2016. A corpus-based study on the semantic prosody of challenge. 13(2): pp. 99-146.

3 THE SCOPE & NATURE OF SEMANTIC PROSODY

Before describing the scope and nature of the phenomenon of semantic prosody, an important consideration is in order. One could legitimately ask: can all lexical items be analyzed in terms of semantic prosody?

Judging from a fairly small subset of words and expressions analyzed in the literature, one could get an impression that semantic prosody is not a general linguistic phenomenon, but rather a peculiar occurrence found in a few lexical items. Some researchers (e.g., Stubbs⁴⁰) indeed contend that semantic prosody is not always identifiable. Similarly, when making a distinction between lexical priming and semantic prosody, Hoey⁴¹ claims that semantic prosody (unlike lexical priming) can only be found for a smaller set of words.

An example of lexical items for which there could not be any identifiable semantic prosody are articles (*A, AN, THE*) since they co-occur with an enormous number of different words and arguably do not contribute to evaluative meaning.

However, Cheng's 2006⁴² study finds that "it is possible to describe the semantic prosody associated with all of the lexical items which confirms (...) that prosody is always identifiable, that is, obligatory". This is in line with Sinclair's definition⁴³, in which semantic prosody constitutes one of the obligatory elements of the unit of meaning.

Unifying these, at first glance opposite, views can be challenging. However, in our view, there is a way of doing so. Since, as we will shortly see, semantic prosody can also be found for longer sequences of words (or grammatical constructions), we can say that semantic prosody is always present — but it might call for "zooming-out" from the atomic, single-word perspective.

To use the example we provided for the first point, the articles (*A, AN, THE*) might themselves not carry enough meaning for their semantic prosody to be identifiable. However, they surely constitute a part of larger units for which — in line with the view of Sinclair and Chen — we should be able to find semantic prosody.

Another line of reasoning could unify these views in the following way: what Stubbs and Hoey identify as *no semantic prosody*, can in fact be *a neutral semantic prosody*. After all, containing neutral connotations could be seen as having no connotations, since the evaluative load is usually characterized in a way that deviates from neutrality, e.g., on the

⁴⁰ Stubbs, M. 2001. *Words and Phrases*. Oxford: Blackwell. p. 106

⁴¹ Hoey, M. 2005. *Lexical Priming: A New Theory of Words and Language*. London and New York: Routledge

⁴² Cheng, W. 2006. 'Describing the extended meanings of lexical cohesion in a corpus of SARS spoken discourse'. *International Journal of Corpus Linguistics*, 11/3: pp. 325–344.

⁴³ Sinclair, J. 1998. 'The lexical item', in E. Weigand (ed.), *Contrastive Lexical Semantics*. Amsterdam: John Benjamins, p. 15.

negative-positive scale (more on that in chapter 5). Therefore, items placed at the center of these scales could be seen as indistinct, or even scientifically uninteresting.

What is worth reiteration, Stubbs subscribes to the view that semantic prosody's obligatory feature is its covertness (more on that in chapter 4). It is not surprising then that he would also exclude from the set of items containing semantic prosody the examples of lexical items for which their connotative load is in accordance with its dictionary definition.

We propose that semantic prosody can be identified for any lexical item. It might, however, prove to be a more appropriate level of analysis to treat some items as a part of another, bigger, unit of meaning. For instance, the preposition *OF* grammatically combines with a plethora of other items, and analyzing it as a separate unit would not point us to such clear results as those found for *SYMPTOMATIC OF*.

We could hypothesize, that the semantic prosody of the word *OF* is “blurry”, unrecognizable, due to its propensity to collocate with a huge number of lexical items, and therefore its multiple semantic prosodies, interfering with each other. An additional factor, increasing this “blurriness”, could be the commonness of an item. In the written corpora of BNC⁴⁴, the search for *OF* gives us 63 414 results (4 629.94 per million), whilst *SYMPTOMATIC OF* is found only 5 times (1.79 per million). This hypothesis, however, would need to be tested, and it exceeds the scope of this dissertation.

3.1 THE SCOPE OF SEMANTIC PROSODY

One of the major discords — or ambiguities — regarding semantic prosody is its scope. Authors claim it belongs to a word (Hunston & Francis, Cotterill⁴⁵, Sinclair, Louw, Partington), unit of meaning (Sinclair, Tognini-Bonelli, Partington), lexical item (Cotterill), combination of words (Sinclair), node & core item (Hunston, Hoey), discourse unit (Stubbs) or constructions (Stempel⁴⁶).

Since, as it was mentioned in the beginning of this chapter, semantic prosody can be experimentally traced for both words (e.g., *CAUSE*) and longer strings of words (e.g., *SYMPTOMATIC OF*, *GREEN FUNDAMENTALISM*), in this dissertation we will use the term “lexical unit” or “lexical item” for both instances, and the term “word” or “phrase” when the emphasis of it will be useful.

Oxford Advanced Learner's Dictionary defines a lexical unit as “a word or several words that have a meaning that is not expressed by any of its separate parts”⁴⁷. This definition points to the fact that there are instances when the appropriate level of analysis is not a single word (e.g., *OF*) but rather several words (e.g., *SYMPTOMATIC OF*) since they constitute a synergistic lexical and semantic unit. This recognition is in line with our considerations in the previous part of this chapter, aiming at unifying the (supposedly) opposing, views.

Drawing a metaphor from physics, semantic prosody can be seen as a feature of an “atomic” unit of meaning. The term “atomic” is used with the purpose of underlining that

⁴⁴ Brezina, V., Gablasova, D. & Reichelt, S. (2018). BNCLab. <http://corpora.lancs.ac.uk/bnclab> [electronic resource], Lancaster University.

⁴⁵ Cotterill, J. 2001. ‘Domestic discord, rocky relationships: semantic prosodies in representations of marital violence in the O.J. Simpson trial’. *Discourse and Society*, 12/3: 291–312.

⁴⁶ Stempel, P. 2019. ‘A Constructional Reanalysis of Semantic Prosody’. [Doctoral thesis, Rice University]

⁴⁷ <https://www.oxfordlearnersdictionaries.com/definition/english/lexical-unit> ; accessed: 19.10.2024

although words and phrases can be broken down into smaller parts (as atoms can be divided into protons, neutrons, and electrons), their synergy constitutes a novel meaning, different from a sum of its parts (as atoms differ largely in their properties).

3.2 THE NATURE OF SEMANTIC PROSODY

The nature of semantic prosody is also presented by authors in different ways. It is mostly referred to as a type of meaning (Louw, Sinclair, Tognini-Bonelli, etc.), but one can also encounter references of it as a process (Baker et al.⁴⁸, Coffin et al.⁴⁹), a phenomenon (Lewandowska-Tomaszczyk⁵⁰), or a pattern (Berber-Sardinha⁵¹).

We see every single one of these approaches as insightful, and necessary for different types of considerations. For instance, using the term “process” is valuable when investigating the diachronic nature of semantic prosody, as in Gavioli’s definition of it as “the way in which words and expressions create an aura of meaning capable of affecting words around them”⁵².

This dissertation’s main goal is to facilitate the introduction of semantic-prosody into L2 teaching. Therefore, we present the view that the term “feature” is the most appropriate for our considerations, as it corresponds to the way lexical items (or words) are generally approached in L2 teaching — namely, characterized by a set of phonetic, morphological, syntactic, lexical and semantic features⁵³⁵⁴. However, we will also deploy terms like “phenomenon”, or “load”, in order to avoid repetitions and for other rhetorical reasons.

3.3 COLLOCATION, COLLIGATION, CONNOTATION, SEMANTIC PROSODY, SEMANTIC PREFERENCE, AND SEMANTIC TRANSFER

The literature on semantic prosody is full of the terms mentioned in the title of this subchapter. In our view, their formal similarity may lead to confusion and — what is the most relevant for the application of semantic prosody to L2 teaching — discouragement on the part of non-linguists.

We will now shortly define each one of them, aiming at drawing the clearest boundaries possible.

⁴⁸ Baker, M., Francis, G. and Tognini-Bonelli, E. 1993. *Text and Technology: In Honour of John Sinclair*. Amsterdam: John Benjamins.

⁴⁹ Coffin, C., Hewings, A. and O’Halloran, K. (eds). 2004. *Applying English Grammar. Functional and Corpus Approaches*. London: Arnold

⁵⁰ Lewandowska-Tomaszczyk, B. 1996. ‘Cross-linguistic and language-specific aspects of semantic prosody’. *Language Sciences*, 18/1–2: 153–178.

⁵¹ Berber-Sardinha, T. 2000. ‘Semantic prosodies in English and Portuguese: a contrastive study’. *Cuadernos de Filología Inglesa (University of Murcia, Spain)*

⁵² Gavioli, L. 2005. *Exploring Corpora for ESP Learning*. Amsterdam: John Benjamins. p. 46

⁵³ University of Arizona, “Knowledge Map”: <https://kmap.arizona.edu/map/topics/linguistic%20features> accessed: 19.10.2024

⁵⁴ Kibort, Anna & Corbett, Greville G. *Grammatical Features — Feature Inventory*: <http://www.grammaticalfeatures.net/inventory.html> accessed: 19.10.2024

3.3.1 Collocation

A definition we will draw attention to is the following: “collocation is a term used to describe a group of words which occur repeatedly in a language”⁵⁵. The examples of English collocations are: *TO MAKE NOISE*, *TO MAKE A POINT*, or *TO MAKE SENSE*.

The importance of collocations in L2 teaching is paramount, since they are often untranslatable word by word and pose challenges to L2 learners, as recognized by Harold Palmer⁵⁶. For instance, the English collocation *TO PAY ATTENTION* ought to be translated as *PRESTAR ATENCIÓN* (lit.: *TO *LEND ATTENTION*) into Spanish, *ZWRÓCIĆ UWAGĘ* (lit.: *TO *RETURN ATTENTION*) into Polish, or *MEMBERI PERHATIAN* (lit.: *TO *GIVE ATTENTION*) into Indonesian.

A similar concept is an idiom. Some linguists claim it is a type of collocation (e.g., Palmer⁵⁷), others see it as a separate category of word combination (e.g., Crowther et al.⁵⁸).

A crucial distinction between them is whether their meaning is deducible from their parts⁵⁹: a collocation *TO MAKE NOISE* is transparent in its meaning, the verb conveys the notion of production and the noun is verbatim what is produced. On the other hand, *TO KICK THE BUCKET* (meaning: *TO DIE*) is an idiom because without the prior knowledge of this expression, its meaning would be difficult to deduce (even for a native speaker).

There is an issue with this notion, because one could argue that for a native Spanish speaker, the meaning of the English collocation *TO PAY ATTENTION* could also be seen unclear or not deducible. It might be so, because when the verb *TO PAY* is introduced in L2 teaching, it usually describes an action of exchanging money for goods. However, to a native English speaker, as this verb is also used to convey the notion of giving (e.g., *TO PAY A VISIT*, *TO PAY RESPECT*), it should not pose challenges in deducing its meaning in *TO PAY ATTENTION*.

3.3.2 Colligation

Colligation is a similar term to collocation, but instead of words co-occurring with words, we observe words (or lexical units) co-occurring with grammatical categories⁶⁰. For instance, the English verb *TO BUDGE* is often seen preceded by a modal auxiliary verb (e.g., *WILL/WON'T BUDGE*).

In Hoey's theory of lexical priming, colligations constitute a key component of linguistic competence. Similarly to collocations, they are seen as posing challenges for L2 learners.

Thanks to comparative study of colligations of near-synonyms, researchers gain insights into the difference between such lexical items as *LITTLE* and *SMALL*. Although semantically akin, they are found in different grammatical contexts: the word *LITTLE* is less

⁵⁵ Carter, R. 1994. *Vocabulary: Applied Linguistics Perspective*, Routledge, London and New York.

⁵⁶ Palmer, H.E. 1933. Second interim report on English collocations, submitted to the Tenth Annual Conference of English Teachers, under the auspices of the Institute for Research in English Teaching.

⁵⁷ Palmer F.R., 1976. *Semantics. A new outline*, Cambridge University Press, Cambridge.

⁵⁸ Crowther J. et al. 2002. (eds.): *Oxford Collocations Dictionary for Students of English*, Oxford University Press, Oxford.

⁵⁹ Cruse D.A. 1986. *Lexical Semantics*, Cambridge University Press, Cambridge.

⁶⁰ Sinclair, J. 1998. The lexical item.” In *Contrastive Lexical Semantics*, ed. by E. Weigand, p. 1–24. Amsterdam: John Benjamins.

likely to be used in the subject complement position⁶¹. Consider: “the village is *LITTLE*” vs. “the village is *SMALL*”.

3.3.3 Connotation

Denotative meaning is the literal, dictionary definition of a lexical unit, a “kind of meaning which, in the context of a proposition, contributes to the truth-conditions of that proposition”⁶². For instance, the denotative meaning of the word “heart” is “the organ in the chest that sends blood around the body”⁶³.

Connotative meaning is often presented by means of negative definition: everything the word means, but it is not its denotative meaning, is therefore its connotative meaning⁶⁴. The connotations of the word “heart” could be “love” or “kindness” because, although it is not evident from its definition, we associate it with these terms.

The concept of connotation might seem overlapping with semantic prosody, as pointed out by Whitsitt⁶⁵. Some authors are using these terms interchangeably (Partington⁶⁶) and some treat semantic prosody as a subset of connotation (Hunston⁶⁷).

Yet, there is a crucial difference: semantic prosody is observable in corpus data, as an evaluative set of words co-occurring with a lexical unit. Connotation, on the other hand, is much more contingent upon what is not uttered, therefore not visible in the — spoken or written — corpus data.

Louw⁶⁸ points to *Collins Cobuild English Dictionary for Advanced Learners*’ 1995 definition: “the connotations of a particular word or name are the ideas or qualities which it makes you think of”. Moreover, he presents semantic prosody as a “strongly collocational” phenomenon (which underlines its relationship with habitual co-occurrences in corpora), whilst connotation — he claims — is more “schematic” in nature. It is in line with the view of McEnery et al.⁶⁹ who claimed that “connotation can be collocational or noncollocational whereas semantic prosody can only be collocational”.

Another distinction is the notion that connotation constitutes “peripheral”⁷⁰ or

⁶¹ Biber, D., Conrad, S., & Reppen, R. 1998. *Corpus Linguistics: Investigating Language Structure and Use*. New York: Cambridge University Press.

⁶² Dickins, J. 2019. Types of connotative meaning, and their significance for translation. In: Faiq, S, (ed.) *Discourse in Translation*. Routledge, Abingdon, Oxon, UK, pp. 135-162.

⁶³ Oxford Learner’s Dictionaries, https://www.oxfordlearnersdictionaries.com/definition/english/heart_1?q=heart accessed: 19.10.2024

⁶⁴ *ibid.* p. 135

⁶⁵ Whitsitt, S. 2005. ‘A critique of the concept of semantic prosody’. *International Journal of Corpus Linguistics*, 10/3: pp. 283–305.

⁶⁶ Partington, A. 1998. *Patterns and Meanings: Using Corpora for English Language Research and Teaching*. Amsterdam: John Benjamins.

⁶⁷ Hunston, S. 2002. *Corpora in Applied Linguistics*. Cambridge: Cambridge University Press

⁶⁸ Louw, B. 2000. ‘Contextual prosodic theory: bringing semantic prosodies to life’, in C. Heffer and H. Saunston (eds), *Words in Context: In Honour of John Sinclair*. Birmingham: ELR, pp. 48–94.

⁶⁹ McEnery, A., Xiao, R. and Tono, Y. 2006. *Corpus-based Language Studies: An Advanced Resource Book*. London and New York: Routledge.

⁷⁰ Yallop, C. 2004. ‘Words and meaning’, in M. Halliday, W. Teubert, C. Yallop and A. Čermáková, *Lexicology and Corpus Linguistics. An Introduction*. London and New York: Continuum, pp. 23–71.

“additional”⁷¹ meaning, whilst semantic prosody is presented as a “central part”⁷² of the meaning of a lexical unit.

Therefore, although both phenomena are connotative in nature, we advocate for disambiguating them on the basis of observability in the corpus data. The connotation of the word *HEART* can be “love” or “affection”, but a search using SKELL⁷³ will show no indication of such words amongst the collocates of it.

Interestingly, it shows that *HEART* sometimes occurs more often in negative contexts than in positive ones. For instance, it is more likely to be found in the company of a verb *BREAK* (e.g., “Her heart is broken and burning inside.” — 1.05 results per million) than *TOUCH* (e.g., “My heart is touched by this story.” — 0.26 results per million) or *WARM* (e.g., My heart is warmed by her response. — 0.13 results per million). However, before one could say that *HEART* has a negative semantic prosody, it would have to be examined in greater detail.

3.3.4 Semantic Preference

Semantic preference is yet another term, which, although related to semantic prosody, should not be mistaken with it.

Sinclair lays the groundwork for disambiguating these concepts in his model of lexical item (where he also sets them apart from connotation and colligation)⁷⁴. According to this model, “semantic prosody (...) is attitudinal, and on the pragmatic side of the semantics/pragmatics continuum”, while semantic preference is the association of a lexical item with a semantic field that it pertains to, which “captures more of the patterning than the other(...)” concepts, such as connotation or colligation. He ascribes the lexical item *NAKED EYE* with a semantic preference of “visibility” (due to collocates such as: *APPARENT, EVIDENT, OBVIOUS, UNDETECTABLE*) and semantic prosody of “difficulty” (due to co-occurrences of *BARELY, RARELY, JUST* with *VISIBLE*).

As Stubbs pointed out⁷⁵, Sinclair’s model fits well with Morris’ 1938⁷⁶ distinction of syntax, semantics, and pragmatics. His definitions of collocation and connotation correspond to the category of syntax, semantic preference pertains to semantics, and semantic prosody is related to pragmatics.

Stubbs defined semantic preference as “the relation, not between individual words, but between a lemma or word form and a set of semantically related words”⁷⁷. In his 2001 work, he described semantic preference of the lemma *LARGE*, which in more than 25% of occurrences was found in the company of words describing “quantities and sizes”, eg.,

⁷¹ Lyons, J. 1977. *Semantics*. Cambridge: Cambridge University Press. Mahlberg, M. 2005. *English General Nouns: A Corpus Theoretical Approach*. Amsterdam: John Benjamins.

⁷² Sinclair, J. 1998. ‘The lexical item’, in E. Weigand (ed.), *Contrastive Lexical Semantics*. Amsterdam: John Benjamins, pp. 1–24

⁷³ <https://skell.sketchengine.eu/#result?f=wordsketch&lang=en&query=heart> accessed: 5.11.2024

⁷⁴ Sinclair, J. 1996. ‘The search for units of meaning’. *Textus*, 9: pp. 75–106.

⁷⁵ Stubbs, M. 2007. ‘Quantitative data on multi-word sequences in English: the case of the word world’, in M. Hoey, M. Mahlberg, M. Stubbs and W. Teubert, *Text, Discourse and Corpora: Theory and Analysis*. London and New York: Continuum, pp. 163–189.

⁷⁶ Morris, C.W. 1938. ‘Foundations of the theory of signs’, in O. Neurath, R. Carnap and C.W. Morris (eds), *International Encyclopedia of Unified Science*. Chicago: Chicago University Press

⁷⁷ Stubbs, Michael. 2001. *Words and Phrases: Corpus Studies of Lexical Semantics*. Oxford: Blackwell.

numbers.

We can conclude that semantic preference is a matter of semantic similarity (semantics) of co-occurring lexical items, whilst semantic prosody is more related to the attitudinal and evaluative component of an utterance (pragmatics).

3.4 CONCLUSION OF CHAPTER 3

In this chapter we examined the nature and scope of semantic prosody, what was followed by a series of disambiguations and definitions. The rationale for providing such descriptions only in chapter 3 — what tends to be done much earlier on — is that without the appropriate introduction, and the chronological review, the necessity of such considerations would not be as clear.

We have examined whether all lexical items can have identifiable semantic prosody. While some researchers argue that prosody may not apply universally—suggesting it is absent or neutral in highly frequent words like articles (e.g., *THE*) — other studies (e.g., Cheng, Sinclair) assert that semantic prosody is universally identifiable but may require broader context (e.g., multi-word phrases).

In defining the scope, we outline that semantic prosody can apply to both individual words (e.g., "CAUSE") and complex units (e.g., "SYMPTOMATIC OF"), justifying the need to consider "lexical units" as the scope of prosodic analysis. The nature of semantic prosody is framed as a "feature" in language, given its utility in second-language teaching, which deviates from literature where it is described as a meaning, process, phenomenon, or pattern. Finally, we differentiate related terms such as collocation, colligation, connotation, and semantic preference.

The next chapter is devoted to analyzing the claims of hiddenness and covertness in semantic prosody, as well as its inferability by language users.

4 INTUITION & THE HIDDEN ASPECT OF SEMANTIC PROSODY

One of the main premises of this thesis, as mentioned in the introduction, is that incorporating semantic prosody into L2 teaching can help learners gain insights into the natural, native-like understanding and communication in their target language.

For it to be true, we must prove that proficient speakers (or at least native speakers) have knowledge — *explicit* or *implicit* — of semantic prosodies in the said language.

In order to start these considerations, we will first look closely at the hidden aspect of semantic prosody, which for some (Tognini-Bonelli⁷⁸, Widdowson⁷⁹, Hunston⁸⁰, Bublitz⁸¹, Stubbs⁸²) is crucial to the phenomenon, and for some (Lewandowska-Tomaszczyk⁸³, Stempel⁸⁴) it is not an obligatory component.

Language acquisition requires the retention of extensive information, making memory a critical factor in learning, understanding, and using a language⁸⁵. In the context of language learning, memory is typically categorized into two well-established systems: explicit (or declarative) memory and implicit (procedural).

The explicit memory system, associated with the hippocampus and medial temporal lobe structures, is primarily responsible for the conscious acquisition, storage, and retrieval of factual knowledge⁸⁶. Learning within this system is deliberate and controlled, and its effects can often be observed relatively quickly⁸⁷; it leads to a type of knowledge that one is consciously aware of and can explain or verbalize⁸⁸.

In contrast, the implicit memory system, associated with the basal ganglia, is believed to support the unconscious acquisition and automation of both perceptual-motor and cognitive

⁷⁸ Tognini-Bonelli, E. 2004. 'Working with corpora: issues and insights', in C. Coffin, A. Hewings and K. O'Halloran (eds), *Applying English Grammar. Functional and Corpus Approaches*. London: Arnold

⁷⁹ Widdowson, H. 2000. 'On the limitations of linguistics applied'. *Applied Linguistics*, 21/1

⁸⁰ Hunston, S. 2002. *Corpora in Applied Linguistics*. Cambridge: Cambridge University Press.

⁸¹ Bublitz, W. 1996. 'Semantic prosody and cohesive company: somewhat predictable'. *Leuvense Bijdragen: Tijdschrift voor Germaanse Filologie*, 85/1–2

⁸² Stubbs, M. 1995. 'Collocations and semantic profiles. On the cause of the trouble with quantitative studies'. *Functions of Language*, 2/1: pp. 23–55.

⁸³ Lewandowska-Tomaszczyk, B. 1996. 'Cross-linguistic and language-specific aspects of semantic prosody'. *Language Sciences*, 18/1–2: pp. 153–178.

⁸⁴ Stempel, P. 2019. 'A Constructional Reanalysis of Semantic Prosody'. [Doctoral thesis, Rice University]

⁸⁵ Ullman, M. T. 2016. The declarative/procedural model. *Neurobiol. Lang.* pp. 953–968.

⁸⁶ Henke, K. 2010. A model for memory systems based on processing modes rather than consciousness. *Nat. Rev. Neurosci.* 11, pp. 523–532.

⁸⁷ Carey, S., and Bartlett, E. 1978. "Acquiring a single new word," in *Proceedings of the Stanford Child Language Conference* Vol. 15, Stanford, CA, pp. 17–29.

⁸⁸ Ellis, N. C. 2005. At the interface: Dynamic interactions of explicit and implicit language knowledge. *Studies in Second Language Acquisition*, 27(2), pp. 305–352.

skills⁸⁹. This type of learning is typically unconscious, requiring minimal effort and functioning largely automatically. However, it demands substantial time and repeated practice for effective learning to occur⁹⁰. Implicit knowledge refers to intuitive understanding that operates through automatic processing. While it is activated during performance, it cannot be consciously accessed or explicitly explained⁹¹.

Explicit instruction (or teaching) involves providing learners with explanations of rules as part of the teaching process. Implicit instruction, on the other hand, is free of any explanation or the provision of rules — it is aimed at exposing learners to the subject matter, putting them in charge of drawing conclusions and discovering new knowledge⁹². Some studies (e.g., Norris and Ortega's⁹³) have found that explicit instruction, which encompasses various classroom methods designed to draw learners' attention to linguistic structures and forms, tends to produce more favorable results compared to implicit instruction. However, it has been widely recognized that second language acquisition encompasses both explicit and implicit processes, with proficiency relying on a combination of explicit and implicit knowledge⁹⁴.

The question of the nature of the knowledge of semantic prosody is essential to its application into language pedagogy. If it turns out to be *only* a type of implicit, unconscious knowledge (intuition) then we ought to approach it differently in L2 teaching than if it were to constitute an explicit, conscious type of knowledge. If it were to be completely inaccessible, then the very rationale of teaching it would stand in question.

4.1 IS SEMANTIC PROSODY INFERRABLE?

In 1996, Lewandowska-Tomaszczyk writes that she “would see no reason (...) not to use the term semantic prosody for the cases when the semantic load of an item is quite explicit”⁹⁵. She exemplifies it on the lexical item *BENT ON*, which was described by Louw⁹⁶. She argues that its metaphorical meaning is “almost explicitly, negatively loaded”, and yet we can observe and analyze its semantic prosody in the corpus data. This hints at the fact that — at least in some instances — semantic prosody can be consciously inferrable. However, an array of researchers (as we present in this subchapter) claimed semantic prosody to be *only* conceivable through computer-assisted analysis of large corpora. Which view better reflects the linguistic reality?

⁸⁹ Ullman, M. T. 2004. Contributions of memory circuits to language: the declarative/procedural model. *Cognition* 92, pp. 231–270.

⁹⁰ Nicolson, R. I., Fawcett, A. J., Brookes, R. L., and Needle, J. 2010. Procedural learning and dyslexia. *Dyslexia* 16, pp. 194–212.

⁹¹ Dörnyei, Z. 2009. *The psychology of second language acquisition*. Oxford University Press

⁹² Kim, K. M., Godfroid, A. 2023. The interface of explicit and implicit second-language knowledge: A longitudinal study. *Bilingualism: Language and Cognition* 26, pp. 709–723

⁹³ Norris, J. M., and Ortega, L. 2001. Does type of instruction make a difference? Substantive findings from a meta-analytic review. *Lang. Learn.* 51, pp. 157–213.

⁹⁴ Ellis, R. 2005. Measuring implicit and explicit knowledge of a second language: A psychometric study. *Studies in Second Language Acquisition*, 27(2), pp. 141–172.

⁹⁵ Lewandowska-Tomaszczyk, B. 1996. ‘Cross-linguistic and language-specific aspects of semantic prosody’. *Language Sciences*, 18/1–2: p. 157

⁹⁶ Louw, B. 1993. ‘Irony in the text or insincerity in the writer? The diagnostic potential of semantic prosodies’, in M. Baker, G. Francis and E. Tognini-Bonelli (eds), *Text and Technology: In Honour of John Sinclair*. Amsterdam: John Benjamins, pp. 157–175

Also in 1996, Bublitz⁹⁷ affirms that, “intuitions about frequency and likelihood of co-occurrence are notoriously thin and not always accurate”⁹⁸. This point is further stressed by Stubbs, when he states that “attested data are required in collocational studies, since native speaker intuitions are not a reliable source of evidence”⁹⁹. Although his point of gathering evidence from corpora instead of relying on speaker’s reports is a praiseworthy scientific approach, he makes a claim of the inaccuracy of speaker’s intuition for which no empirical data is cited.

Tognini-Bonelli¹⁰⁰, references Louw’s¹⁰¹ claim that semantic prosody can disclose speakers’ attitudes even when they attempt to hide them, and proposes that “this lack of control suggests that semantic prosodies operate mainly subliminally and are not readily available to the speaker as discourse devices at the conscious level.” She later reaffirms this view, noting that “semantic prosodies are mainly engaged at the subconscious level.”

The covert nature is also present in Munday’s definition of semantic prosody. He claims that “semantic prosody refers to how what might be expected to be a semantically neutral form, such as the lemma 'cause', in fact tends to be used with words that give it a particular hue (negative in the case of cause)”¹⁰². In the words of Tognini-Bonelli, “this type of information had not been available to the linguist until the advent of corpora. It is the sheer quantity of the evidence that makes this kind of insight possible”¹⁰³. Similarly, Widdowson holds that semantic prosodies “do indeed reveal a reality about language usage which was hitherto not evident to its users”¹⁰⁴.

The citations from the previous paragraph point to the assumption that knowledge of semantic prosody is not evident and that information regarding it wasn’t available before technological advances of XX century. Yet, it is worth underlining, that this is not the same as to say that language users don’t have — at least, implicit — knowledge of semantic prosody. The scientific evidence might have not been available, or the information not formulated as such, but this does not exclude the possibility of awareness of it on the part of language users.

Similarly, Adolphs and Carter¹⁰⁵ claim that “semantic prosodies are difficult, if not impossible, to determine on the basis of intuition alone”. Their statement, although stressing the hardships it should pose to those who try to infer semantic prosodies without the help of corpora, points to the fact that it might be possible — at least to some extent. In a similar vein,

⁹⁷ Bublitz, W. 1996. ‘Semantic prosody and cohesive company: somewhat predictable’. *Leuvense Bijdragen: Tijdschrift voor Germaanse Filologie*, 85/1–2: p. 9

⁹⁸ *ibid.* p.23

⁹⁹ Stubbs, M. 1995. ‘Collocations and semantic profiles. On the cause of the trouble with quantitative studies’. *Functions of Language*, 2/1: p. 24.

¹⁰⁰ Tognini-Bonelli, E. 2001. *Corpus Linguistics at Work*. Amsterdam: John Benjamins. p. 112

¹⁰¹ Louw, B. 1993. ‘Irony in the text or insincerity in the writer? The diagnostic potential of semantic prosodies’, in M. Baker, G. Francis and E. Tognini-Bonelli (eds), *Text and Technology: In Honour of John Sinclair*. Amsterdam: John Benjamins, pp. 169-171.

¹⁰² Munday, J. Forthcoming. ‘Looming large: a cross-linguistic analysis of semantic prosodies in comparable reference corpora’, in A. Kruger and K. Wallmach (eds), *Corpus-based Translation Studies: Research and Applications*, Manchester: St Jerome

¹⁰³ Tognini-Bonelli, E. 2004. ‘Working with corpora: issues and insights’, in C. Coffin, A. Hewings and K. O’Halloran (eds), *Applying English Grammar. Functional and Corpus Approaches*. London: Arnold, p.20.

¹⁰⁴ Widdowson, H. 2000. ‘On the limitations of linguistics applied’. *Applied Linguistics*, 21/1: p. 6

¹⁰⁵ Adolphs, S. and Carter, R. 2002. ‘Points of view and semantic prosodies in Virginia Woolf’s *To the Lighthouse*’. *Poetica*, 58: p. 7

Partington distinguishes semantic prosody as “much less evident to the naked eye”¹⁰⁶ in comparison to connotations. He acknowledges the hidden aspect of it, while — shall our interpretation be correct — hints at the possibility of it being inferrable.

Hunston and Thompson¹⁰⁷ write that in the case of semantic prosodies “the given word takes on an association with the positive, or, more usually, the negative, and this association can be exploited by speakers to express evaluative meaning covertly”. This poses semantic prosody as usable in expression, which suggests that there must be a way in which the addressee is able to receive and decode the covert message. Therefore, semantic prosody should be at least implicitly known by speakers and one could argue, that if it can be “exploited” it must be consciously accessible.

Moreover, Hoffmann notes that “several studies [on introspection] have shown that judgments elicited via carefully constructed experiments are in fact intra- and inter-subject consistent”¹⁰⁸. Interestingly, he presents a study on preposition placement, for which he claims that combining both the results of introspective studies and corpus data has allowed for insights “well beyond what the two data sources would have allowed individually”. In Hoffmann’s view, speakers not only are able to infer semantic prosodies, but he also poses it as an insightful research tool.

In the light of cited studies, we can contend that language users — contrarily to early descriptions of semantic prosody — do have, at least, unconscious, subliminal knowledge of semantic prosody. The next subchapter offers more considerations of this topic.

4.2 KNOWLEDGE OF SEMANTIC PROSODY — IMPLICIT OR EXPLICIT?

Ellis and Frey¹⁰⁹ found that affective priming — a phenomenon leading to a higher accuracy and shorter processing time for judgements of attitudinal lexis — is influenced by semantic prosody. This means that “language users are sensitive to semantic prosody in their language processing”, suggesting underlining implicit processing.

Similarly, Hauser and Schwarz’s experiments show that semantic prosody affects:

- (i) interpretation of ambiguous (containing a nonsense word as a key lexical item) sentences¹¹⁰, and
- (ii) judgments language users make about outcomes and subjects of actions^{111 112}.

¹⁰⁶ Partington, A. 2004. “‘Utterly content in each other’s company’: semantic prosody and semantic preference”. *International Journal of Corpus Linguistics*, 9/1: pp. 131-132.

¹⁰⁷ Hunston, S. and Thompson, G. (eds). 1999. *Evaluation in Text: Authorial Stance and the Construction of Discourse*. Oxford: Oxford University Press. p. 38

¹⁰⁸ Hoffmann, T. 2006. ‘Corpora and introspection as corroborating evidence: the case of preposition placement in English relative clauses’. *Corpus Linguistics and Linguistic Theory*, 2/2: p. 167

¹⁰⁹ Ellis, N. C., Frey, E. 2009. The psycholinguistic reality of collocation and semantic prosody (2): Affective priming. In Corrigan, R., editor, *Formulaic language, Volume: Acquisition, loss, psychological reality, and functional explanations*, volume 83 of *Typological studies in language*, pp. 473–497. John Benjamins.

¹¹⁰ Hauser, D. J. and Schwarz, N. 2016. Semantic prosody and judgment. *Journal of Experimental Psychology: General*, 145(7): pp. 882–896.

¹¹¹ *ibid.*

¹¹² Hauser, D. J. and Schwarz, N. 2018. How seemingly innocuous words can bias judgment: Semantic prosody and impression formation. *Journal of Experimental Social Psychology*, 75: pp. 11–18.

All these findings hint at the possibility of speakers having a certain extent of implicit knowledge of semantic prosody, which they are able to subconsciously process.

Louw¹¹³ has looked at how semantic prosody can be used to convey irony. Louw points to the fact that irony is based on inconsistency of one's utterance with how words are used generally. He calls it a "collocative clash". He notes that "in order for a potential collocative clash to attract the ironist's interest, there must be a sufficiently consistent background of expected collocation against which the instantiation of irony becomes possible". Therefore, language users should have a way of (i) imbuing an utterance with some prosodic inconsistency, (ii) decoding such an inconsistency in the language production of the others. The first notion hints at explicit knowledge of semantic prosody and the second points to, at least, implicit knowledge.

Interestingly, Louw also hypothesized that when these utterances are not meant as irony, they might reveal a hidden attitude of a speaker/writer. His line of argumentation is that they cannot be a simple slip-of-the-tongue "when we consider the extent to which the evidence in corpora suggests that they are indicative of something other than this"¹¹⁴. In our view, this conclusion is too far-reaching — psycholinguistic studies reveal (see e.g., Goldrick¹¹⁵) that errors tell us more about the organization of mental lexicon (connecting lexical items that are semantically, phonologically, and otherwise, similar) than reveal hidden intentions. However, it does point to the fact that some knowledge of semantic prosody must be accessible to the producer (and addressee) of an utterance, since language users notice its peculiarity. It is worth mentioning here that Burgers & Schellens¹¹⁶ introduced the verbal irony procedure (VIP) which is a method of recognizing irony that uses the evaluative mismatch between lexical items (for which semantic prosody proves to be a useful tool).

Partington notes that the knowledge of the patterns of lexical co-occurrence, although perhaps not "conscious or explicitly recollectable (...) remain part of our communicative competence"¹¹⁷. Semantic prosody is one of such patterns. Similarly, Widdowson¹¹⁸ observes that "there are frequencies of words, and regular patterns of collocational occurrence, which users are unaware of, though they must be part of their competence in a procedural sense since they would not otherwise be attested."

In Nordquist's 2004 study¹¹⁹, participants were asked to use the word *CAUSE* in three sentences. The aim was to verify if they are able to access knowledge of its negative semantic prosody, without other contextual hints. Indeed, she found that 70% of produced sentences contained negative evaluations, showing that knowledge of semantic prosody is retrievable

¹¹³ Louw, B. 1993. 'Irony in the text or insincerity in the writer? The diagnostic potential of semantic prosodies', in M. Baker, G. Francis and E. Tognini-Bonelli (eds), *Text and Technology: In Honour of John Sinclair*. Amsterdam: John Benjamins, pp. 157–175.

¹¹⁴ *ibid.* 43

¹¹⁵ Goldrick, M. 2011. Linking Speech Errors and Generative Phonological Theory. *Language and Linguistics Compass*, 5(6): pp. 397-412.

¹¹⁶ Burgers, C., van mulken, M., and Schellens, P. 2011. Finding irony: An introduction of the verbal irony procedure (vip). *Metaphor and Symbol*, 26: pp.186–205.

¹¹⁷ Partington, A. 2004. "'Utterly content in each other's company': semantic prosody and semantic preference'. *International Journal of Corpus Linguistics*, 9/1: p. 132.

¹¹⁸ Widdowson, H. 2000. 'On the limitations of linguistics applied'. *Applied Linguistics*, 21/1: pp. 3–25.

¹¹⁹ Nordquist, D. 2004. Comparing elicited data and corpora. In Achard, M. and Kemmer, S., editors, *Language, culture and mind*, pp. 211–224.

outside the context. This suggests that semantic prosody is indeed a feature pertaining to a lexical item, rather than a byproduct of contextual patterning, and that language users have a better understanding of it than it was previously assumed. Similar results were found by McGee¹²⁰ who investigated the knowledge of semantic prosody among learners of English. Participants were asked to produce three sentences with items *BRING ABOUT*, *TO CAUSE*, *COMPLETELY*, *TO FACE*, *TO PROVIDE*, *REGIME*. As it turned out, they were able to provide examples of sentences matching the semantic prosodies found in the corpus data.

When analyzing soon-to-be translators' awareness of semantic prosody, Dam-Jensen and Zethsen¹²¹ found that most of them were indeed able to use lexical items *TO CAUSE* and *TO LEAD TO* with a high level of accordance with the findings from corpora. Therefore, they must have access to implicit knowledge of semantic prosody. Moreover, researchers found that a small group of trainee translators (at an earlier educational stage) had consistently chosen an incorrect verb, which suggest varying levels of awareness of SP along their professional training. This points to the rationale of introducing semantic prosody into L2 teaching, which we will further elaborate in chapters 9 and 10.

One could go even hypothesize that, as noted by Whitsitt, the intuition “is the very thing that makes a corpus possible, for it is surely the collection of people’s intuitive use of language that makes it possible for a corpus to contain ‘real’ language”¹²². In other words, there is merit in saying that computational methods of corpus linguistic only now reveal what was accessible to language users all along. What is then the origin of the notion of hiddenness?

As recognized by Stewart, “the idea that semantic prosody is scarcely accessible to introspection appears itself to be the result of an introspection” with reference to Biber and Conrad’s article¹²³, where they infer this “widely-held intuition” of English language users, without providing any data that would support their view. It is safe to say that in the light of studies mentioned in this subsection, language users have a better implicit understanding of semantic prosody, than it was previously assumed by the literature. However, the question remains, what can be said about explicit knowledge?

The majority of research seems to point to the implicit character of the knowledge of semantic prosody. However, a study conducted by Stempel¹²⁴, tested the hypothesis of whether language users are able to access knowledge of semantic prosody in an explicit way. In his study, 17 native American English speakers were shown 55 linguistic items (either words or larger units) and were asked to assess if these items were more likely to be found in positive or negative evaluative contexts. Participants were supposed to quantify their assessments using a Likert scale (from 1 to 7), where 1 stood for “maximally negative”, 4 “completely neutral” and 7 “maximally positive”. Items were presented in random order, one

¹²⁰ McGee, I. 2012. Should we teach semantic prosody awareness? *RELC Journal*, 43(2): pp. 169–186.

¹²¹ Dam-Jensen, H., Zethsen, K.K. 2008. Translator awareness of semantic prosodies. *Target-international Journal of Translation Studies*, 20(2): pp. 203-221.

¹²² Whitsitt, S. 2005. ‘A critique of the concept of semantic prosody’. *International Journal of Corpus Linguistics*, 10/3: p. 294.

¹²³ Biber, D. and Conrad, S. 2004. ‘Corpus-based comparisons of register’, in C. Coffin, A. Hewings and K. O’Halloran (eds), *Applying English Grammar. Functional and Corpus Approaches*. London: Arnold, pp.40–56.

¹²⁴ Stempel, P. 2019. ‘A Constructional Reanalysis of Semantic Prosody’. [Doctoral thesis, Rice University], pp.211-230

by one, and answers could only be given after a forced 4-second delay and no upper limit of time — which was supposed to encourage reflection. Next, Stempel compared these scores with three different measures which were created based on statistical metrics used in corpus linguistics (e.g., valence score of collexeme types or tokens).

His results were the following:

- (i) “speakers generally possessed better explicit knowledge of semantic prosody than assumed in the prior literature”,
- (ii) although speakers usually recognized semantic prosodies correctly, for some items they underestimated the degree to which they occur in negative contexts — for instance, the verb *TO CAUSE*, was rated as only moderately negative while — according to measures adopted by Stempel and previous studies of this verb — it is overwhelmingly negative,
- (iii) words which are generally used more often were assessed with greater accuracy than less frequently occurring ones — which is in line with frequency effect recognized by Forster (we will elaborate it in the subsection 10.3),
- (iv) “semantic prosody is often not hidden; at best it is invisible in a few rare cases”.

These findings confirm the hypothesis that language users have explicit knowledge of semantic prosody, and they are able to use it in language production and comprehension.

Relevantly to our considerations, Guo et al.¹²⁵ find that speakers can acquire knowledge of semantic prosody through both incidental and intentional learning. As they show, knowledge of semantic prosody can not only be acquired through language immersion (which leads to subconscious, implicit knowledge) but also through training interventions (which expectedly contributes more to the “conscious acquisition”, i.e., explicit knowledge).

4.3 CONCLUSION OF CHAPTER 4

This chapter explores whether semantic prosody is accessible to language users and, if so, whether this knowledge is explicit or implicit. This is essential for L2 teaching, as understanding prosody could enhance learners’ natural communication skills.

The chapter begins by assessing the hidden nature of semantic prosody, with some scholars (e.g., Tognini-Bonelli, Stubbs) arguing that it operates subliminally, accessible only through corpus analysis, while others suggest that prosodic meanings are unconsciously processed (e.g., Partington, Whitsitt) or even consciously inferrable (e.g., Stempel, Guo).

Experimental studies are reviewed to determine if language users possess implicit or explicit knowledge of semantic prosody. Findings show that language users often process semantic prosody unconsciously, affecting interpretation and judgments. Some studies also provide evidence that speakers can consciously access and employ prosody patterns, especially with frequent or affectively charged lexical items.

We conclude that while semantic prosody may generally function at an unconscious level, language users demonstrate both implicit and explicit awareness of it. This notion

¹²⁵ Guo, X., Zheng, L., Zhu, L., Yang, Z., Chen, C., Zhang, L., Ma, W., Dienes, Z. 2011. Acquisition of conscious and unconscious knowledge of semantic prosody. *Consciousness and Cognition*, 20(2): pp. 417–425

supports the inclusion of prosody in L2 education, even more so since — as revealed in a Guo et al.'s study — prosodic intuition can be nurtured in L2 learners, both incidentally and explicitly.

The next chapter explores the evaluative load of semantic prosody, with specific reference to its description using the positive-negative polarity and other frameworks.

5 BEYOND POSITIVE-NEGATIVE POLARITY OF SEMANTIC PROSODY

Before we describe the topic of this chapter, we shall start with defining what does it mean for a lexical item to have attitudinal (or evaluative) load — since this is what the positive-negative polarity is trying to capture. Words “attitudinal” and “evaluative” are not entirely synonymous, however, we will use them interchangeably since — with regard to semantic prosody — they point to the same aspect of the phenomenon. We will presume that the evaluative load of lexis corresponds to speakers’ attitudes.

Allport defines attitude as “a learned disposition to think, feel and behave toward a person (or object) in a particular way”¹²⁶. This definition points to the fact that for a word to have “attitudinal” characteristic, it ought to express speaker’s thoughts or emotions that position him (figuratively) with some regard to what is being spoken about.

Sarnoff sees attitude as “a disposition to react favourably or unfavourably to a class of objects”¹²⁷. As we have seen in the chronological review, this favorable-unfavorable polarity reflects the ways in which semantic prosody has been described in the literature.

Arguably, most of the research on semantic prosody was conducted through the lens of the positive-negative polarity. Typically, researchers ascribe positive or (more often) negative semantic prosody to seemingly (or lexicographically) neutral terms — as this configuration of evaluative meaning can be said to be unapparent, less obvious. However, there are rare examples of examining clearly negative terms (see: Partington’s *RIFE*¹²⁸, Stubbs’ *RECKLESS*¹²⁹, and Tognini-Bonelli’s *FICKLE*¹³⁰).

It is possible nevertheless to find descriptions of semantic prosody that go beyond the positive-negative spectrum. In this chapter, we will examine these references and propose a unified view on the positive-negative polarity of semantic prosody. Before doing so, a few notes in parentheses are in order.

First is that although semantic prosody can be demonstrated via co-occurrences of lexical items, putting a name tag on the exact type of attitude/evaluation it represents, proves to be difficult to do in all due scientific rigor. It is so because these attitudinal/evaluative meanings are categorized based on individual, subjective interpretation of a researcher. As

¹²⁶ Allport, G. W. 1935. Attitudes. In C. M. Murchison (Ed.), *Handbook of Social Psychology*. Winchester, MA: Clark University Press.

¹²⁷ Sarnoff, I. 1970. Social attitudes and the resolution of motivational conflict. In M. Jahoda & N. Warren (Ed.), *Attitudes: Selected readings*. pp. 279–84.

¹²⁸ Partington, A. 1998. *Patterns and Meanings: Using Corpora for English Language Research and Teaching*. Amsterdam: John Benjamins p. 67

¹²⁹ Stubbs, M. 2001. *Words and Phrases: Corpus Studies of Lexical Semantics*. Oxford: Blackwell. p. 85

¹³⁰ Tognini-Bonelli, E. 2001. *Corpus Linguistics at Work*. Amsterdam: John Benjamins. pp. 19-21

Dominic Stewart pointed out in this regard, “what is one analyst’s meat is another analyst’s poison”¹³¹. In similar vein, Dilts and Newman comment that “the researcher is required to make evaluative judgements in the absence of a set of principled criteria to guide the evaluation. Terms such as ‘good’ or ‘bad’, ‘positive’ or ‘negative’ etc. are introduced at will and without much care taken to explain the basis for the judgement”¹³². It is in line with Appraisal theory, a crucial component of which states that individuals construe their own emotional (thus, evaluative) reactions with a degree of variance¹³³.

Similarly to the previous point, the second caveat is that true neutrality is a rather vague concept, and one can make the case for the argument that no word is neutral. From a philosophical standpoint, Ackerman¹³⁴ shows that being “neutral” can itself be seen as positive or negative depending on the context of the utterance. Moreover, recent studies on neutrality show that what has been considered neutral might be more nuanced, and sometimes not neutral at all (see: Anvari et al.¹³⁵ and Colhon et al.¹³⁶).

Furthermore, as it was described in section 3.3.4, the concept of semantic preference is similar to semantic prosody, with the differentiating factor of the attitudinal/evaluative dimension of the latter, and co-occurring with specific semantic sets of the former. The more specifically the evaluative load of a word is described, the more it might gain the characteristic of semantic preference (which would exceed the scope of this dissertation). For instance, the semantic prosody of “difficulty” that was ascribed to the item *NAKED EYE* by Sinclair could be easily mistaken for semantic preference, co-occurrence of semantic fields connected with hardships in undertaking an action. Moreover, the term “difficulty” is less clear in its evaluative dimension than, for instance, the term “negative”. The attitude towards difficulty can be different among people. For some it might be a motivating force, leaning it towards the positive evaluation, and for other a painstaking challenge. Again, we return to one of the points from Appraisal Theory mentioned in the penultimate paragraph.

Having said all of that, we would like to argue that attempts at specifying the exact type of evaluation semantic prosody represents can be propitious to the learners’ understanding of it (e.g., due to the active engagement with the topic during a process of such specification), therefore we will explore more granular approaches as well. Moreover, extending the degree of granularity in describing the evaluative load of SP provides more basis for comparison — a task we shall undertake in chapter 8.

Interestingly, it is a rare occurrence in the literature, but some words have been shown to have both positive and negative semantic prosodies. In Lin & Chung’s study¹³⁷, they analyzed the word *CHALLENGE*. They found that, depending on the syntactic structure it was

¹³¹ Stewart D. 2010. ‘Semantic Prosody A Critical Evaluation’. Routledge Advances in Corpus Linguistics. p.91

¹³² Dilts, P. and Newman, J. 2006. ‘A note on quantifying “good” and “bad” prosodies’. *Corpus Linguistics and Linguistic Theory*, 2/2: pp. 233–242.

¹³³ Smith, Craig A. & Lazarus, Richard S. 1990.. Chapter 23. Emotion and Adaptation. In L.A. Pervin (Ed.). *Handbook of Personality: Theory and Research*. pp. 609-637. New York: Guilford.

¹³⁴ Bruce, Ackerman. .1983. 3. What is Neutral about Neutrality. *Ethics*

¹³⁵ Anvari F., Bachmann J., Sanchez-Burks J., Schneider. I.K. (2023). Is “Neutral” Really Neutral? Mid-point Ratings in the Affective Norms English Words (ANEW) May Mask Ambivalence. *Collabra*, 9(1)

¹³⁶ Colhon, Mihaela & Vlăduțescu, Ștefan & Negrea, Xenia. 2017. How Objective a Neutral Word Is? A Neutrosophic Approach for the Objectivity Degrees of Neutral Words. *Symmetry*.

¹³⁷ Lin, Y., Chung S. 2016. A corpus-based study on the semantic prosody of challenge. 13(2): pp. 99-146.

used in, it displayed either negative (adjective + *CHALLENGE*) or positive (*CHALLENGE* + noun) semantic prosody. It raises an issue of generalizing the overarching evaluative load for such lexical items, and points to *construction grammar (CxG)*¹³⁸ as perhaps a more accurate way of analyzing languages.

One last note before we begin the review. In linguistics, the terms positive (affirmative) and negative can also be used to refer to grammatical polarity, as in *JIM IS HERE* and *JIM IS NOT HERE*. Any time we use these words, or cite any other researchers who did so, we refer to it exclusively in the evaluative/attitudinal sense.

5.1 POSITIVE-NEUTRAL-NEGATIVE

In order to provide a background for the upcoming considerations, we would like to reiterate Munday's definition: "semantic prosody refers to how what might be expected to be a semantically neutral form, such as the lemma *cause*, in fact tends to be used with words that give it a particular hue (negative in the case of *cause*)"¹³⁹. This exemplifies researchers' general interest in the cases when corpus data reveals an evaluative load of a lexical item, which would otherwise be seen as deprived of one.

Indeed, many canonical examples — canonical in the sense they have been recognized long time ago and revisited by many researchers — include words that are connected with neutral semantic groups: happen-words (*TO HAPPEN, TO OCCUR, BRING ABOUT*), action-words (*TO COMMIT, TO UNDERGO, TO PROVIDE*), or degree adverbs (*SOMEWHAT, UTTERLY, COMPLETELY*).

This state of affairs could suggest that words that possess a clearly evaluative meaning (described as "attitudinal lexis"), are by definition incapable of carrying semantic prosody — as their core meaning¹⁴⁰ is already evaluative. However, more clearly negative words have also been described, e.g., *RIFE*¹⁴¹, *FICKLE*¹⁴², *RECKLESS*¹⁴³, as shown in the introduction to this section.

When Channell¹⁴⁴ analyzes the co-occurrences of *FAT* and *SELF-IMPORTANT*, two clearly negatively evaluative words, she finds evidence for their negative semantic prosody (*FAT* collocates with *OLD, SLOB, POMPOUS*, and *SELF-IMPORTANT* co-occurs with *INSINCERE, BLOATED, ALARMINGLY*). The author points out that clustering of negative items is well-spread across written and spoken language, forming a "web of negative words"¹⁴⁵.

¹³⁸ Goldberg, A. 2006. *Constructions at Work: The Nature of Generalization in Language*. New York: Oxford University Press. pp. 5–10.

¹³⁹ Munday, J. Forthcoming. 'Looming large: a cross-linguistic analysis of semantic prosodies in comparable reference corpora', in A. Kruger and K. Wallmach (eds), *Corpus-based Translation Studies: Research and Applications*, Manchester: St Jerome

¹⁴⁰ Here we refer to Mahlberg's 2005 three-way model of evaluative meanings, consisting of: 1. core meaning, 2. collocational meaning or prosody, 3. textual meaning. Source: Mahlberg, M. 2005. *English General Nouns: A Corpus Theoretical Approach*. Amsterdam: John Benjamins.

¹⁴¹ Partington, A. 1998. *Patterns and Meanings: Using Corpora for English Language Research and Teaching*. Amsterdam: John Benjamins.

¹⁴² Tognini-Bonelli, E. 2001. *Corpus Linguistics at Work*. Amsterdam: John Benjamins.

¹⁴³ Stubbs, M. 2001. *Words and Phrases: Corpus Studies of Lexical Semantics*. Oxford: Blackwell.

¹⁴⁴ Channell, J. 1999. 'Corpus-based analysis of evaluative lexis', in S. Hunston and G. Thompson (eds), *Evaluation in Text: Authorial Stance and the Construction of Discourse*. Oxford: Oxford University Press, pp. 38–55.

¹⁴⁵ *ibid.* p.44

There are also cases of recognizing the negative semantic prosody for positive words. For instance, the positive lexical unit *TRUE FEELINGS* was characterized as having a negative prosody¹⁴⁶. Stubbs¹⁴⁷ and Tognini-Bonelli¹⁴⁸ have examined the word *PROPER* — whose denotative meaning points to positive evaluations — and ascribed it with a negative prosody.

There are other, arguably synonymous, words that are used to refer to this positive-negative polarity. Sinclair describes the collocates of the verb *SET IN* as referring to “unpleasant states of affairs”¹⁴⁹. Bublitz, when describing the evaluative aspect (“halo”, “profile” or “coloring”) of semantic prosody states that it “may be positive, pleasant and good, or else negative, unpleasant and bad” which shows a range of nearly-synonymous words that can be encountered in the literature on semantic prosody¹⁵⁰.

To this day, the positive-negative nomenclature stays in fact the most commonly adopted framework for describing evaluative load of semantic prosody (or evaluative meaning in general).

However, as we will argue in the future chapters, the usefulness of semantic prosody in L2 teaching lies also in learners’ subjective way of categorizing lexical items and ascribing more information to them. Therefore, in order to inspire individual exploration of the evaluative load of semantic prosody, we will now present other terminology that can be found in the literature.

5.2 OTHER FRAMEWORKS

Although, as stated in the previous subchapter, the negative-positive framework of semantic prosody is most commonly adopted, researchers have also used other terms to describe the evaluative aspect of it.

In the next subchapters, we will explore various ways of categorizing the evaluative and attitudinal profile of semantic prosody.

5.2.1 Appraisal Theory

The previously mentioned Appraisal Theory¹⁵¹, provides insights into ascribing the evaluative aspects of lexis (or semantic prosody for that matter). In literature, it is referred to as a linguistic system of meanings for evaluation — what language users deploy in construing meaning — and a framework of resources used to describe evaluation — a tool that linguists deploy to analyze text¹⁵². We will refer to it exclusively in the latter sense. As recognized by Burns et al.¹⁵³, the usefulness of this framework lies in precise measurement of what could be

¹⁴⁶ Sinclair, J. 1996. ‘The search for units of meaning’. *Textus*, 9: 75–106.

¹⁴⁷ Stubbs, M. 2001. *Words and Phrases: Corpus Studies of Lexical Semantics*. Oxford: Blackwell.

¹⁴⁸ Tognini-Bonelli, E. 2001. *Corpus Linguistics at Work*. Amsterdam: John Benjamins.

¹⁴⁹ Sinclair, J. 1991. *Corpus, Concordance, Collocation*. Oxford: Oxford University Press. pp.74-75

¹⁵⁰ Bublitz, W. 1996. ‘Semantic prosody and cohesive company: somewhat predictable’. *Leuvense Bijdragen: Tijdschrift voor Germaanse Filologie*, 85/1–2: p.9.

¹⁵¹ Martin, J. R., & White, P. R. R. 2005. *The Language of Evaluation*. New York: Palgrave.

¹⁵² Martin, J. R. 2017. The discourse semantics of attitudinal relations: Continuing the study of lexis. *Russian Journal of Linguistics*, 21(1), 22-47.

¹⁵³ Burns, A.R., Matarazzo, O., Abbamonte, L. 2014. *Corpus Linguistics and the Appraisal Framework for Retrieving Emotion and Stance – The Case of Samsung’s and Apple’s Facebook Pages*. In: Bassis, S., Esposito, A., Morabito, F. (eds)

otherwise intangible — namely, the description of the evaluative load of a lexical item.

The Appraisal theory deconstructs evaluation as consisting of:

- Attitude,
- Graduation, and
- Engagement.

Attitude, sometimes paraphrased as “ways of feeling”¹⁵⁴, can be further divided into *affect* (emotions), *judgment* (ethics) or *appreciation* (aesthetics). *Affect* encompasses emotional reactions (e.g., sadness, cheerfulness, anxiety). *Judgment* pertains to the evaluation based on the ability to comply with the social, moral, or legal standards (e.g., kindness, authority, corruption). Lastly, *appreciation* involves a broader assessment from an aesthetic perspective.

The second component of the Appraisal system, *graduation*, focuses on the modulation of attitude, either by intensifying or diminishing it. Here, two scales are brought up: *force* and *focus*. By means of intensification or quantification, attitudinal lexis can either upscale (*VERY, LARGELY*) or downscale (*SLIGHTLY, A FEW*) the force of the evaluative load. It is contrasted with focus, which, as the analogy to photography would suggest, can be sharpened (a *TRUE* friend) or softened (an apology *OF SORTS*).

The final system, *engagement*, comprises a range of resources that allow the speaker to convey their stance toward the evaluation and indicate whether it is open to negotiation (*heteroglossic*) or firmly stated (*monoglossic*). *Monoglossic* evaluations are presented as definitive and non-negotiable, allowing no room for alternative viewpoints or discussion (‘It is bad.’). *Heteroglossic* utterances recognize previous statements, potential alternative perspectives, and expected responses (‘*There can be no denying* it is bad.’). The heteroglossic example in the parenthesis could generate some confusion, as this statement is strong, in the sense that one could argue that no room for discussion was left there. However, the speaker of it, by the virtue of acknowledging that denying could be thought of, recognized the perspective of potential opposition.

5.2.2 Osgood’s Evaluative Scales & Dilts and Newman’s Quantitative Framework

In their 2008 article, Dilts and Newman¹⁵⁵ underlined the problem of subjective judgments of researchers regarding semantic prosody. They suggested “a method designed to eliminate the need for the researcher to be making their own evaluative judgments in assessing the positive or negative prosodies of words”. They used the framework of Osgood et al.¹⁵⁶ who list 76 antonymous pairs of adjectives which were said (by participants and researchers involved in the experiment) to encapsulate the whole spectrum of what adjectives could describe (or ‘semantic space of adjectives’): *good-bad, clean-dirty, kind-cruel* etc.

Recent Advances of Neural Network Models and Applications. Smart Innovation, Systems and Technologies, vol 26. Springer, Cham.

¹⁵⁴ Martin, J. R., & White, P. R. R. 2005. *The Language of Evaluation*. New York: Palgrave. p.42

¹⁵⁵ Dilts, P., Newman, J. 2006. A note on quantifying “good” and “bad” prosodies. *Corpus Linguistics and Linguistic Theory*. 2. pp. 233-242.

¹⁵⁶ Osgood, et al. 1957 *The Measurement of Meaning*. Urbana: University of Illinois Press.

Then, they asked participants to rate 20 lexical items (from 5 domains: *persons*, *objects*, *abstract concepts*, *events*, and *institutions*) on the scales comprised of these 76 pairs. Next, through a factorial analysis, they recognized 20 pairs which correlated best with the good-bad polarity, i.e., they accounted for the evaluative factor of their judgments.

The table below presents the 20 recognized pairs together with the correlation score.

Table 1. Top 20 adjective pairs with a value assigned in Osgood et al.'s study

Positive	Negative	Correlation with <i>good-bad</i>	Positive	Negative	Correlation with <i>good-bad</i>
good	bad	1.00	positive	negative	0.48
reputable	disreputable	0.68	high	low	0.45
wise	foolish	0.57	clean	dirty	0.45
beautiful	ugly	0.52	progressive	regressive	0.43
kind	cruel	0.52	sociable	unsociable	0.42
successful	unsuccessful	0.51	meaningful	meaningless	0.41
true	false	0.50	sober	drunk	0.40
harmonious	dissonant	0.49	interesting	boring	0.40
grateful	ungrateful	0.49	important	unimportant	0.38
sane	insane	0.48	believing	skeptical	0.38

What is arguably the most unexpected, is the relatively low correlation of *good-bad* with *positive-negative*. It might be due to the choice of the items assessed in the experiment, since it might be counterintuitive to assess, e.g., physical objects and institutions, as positive or negative. Osgood's findings provide another framework for deconstructing the positive-negative polarity of attitudinal lexis — 20 pairs that constitute 20 potential evaluative scales.

Dilts and Newman used these scales to propose a method for quantitative analysis of evaluative load of a noun. Below, we provide the formula that they used to calculate the prosodic score.

$$Prosody(n) = \sum_i [weight(adj_i) \times (\frac{p(adj_i, n)}{p(adj_i, n) + p(-adj_i, n)})]$$

For a noun under investigation, they used data such as the absolute frequency of a given adjective and noun pair, divided by the absolute frequency of this adjective, and different configurations of the correlation coefficients from Osgood's study. This allowed for a weighted quantification of the evaluative load of a noun, based on the adjectives that co-occurred with it in a L1 position. Nouns were ascribed a prosodic score, 19,97 being the

highest and -19,97 the lowest possible number. Below, we present 10 highest scoring positive and 10 lowest scoring negative nouns found in the BNC corpus:

Table. 2 Top 10 positive-prosody and top 10 negative-prosody words in the BNC corpus, as recognized by Dilts and Newman

Noun	Prosody Score	Number of Collocates	Noun	Prosody Score	Number of Collocates
support	7.64	31	joke	-3.26	16
government	6.78	33	grin	-3.19	13
home	6.31	30	jokes	-3.00	12
atmosphere	5.99	31	beast	-2.83	10
model	5.91	26	thoughts	-2.72	23
programme	5.90	26	mistakes	-2.72	9
study	5.83	26	laughter	-2.69	14
information	5.81	37	head	-2.68	32
function	5.80	21	shoulder	-2.44	13
performance	5.66	31	dreams	-2.43	16

As one can see, this provides a quantitative framework for consistent description and comparison of semantic prosodies of nouns.

Nonetheless, before we continue, a note is due. One might have an impression that, since such a study exists, linguists could once and for all abandon the subjective judgments of researchers and move towards such quantitative methods. However, the method proposed by Dilts and Newman has some considerable limitations. The biggest one is, as they acknowledge, the fact that “the method can only be used to measure prosodies of nouns”¹⁵⁷. Moreover, it takes into account only the adjectives in the L1 position of nouns (concordance first to the left from the node) as the basis of evaluation. Lastly, the number of adjectives (152) described in Osgood’s framework is far from a completely exhaustive list, and because of this, a lot of potential data points can be lost in the process of analysis.

Nevertheless, it is a good example of how similar methods could be constructed.

5.2.3 Bednarek’s Evaluative Parameters

In a 2008 study, Bednarek¹⁵⁸ compares ways in which evaluation has been analyzed in

¹⁵⁷ Dilts, P., Newman, J. 2006. A note on quantifying “good” and “bad” prosodies. *Corpus Linguistics and Linguistic Theory*. 2. p.240.

¹⁵⁸ Bednarek, M. 2008. “An increasingly familiar tragedy”. *Evaluative collocation and conflation*. *Functions of Language*, 15/1: pp. 7–34.

linguistics so far (reviewing works of Francis¹⁵⁹, Thompson and Hunston¹⁶⁰, Conrad and Biber¹⁶¹, Biber and Finegan¹⁶², Lemke¹⁶³) and proposes an integrated model consisting of 10 evaluative criteria.

She recognized 7 core evaluative parameters:

- comprehensibility,
- emotivity,
- expectedness,
- humorousness,
- importance,
- possibility/necessity, and
- reliability,

and 3 peripheral evaluative parameters:

- evidentiality,
- mental state, and
- style.

First, we will examine the core evaluative parameters. Comprehensibility is a type of evaluation which states that lexical items are either *comprehensible* (*CLEAR, PLAIN*) or *incomprehensible* (*UNCLEAR, MYSTERIOUS*). Emotivity is a parameter that corresponds the most to the positive-negative polarity: it can ascribe the *positive* (*A POLISHED SPEECH*) or *negative* (*A RANT*) evaluation. Expectedness accounts for *expected* (*INEVITABLY*) and *unexpected* (*ASTONISHING*) polarity but also can refer to *contrast* (*HOWEVER*) or *comparison* (*HARDLY*). Humorousness assess lexis either as *humorous* (*FUNNY*) or *serious* (*GRAVE*). Importance corresponds to *important* (*KEY, LANDMARK*) or *unimportant* (*MINOR, SLIGHTLY*) evaluations. *Possibility/necessity* (paired because of the grammatical character of such lexical items — namely, falling into the category of modal verbs) deems words *necessary* (*HAD TO*) or *unnecessary* (*NEED NOT*), and *possible* (*COULD*) or *impossible* (*COULD NOT*). The last one, reliability refers to *genuine* (*REAL*) and *fake* (*CHOREOGRAPHED*) polarity, as well as a 3-step scale of *low* (*MAY*), *medium* (*LIKELY*) and *high* (*WILL, BE TO*) dependability.

Peripheral evaluative parameters are different from the core ones in that instead of proposing antonymous scales (e.g., expected vs. unexpected), they consist of more granular and less clearly opposite “hues” of evaluation. Evidentiality consists of traits such as *hearsay* (*HE SAID* it was a lie), *mindsay* (well done — *HE THOUGHT*), *perception* (*SEEM*,

¹⁵⁹ Francis, G. 1995. Corpus-driven grammar and its relevance to the learning of English in a cross-cultural situation. Unpublished manuscript.

¹⁶⁰ Thompson, G. and Hunston, S. 2000. Evaluation: an introduction. In S. Hunston and G. Thompson (eds.), pp. 1-27.

¹⁶¹ Conrad, S. and Biber D., 2000. Adverbial marking of stance in speech and writing. In S. Hunston and G. Thompson (eds.), pp. 56-73.

¹⁶² Biber, D. and E. Finegan. 1988. Adverbial stance types in English. *Discourse processes* 11: pp. 1-34.

¹⁶³ Lemke, J.L. 1998. Resources for attitudinal meaning: evaluative orientations in text semantics. *Functions of language* 5.1: pp. 33-56

VISIBLY), *general knowledge (FAMOUSLY)*, *evidence (PROOF THAT)*, *unspecific (IT EMERGED THAT)*. Mental state hints at speaker's *belief (ACCEPT)* or *disbelief (DOUBT)*, *emotion (SCARED)*, *expectation (EXPECT)*, *knowledge (RECOGNIZE)*, *state-of-mind (ALERT)*, *process (PONDER)*, and *volition (DELIBERATELY)* and *non-volition (FORCED TO)*. Style involves the reference to either the self (*FRANKLY*) or the other (*THREATEN*).

As Bednarek stated in the final notes of her article, although for the analyzed corpus this framework seemed exhaustive, it should “be regarded as an open-ended approach”, there is still room for “the addition of more parameters as research into evaluation progresses”¹⁶⁴. In the next section, we will briefly mention other references to the evaluative aspect of semantic prosody in order to empower L2 learners and educators in their autonomous exploration and formulation of such parameters.

5.2.4 Other Evaluative Terms Found in the Literature

In this section, we present other ways in which the evaluative load of semantic prosody has been described. They are singular instances rather than complete frameworks, but — in our view — they point to the need of describing semantic prosody with more than just negative-positive polarity.

When analyzing *TRUE FEELINGS*, Sinclair¹⁶⁵ assigns it a prosody of “reluctance”. This lexical item tends to co-occur with expression such as *WILL NEVER REVEAL*, *PREVENTS ME FROM EXPRESSING*, or *LESS OPEN ABOUT SHOWING*. In the same work he examines *NAKED EYE* and ascribes it a semantic prosody of “difficulty”, due to collocates such as *BARELY VISIBLE TO* or *TOO FAINT TO BE SEEN WITH*. He also points to the association of *TO BROOK* with “authority”, since it tends to occur in constructions such as “we” [authority] + “will not brook (any)” + “[object]”.

In Cotterill’s analysis of the lexical co-occurrences of the item *CONTROL* in the opening arguments for the prosecution and the defense on trials, she points to the objects of control as representing “a danger or a negative influence of some kind”. However, it is worth mentioning that this interpretation has been criticized and — even if taken as valid — it is heavily influenced by the chosen corpus (an issue that we will examine closely in chapter 7 Register and Genre).

Both Stubbs¹⁶⁶ and Tognini-Bonelli¹⁶⁷ propose that the item *PROPER* should have a semantic prosody of “lack” or “absence”. It is claimed that it tends to comprise a part of a unit of meaning in which “complaint for the absence of something that we all think should be present or available”¹⁶⁸ is expressed.

As seen from this short subchapter, the need for a more granular description of semantic prosody can be found in the literature. What is the most relevant to our considerations, construing one’s own “feeling” of the evaluative load of lexical items is a

¹⁶⁴ Bednarek, M. 2008. “An increasingly familiar tragedy”. Evaluative collocation and conflation’. *Functions of Language*, 15/1: p.30

¹⁶⁵ Sinclair, J. 1996. ‘The search for units of meaning’. *Textus*, 9: pp. 75–106.

¹⁶⁶ Stubbs, M. 2001. *Words and Phrases: Corpus Studies of Lexical Semantics*. Oxford: Blackwell.

¹⁶⁷ Tognini-Bonelli, E. 2001. *Corpus Linguistics at Work*. Amsterdam: John Benjamins.

¹⁶⁸ *ibid.* p.110

crucial step in language learning, and these frameworks can serve as a hint to L2 learners and educators.

5.2.5 CONCLUSION OF CHAPTER 5

This chapter examined semantic prosody's attitudinal dimension, moving beyond the conventional positive-negative polarity.

Traditionally, researchers have categorized words as having positive or negative prosodies, yet the subjective nature of such classifications is often debated. We acknowledged that many studies focus on neutral words that display positive or negative meanings through context, together with some rare cases where clearly evaluative words — such as *RECKLESS* or *FICKLE* — were also analyzed.

Furthermore, we explored alternative frameworks that broaden the evaluative spectrum beyond positive and negative, such as Appraisal Theory, Osgood's evaluative scales, and Bednarek's evaluative parameters.

Finally, we suggest that a granular approach to evaluation can benefit language learners, as they actively engage with the subtleties of word meanings through personal interpretation.

6 SEMANTIC PROSODY ACROSS LANGUAGES

So far, we mostly examined semantic prosody from the perspective of the English language. The question arises, is semantic prosody different for near-synonyms across languages?

Since our main focus is the application of semantic prosody to L2 teaching, we shall now present the cross-linguistic studies in the aforementioned regard. Otherwise, one could argue that it should suffice one's investigative curiosity to, first, examine semantic prosody for a given lexical item and, next, use a translating tool to discover its counterpart in the target language.

As we will see, such strategy would not yield productive results. On the contrary, the very question of comparing near-synonyms can be aided by the comparison of, *inter alia*, their semantic prosodies — those for which a similar semantic prosody has been found should be presented to learners as “nearer” synonyms.

6.1 ABSOLUTE AND NEAR-SYNONYMY

The term “near-synonym” (as opposed to “synonym”) is widely adopted across linguistic literature, as a way of acknowledgement that — on account of their connotations, semantic prosody, semantic preference etc. — it is almost impossible for two words to have the exact same meaning. A term “plesionym” can also be met (“plesio”, coming from Ancient Greek πλησίον, stands for “near”).

Philosophers of language, such as Quine¹⁶⁹ and Goodman¹⁷⁰, have argued that absolute synonymy is impossible to find, by the virtue of the very definition of it. For a word to be perfectly synonymous, it would have to be the exact same word. In the words of Clark, “every two forms contrast in meaning”¹⁷¹.

It has been pointed out that absolute synonymy can only be found in dialectical variation of lexical items (*UNDERWEAR* in American English vs. *PANTS* in British English) or technical terms (*GROUNDHOG* vs. *WOODCHUCK*). However, one could easily make a case that even those, when substituted for each other, will account for at least a different style of an utterance¹⁷².

In the diachronic approach to near-synonyms, it is claimed that “natural languages abhor absolute synonyms just as nature abhors a vacuum” due to the constant changes that

¹⁶⁹ Quine, W. V. O. 1951. Two dogmas of empiricism. *Philosophical Review*, 60: pp. 20–43.

¹⁷⁰ Goodman, Nelson. 1952. On likeness of meaning. In L. Linsky, editor, *Semantics and the Philosophy of Language*. University of Illinois Press, pp. 67–74.

¹⁷¹ Clark, Eve V. 1992. Conventionality and contrast: Pragmatic principles with lexical consequences. In Adrienne Lehrer and Eva Fedder Kittay, editors, *Frames, Fields, and Contrasts: New Essays in Semantic and Lexical Organization*. Lawrence Erlbaum, pp. 171–188

¹⁷² Edmonds, P. Hirst, G. 2002. Near-Synonym and Lexical Choice. *Association for Computational Linguistics*

languages undergo¹⁷³. Two absolute synonyms, would either fall out of use or eventually develop a semantic or pragmatic difference. Cruse¹⁷⁴ also present a framework of dimensions for accounting for the difference in meaning of near-synonyms. He proposes that their variations are:

- denotational,
- stylistic,
- expressive, and/or
- structural.

Denotational variation refers to the core or propositional meaning of a lexical item. *Stylistic* variation can be accounted for on the basis of dialect and register. *Expressive* variation — perhaps the most relevant for our considerations of semantic prosody — include emotive and attitudinal differences. *Structural* variation refers to syntactic, selectional and collocational aspects, which are also related to semantic prosody, as the analysis of collocates constitutes the basis for discovering semantic prosody.

We will now explore the phenomenon of semantic prosody across languages, showing the degree of detail it provides to those wishing to differentiate near-synonyms with regard to their expressive variation.

6.2 CROSS-LINGUISTIC STUDIES OF SEMANTIC PROSODY

One crucial opening note is that it is not claimed that near-synonyms across languages always differ in their semantic prosodies.

Sometimes researchers reach surprisingly similar conclusions even between very distant languages. One such study was conducted by Xiao and McEnery in which they found a similar semantic prosody for near-synonyms in English and Chinese¹⁷⁵. They examined groups of near-synonyms centered around the following lexical items: *CONSEQUENCE*, *CAUSE*, *PRICE/COST*. They concluded that “the collocational behavior and semantic prosodies of near-synonyms are quite similar in the two languages”.

Xiao and McEnery’s findings are additionally relevant to this dissertation, since in the concluding section of their paper, they point to the necessity of further investigation of semantic prosody in the context of L2 teaching. They state that “learners must be made aware of the fact that collocation patterns and semantic prosodies can vary across text categories”. Specifically, they mention that they found a large difference between “general” and “technical or specialized” texts — another crucial notion which we will further elaborate in the next chapter.

¹⁷³ Cruse, D. Alan. 1986. *Lexical Semantics*. Cambridge University Press. p.270

¹⁷⁴ *ibid.*

¹⁷⁵ Xiao, Z. and McEnery, A. 2006. ‘Near synonymy, collocation and semantic prosody: a cross-linguistic perspective’. *Applied Linguistics*, 27/1: pp. 103–129.

Berber-Sardinha¹⁷⁶ has compared the semantic prosodies of near-synonyms across English and Portuguese. In some cases he found a similar semantic prosody (e.g., *COMMIT* vs. *COMETER*) whilst for others he found considerable differences (e.g., *SET IN* vs. *ESTABLECER-SE/MANIFESTAR-SE*). Similarly, Munday¹⁷⁷ finds analogous semantic prosody for some English and Spanish pairs (*CREAR* vs. *CREATE*, *CAUSAR* vs. *CAUSE*) but the comparison of lexical items *CERNERSE* and *LOOM LARGE*, has shown dissimilarities.

Partington¹⁷⁸ described the difference in prosodies among English *IMPRESSIVE*, which has generally positive semantic prosody, whilst the lexical environment of *IMPRESIONANTE* in Italian accounts for its negative prosody. Other examples from his work include *SANCTION* vs. *SANZIONARE* and *CORRECT* vs. *CORRETTO* which are also claimed to occur in largely different lexical surroundings. Interestingly, when Munday references Partington's article, he claims that these lexical pairs could be described as "a subtler variation on the old false cognate (faux ami) translation chestnut"¹⁷⁹. It is insightful, as the working definition of a false cognate (or false friend, as non-linguists usually call it) could be summarized as a term which looks similar but has a different meaning. Here, one could argue that the denotational (dictionary) meaning is the same — what is different is the evaluative load. This recognition posits semantic prosody as an essential component of meaning and further exemplifies its usefulness in, inter alia, language pedagogy.

Tognini-Bonelli¹⁸⁰ examined the difference in semantic prosody of English *REAL* and Italian *VERO*, and she concludes that although similar in the general sense, they do not show the same variation of their lexical environment.

Ebeling's¹⁸¹ analysis of semantic prosody of the verb *TO CAUSE* and its Norwegian counterpart *FORÅRSÅKE* has shown that, although in the case of English a negative semantic prosody has been repeatedly described, the prosody in Norwegian tends towards neutrality. A similar study conducted by Dam-Jensen & Zethsen¹⁸² of Danish-English pair of *FORÅRSÅGE* and *TO CAUSE* has on the other hand yielded consistent results — for both lexical items, the recognized semantic prosodies were negative. However, as the authors noted, a near-synonym of *FORÅRSÅGE* — namely, *MEDFØRE* — has also shown a negative semantic prosody, but not to the same degree.

Pornthip Supanfai¹⁸³ compared semantic prosodies between near-synonyms of English and Thai. For both */KÒCHÁYKÈÈT/* and *TO CAUSE* she found — in line with other studies

¹⁷⁶ Berber-Sardinha, T. 2000. 'Semantic prosodies in English and Portuguese: a contrastive study'. *Cuadernos de Filología Inglesa* (University of Murcia, Spain), 9/1: PP. 93–110

¹⁷⁷ Munday, J. 2013. Looming large: A cross-linguistic analysis of semantic prosodies in comparable reference corpora. In A. Kruger, K. Wallmach & J. Munday (Eds.), *Corpus-based translation studies: Research and applications*. pp. 169-186.

¹⁷⁸ Partington, A. 1998. *Patterns and Meanings: Using Corpora for English Language Research and Teaching*. Amsterdam: John Benjamins.

¹⁷⁹ Munday, J. 2013. Looming large: A cross-linguistic analysis of semantic prosodies in comparable reference corpora. In A. Kruger, K. Wallmach & J. Munday (Eds.), *Corpus-based translation studies: Research and applications*. p.172

¹⁸⁰ Tognini-Bonelli, E. 2001. *Corpus Linguistics at Work*. Amsterdam: John Benjamins.

¹⁸¹ Ebeling, Signe Oksefjell. 2013. Semantic prosody in a cross-linguistic perspective. In Magnus Huber & Joybrato Mukherjee (eds.), *Corpus Linguistics and Variation in English: Focus on Non-Native Englishes*, vol. 13, online. *Studies in Variation, Contacts and Change in English*.

¹⁸² Dam-Jensen, H. & K.K. Zethsen. 2006. "Pragmatic patterns and the lexical system – A reassessment of evaluation in language". *Journal of Pragmatics* 39: pp.1608–1623.

¹⁸³ Supanfai P. 2017. *Semantic Prosody in Thai*. Thesis submitted for the degree of PhD Department of Linguistics and English Language Lancaster University. pp. 159-194

of such a pair across languages — a negative semantic prosody. She also compared /CHŌŌP/ and its English counterpart *TO LIKE*. The Thai word exhibited negative semantic prosody, whilst the English was placed on the border between neutral and positive.

Kübler and Volanschi¹⁸⁴ compared English *TO COMMIT* and French *COMMETTRE* in general language corpora, where they found consistently negative prosodies. They also analyzed *TO CAUSE* and *CAUSER* in earth science corpora — here the French item is claimed to maintain the negative prosody, whilst English tends towards neutrality.

In a study conducted by Jurko¹⁸⁵ between words meaning “to express orally” in English (*TO TELL, TO SAY, TO SPEAK, TO TALK*) and Slovene (*POVEDATI, PRAVITI, REČI, DEJATI, GOVORITI*) in the extended unit of meaning (ADV + V), an intricate interplay of hues of meaning is presented. It shows the complexity of the translation process, as well as underlines ways in which semantic prosody (and other corpus linguistics concepts) can aid the process of translation.

In a 2016 paper, Kotait contrasted collocational behavior and semantic prosody of *PRICE/COST* in English and *سعر/ثمن* in Arabic¹⁸⁶. She found considerable differences in the attitudinal load of these lexical items.

In Stempel’s¹⁸⁷ analysis of semantic prosody of *TO CAUSE* and 10 German candidates for its translation (*VERURSACHEN, FÜHREN ZU, ENTSTEHEN* etc.) he states that although on a general level all of them tend to co-occur with negative items, none of them meet sufficient criteria to be called a near-synonym of *TO CAUSE*. For instance, he notes that the collostructional analysis of these items shows that none of the German potential counterparts are as productive as *TO CAUSE*. Different constructions that the English verb appears in, are usually expressed using a different verb in German (e.g., *TO CAUSE* in the passive and transitive constructions corresponds best to *VERURSACHEN*).

Stempel concludes that “the finer the granularity of our analysis, the more details we find and the more opportunity for cross-linguistic differences we encounter”¹⁸⁸. This puts the cross-linguistic consideration into perspective. It would seem logical that when investigating semantic prosody, a different level of detail is advised for:

- (i) L2 learners (which could perhaps be further divided into levels of proficiency),
- (ii) translators,
- (iii) corpus linguists.

In the context of L2 teaching, perhaps a model in which a certain level of generality is maintained but the awareness of possible limitations and ways of more detailed investigation are taught, will suffice.

We will come back to this point in chapter 10, where we give recommendations for the incorporation of semantic prosody into L2 teaching.

¹⁸⁴ Kübler, Natalie & Volanschi, Alexandra. 2012. Semantic prosody and specialised translation, or how a lexico-grammatical theory of language can help with specialised translation.

¹⁸⁵ Jurko, P. 2021. Semantic Prosody in Translation: Slovene and English ADV-V combinations. *ELOPE: English Language Overseas Perspectives and Enquiries*, 18(1), pp.187-209.

¹⁸⁶ Kotait, R. M. M. 2016. On Translating Semantic Prosody: A Corpus-based Cognitive-Semantic Approach

¹⁸⁷ Stempel, P. 2019. ‘A Constructional Reanalysis of Semantic Prosody’. [Doctoral thesis, Rice University]

¹⁸⁸ *ibid.* pp. 272-273

6.3 CONCLUSION OF CHAPTER 6

This chapter investigated the concept of semantic prosody across languages, particularly regarding near-synonyms. Semantic prosody has been extensively studied, and the cross-linguistic approach reveals that near-synonyms often diverge in prosody across languages, challenging the assumption that translation alone can capture semantic nuances.

Studies comparing semantic prosodies across languages — such as English, Chinese, Portuguese, Spanish, and Thai — show mixed results. In some cases, near-synonyms align in attitudinal load; in others, they diverge significantly, impacting their appropriateness in different contexts.

Moreover, we emphasized that semantic prosody plays a crucial role in language pedagogy, as recognizing subtle shifts in attitudinal meaning can aid learners in distinguishing near-synonyms. Such awareness is valuable not only for language learners but also for translators and corpus linguists, who benefit from understanding the variability of semantic prosody across linguistic contexts.

7 REGISTER AND GENRE

Register and genre are two similar, yet distinct concepts, which have garnered considerable attention in the literature on semantic prosody. As mentioned by Swales in 1990, “it is only comparatively recently that genre has become disentangled from register”¹⁸⁹. However, even much more recent articles (e.g., Biber and Conrad in 2009¹⁹⁰) remind us that the distinction between the two is far from clear. What adds up to the confusion is the fact that some researchers (e.g., Hoey¹⁹¹) use the terms genre, register, domain without defining any of these terms.

Register refers to a specific style or form of language adapted to suit a particular purpose or communication context. The concept was introduced in by Halliday and Hasan¹⁹² within their framework of language as a form of social action. They define register as a “system of meaning that relates linguistic choices to the context of the situation”.

Genre on the other hand refers to a category or type of discourse characterized by specific conventions, structures, and purposes, often associated with particular social or cultural contexts (e.g., casual conversations, news articles, scientific reports etc.). Martin’s¹⁹³ definition of genre as a “staged, goal-directed, purposeful activity in which speakers engage as members of our culture” shows that in his understanding, this term encompasses register.

For the sake of clarity, we will summarize the interplay between these terms in the following way: when *language users* deploy a certain *register* in a certain written or spoken context and the entirety of this deployment becomes solidified as a *genre*. We see these terms as different facets of the same characteristic of semantic prosody. Therefore, especially when referring to its application into language pedagogy, we will use these terms to stress either shorter context/type of language production (register) and or the type of text (genre).

Biber and Conrad’s¹⁹⁴ approach to disambiguating register and genre was summarized by Main¹⁹⁵. They differentiate these terms on the basis of 4 defining characteristics:

- textual focus,
- linguistic characteristics,
- distribution of linguistic characteristics,
- interpretation.

¹⁸⁹ Swales, J. 1990. *Genre Analysis: English in academic and research settings*. Cambridge: Cambridge University Press.

¹⁹⁰ Biber, D. and Conrad, S. 2009. *Register, Genre, and Style*. Cambridge/New York: Cambridge University Press

¹⁹¹ Hoey, M. 2005. *Lexical Priming: A New Theory of Words and Language*. London and New York: Routledge.

¹⁹² Halliday, M.A.K., and R. Hasan. 1989. *Language, context and text: aspects of language in a social-semiotic perspective*. Geelong: Deakin University.

¹⁹³ Martin, J.R. 2001. *Language, Register and Genre*. In Burns, A. and C. Coffin (Eds). 2001. *Analysing English in a Global Context: a reader*. London: Routledge.

¹⁹⁴ Biber, D. and Conrad, S. 2009. *Register, Genre, and Style*. Cambridge/New York: Cambridge University Press.

¹⁹⁵ Main P.T. 2017. *A CORPUS-BASED STUDY OF THE EFFECTS OF COLLOCATION, PHRASEOLOGY, GRAMMATICAL PATTERNING, AND REGISTER ON SEMANTIC PROSODY*. The University of Birmingham

Textual focus refers to the volume of the source being analyzed. It can either be smaller samples of text (register) or complete texts (genre). From this we can draw a conclusion that in the former case our aim is to analyze lexico-grammatical features of lexical units, while the latter points to the analysis of “specialized expressions, rhetorical organization, formatting” of the entire text’s *linguistic characteristics*. The *distribution* of these linguistic characteristics is another disambiguating factor. When making claims for a register, the analyst should present a feature as “frequent and pervasive” in a given variety of texts, whilst the analysis of a genre usually points to a specific feature occurring once in a text (e.g., introduction). The last distinctive feature is *interpretation*. The characteristics of a register typically serve an important “communicative function”, while in genre they are associated with the text conventionally (e.g., expected format of Ph.D. thesis) but often not serving a specific function.

In the context of analyzing register and genre, authors (e.g., Flowerdew et al.¹⁹⁶) deploy the term *move* for describing functional units of a text (e.g., “introduction” or “results” sections in academic texts) and *step* as a more detailed, smaller tactic — as opposed to strategy, to use an analogy from chess — of a larger move (e.g., “providing information on the current literature” and “presenting the aim the study” in the introduction of a research paper).

An example of using genre analysis is the CARS (Create A Research Space) model. It was developed by John Swales¹⁹⁷ in 1990, and it is used to reverse-engineer the rhetorical structure of the introductions to the academic research articles. Swales' model provides insight into how scholars establish a context for their research, position their work within the existing body of knowledge, while also demonstrate its relevance. The model consists of 3 moves, each containing 3-to-4 different steps.

In Move 1 (Establishing a Territory), the writer introduces the topic by either claiming its importance, making general statements, or reviewing previous research. Move 2 (Establishing a Niche) identifies a gap in the literature through counter-claiming, indicating a gap, raising a question, or continuing a tradition. Finally, in Move 3 (Occupying the Niche), the writer outlines the purpose of the study, presents the research, summarizes key findings, or previews the structure of the article.

It has been recognized that, in the context of language pedagogy, the constructs of genre and register serve as valuable frameworks and can significantly enhance language acquisition through various pedagogical approaches¹⁹⁸. We will now provide an overview of the research of the effects of register and genre on semantic prosody to “set the stage” for the forthcoming recommendations of incorporating those into L2 teaching.

7.1 THE EFFECTS OF REGISTER AND GENRE ON LINGUISTIC FEATURES

Arguably the most often studied type of register and genre are academic papers and,

¹⁹⁶ Flowerdew, J. and Dudley-Evans, T. (2002) ‘Genre Analysis of Editorial Letters to International Journal Contributors’, *Applied Linguistics*, 23(4), p. 463–550.

¹⁹⁷ Swales, J. 1990. *Genre Analysis: English in academic and research settings*. Cambridge: Cambridge University Press.

¹⁹⁸ Painter, C. 2001. *Understanding Genre and Register. Implications for Language Teaching*. In Burns, A. and C. Coffin (Eds). 2001. *Analysing English in a Global Context: a reader*. London: Routledge.

interestingly, letter communication between people of academia. Therefore, most of the following examples will be based on such types of texts. Many of these articles also reference pedagogical implications, especially for L2 learners. It is in line with the main purpose of this thesis, namely applying the register-and-genre-specific semantic prosody to language pedagogy.

In 1994, Paltridge investigates whether linguistic factors can define moves within a genre, ultimately concluding that “structural divisions in texts” are marked by “cognitive boundaries in terms of convention, appropriacy, and content”, and that transitions between moves are not based on linguistic criteria.

In Paltridge's paper, *convention* refers to the established norms and expectations within a particular genre, guiding how content should be structured. *Appropriacy* relates to how well the text fits the context, audience, and purpose, ensuring that language use aligns with the situation. *Content* focuses on the subject matter itself, determining the relevance and coherence of the information presented within the genre's framework.

Flowerdew and Dudley-Evans¹⁹⁹ add an important claim to the discussion, namely that one should not “present a study that focuses on the moves that a writer uses without consideration of the role of the writer in the discourse community and the expectations of that community.” Their study of editorial letters sent to potential contributors of an academic journal specifically looks at language used to maintain positive relationships and prevent communication that could threaten the recipient's face. They analyzed personal pronouns, verbs like *TO THINK*, and politeness strategies such as using modal verbs and expressions like *SORRY* or *AFRAID*. Interestingly, they discover that while these strategies aim to soften communication for the letter's recipients, they often end up causing confusion for the readers.

In a similar vein, Hyon²⁰⁰ examines the evaluation process within the genre of university faculty tenure and promotion letters. Taking a lexical approach, she analyzes the frequencies of both negative and positive language (referring to its attitudinal load). Hyon finds that negative evaluations are frequently softened, indicating that preserving face and maintaining positive relationships between the evaluator and the faculty member are crucial factors.

Weizman²⁰¹ discovered that in Hebrew, quotation marks, along with other discourse markers, convey subtle nuances of the reporter's attitude across different discourse units. This study is relevant to teachers aiming to prevent errors in register or genre transfer in students' language production, as it shows, for instance, how improper usage of quotation marks can add evaluative load to certain lexical items.

Malcolm²⁰² highlights that writers in scientific articles face both "obligatory constraints" and "strategic choices" regarding verb tense. The main implications of his study

¹⁹⁹ Flowerdew, J. and Dudley-Evans, T. 2002. ‘Genre Analysis of Editorial Letters to International Journal Contributors’, *Applied Linguistics*, 23(4), p. 463-489+550.

²⁰⁰ Hyon, S. 2011. ‘Evaluation in Tenure and Promotion letters: Constructing Faculty as Communicators, Stars, and Workers’, *Applied Linguistics*, 32(4), pp. 3890-407.

²⁰¹ Weizman, E. 1984. ‘Some Register Characteristics of Journalistic Language: Are They Universals?’, *Applied Linguistics*, 5(1).

²⁰² Malcolm, L. 1987. ‘What rules govern tense usage in scientific articles?’, *English for Specific Purposes*, 6(1), pp. 31–43.

are pedagogical — Malcolm argues that simply memorizing a list of examples (of tense uses) is less effective than developing a broader understanding of how temporal references influence tense selection and serve specific rhetorical objectives. This is in line with our (upcoming) recommendation of introducing, not only specific semantic prosodies of lexical items, but also the very concept of semantic prosody into L2 teaching.

Thompson and Yiyun²⁰³ provide an initial classification of more than 400 reporting verbs found in academic writing, emphasizing how their usage in citations conveys evaluation. The primary objective of their work is also didactic — they start with “the simple aim of identifying a specific subset of the lexical items which [they] felt it would be useful for [their] students to know: namely, the verbs used in citations”²⁰⁴.

Thompson²⁰⁵ also analyzes the move structures found in literature reviews of Ph.D. theses, as well as the common nouns used within this subgenre. He specifically investigates the usage patterns of the nouns *evidence*, *problem*, and *model* to determine what makes the literature review a distinct (sub)genre and to identify strategies employed in these reviews. He finds that the writer's voice predominates in the text, even though literature reviews typically reference the work of other authors and researchers. Furthermore, he notes that these patterns differ among various academic disciplines.

Swales et al.²⁰⁶ offer an initial examination of the forms and functions of imperatives in scholarly articles across different disciplines. They find that imperative structures are commonly located in sections that present the main arguments of the paper, serving as intricate textual cues through which academic writers employ various rhetorical strategies. The main emphasis is put on educational implications, as many academic style guides offer limited or no advice to inexperienced and non-native English-speaking researchers and writers.

Hedging — the use of language to express uncertainty or to soften statements, often by using qualifiers or cautious terms (e.g., *MIGHT*, *PERHAPS*) — plays a significant role in various genres and registers. Hyland²⁰⁷ notes that hedges occur quite frequently in scientific writing, comprising more than one out of every fifty words in the corpus he analyzed. He examines the social and linguistic contexts and motivations for using different hedges, revealing considerable variation among them. Once again, his findings are focused on educational implications. Hyland asserts that the research article is a crucial genre within academic fields, and being familiar with its conventions, particularly the correct recognition and use of hedges, is essential for both novice first-language writers and, more importantly, for second-language learners.

The research on genre and register was also applied to non-native writing, in order to

²⁰³ Thompson, G. and Yiyun, Y. 1991. ‘Evaluation in the reporting verbs used in academic papers’, *Applied Linguistics*, 12(4), pp. 365–382

²⁰⁴ *ibid.* p.365

²⁰⁵ Thompson, P. 2009. *Literature Reviews in Applied PhD Theses: Evidence and Problems*, *Academic Evaluation: Review Genres in University Settings*. Edited by K. Hyland and G. Diani. Palgrave MacMillan.

²⁰⁶ Swales, J. et al. 1998. ‘Consider this: the role of imperatives in scholarly writing’, *Applied Linguistics*, 19(1), pp. 97–121.

²⁰⁷ Hyland, K. 1996. ‘Talking to the Academy: Forms of Hedging in Science Research Articles’, *Written Communication*, 13(2), pp. 251–281.

provide insights into L2 teaching. For instance, the study by Pu et al.²⁰⁸ analyzed the development of syntactic complexity in written essays created by Chinese EFL (English as a foreign language) learners over the span of 1 academic year. They found a statistically significant increase in syntactic complexity in both argumentative and expository essays, especially at the phrasal level (“coordination and particular structures”), with the former showing much greater syntactic complexity than the latter. Researchers comment that this confirms previous findings of genre-related differences within non-narrative writing (see: Beers & Nagy²⁰⁹, and Yoon and Polio²¹⁰).

We can conclude that register and genre influence different linguistic features, such as syntactic complexity, or lexical, grammatical, and orthographic choices. It was also mentioned that these characteristics sometimes account for a different evaluative interpretation of a given text. In the next section, we examine the effects that register and genre have on semantic prosody — an evaluative feature of lexical items.

7.2 THE EFFECTS OF REGISTER AND GENRE ON SEMANTIC PROSODY

A great many studies do not mention the dependence of semantic prosody on genre and/or register. Louw²¹¹ even makes a very strong claim that semantic prosody is not genre-/register specific. He claims that this phenomenon is a general linguistic feature, pertaining to a lexical item, and its analysis should yield consistent results across all types of language. However, as noted by Main²¹², this claim was “purely theoretical” (as opposed to empirical/corpus-based).

Moreover, findings on semantic prosody are often generalized to the entire corpora (or even languages), which are rarely homogenous when it comes to the genre. For instance, the BNC corpus²¹³ — often used in prosodic research — is composed of academic texts, official documents, newspapers, magazines, fiction writing, internet entries, and speech. Each of these categories could be divided into more specific subgenres. Would the analysis of semantic prosodies across those, yield consistent results? Below, we examine the literature of the studies which has provided insights into the topic.

Partington²¹⁴ claims that “research seems to show that it is highly likely that the quality and strength of the prosody of a good many items will differ from genre to genre or from domain to domain”. In his article, he proceeds to reference Stubbs’²¹⁵ 2001 study, in which it is stated that the adjective *LAVISH* typically carries a “neutral-to-good” prosody;

²⁰⁸ Pu, L., Heng, R., Cao C. 2022. The effects of genre on the syntactic complexity of argumentative and expository writing by Chinese EFL learners. *Frontiers in Psychology*.

²⁰⁹ Beers, S. F., and Nagy, W. E. 2011. Writing development in four genres from grades three to seven: syntactic complexity and genre differentiation. pp. 183–202

²¹⁰ Polio, C., and Yoon, H. J. 2018. The reliability and validity of automated tools for examining variation in syntactic complexity across genres. *Int. J. Appl. Linguist.* 28, pp. 165–188

²¹¹ Louw, B. 1993. ‘Irony in the text or insincerity in the writer? The diagnostic potential of semantic prosodies’, in Baker, M., Francis, G., and Tognini-Bonelli, E. (eds) *Text and Technology: In Honour of John Sinclair*. Amsterdam and Philadelphia: John Benjamins Publishing Company, pp. 157–176.

²¹² Main P.T. 2017. A CORPUS-BASED STUDY OF THE EFFECTS OF COLLOCATION, PHRASEOLOGY, GRAMMATICAL PATTERNING, AND REGISTER ON SEMANTIC PROSODY. The University of Birmingham. p.98

²¹³ Brezina, V., Gablasova, D. & Reichelt, S. 2018. BNClab. <http://corpora.lancs.ac.uk/bnclab> [electronic resource], Lancaster University.

²¹⁴ Partington, A. 2004. “‘Utterly content in each other’s company’: semantic prosody and semantic preference”. *International Journal of Corpus Linguistics*, 9/1: pp. 131–156.

²¹⁵ Stubbs, M. 2001. *Words and Phrases: Corpus Studies of Lexical Semantics*. Oxford: Blackwell.

however, in the context of journalism, its evaluative load is significantly more negative.

Cheng²¹⁶ identified prosodies within spoken discourse on the 2003 SARS crisis, using data from the Hong Kong Corpus of Spoken English. The study aimed to analyze the combined impact of regularly co-occurring lexical choices that shape meaning and coherence both within individual texts and across multiple texts. She concludes that her article “provides evidence that semantic prosody is both dynamic and text or genre-specific, as it has been shown that this is the case for a number of lexical items studied”. For instance, the item *HEALTH* has shown a prosody of “lacking”, which is claimed not to be observed in different genres.

Stubbs frequently highlights the specific lexical patterns of words within particular contexts. For instance, in his general corpus analysis²¹⁷, around 80% of the random concordance lines for *CHOPPED* stemmed from recipe sources, often appearing alongside culinary-associated words like *FINELY*, *FRESH*, *PARSLEY*, *ONION*, *GARLIC*, *TBSP*, and *TOMATOES*. The remaining 20% were found in other text types, where *CHOPPED* tended to collocate with prepositions like *OFF*, *UP*, and *DOWN*, some of which occurred in contexts involving human violence. This shows largely different semantic prosody of the item *CHOPPED* in the culinary and more general genres. Additionally, Stubbs observes that *UNDERGO* — which typically carries a negative tone — is generally neutral in scientific and technical writing. Similarly, Sinclair²¹⁸ contends that register serves as a limiting factor that directly influences lexical co-selection, noting that “once a register choice is made, and these are normally social choices, then all slot-by-slot choices are massively reduced in scope or even, in some cases, pre-empted.”

In his theory of lexical priming, Hoey²¹⁹ explains that “priming is genre and domain specific in the first instance, though there are many primings that apply across generic and domain boundaries”. Stubbs earlier findings account both for Hoey’s initial claim and its following disclaimer. In his 1995 article²²⁰, he finds that the negative semantic prosody of the lemma *CAUSE* is found across all genres of Lancaster-Oslo-Bergen Corpus. However in 2001²²¹, when he analyzes *UNDERGO* he notes that although the semantic prosody of this lexical item is generally negative, “in scientific and technical English, the word is usually neutral”.

In contrast with Stubbs’ claim about *CAUSE*, Hunston²²² suggests that the verb *TO CAUSE* may lose its negative connotation in scientific contexts. However, rather than fully exploring this idea, Hunston proposes that the attitudinal meaning of *TO CAUSE* is more likely to be observed in relation to animate beings, their actions, or objectives. According to him, in cases where the caused entity is inanimate and unrelated to human intentions, no

²¹⁶ Cheng, W. 2006. ‘Describing the extended meanings of lexical cohesion in a corpus of SARS spoken discourse’. *International Journal of Corpus Linguistics*, 11/3: pp. 325-344

²¹⁷ Stubbs, M. 2001. *Words and Phrases: Corpus Studies of Lexical Semantics*. Oxford: Blackwell.

²¹⁸ Sinclair, J. 1991. *Corpus, Concordance, Collocation*. Oxford: Oxford University Press.

²¹⁹ Hoey, M. 2005. *Lexical Priming: A New Theory of Words and Language*. London and New York: Routledge. p. 115

²²⁰ Stubbs, M. 1995. ‘Collocations and semantic profiles: On the cause of the trouble with quantitative studies’, *Functions of Language*, 2(1).

²²¹ Stubbs, M. 2001. *Words and phrases: Corpus studies of lexical semantics*. Oxford: Blackwell Publishing

²²² Hunston, S. 2007. ‘Semantic prosody revisited’, *International Journal of Corpus Linguistics*, 12(2), pp. 249–268.

attitudinal meaning is implied. Louw and Chateau²²³ seem to align with Hunston's view, suggesting that in scientific writing, the lack of a human element eliminates the need for negative connotations. They argue that the field of hard science operates in an impersonal realm of cause and effect, where human involvement is not a factor.

17 years after Louw's initial — we will go as far as to say, wrong — hypothesis regarding irrelevance of register and genre for the variation in semantic prosody, Louw and Chateau²²⁴ contend that the negative semantic prosodies associated with the lexical items *TO CAUSE*, *BRING ABOUT*, and *GIVE RISE TO* are “smoothed” in a corpus of writing from the “hard sciences”, meaning they primarily collocate with neutral rather than negative terms. They propose that one reason for this is that the verb *TO CAUSE* is challenging to substitute, as synonyms are often multi-word expressions rather than single words, and scientific writing typically favors single-word choices over phrasal or multi-word alternatives. Furthermore, they note that the methods and materials sections (a sub-genre of scientific research articles) frequently lack full contextual and situational details, which they argue contributes to shifting the prosody of *CAUSE* from negative to neutral.

Nelson²²⁵ analyzes semantic prosody within business English, focusing on terms like *COMPETITIVE*, *MARKET*, and *EXPORT*. He observes that, especially in specialized linguistic contexts, words tend to develop more fixed collocational patterns. He goes on to explain that words like *BIG*, usually collocationally flexible in general English, are more restricted in business contexts. Additionally, semantic prosody reveals how business professionals perceive language; for instance, *boss* in the Business English Corpus (BEC) is commonly associated with negative adjectives like *MEANEST* or *OLD-FASHIONED*, unlike *MANAGER*, which has neutral or positive associations. Nelson proposes that these findings “can now be transferred to the classroom as it can be of great value to both teachers and students alike”²²⁶.

Both Partington²²⁷ and Stubbs²²⁸ suggest that semantic prosodies, particularly negative ones, occur more often in newspaper reporting. In an earlier article, Partington²²⁹ recommends that it could be beneficial to start the analysis with the texts that are likely to amplify prosodic effects — such as newspapers, political discourse, and advertising — to identify potential examples and then further investigate them using corpus data. This notion posits these genres as a kind of environment in which certain prosodic effects should be more easily

²²³ Louw, B. and Chateau, C. 2010. ‘Semantic prosody for the 21st century: Are prosodies smoothed in academic context? A contextual prosodic theoretical perspective’, in *Statistical Analysis of Textual Data: Proceedings of the tenth JADT Conference*, pp. 754–764.

²²⁴ Louw, B. and Chateau, C. 2010. ‘Semantic prosody for the 21st century: Are prosodies smoothed in academic context? A contextual prosodic theoretical perspective’, in *Statistical Analysis of Textual Data: Proceedings of the tenth JADT Conference*, pp. 754–764.

²²⁵ Nelson, M. 2006. ‘Semantic associations in business English: a corpus-based analysis’. *English for Specific Purposes*, 25: 217–234.

²²⁶ *ibid.* p.233

²²⁷ Partington, A. 2004. “‘Utterly content in each other’s company’: Semantic prosody and semantic preference”, *International Journal of Corpus Linguistics*, 9(1), pp. 131–156.

²²⁸ Stubbs, M. 1995. ‘Collocations and semantic profiles: On the cause of the trouble with quantitative studies’, *Functions of Language*, 2(1).

²²⁹ Partington, A. 1998. *Patterns and Meanings: Using Corpora for English Language Research and Teaching*. Amsterdam/Philadelphia: John Benjamins Publishing Company.

recognizable. Shall this hypothesis prove right, the explorations of semantic prosody among L2 learners could be advised to start from those.

Tribble's²³⁰ work has brought forth the notion of “local prosodies” (as opposed to “global prosodies”), where “words in certain genres may establish local semantic prosodies which only occur in these genres, or analogues of these genres”. He proposed that “this linguistic feature merits attention, as it provides valuable local knowledge for authors working within a particular genre”. Building on this concept, Tribble identifies a specific local prosody for the term *EXPERIENCE* within a corpus composed of project proposals submitted to the European Union's PHARE program. There, he claims, *EXPERIENCE* predominantly refers to notions like office experience, work experience, and skills experience, contrasting with its broader application across other text types.

As seen from the previous research, lexical items sometimes exhibit variance in their semantic prosody, as compared between the whole corpus (global prosody) and specific genres (local prosody).

7.3 CONCLUSION OF CHAPTER 7

This summary marks a turning point in this dissertation.

So far, we have explored semantic prosody:

- from the historical perspective (chapter 2),
- with regard to its scope and nature (chapter 3),
- disambiguating it from similar corpus linguistic terms (subchapter 3.3),
- describing its hidden aspect and the topic of intuition (chapter 4),
- with regard to the ways in which its attitudinal load is described (chapter 5),
- across languages (chapter 6),
- examining its register- and genre-specific characteristics (chapter 7).

The main objective of this dissertation is providing a framework for incorporation of register-specific semantic prosody into L2 teaching. In order to summarize what we have previously described and facilitate the familiarization of semantic prosody on the part of non-linguists, we would like to offer a unified definition:

Semantic prosody is a phenomenon observed in lexical items (e.g., words or phrases). If the co-occurrences of such items (i.e., their surroundings) can be ascribed with an evaluative character (e.g., positive or negative), the item can be said to possess semantic prosody.

Semantic prosody can vary among near-synonymous words across languages. Moreover, a given lexical item can exhibit different semantic prosodies across various genres and registers.

Semantic prosody is best analyzed through the observation of the collocates of

²³⁰ Tribble, C. 2000. ‘Genres, keywords, teaching: towards a pedagogic account of the language of project proposals’, in L. Burnard and A. McEnery (eds), *Rethinking Language Pedagogy from a Corpus Perspective*. Papers from the third international conference on Teaching and Language Corpora. Frankfurt: Peter Lang, pp. 75–90.

a given lexical item in a corpus, but it might also be inferred by native-speakers or proficient language users, who are shown to use it in their language production and comprehension. This recognition makes semantic prosody a candidate for a framework that can enrich students' understanding of vocabulary and lead to better learning outcomes.

Now, a study aiming at replicating some previously recognized register-specific semantic prosodies will follow. After that, we will examine the field of language pedagogy, with special regard to the possibility of applying register-specific semantic prosody in L2 teaching.

8 STUDY: SEMANTIC PROSODY OF THE NEAR-SYNONYMS *TO CAUSE* AND *TO LEAD TO* ACROSS REGISTERS/GENRES

In this chapter, we describe the study of semantic prosodies of near-synonyms *TO CAUSE* and *TO LEAD TO* performed across different registers/genres.

The verb *TO CAUSE* was defined in Oxford Learner's Dictionary as "to make something happen, especially something bad or unpleasant; to make somebody do something"²³¹. The examples provided by the lexicographers are also in line with this recognition of negative collocations:

Are you **causing trouble** again?

Recently there have been several **deaths caused** by **dangerous driving**.

This definition, and further exemplification, reflect the finding of the negative semantic prosody of this lexical item, as recognized by Stubbs²³², Bublitz²³³, Xiao and McEnery²³⁴. However, when Hunston²³⁵ compared the concordance lines from a general corpus (Bank of English) with those from an academic corpus (the journal *New Scientist* corpus), he found a disparity. The general corpus was shown mostly negative usage, whilst the academic one mostly neutral. Similarly, in a study by Yang and Chen²³⁶ it was found that this verb, although "overwhelmingly negative" in social and applied science texts, it is "mainly" neutral in natural and pure science.

This shows once again the rationale of conducting studies across different genres in order to provide a basis for the application of semantic prosody to language pedagogy, as was also recognized by Yang and Chen.

The verb *TO LEAD TO* was defined as "to have something as a result"²³⁷, which

²³¹ https://www.oxfordlearnersdictionaries.com/definition/english/cause_2 [accessed: 23.11.204]

²³² Stubbs, M. (1995). Collocations and semantic profiles: On the cause of the trouble with quantitative methods. *Function of Language*, 2, pp. 1-33.

²³³ Bublitz, W. 1996. 'Semantic prosody and cohesive company: somewhat predictable'. *Leuvense Bijdragen: Tijdschrift voor Germaanse Filologie*, 85/1-2: pp. 1-32.

²³⁴ Xiao, R., & McEnery, T. (2006). Collocation, semantic prosody, and near synonymy: A crosslinguistic perspective. *Applied Linguistics*, 27, pp. 103-129.

²³⁵ Hunston, S. (2007). Semantic prosody revisited. *International Journal of Corpus Linguistics*, 122(2), pp. 249-268.

²³⁶ Yang, B., & Chen, B. (2016). The Usage of *CAUSE* in Three Branches of Science. *Higher Education Studies*, 6, pp. 109-118.

²³⁷ https://www.oxfordlearnersdictionaries.com/definition/english/lead1_1?q=lead [accessed: 23.11.2024]

doesn't seem to include any evaluative load whatsoever. However, an examination of examples provided clearly hints at negative collocates:

The fire ant's painful sting can ultimately **lead to** death for some people.
Eating too much sugar can **lead to** health problems.

Therefore, the definition does not include, what was recognized by Xiao and Enery²³⁸ (general corpus), Sarhad and Mahmood²³⁹ (general corpus) or Qin and Le²⁴⁰ (in the academic prose) and indirectly shown in the dictionary examples, that *TO LEAD TO* can be described as having negative semantic prosody. We haven't found any studies analyzing *TO LEAD TO* across genres, but we see no reason to believe that the rationale of comparing lexi's semantic prosody across genre wouldn't include this verb.

8.1 RESEARCH OBJECTIVES

Firstly, we aim at replicating previously recognized semantic prosodies of the verbs *TO LEAD TO* and *TO CAUSE*. Moreover, we will compare the prosodies across multiple genres (academic prose, elanguage, fiction, magazines, newspapers, official documents) in order to:

- (i) analyze general & genre-specific semantic prosody of the verb *TO LEAD TO*,
- (ii) analyze general & genre-specific semantic prosody of the verb *TO CAUSE*,
- (iii) compare general & genre-specific semantic prosodies of the near-synonymous verbs *TO LEAD TO* and *TO CAUSE*.

Furthermore, we want to present a way of analyzing the semantic prosody of lexical items via the frameworks described in chapter 5. As we propose, a more granular approach to describing the evaluative load can aid L2 learning and teaching.

8.2 METHODOLOGY

In this subchapter, we elaborate the methodology used in the study, together with the corpus chosen for the analysis.

8.2.1 Corpus Used: BNC2014 and its Subcorpora

We selected the British National Corpus 2014 (BNC2014)²⁴¹ as the foundation for our KWIC analysis due to its extensive representation of contemporary British English across diverse genres.

The British National Corpus 2014 (BNC2014) is a comprehensive compilation of modern British English, featuring diverse examples from real-world contexts. Compiled by

²³⁸ Xiao, R., & McEnery, T. (2006). Collocation, Semantic Prosody, and Near Synonymy: A Cross-Linguistic Perspective. *Applied Linguistics*, 27, pp. 103-129.

²³⁹ Sarhad, J., & Mahmood, R. (2023). A Corpus-based Study of Semantic Prosody across a Native Corpus. *Journal of Garmian University*, 10(3), pp. 902-909.

²⁴⁰ Qin, Z., & Le, Z. (2020). Corpus-Based Approach to Explore the Semantic Prosody of Synonym: A Case Study of "Lead to" and "Result in". *Us-China Foreign Language*, 18.

²⁴¹ Love, R., Dembry, C., Hardie, A., Brezina, V. and McEnery, T. (2017). The Spoken BNC2014: designing and building a spoken corpus of everyday conversations. In *International Journal of Corpus Linguistics*, 22(3): pp. 319-344.

Lancaster University in collaboration with Cambridge University Press, this corpus includes millions of words from both spoken and written English. It serves as a recent resource for studying and teaching contemporary British English, succeeding the original British National Corpus created in the early 1990s.

To explore how semantic prosody varies across genres, we will analyze 6 subcorpora within the BNC2014, including academic prose, e-language, fiction, magazines, newspapers, official documents, together with the general corpus. This approach allows us to compare the semantic prosody of two extensively studied verbs, *TO CAUSE* and *TO LEAD TO*, providing insights into how their connotations and usage are shaped by different communicative contexts. We have intentionally left out 2 subcorpora (informal speech and written-to-be-spoken texts) because initial examination of collocates and concordances has shown that they didn't yield sufficiently extensive results to include them in the study.

8.2.2 Analytical Approach: Collocation & KWIC Analysis

The method chosen for the examination of semantic prosody will be the Collocation Analysis supplemented with the Key Word in Context (KWIC) analysis, both widely used tools in corpus linguistics for examining contextual patterns.

For both *TO CAUSE* and *TO LEAD TO* concordance lines will be extracted from the general BNC2014 corpus and 6 subcorpora in the BNC2014 using LancsBox X 5.0.3²⁴² software.

The entire BNC2014 corpus consists of 102 million words, we will analyze the following 6 subcorpora together with the entirety:

- academic prose (20 million words),
- e-language (5 million words),
- fiction (20 million words),
- magazines (15 million words),
- newspapers (20 million words),
- official documents (7 million words).

The GraphColl tool will be deployed to find collocates for each search, and qualitative analysis will be implemented to classify their evaluative or affective connotations. In order to account both for longer sentences and prosodies exceeding the scope of 1 sentence, we will set the context size to the biggest range that the software allows: L10 — R10 (10 words to the left and right of a node). Some researchers used an even bigger span (L25 — R25 in the example of Koller and Mautner²⁴³) but we decided not to try to overcome this technological limitation, since this range is already twice as big as the usually deployed L5 — R5.

We will compile and scrutinize 30 most frequent collocates, after the exclusion of stop words (defined as articles, pronouns, conjunctive adverbs, and other words we will find

²⁴² Brezina, V. & Platt, W. (2024) #LancsBox X [software], Lancaster University, <http://lancsbox.lancs.ac.uk>. [accessed: 17.11.2024]

²⁴³ Koller, V. and Mautner, G. 2004. 'Computer applications in critical discourse analysis', in C. Coffin, A. Hewings and K. O'Halloran (eds), *Applying English Grammar. Functional and Corpus Approaches*. London: Arnold, pp. 216–228.

irrelevant). Unlike other studies (e.g., by Yang & Chen²⁴⁴), we will sort the collocates based on their raw frequency instead of statistical measures such as LogDice. This is done to reflect the actual frequency of collocates, which in our view is more relevant to the analysis of semantic prosody than measures of collocational strength. However, we chose to also include LogDice scores to serve as a supplementary way of comparison between the collocates of the lexical items *TO CAUSE* and *TO LEAD TO* across subcorpora.

Since modal verbs were recognized by Bednarek to pertain to evaluative meaning on the *possibility/necessity* scale, we decided not to leave them out but instead include them as neutral lexis. In our view, omitting those may lead to overrepresentation of both negative and positive collocates, when in fact, the reality would not be so radical.

Moreover, words pertaining to the category of *comparison/contrast* (e.g., *INCREASE*, *REDUCE*) were found — during KWIC analysis — to be used to juxtapose quantities, of both negative and positive lexis. Therefore, we also decided to include them as neutral collocates. However, it is worth emphasizing that in Osgood’s study, the scale *high-low* was found to be correlated with the *good-bad* scale. We propose that it reflects — what was recognized in the chapter 5 — that neutral words are not always equally neutral, and that such *comparison/contrast* lexis could be ascribed with something akin to the *neutral semantic prosody of comparison*. However, the word *BETTER* will be described as *positive*, since it compares “goodness” which has a clear evaluative connotation, unlike e.g., the quantity.

Another choice we will make is the exclusion of the verbs *TO BE*, *TO HAVE* and *TO DO*, because of their grammatical function as auxiliary verbs and unclear evaluative load.

We will compile statistical measures such as:

- (i) frequency of occurrences — in order to show how often a word was found in a corpus (which is the basis for our sorting of the collocates),
- (ii) normalized frequency — in order to enable a statistically objective comparison across genres,
- (iii) LogDice — in order to measure the collocational strength of collocates.

The parameter LogDice will be taken directly from LancsBox statistics. It is calculated using the formula:

$$14 + \text{Log}_2 \frac{2xA}{BxC}, \text{ where:}$$

A — the number of collocations of 2 words (X, Y),

B — the number of occurrences of word X,

C — the number of occurrences of word Y,

14 — a constant added to make the results positive and interpretable

The normalized frequency will be calculated using the equation:

²⁴⁴ Yang, B., & Chen, B. (2016). The Usage of CAUSE in Three Branches of Science. *Higher Education Studies*, 6, pp. 109-118.

$\frac{B}{D} \times 1\,000\,000$, where:

B - the number of occurrences of word *X*,
D - the total number of words in a corpus.

Next, these lists will be qualitatively and quantitatively analyzed in order to describe semantic prosodies they reveal.

In the qualitative analysis, we will first deploy (i) the classical positive-negative polarity, and secondarily we will include (ii) the Appraisal Theory, and Osgood's et al.'s and Bednarek's evaluative frameworks to provide more granular description. Even though there is a growing conviction that the classical description of semantic prosody (on the spectrum of positive-negative evaluation) does not do justice to the phenomenon (at least not entirely), we will use it as a primary framework because to this day it is still most commonly applied. Consequently, the results acquired by deploying it will allow for seamless comparison with other studies. Moreover, if the qualitative results were to be excessively granular, it would prove difficult to present a relevant quantitative analysis, and juxtaposition across registers and between the chosen verbs. Nevertheless, as an additional, second step, we will also utilize the other aforementioned descriptive frameworks in order to show the merit of a more detailed approach in qualitative analysis of the evaluative load of lexis.

The quantitative analysis will consist of adding up the number of words evaluated as *positive*, *negative*, and *neutral*, and their normalized frequencies, in order to provide a basis for comparison. Moreover, we will look at the LogDice score in order to compare the collocational strength between the node and collocates.

Next, those analyses will be compared with:

- (i) the analyses of a given item in other subcorpora (and the entire BNC2014 corpus), in order to analyze the genre-specific aspect of semantic prosody (subchapters 8.3 and 8.4),
- (ii) the analyses of the other lexical item in order to show the differences and similarities of their semantic prosodies (subchapter 8.5).

8.3 TO LEAD TO

Our analysis will be focused on verbs, therefore we ought to exclude other parts of speech (PoS) from our searches. Thanks to LancsBox X's PoS tagging feature, we are able to automatize the process. Moreover, we want to only find the concordance lines of the verb *TO LEAD* in its meaning synonymous to *TO CAUSE* and exclude other meanings, such as providing guidance. In the search bar, we put the string:

[hw="lead" pos="V.*"] to

The first variable indicates the headword (or lemma) — *LEAD* — and the second one signifies that we are interested in verbs in all of their grammatical forms — *LEAD*, *LEADS*, *LED* and *LEADING*. Lastly, we add the preposition *TO* in order to find relevant verbs.

Next, we will analyze 30 most common collocates of the verb *TO LEAD TO* in the general BNC2014 corpus and its 6 subcorpora.

8.3.1 Results: collocates of *TO LEAD TO* (General corpus)

There are 14 885 instances of using the verb *TO LEAD TO* in 7 497 texts in the BNC2014 corpus. Given the size of the corpus (102M), the normalized frequency of this item is 145,93. Using GraphCall feature, we proceed to a compilation of a list of collocates.

After excluding articles, prepositions, pronouns, determiners, conjunctions (e.g., *THE, OF, AS, AND, HE*), various forms of *TO BE* (e.g., *IS, ARE, BEING*), *TO HAVE* (e.g., *HAVE, HAS*), conjunctive adverbs (e.g., *HOWEVER*), numerals (e.g., *TWO*), abbreviations (e.g., *ET AL.*) we are left with the following list of the top 30 relevant collocates:

Table 3. Collocates of *TO LEAD TO* in the general corpus

a collocate of <i>TO LEAD TO</i>	number of occurrences	normalized frequency	LogDice Score
CAN	1549	15,19	7,6
COULD	1067	10,46	7,6
MORE	949	9,30	7,0
MAY	826	8,10	8,1
WOULD	795	7,79	6,8
INCREASE	487	4,77	8,9
INCREASED	479	4,70	9,0
NEW	401	3,93	6,5
HIGHER	356	3,49	8,2
TIME	328	3,22	5,9
LOSS	325	3,19	8,5
HIGH	325	3,19	7,6
PEOPLE	302	2,96	6,1
DIFFERENT	301	2,95	7,2
SAID	297	2,91	5,3
SIGNIFICANT	294	2,88	8,0
FURTHER	283	2,77	7,6
MIGHT	276	2,71	6,8
DEVELOPMENT	275	2,70	7,9

CHANGES	272	2,67	8,0
YEAR	264	2,59	6,1
SHOULD	260	2,55	6,4
RESULTS	256	2,51	7,6
MANY	255	2,50	6,7
REDUCTION	253	2,48	8,6
NUMBER	250	2,45	7,2
EVEN	247	2,42	6,2
GREATER	246	2,41	8,2
BETTER	222	2,18	6,9
LOWER	222	2,18	7,8

The verb *TO LEAD TO* has the negative collocate *LOSS* which pertains to the category of *low* (on the high-low scale) in Osgood's framework.

Its normalized frequency is 3,19 and the LogDice score is 8,5. This 1 negative collocate accounts for 3,33% of the top 30 most common collocates.

The neutral collocates include words describing objects or phenomena (*TIME, PEOPLE, RESULTS, YEAR, NUMBER, CHANGES, DEVELOPMENT*). Moreover, we find a number of collocates that pertain to the category of *possibility/necessity* recognized by Bednarek (*CAN, COULD, MAY, WOULD, MIGHT, SHOULD*). Furthermore, we observe some comparative terms (*MORE, INCREASE(D), HIGHER, HIGH, DIFFERENT, FURTHER, MANY, EVEN, GREATER, LOWER, REDUCTION*) corresponding to *graduation* in the appraisal theory or *comparison* in Bednarek's framework. The word *SAID* was also found, used mostly as a marker of reporting someone's utterance.

The accumulated normalized neutral frequency is 111,96 and the sum of LogDices scores is 190,4. There are 26 neutral words, which accounts for 86,66% of the collocates analyzed.

In the positive collocates we can distinguish *BETTER, NEW* and *SIGNIFICANT*. The term *BETTER* is a marker of *comparison* with an overtly positive evaluation. The word *NEW* was recognized as positive because the concordance lines revealed that it is, generally, either used to indicate a novel solution that was developed as a remedy for a "loss" which had been led to or as a modifier of a positive thing that was brought about:

sleep which experts say could **lead to** Alzheimer's disease. New research shows that a good up visits build on, and **lead to new** learning experiences that result in new

Lastly, *SIGNIFICANT* indicates high *importance*.

The normalized positive frequency is 8,99 and the sum of LogDice scores is 21,4. As there are 3 occurrences of positive words we can conclude that 9,99% of the 30 collocates are

positive.

In summary, the collocates of *TO LEAD TO* in the entire BNC2014 corpus are largely neutral (86,66%), with a pint of positivity (9,99%) which exceeds the negative collocates (3,33%).

Table 4. Semantic Prosody of *TO LEAD TO* in BNC2014

Positive Normalized Frequency	Positive LogDice Sum	Positive Percentage of Collocates
8,99	21,4	9,99%
Neutral Normalized Frequency	Neutral LogDice Sum	Neutral Percentage of Collocates
111,96	190,4	86,66%
Negative Normalized Frequency	Negative LogDice Sum	Negative Percentage of Collocates
3,19	8,5	3,33%

8.3.2 Results: collocates of *TO LEAD TO* (Academic Prose)

TO LEAD TO is found 7 473 times in 2 005 texts of academic prose in BNC2014 corpus. Given the size of the corpus (20M), the normalized frequency of this item is 373,65. Using GraphCall feature, and qualitative selection of relevant lexis, we compiled a list of collocates.

After excluding articles, prepositions, pronouns, determiners, conjunctions (e.g., *THE, OF, BY, WHICH, THEIR*), various forms of *TO BE* (e.g., *IS, WAS, WERE*), *TO HAVE* (e.g., *HAVE, HAS*), we are left with the following list of the top 30 relevant collocates:

Table 5. Collocates of *TO LEAD TO* in Academic Prose

a collocate of <i>TO LEAD TO</i>	number of occurrences	normalized frequency	LogDice Score
CAN	622	31,10	8,4
MAY	422	21,10	8,6
COULD	283	14,15	8,5
MORE	271	13,55	7,4
INCREASE	243	12,15	9,0
INCREASED	241	12,05	9,0
WILL	231	11,55	8,0
WOULD	228	11,40	7,8

DIFFERENT	184	9,20	7,6
HIGHER	165	8,25	8,2
CHANGES	154	7,70	8,3
SIGNIFICANT	148	7,40	7,8
DEVELOPMENT	143	7,15	7,9
REDUCTION	134	6,70	8,5
GREATER	123	6,15	8,2
MIGHT	116	5,80	7,6
LOSS	114	5,70	8,3
RESULTS	114	5,70	7,2
REDUCED	109	5,45	8,2
NEW	107	5,35	7,2
FORMATION	107	5,35	8,4
PROCESS	102	5,10	7,4
FURTHER	96	4,80	7,3
LOWER	90	4,50	7,6
TURN	85	4,25	8,0
DATA	84	4,20	6,3
LARGE	82	4,10	7,4
CHANGE	81	4,05	7,1
LEVELS	79	3,95	7,3
SOCIAL	78	3,90	6,6

The only negative collocate of the verb *TO LEAD TO* is *LOSS*.

Its normalized frequency is 5,70 and the LogDice score is 8,3. This one occurrence accounts for 3,33% of the top 30 most common collocates.

The neutral collocates include words describing objects or phenomena (DEVELOPMENT, RESULTS, FORMATION, PROCESS, DATA, CHANGE, LEVELS, SOCIAL). Moreover, we find a number of collocates that pertain to the category of *possibility/necessity* recognized by Bednarek (*CAN, MAY, COULD, WILL, WOULD, MIGHT*). Furthermore, there are some *comparison* words (*MORE, INCREASE(D), DIFFERENT, HIGHER, GREATER, REDUCED, FURTHER, LOWER, LARGE*) corresponding also to *graduation* in the appraisal theory. The word *TURN* was also found, almost exclusively used as a part of a phrase *IN TURN*, indicating a change in perspective

when describing something.

The accumulated normalized neutral frequency is 233,35 and the sum of LogDices scores is 211,8. There are 16 neutral words, which accounts for 90% of the collocates analyzed.

The positive collocates of *TO LEAD TO* are *SIGNIFICANT* (a marker of *importance*) and *NEW* (which was described in the analysis of the general corpus; see 8.3.1).

Their summed normalized frequency is 12,75 and the sum of LogDice scores is 15. These 2 occurrences of a positive word account for 6,66% of the 30 collocates.

In summary, the collocates of *TO LEAD TO* in academic prose genre is overwhelmingly neutral (90%). However, the positive collocates were twice as frequent (6,66%) as the negative ones (3,33%).

Table 6. Semantic Prosody of *TO LEAD TO* in Academic Prose

Positive Normalized Frequency	Positive LogDice Sum	Positive Percentage of Collocates
12,75	15	6,66%
Neutral Normalized Frequency	Neutral LogDice Sum	Neutral Percentage of Collocates
233,35	211,8	90%
Negative Normalized Frequency	Negative LogDice Sum	Negative Percentage of Collocates
5,7	8,3	3,33%

8.3.3 Results: collocates of *TO LEAD TO* (Elanguage)

There are 323 instances of using the verb *TO LEAD TO* in 243 texts of elanguage in BNC2014 corpus. Given the size of the corpus (5M), the normalized frequency of this item is 64,6. Using GraphCall feature, and qualitative selection of relevant lexis, we compiled a list of collocates.

After excluding articles, prepositions, pronouns, determiners, conjunctions (e.g., *THE, OF, AS, THAT, YOU*), item *WELL* (due to its different functions beside being an adverb, e.g., a part of *AS WELL AS*), item *LIKE* (because of its discourse function, as in *IT WAS, LIKE...*), various forms of *TO BE* (e.g., *IS, WAS, WERE*), *TO HAVE* (e.g., *HAVE, HAS*), we are left with the following list of the top 30 relevant collocates:

Table 7. Collocates of *TO LEAD TO* in Elanguage

a collocate of <i>TO LEAD TO</i>	number of occurrences	normalized frequency	LogDice Score
CAN	48	9,60	6,5
WILL	33	6,60	6,0

WOULD	28	5,60	6,0
MORE	25	5,00	5,9
BELIEVE	17	3,40	8,2
COULD	16	3,20	6,1
VERY	15	3,00	4,9
EVEN	12	2,40	5,9
WAY	12	2,40	6,0
PROBLEMS	10	2,00	7,9
GET	10	2,00	4,6
PEOPLE	9	1,80	5,1
NEW	9	1,80	5,2
MOST	9	1,80	5,9
MUCH	8	1,60	4,9
BETTER	8	1,60	5,7
THINGS	8	1,60	5,9
INCREASE	8	1,60	8,7
BAD	8	1,60	6,6
REALLY	8	1,60	4,6
SERIOUS	7	1,40	8,1
EVENTS	7	1,40	8,2
TAKE	7	1,40	5,6
HEALTH	7	1,40	7,5
GREAT	7	1,40	3,7
COURSE	7	1,40	6,7
LINK	7	1,40	7,9
GOOD	6	1,20	3,1
CANCER	6	1,20	7,7
WANT	6	1,20	5,1

The verb *TO LEAD TO* collocates with the following negative words: *PROBLEMS*, *BAD*, *SERIOUS*, *CANCER*. The two most common ones (*PROBLEMS*, *BAD*) point to a negative state of affairs. *SERIOUS* pertains to the extreme of the scale *humorous-serious*.

CANCER indicates a type of disease.

Their total normalized frequency is 6,20 and the LogDice score is 30,3. They account for 13,33% of the top 30 most common collocates.

The neutral collocates include words describing objects or phenomena (*WAY, PEOPLE, THINGS, EVENTS, HEALTH, COURSE, LINK*). Moreover, we find a number of collocates that pertain to the category of *possibility/necessity* recognized by Bednarek (*CAN, WILL, WOULD, COULD, MAY*). There are also a few comparative terms (*MORE, VERY, EVEN, MOST, MUCH, INCREASE, REALLY*) corresponding to *graduation* in the appraisal theory or *comparison* in Bednarek’s framework. Verbs *BELIEVE, GET, TAKE, WANT* with no clear evaluative load were also found.

The accumulated normalized neutral frequency is 61,40 and the sum of LogDice scores is 136,2. There are 22 neutral words, which accounts for 73,33% of the collocates analyzed.

We recognized the collocates *NEW, BETTER, GREAT, and GOOD* as *positive*. *BETTER* and *GOOD* carry overt positive evaluation. The term *GREAT* has been used in its sense of “*VERY GOOD*” much more than “*BIG*”, therefore it was ascribed with positive load. The term *NEW* was used as (with one exception) indicating something novel and desirable.

The normalized positive frequency is 6 and the sum of LogDice scores is 17,7. As there are 4 occurrences of positive words, we can conclude that 13,33% of the 30 collocates are positive.

In summary, the collocates of *TO LEAD TO* in the elanguage genre are mostly neutral (73,33%). The negative (13,33%) and positive (13,33%) collocates are in equilibrium, however the collocational strength is almost twice as big for negative words (30,3 vs. 17,7). This hints at the possibility of negative collocates overwhelming the positive ones, when, for instance, analyzed in a bigger corpus.

Table 8. Semantic Prosody of *TO LEAD TO* in Elanguage

Positive Normalized Frequency	Positive LogDice Sum	Positive Percentage of Collocates
6,00	17,7	13,33%
Neutral Normalized Frequency	Neutral LogDice Sum	Neutral Percentage of Collocates
61,40	136,2	73,33%
Negative Normalized Frequency	Negative LogDice Sum	Negative Percentage of Collocates
6,20	30,30	13,33%

8.3.4 Results: collocates of *TO LEAD TO* (Fiction)

There are 968 instances of using the verb *TO LEAD TO* in 525 texts of fiction in BNC2014 corpus. Given the size of the corpus (20M), the normalized frequency of this item

is 48,4. Using GraphCall feature, and qualitative selection of relevant lexis, we compiled a list of collocates.

After excluding articles, prepositions, pronouns, determiners, conjunctions (e.g., *THE, OF, INTO, THAT, THEY*), numerals (e.g., *TWO*), item *WELL* (due to its different functions beside being an adverb, e.g., a part of *AS WELL AS*), item *LIKE* (because of its discourse function, as in *IT WAS, LIKE...*), various forms of *TO BE* (e.g., *IS, WAS*), *TO HAVE* (e.g., *HAD*), we are left with the following list of the top 30 relevant collocates:

Table 9. Collocates of *TO LEAD TO* in Fiction

a collocate of <i>TO LEAD TO</i>	number of occurrences	normalized frequency	LogDice Score
DOOR	82	4,10	7,2
WOULD	79	3,95	5,3
COULD	60	3,00	5,0
ROAD	54	2,70	8,1
ROOM	49	2,45	6,5
CORRIDOR	47	2,35	9,1
MIGHT	44	2,20	6,2
SAID	41	2,05	3,7
MORE	40	2,00	5,1
LED	35	1,75	8,3
WAY	34	1,70	5,3
LONG	31	1,55	5,7
BELIEVE	30	1,50	7,1
TIME	30	1,50	4,6
SMALL	30	1,50	6,6
DOORS	30	1,50	8,1
CAN	29	1,45	5,9
HOUSE	28	1,40	6,1
PATH	26	1,30	8,2
THING	25	1,25	5,8
END	25	1,25	6,3
STEPS	24	1,20	7,7

SEE	24	1,20	4,6
NARROW	23	1,15	8,2
SIDE	23	1,15	5,8
DEATH	21	1,05	7,0
LINK	7	0,35	7,9
GOOD	6	0,30	3,1
CANCER	6	0,30	7,7
WANT	6	0,30	5,1

The verb *TO LEAD TO* collocates with the following negative words: *DEATH* and *CANCER*.

Their total normalized frequency is 1,35 and the LogDice score is 14,7. They account for 6,66% of the top 30 most common collocates.

The neutral collocates include words describing objects or phenomena (*DOOR(S)*, *ROAD*, *ROOM*, *CORRIDOR*, *WAY*, *HOUSE*, *TIME*, *PATH*, *THING*, *END*, *STEPS*, *SIDE*, *LINK*). It is worth underlying that, unlike genres, here the verb *TO LEAD TO* is used in its literal sense of leading someone down a path to a destination (e.g., *DOOR*, *HOUSE*), e.g.:

between two posts at the entrance, and a small drive **leading to** the front door. It was the lady herself who answered

Moreover, we find a number of collocates that pertain to the category of *possibility/necessity* recognized by Bednarek (*WOULD*, *COULD*, *MIGHT*, *CAN*). There is also a comparative term (*MORE*) corresponding to *graduation* in the appraisal theory or *comparison* in Bednarek’s framework. Verbs (*LED*, *SEE*, *SAID*, *WANT*) and adjectives (*LONG*, *SMALL*, *NARROW*) without clear evaluative load were also found.

The accumulated normalized neutral frequency is 47,80 and the sum of LogDices scores is 173,5. There are 27 neutral words, which accounts for 90% of the collocates analyzed.

The only positive collocate is *GOOD*.

Its normalized frequency is 0,30 and the LogDice score is 3,1. This 1 occurrence of a positive word, amounts to 3,33% of the 30 collocates.

In summary, the collocates of *TO LEAD TO* in the fiction genre are overwhelmingly neutral (90,00%). However, this neutral semantic prosody, paired with semantic preference of “arriving at a destination”, doesn’t show as much comparative aspect as with other genres. This perhaps could be summarized as a neutral semantic prosody with “a low degree of graduation”. The negative (6,66%) are 2 times more frequent than positive (3,33%) showing almost 5 times bigger collocational strength (14,7 vs. 3,1).

Positive Normalized Frequency	Positive LogDice Sum	Positive Percentage of Collocates
1,35	14,7	6,66%
Neutral Normalized Frequency	Neutral LogDice Sum	Neutral Percentage of Collocates
47,80	173,50	90%
Negative Normalized Frequency	Negative LogDice Sum	Negative Percentage of Collocates
0,30	3,1	3,33%

8.3.5 Results: collocates of *TO LEAD TO* (Magazines)

There are 2 023 instances of using the verb *TO LEAD TO* in 1 618 magazine texts in BNC2014 corpus. Given the size of the corpus (15M), the normalized frequency of this item is 134,86. Using GraphCall feature, and qualitative selection of relevant lexis, we compiled a list of collocates.

After excluding articles, prepositions, pronouns, determiners, conjunctions (e.g., *THE, BY, BUT, THAT, THEY*), numerals (e.g., *ONE*), item *WELL* (due to its different functions beside being an adverb, e.g., a part of *AS WELL AS*), item *LIKE* (because of its discourse function, as in *IT WAS, LIKE...*), various forms of *TO BE* (e.g., *IS, WAS*), *TO HAVE* (e.g., *HAVE*), we are left with the following list of the top 30 relevant collocates:

Table 11. Collocates of *TO LEAD TO* in Magazines

a collocate of <i>TO LEAD TO</i>	number of occurrences	normalized frequency	LogDice Score
CAN	242	16,13	7,8
MORE	176	11,73	6,9
WILL	171	11,40	6,7
COULD	163	10,87	7,9
YEAR	100	6,67	6,7
WOULD	93	6,20	6,8
CENT	86	5,73	6,7
SAYS	82	5,47	6,9
NEW	71	4,73	5,7
HIGHER	62	4,13	8,0
HIGH	58	3,87	7,4

PRICES	56	3,73	8,4
SHOULD	55	3,67	6,9
LAST	54	3,60	6,6
TIME	52	3,47	5,9
MAY	51	3,40	6,9
GROWTH	50	3,33	7,5
BETTER	47	3,13	7,2
LOSS	46	3,07	8,7
LOW	46	3,07	7,9
INCREASE	46	3,07	8,2
LIKELY	45	3,00	7,7
MARKET	45	3,00	6,8
PRICE	45	3,00	6,7
MOST	45	3,00	6,1
INCREASED	44	2,93	8,4
SAID	44	2,93	6,1
UK	43	2,87	6,3
PROFIT	43	2,87	7,8
CASH	42	2,80	7,4

The verb *TO LEAD TO* was found to collocate with the negative word *LOSS*.

Its total normalized frequency is 3,07 and the LogDice score is 8,7. It constitutes 3,33% of the top 30 most common collocates.

The neutral collocates include words describing objects or phenomena (*YEAR, CENT, PRICE(S), TIME, GROWTH, MARKET, UK, PROFIT, CASH*). Moreover, we find a number of collocates that pertain to the category of *possibility/necessity* recognized by Bednarek (*CAN, WILL, COULD, WOULD, MAY, LIKELY*). There is also a comparative term (*MORE, HIGHER, HIGH, LOW, INCREASE(D), MOST*) corresponding to *graduation* in the appraisal theory or *comparison* in Bednarek's framework. Verbs (*SAYS, SAID*) and an adjective (*LAST*) without clear evaluative load were also found.

The accumulated normalized neutral frequency is 135,93 and the sum of LogDices scores is 193,4. There are 27 neutral words, which accounts for 90% of the collocates analyzed.

The positive collocates of *TO LEAD TO* are *BETTER* and *NEW*, the latter identified as positive because it appeared in the context of novel, desirable outcomes.

Its normalized frequency is 7,87 and the LogDice score is 12,9. These 2 occurrences of positive words, amount to 6,66% of the 30 collocates.

In summary, the collocates of *TO LEAD TO* in the genre of magazines are overwhelmingly neutral (90,00%). Interestingly, in the genre of magazines, a semantic preference of items connected with *economy* or *money* (e.g., *MARKET*, *CENT*, *PRICE*) has emerged. The positive (6,66%) collocates are 2 times more frequent than the negative (3,33%), remaining nevertheless insignificant when compared to the neutral.

Table 12. Semantic Prosody of *TO LEAD TO* in Magazines

Positive Normalized Frequency	Positive LogDice Sum	Positive Percentage of Collocates
3,07	8,7	3,33%
Neutral Normalized Frequency	Neutral LogDice Sum	Neutral Percentage of Collocates
135,93	193,4	90%
Negative Normalized Frequency	Negative LogDice Sum	Negative Percentage of Collocates
7,87	12,9	6,66%

8.3.6 Results: collocates of *TO LEAD TO* (Newspapers)

There are 2 923 instances of using the verb *TO LEAD TO* in 2 544 texts in the newspaper genre. Given the size of the corpus (20M), the normalized frequency of this item is 146,15. Using GraphCall feature, we compile of a list of collocates.

After excluding articles, prepositions, pronouns, determiners, conjunctions (e.g., *THE*, *OF*, *AS*, *AND*, *HE*), various forms of *TO BE* (e.g., *IS*, *ARE*, *BEING*), *TO HAVE* (e.g., *HAVE*, *HAS*), conjunctive adverbs (e.g., *HOWEVER*), numerals (e.g., *TWO*), abbreviations (e.g., *ET AL.*) we are left with the following list of the top 30 relevant collocates:

Table 13. Collocates of *TO LEAD TO* in Newspapers

a collocate of <i>TO LEAD TO</i>	number of occurrences	normalized frequency	LogDice Score
COULD	335	16,75	8,4
CAN	295	14,75	7,7
WILL	224	11,20	6,6
WOULD	189	9,45	7,1
SAID	188	9,40	6,3
MORE	186	9,30	6,9

NEW	100	5,00	6,5
PEOPLE	96	4,80	6,5
MAY	90	4,50	7,2
YEAR	87	4,35	6,4
LAST	83	4,15	6,2
MANY	65	3,25	6,8
DEATH	62	3,10	8,1
YEARS	61	3,05	6,1
EVEN	60	3,00	6,6
POLICE	58	2,90	7,1
SAYS	57	2,85	6,4
PROBLEMS	50	2,50	8,1
HEALTH	50	2,50	7,5
WORK	48	2,40	6,4
SHOULD	47	2,35	6,3
LOSS	46	2,30	8,1
GOVERNMENT	45	2,25	6,8
UK	45	2,25	6,4
HIGH	42	2,10	7,0
BETTER	41	2,05	6,8
GOAL	41	2,05	7,3
RISK	40	2,00	7,6
LIFE	40	2,00	6,4
PRICES	40	2,00	7,7

The verb *TO LEAD TO* collocates with the following negative words: *DEATH, PROBLEMS, LOSS, RISK*.

Their total normalized frequency is 9,90 and the LogDice score is 31,9. They account for 13,33% of the top 30 most common collocates.

The neutral collocates include words describing objects or phenomena (*PEOPLE, YEAR(S), POLICE, HEALTH, WORK, GOVERNMENT, UK, GOAL, LIFE, PRICES*). Moreover, we find a number of collocates that pertain to the category of *possibility/necessity* recognized by Bednarek (*COULD, CAN, WILL, WOULD, MAY*). There are also a few

comparative terms (*MORE, MANY, EVEN, HIGH*) corresponding to *graduation* in the appraisal theory or *comparison* in Bednarek’s framework. The words *SAYS* and *SAID* were also found, used as a marker of reporting someone’s utterance. Lastly, the word *LAST* was identified.

The accumulated normalized neutral frequency is 123,60 and the sum of LogDices scores is 164,1. There are 24 neutral words, which accounts for 80% of the collocates analyzed.

We recognized the collocates *NEW* and *BETTER* as *positive*.

The normalized positive frequency is 7,05 and the sum of LogDice scores is 13,3. As there are 3 occurrences of positive words, we can conclude that 6,66% of the 30 collocates are positive.

In summary, the collocates of *TO LEAD TO* in the newspaper genre are mostly neutral (80%). However, the negative collocates (13,33%) were twice as frequent as the positive ones (6,66%).

Table 14. Semantic Prosody of *TO LEAD TO* in Newspapers

Positive Normalized Frequency	Positive LogDice Sum	Positive Percentage of Collocates
7,05	13,3	6,66%
Neutral Normalized Frequency	Neutral LogDice Sum	Neutral Percentage of Collocates
123,60	164,1	80%
Negative Normalized Frequency	Negative LogDice Sum	Negative Percentage of Collocates
9,90	31,9	13,33%

8.3.7 Results: collocates of *TO LEAD TO* (Official Documents)

There are 1 028 instances of using the verb *TO LEAD TO* in 452 texts in the official documents. Given the size of the corpus (20M), the normalized frequency of this item is 146,86. Using GraphCall feature, we compile of a list of collocates.

After excluding articles, prepositions, pronouns, determiners, conjunctions (e.g., *THE, OF, AS, ANY, THEY*), various forms of *TO BE* (e.g., *IS, ARE, BEING*), *TO HAVE* (e.g., *HAVE, HAS*) we are left with the following list of the top 30 relevant collocates:

Table 15. Collocates of *TO LEAD TO* in Official Documents

a collocate of <i>TO LEAD TO</i>	number of occurrences	normalized frequency	LogDice Score
COULD	130	18,57	9,9

WILL	124	17,71	7,2
INCREASE	75	10,71	8,8
MAY	72	10,29	7,9
GROUP	67	9,57	5,9
CAN	67	9,57	7,6
WOULD	66	9,43	7,8
INVESTMENT	63	9,00	7,2
COMPANY	62	8,86	6,0
FINANCIAL	59	8,43	5,9
LOSS	57	8,14	8,0
MORE	54	7,71	8,0
YEAR	51	7,29	5,8
NEW	51	7,29	7,2
RISK	49	7,00	7,1
MARKET	49	7,00	7,4
INCREASED	49	7,00	8,5
SIGNIFICANT	47	6,71	8,0
BUSINESS	46	6,57	6,7
PERFORMANCE	41	5,86	6,8
VALUE	38	5,43	6,3
HIGHER	36	5,14	8,7
CAPITAL	34	4,86	6,7
REDUCTION	34	4,86	8,9
NUMBER	34	4,86	7,1
FURTHER	32	4,57	7,4
GROWTH	32	4,57	7,1
PEOPLE	31	4,43	6,9
MANAGEMENT	30	4,29	6,3
SHOULD	30	4,29	7,2

The verb *TO LEAD TO* collocates with 1 negative word: *LOSS*.

Its normalized frequency is 8,14 and the LogDice score is 8. It accounts for 3,33% of the top 30 most common collocates.

The neutral collocates include words describing objects or phenomena (*GROUP, INVESTMENT, COMPANY, YEAR, RISK, MARKET, BUSINESS, PERFORMANCE, VALUE, CAPITAL, NUMBER, GROWTH, PEOPLE, MANAGEMENT*). Moreover, we find a number of collocates that pertain to the category of *possibility/necessity* recognized by Bednarek (*COULD, WILL, MAY, CAN, WOULD, SHOULD*). There are also a few comparative terms (*MORE, INCREASED, HIGHER, FURTHER, REDUCTION*) corresponding to *graduation* in the appraisal theory or *comparison* in Bednarek's framework. We also find the term *FINANCIAL*.

The accumulated normalized neutral frequency is 207,86 and the sum of LogDices scores is 197,1. There are 27 neutral words, which accounts for 90% of the collocates analyzed.

We recognized the collocates *NEW* and *SIGNIFICANT* as *positive*. The latter pertains to the *importance* scale, and the former indicates a novel, propitious state of affairs.

Their normalized positive frequency is 14 and the sum of LogDice scores is 15,2. As there are 2 occurrences of positive words, we can conclude that 6,66% of the 30 collocates are positive.

In summary, the collocates of *TO LEAD TO* in the genre of official documents are overwhelmingly neutral (90%). Similarly to the genre of magazines, a semantic preference of items connected with *economy* or *money* (e.g., *INVESTMENT, FINANCIAL, BUSINESS*) has been found. The negative collocates (3,33%) were 2 times less frequent than the positive ones (6,66%).

Table 16. Semantic Prosody of *TO LEAD TO* in Official Documents

Positive Normalized Frequency	Positive LogDice Sum	Positive Percentage of Collocates
14	15,2	6,66%
Neutral Normalized Frequency	Neutral LogDice Sum	Neutral Percentage of Collocates
207,86	197,1	90%
Negative Normalized Frequency	Negative LogDice Sum	Negative Percentage of Collocates
8,14	8	3,33%

8.3.8 Discussion: collocates of *TO LEAD TO* across genres

Below, we present a summary table of our findings of semantic prosody of *TO LEAD TO* across 7 genres:

Table 17. The comparison of Semantic Prosody of *TO LEAD TO* across 6 subcorpora and the general BNC corpus

(Sub)corpus	PNF	PLD	PP	NNF	NLD	NP	NNF'	NLD'	NP'
General	8,99	21,4	9,99%	111,96	190,4	86,66%	3,19	8,5	3,33%
Academic Prose	12,75	15	6,66%	233,35	211,8	90%	5,7	8,3	3,33%
Elanguage	6,00	17,7	13,33%	61,40	136,2	73%	6,20	30,30	13,33%
Fiction	1,35	14,7	6,66%	47,80	173,50	90%	0,30	3,1	3,33%
Magazines	3,07	8,7	3,33%	135,93	193,4	90%	7,87	12,9	6,66%
Newspapers	7,05	13,3	6,66%	123,60	164,1	80%	9,90	31,9	13,33%
Official Documents	14	15,2	6,66%	207,86	197,1	90%	8,14	8	3,33%

In our study, we found that the verb *TO LEAD TO* generally shows neutral semantic prosody (as also recognized by Xiao and Eneery²⁴⁵). However, in some genres the positive collocates were more frequent than the negative ones: general (9,99% vs. 3,33%), academic prose (6,66% vs. 3,33%), fiction (6,66% vs. 3,33%), official documents (6,66% vs. 3,33%). Conversely, in the newspaper genre the negative collocates (13,33%) overwhelmed the positive ones (6,66%) which could be in line with Partington's hypothesis²⁴⁶ (see: chapter 7) that the journalistic genres can bring out the hues of evaluation, due to their strong, polarizing tone. Elanguage genre was found to be in equilibrium (13,33% each) regarding its positive-negative polarity.

As mentioned in the introduction, Sarhad & Mahmood²⁴⁷ analyzed the semantic prosody of *TO LEAD TO* in BNC corpus and found negative semantic prosody (64% of KWIC lines). The question remains, why our findings seem to be on par with findings by Sarhad & Mahmood, who used the exact same corpus as we did?

Firstly, the methodologies that were used in our and Sarhad & Mahmood's work were largely different. They drew 50 random lines of concordances and qualitatively described their evaluative meaning. Moreover, they focused on the right-side concordances, not exceeding 5 words. Our methodology included the analysis of 30 most frequent collocates (after the exclusion of irrelevant words, see: Methodology section) and our searches spanned 10 words to the left and 10 words to the right of the node. Their methodology didn't account for the effects of frequency, which could have lead to results which are not representative. On the other hand, they ascribed evaluative meaning to of larger units, which in turn could better suit the reality of semantic prosody. Additionally, the method that we used to indicate the

²⁴⁵ Xiao, R., & McEnery, T. (2006). Collocation, Semantic Prosody, and Near Synonymy: A Cross-Linguistic Perspective. *Applied Linguistics*, 27, pp. 103-129.

²⁴⁶ Partington, A. (1998) *Patterns and Meanings: Using Corpora for English Language Research and Teaching*. Amsterdam/Philadelphia: John Benjamins Publishing Company.

²⁴⁷ sarhad, J., & Mahmood, R. (2023). A Corpus-based Study of Semantic Prosody across a Native Corpus. *Journal of Garmian University*, 10(3), pp. 902-909.

positive-negative polarity of lexical items could lead to different results. To exemplify this, let's see one of Sarhad & Mahmood's concordance lines:

ork. The studio work will **lead to** a cramming project - a pr

In this line from Sarhad & Mahmood, there is a modal verb which we would treat as neutral, however, in their study it constituted a part of negative semantic prosody of a larger unit.

In our view, a combination of both methods could yield a holistic view on semantic prosody, both having their limitations which are neutralized by the other.

Zhou and Zhang, when analyzing *TO LEAD TO* in British Academic Written English corpus (BAWE), found 65 “frequent collocates” among which 52% are claimed to be negative, 20% neutral and 28% positive. We weren't able to replicate these results, if anything we found a marginally more positive evaluation on top of the overwhelmingly neutral one. However, the differences might result from (1) different sample — we chose to analyze 30 most frequent relevant collocates, which is more than 2 times less than Zhou and Zhang's study, (2) our choice of description of evaluative load. The latter point emphasizes that, in our study, words like *REDUCTION* or *HIGH* were described as neutral lexis pertaining to the category of *comparison*, while Zhou and Zhang saw them as negative and positive accordingly.

Another possible explanation for the discrepancies between the two above-mentioned studies and ours, can be their underlying assumption that semantic prosody of a node depends more on the total number of evaluative words it collocates with, regardless of their frequency. However, this view would question the rationale for the model of mental lexicon and the frequency effects, since — as we presented in chapter 4 — native and proficient speakers were able to produce utterances in line with semantic prosodies. How one would account for this capacity then if not based on frequency? If one were to reconcile these conflicting assumptions, they could propose that semantic prosody is an additional effect (overriding the frequency effects), which “binds” the words in our mental lexicon on the basis of the evaluative/attitudinal tendencies. This view would allow for the accumulation of the individual, infrequent occurrences into a “total negative frequency” and as such align with the frequency effect theory. Investigation of the hypotheses mentioned in this paragraph would require analyzing all the concordance lines from a given corpus, which for items such as *TO LEAD TO* would be very laborious. However, with the application of large language models, this should be feasible.

8.4 TO CAUSE

Since the goal of the analysis is to compare verbs, we need to exclude from our searches other parts of speech (PoS). Thanks to LancsBox X's PoS tagging feature, we are able to do it automatically. In the search bar, we put the string:

```
[hw="cause" pos="V.*"]
```

The first variable indicates the headword (or lemma) — CAUSE — and the second one signifies that we are interested in verbs in all of their grammatical forms — CAUSE, CAUSES, CAUSED and CAUSING.

We proceed to analyze the 30 most common collocates of the verb *TO CAUSE* in the general BNC2014 corpus and its 8 subcorpora.

8.4.1 Results: collocates of *TO CAUSE* (General corpus)

There are 16 392 instances of using the verb *TO CAUSE* in 8 622 texts in the BNC2014 corpus. Given the size of the corpus (102M), the normalized frequency of this item is 160,70. Using GraphCall feature, we compiled a list of collocates.

After excluding articles, prepositions, pronouns, determiners, conjunctions (e.g., *THE, OF, BY, AND, THEY*), various forms of *TO BE* (e.g., *IS, WAS, WERE*), *TO HAVE* (e.g., *HAVE, HAS*), *TO DO* (e.g., *DO*), we are left with the following list of the top 30 relevant collocates:

Table 18. Collocates of *TO CAUSE* in BNC2014

a collocate of <i>TO CAUSE</i>	number of occurrences	normalized frequency	LogDice Score
CAN	1016	9,96	7,0
DAMAGE	720	7,06	10
PROBLEMS	668	6,55	9,5
COULD	523	5,13	6,5
WOULD	506	4,96	6,1
MAY	473	4,64	7,3
WILL	467	4,58	5,9
MORE	424	4,16	5,9
HARM	295	2,89	8,9
PAIN	286	2,80	8,5
TROUBLE	277	2,72	8,6
PEOPLE	245	2,40	5,8
SIGNIFICANT	239	2,34	7,6
DEATH	238	2,33	7,9
MIGHT	213	2,09	6,4
LOSS	199	1,95	7,7

MANY	179	1,75	6,2
INCREASE	177	1,74	7,3
EVEN	173	1,70	5,7
DISEASE	169	1,66	7,8
DISTRESS	165	1,62	8,3
SERIOUS	163	1,60	7,6
CHANGE	161	8,05	6,7
KNOW	155	7,75	4,7
CHANGES	152	7,6	7,1
TIME	151	7,55	4,8
LIKELY	151	7,55	7,0
DISRUPTION	151	7,55	8,1
PROBLEM	149	7,45	7,0
INJURY	149	7,45	7,8

As recognized in the literature, the verb *TO CAUSE* has many negative collocates: *DAMAGE, PROBLEM(S), HARM, PAIN, TROUBLE, DEATH, LOSS, DISEASE, DISTRESS, SERIOUS, DISRUPTION, INJURY*. Most of them are *bad* words (on the good-bad scale) but we also see *LOSS* associated with the *low* category (on the high-low scale) and *SERIOUS* pertaining to the serious category (on the serious-humorous scale).

Their accumulated normalized frequency is 35,58 and the sum of LogDice scores is 107,7. Since there are 13 negative words, we can calculate that 43,33% of the top 30 most common collocates are negative.

The neutral collocates include words describing objects or phenomena (*PEOPLE, CHANGE(S), TIME*). Moreover, we find a number of collocates that pertain to the category of *possibility/necessity* recognized by Bednarek (*CAN, COULD, WOULD, MAY, WILL, MIGHT, LIKELY*). Moreover, there are also a few *comparison* words (*MORE, MANY, INCREASE, EVEN*) corresponding also to *graduation* in the appraisal theory. The word *KNOW* was also found.

The accumulated normalized neutral frequency is 50,65 and the sum of LogDice scores is 100,4. There are 16 neutral words, which accounts for 53,33% of the collocates analyzed.

The only positive collocate of *TO CAUSE* is a marker of *importance* (*SIGNIFICANT*).

Its normalized frequency is 2,34 and the sum of LogDice scores is 7,6. This 1 occurrence of a positive word accounts for 3,33% of the 30 collocates.

In summary, the collocates of *TO CAUSE* in BNC2014 are almost as negative (43,33%) as neutral (53,33%), leaning towards the latter. However, the average LogDice score

for a neutral item (6,28) is much lower than for the negative (8,28). Only 3,33% of collocates were found to be positive. All of this suggests a negative semantic prosody, as previously recognized in the literature.

Table 19. Semantic Prosody of *TO CAUSE* in BNC2014

Positive Normalized Frequency	Positive LogDice Sum	Positive Percentage of Collocates
2,34	7,6	3,33%
Neutral Normalized Frequency	Neutral LogDice Sum	Neutral Percentage of Collocates
50,65	100,4	53,33%
Negative Normalized Frequency	Negative LogDice Sum	Negative Percentage of Collocates
35,58	107,7	43,33%

8.4.2 Results: collocates of *TO CAUSE* (Academic Prose)

There are 4 942 instances of using the verb *TO CAUSE* in 1 535 texts of academic prose in BNC2014 corpus. Given the size of the corpus (20M), the normalized frequency of this item is 247,1. Using GraphCall feature, and qualitative selection of relevant lexis, we compiled a list of collocates.

After excluding articles, prepositions, pronouns, determiners, conjunctions (e.g., *THE, OF, TO, AND, THEY*), various forms of *TO BE* (e.g., *IS, WAS, WERE*), *TO HAVE* (e.g., *HAVE, HAS*), abbreviations used in literature (e.g., *FIG.*), conjunctive adverbs (e.g., *HOWEVER, THEREFORE*), we are left with the following list of the top 30 relevant collocates:

Table 20. Collocates of *TO CAUSE* in Academic Prose

a collocate of <i>TO CAUSE</i>	number of occurrences	normalized frequency	LogDice Score
CAN	502	25,1	8,2
MAY	354	17,7	8,4
DAMAGE	222	11,1	9,9
MORE	216	10,8	7,1
INCREASE	204	10,2	9,0
COULD	173	8,65	6,3
SIGNIFICANT	152	7,6	8,1
WOULD	151	7,55	7,4

LOSS	150	7,5	9,1
DUE	149	7,45	8,3
CHANGE	147	7,35	8,2
WILL	142	7,1	7,4
CHANGES	134	6,7	8,4
PROBLEMS	129	6,45	8,8
DISEASE	121	6,05	8,7
HIGH	117	5,85	7,7
MIGHT	115	5,75	7,8
EFFECT	112	5,6	7,7
EFFECTS	112	5,6	7,9
INCREASED	108	5,4	8,1
HARM	105	5,25	9,2
STRESS	97	4,85	8,6
DIFFERENT	97	4,85	6,8
LIKELY	96	4,8	7,9
PRESSURE	96	4,8	8,3
REDUCTION	93	4,65	8,3
MOST	91	4,55	6,9
SYSTEM	86	4,3	7,3
EVEN	85	4,25	7,3
HUMAN	84	4,2	7,5

The verb *TO CAUSE* shows a number of negative collocates: *DAMAGE*, *LOSS*, *PROBLEMS*, *DISEASE*, *HARM*, *STRESS*. Most of them are *bad* words (on the *good-bad* scale) but we also see *LOSS* which pertains more to the category of *low* (on the *high-low* scale).

Their accumulated normalized frequency is 36,35 and the sum of LogDice scores is 54,3. Since there are 6 negative words, we can calculate that 20% of the top 30 most common collocates are negative.

The neutral collocates include words describing objects or phenomena (*CHANGE(S)*, *PRESSURE*, *SYSTEM*, *HUMAN*, *EFFECT(S)*) and the word *DUE* which could also be ascribed with the peripheral evaluative parameter of *evidentiality*. Although one could argue that the word *PRESSURE* also has the meaning of influencing someone forcibly, the

examination of concordance lines shows that it is used mostly in the sense of a physical phenomenon, e.g.:

artery, caution should be exercised as reducing blood pressure can **cause** infarction. There is emerging evidence that blood pressure variably may

We also find a number of collocates that pertain to the category of *possibility/necessity* recognized by Bednarek (*CAN, MAY, COULD, WOULD, WILL, MIGHT, LIKELY*) showing varying degrees of certainty about, usually, a scientific statement. Moreover, there are some *comparison* words (*MORE, HIGH, DIFFERENT, MOST, EVEN, INCREASED(D), REDUCTION*) corresponding also to *graduation* in the appraisal theory.

The accumulated normalized frequency is 173,2 and the sum of LogDices scores is 178,2. There are 21 neutral words, which accounts for 76,66% of the collocates analyzed.

The only positive collocate of *TO CAUSE* is a marker of *importance* (*SIGNIFICANT*).

Its normalized frequency is 5,4 and the sum of LogDice scores is 8,1. This 1 occurrence of a positive word accounts for 3,33% of the 30 collocates.

In summary, the verb *TO CAUSE* seems to be predominantly neutral in the academic prose (73,33%), with the negative collocates (23,33%) overwhelming the positive ones (3,33%). Moreover, the average dice score for a negative item (9,05) is slightly higher for the neutral (8,49). All of this suggests a neutral-to-negative semantic prosody.

Table 21. Semantic Prosody of *TO CAUSE* in Academic Prose

Positive Normalized Frequency	Positive LogDice Sum	Positive Percentage of Collocates
5,4	8,1	3,33%
Neutral Normalized Frequency	Neutral LogDice Sum	Neutral Percentage of Collocates
173,2	178,2	76,66%
Negative Normalized Frequency	Negative LogDice Sum	Negative Percentage of Collocates
36,35	54,3	20%

8.4.3 Results: collocates of *TO CAUSE* (Elanguage)

There are 794 instances of using the verb *TO CAUSE* in 420 texts of elanguage genre in BNC2014 corpus. Given the size of the corpus (5M), the normalized frequency of this item is 158,8. Using GraphCall feature, and qualitative selection of relevant lexis, we compiled a list of collocates.

After excluding articles, prepositions, pronouns, determiners, conjunctions (e.g., *THE, OF, BY, AND, IT*), various forms of *TO BE* (e.g., *IS, WAS, WERE*), *TO HAVE* (e.g., *HAVE,*

HAS), *TO DO* (e.g., *DO*), *TO LIKE* (e.g., *LIKE*), numerals (e.g., *ONE*), item *WELL*, we are left with the following list of the top 30 relevant collocates:

Table 19. Collocates of *TO CAUSE* in Elanguage

a collocate of <i>TO CAUSE</i>	number of occurrences	normalized frequency	LogDice Score
CAN	91	18,20	7,4
PROBLEMS	68	13,60	10,2
WOULD	57	11,40	7,0
PEOPLE	55	11,00	7,6
MORE	55	11,00	7,0
WILL	44	8,80	6,4
MUCH	40	8,00	7,2
COULD	37	7,40	7,2
VERY	33	6,60	6,0
REALLY	33	6,60	6,6
PAIN	29	5,80	9,0
MAY	29	5,80	7,7
KNOW	28	5,60	6,8
TIME	28	5,60	6,1
GOOD	27	5,40	5,2
ANXIETY	25	5,00	9,3
MANY	24	4,80	7,1
THINK	23	4,60	6,3
ISSUES	23	4,60	8,7
DAMAGE	22	4,40	9,4
STRESS	22	4,40	9,3
WORK	20	4,00	6,4
GREAT	20	4,00	5,1
GET	19	3,80	5,5
CANCER	18	3,60	8,7
PROBLEM	18	3,60	7,9

HARM	17	3,40	9,2
THING	16	3,20	6,9
WATER	16	3,20	7,8
LOSS	15	3,00	8,6

The verb *TO CAUSE* shows a number of negative collocates: *PROBLEM(S)*, *PAIN*, *ANXIETY*, *ISSUES*, *DAMAGE*, *STRESS*, *CANCER*, *HARM*, *LOSS*. These words indicate negative states of affairs (e.g., *PROBLEMS*, *DAMAGE*) and injuries to health (e.g., *PAIN*, *ANXIETY*).

Their accumulated normalized frequency is 51,50 and the sum of LogDice scores is 90,3. Since there are 10 negative words, we can calculate that 33,33% of the top 30 most common collocates are negative.

The neutral collocates include words describing objects or phenomena (*PEOPLE*, *TIME*, *WORK*, *THING*, *WATER*). We also find a number of collocates that pertain to the category of *possibility/necessity* recognized by Bednarek (*CAN*, *WOULD*, *WILL*, *COULD*, *MAY*) showing varying degrees of certainty about, usually, a scientific statement. Moreover, there are some *comparison* words (*MORE*, *MUCH*, *VERY*, *REALLY*) corresponding also to *graduation* in the appraisal theory. We also find generally neutral lexis like *KNOW*, *THINK*, and *GET*.

The accumulated normalized frequency is 129,60 and the sum of LogDices scores is 123. There are 18 neutral words, which accounts for 60% of the collocates analyzed.

The positive collocates of *TO CAUSE* are *GOOD* and *GREAT*.

Their normalized total frequency is 9,40 and the sum of LogDice scores is 10,3. These 2 occurrences of a positive word accounts for 6,66% of the 30 collocates.

In summary, the verb *TO CAUSE* seems to be mostly neutral (60%) in the elanguage genre, however the negative collocates (33,33%) constitute one third of all collocates. Moreover, the average LogDice score for a negative collocate (9,03) is much higher than the neutral (6,83), which indicates a stronger collocational strength. The positive collocates are scarce (6,66%).

Table 23. Semantic Prosody of *TO CAUSE* in Elanguage

Positive Normalized Frequency	Positive LogDice Sum	Positive Percentage of Collocates
9,40	10,3	6,66%
Neutral Normalized Frequency	Neutral LogDice Sum	Neutral Percentage of Collocates
129,60	123	60%
Negative Normalized Frequency	Negative LogDice Sum	Negative Percentage of Collocates
51,40	90,3	33,33%

8.4.4 Results: collocates of *TO CAUSE* (Fiction)

There are 2 231 instances of using the verb *TO CAUSE* in 763 texts of fiction genre in BNC2014 corpus. Given the size of the corpus (20M), the normalized frequency of this item is 111,55. Using GraphCall feature, and qualitative selection of relevant lexis, we compiled a list of collocates.

After excluding articles, prepositions, pronouns, determiners, conjunctions (e.g., *THE, OF, BY, BUT, YOU*), various forms of *TO BE* (e.g., *IS, WAS, WERE*), *TO HAVE* (e.g., *HAVE, HAS*), *TO DO* (e.g., *DO*), *TO LIKE* (e.g., *LIKE*), numerals (e.g., *ONE*), item *WELL*, item *RIGHT* (because of its ambiguous usage — not only as meaning “true” but also as the direction or a discourse particle), we are left with the following list of the top 30 relevant collocates:

Table 24. Semantic Prosody of *TO CAUSE* in Fiction

a collocate of <i>TO CAUSE</i>	number of occurrences	normalized frequency	LogDice Score
WOULD	165	8,25	6,3
TROUBLE	138	6,90	9,9
SAID	135	6,75	5,4
COULD	123	6,15	6,0
MORE	120	6,00	6,7
CAN	110	5,50	6,6
EVEN	97	4,85	6,7
MIGHT	95	4,75	7,2
DAMAGE	94	4,70	9,9
KNOW	79	3,95	5,8
PAIN	78	3,90	8,8
WILL	78	3,90	6,4
MUCH	70	3,50	6,6
TIME	61	3,05	5,6
HEAD	56	2,80	6,2
WAY	54	2,70	6,0
MAN	52	2,60	6,0
THINK	51	2,55	5,7

DEATH	51	2,55	7,9
PROBLEMS	49	2,45	9,0
SEE	47	2,35	5,5
PEOPLE	45	2,25	6,2
THOUGHT	44	2,20	5,8
WANT	42	2,10	5,9
GO	41	2,05	5,5
SAY	37	1,85	5,7
EYES	37	1,85	5,6
HARM	36	1,80	8,6
LOOK	36	1,80	5,6
MADE	35	1,75	5,6

The verb *TO CAUSE* shows a number of negative collocates: *TROUBLE*, *DAMAGE*, *PAIN*, *DEATH*, *PROBLEMS*, *HARM*. These words indicate negative states of affairs (e.g., *TROUBLE*) and injuries to health (e.g., *PAIN*, *DEATH*).

Their accumulated normalized frequency is 22,30 and the sum of LogDice scores is 54,1. Since there are 6 negative words, we can calculate that 20% of the top 30 most common collocates are negative.

The neutral collocates include words describing objects or phenomena (*TIME*, *HEAD*, *WAY*, *MAN*, *PEOPLE*, *EYES*). We also find a number of collocates that pertain to the category of *possibility/necessity* recognized by Bednarek (*WOULD*, *COULD*, *CAN*, *MIGHT*, *WILL*) showing varying degrees of certainty about, usually, a scientific statement. Moreover, there are some *comparison* words (*MORE*, *EVEN*, *MUCH*) corresponding also to *graduation* in the appraisal theory. We also find generally neutral words like *KNOW*, *THINK*, *THOUGHT*, *SEE*, *WANT*, *LOOK*, *MADE*, and verbs *SAY* and *SAID* used to indicate someone's utterance.

The accumulated normalized frequency is 85,50 and the sum of LogDices scores is 144,6. There are 24 neutral words, which accounts for 80% of the collocates analyzed.

We didn't find any positive words among 30 most common collocates of *TO CAUSE*.

In summary, the verb *TO CAUSE* seems to be mostly neutral (80%) in the fiction genre, however the negative collocates (20%) are characterized by relatively high average LogDice score (9) in relation to the neutral ones (6,03). Interestingly, not a single positive collocate was found among the most frequent ones. Another peculiarity of the collocates of *TO CAUSE* in the fiction genre is the fact that almost half of them (46,66%) are verbs.

Table 25. Semantic Prosody of *TO CAUSE* in Fiction

Positive Normalized Frequency	Positive LogDice Sum	Positive Percentage of Collocates
0	0	0%
Neutral Normalized Frequency	Neutral LogDice Sum	Neutral Percentage of Collocates
85,50	144,6	80%
Negative Normalized Frequency	Negative LogDice Sum	Negative Percentage of Collocates
22,30	54,1	20%

8.4.5 Results: collocates of *TO CAUSE* (Magazines)

There are 2 474 instances of using the verb *TO CAUSE* in 1 811 texts of fiction genre in BNC2014 corpus. Given the size of the corpus (15M), the normalized frequency of this item is 164,93. Using GraphCall feature, and qualitative selection of relevant lexis, we compiled a list of collocates.

After excluding articles, prepositions, pronouns, determiners, conjunctions (e.g., *A, FOR, THAT, BUT, YOU*), various forms of *TO BE* (e.g., *IS, WAS, WERE*), *TO HAVE* (e.g., *HAVE, HAS*), *TO DO* (e.g., *DO*), *TO LIKE* (e.g., *LIKE*), numerals (e.g., *3*), we are left with the following list of the top 30 relevant collocates:

Table 26. Semantic Prosody of *TO CAUSE* in Magazines

a collocate of <i>TO CAUSE</i>	number of occurrences	normalized frequency	LogDice Score
CAN	278	18,53	7,9
WILL	191	12,73	6,8
WOULD	147	9,80	7,5
MORE	134	8,93	6,5
COULD	127	8,47	7,5
DAMAGE	106	7,07	9,9
PROBLEMS	89	5,93	9,4
MAY	89	5,93	7,6
SCREENSHOTS	82	5,47	9,8
SAYS	81	5,40	6,9
TIME	78	5,20	6,5
NEW	78	5,20	6,5

PEOPLE	77	5,13	7,2
MUCH	76	5,07	7,2
FEW	72	4,80	7,9
WORLD	69	4,60	6,9
TAKE	64	4,27	7,0
YEAR	62	4,13	6,0
FALL	62	4,13	8,7
MANY	61	4,07	7,2
GAME	59	3,93	7,1
MOST	57	3,80	6,5
DAYS	53	3,53	7,8
CAR	53	3,53	6,1
CENT	52	3,47	6,0
SKIN	52	3,47	8,6
EVEN	51	3,40	6,5
SAID	51	3,40	6,3
STIR	50	3,33	9,1
LAST	50	3,33	6,4

The verb *TO CAUSE* shows a number of negative collocates: *DAMAGE*, *PROBLEMS*, *FALL*, *STIR*. One could argue that the word *FALL* also can point to things or actions that are not negative (e.g., the season), but the examination of KWIC lines shows that it is used predominantly in the sense of “abrupt change for worse”, as in:

slow to materialise. Along with a big currency hit, this **caused** a 13 per cent sales fall. But an improving market

Their accumulated normalized frequency is 20,47 and the sum of LogDice scores is 37,1. Since there are 4 negative words, we can calculate that 13,33% of the top 30 most common collocates are negative.

The neutral collocates include words describing objects or phenomena (*SCREENSHOTS*, *TIME*, *PEOPLE*, *WORLD*, *YEAR*, *GAME*, *DAYS*, *CAR*, *CENT*, *SKIN*). We also find a number of collocates that pertain to the category of *possibility/necessity* recognized by Bednarek (*CAN*, *WILL*, *WOULD*, *COULD*, *MAY*) showing varying degrees of certainty about, usually, a scientific statement. Moreover, there are some *comparison* words (*MUCH*, *FEW*, *MANY*, *MOST*, *EVEN*) corresponding also to *graduation* in the appraisal theory. We also

find generally neutral words like *TAKE*, *LAST*, and verbs *SAYS* and *SAID* used to indicate someone's utterance.

The accumulated normalized frequency is 162,93 and the sum of LogDices scores is 185,6. There are 25 neutral words, which accounts for 83,33% of the collocates analyzed.

Arguably, the sole positive collocate is *NEW*.

The accumulated normalized positive frequency is 5,2 and the sum of LogDice scores is 6,5. This 1 positive word accounts for only 3,33% of the 30 collocates.

In summary, the verb *TO CAUSE* is overwhelmingly neutral (83,33%) in magazines, however the negative collocates (13,33%) are characterized by relatively high average LogDice score (9,28) in relation to the neutral ones (7,42). The positive collocates are scarce (3,33%).

Table 27. Semantic Prosody of *TO CAUSE* in Magazines

Positive Normalized Frequency	Positive LogDice Sum	Positive Percentage of Collocates
5,2	6,5	3,33%
Neutral Normalized Frequency	Neutral LogDice Sum	Neutral Percentage of Collocates
162,93	185,6	83,33%
Negative Normalized Frequency	Negative LogDice Sum	Negative Percentage of Collocates
20,47	37,1	13,33%

8.4.6 Results: collocates of *TO CAUSE* (Newspapers)

There are 1 084 instances of using the verb *TO CAUSE* in 929 texts of newspaper texts in BNC2014 corpus. Given the size of the corpus (20M), the normalized frequency of this item is 54,2. Using GraphCall feature, and qualitative selection of relevant lexis, we compiled a list of collocates.

After excluding articles, prepositions, pronouns, determiners, conjunctions (e.g., *THE*, *OF*, *TO*, *AND*, *THEY*), various forms of *TO BE* (e.g., *IS*, *WAS*, *WERE*), *TO HAVE* (e.g., *HAVE*, *HAS*), *TO DO* (e.g., *DO*, *DID*), numerals (e.g., *ONE*), the word *WELL* (due its appearances in the construction *AS WELL AS*, and as a discursive adverb), we are left with the following list of the top 30 relevant collocates:

Table 28. Semantic Prosody of *TO CAUSE* in Newspapers

a collocate of <i>TO CAUSE</i>	number of occurrences	normalized frequency	LogDice Score
CAN	303	15,15	7,8

COULD	155	7,75	7,4
WILL	141	7,05	5,6
PROBLEMS	126	6,3	9,9
WOULD	104	5,2	6,3
SAID	80	4	5,1
DAMAGE	70	3,5	9,8
MORE	67	3,35	5,5
MAY	56	2,8	6,7
HARM	49	2,45	9,9
PEOPLE	48	2,4	5,6
LIKELY	39	1,95	7,8
SERIOUS	37	1,85	8,2
MUCH	36	1,8	6,2
EVEN	34	1,7	6,0
PAIN	28	1,4	8,5
TIME	28	1,4	4,8
OFFENCE	28	1,4	9,0
NEW	27	1,35	4,7
GET	26	1,3	4,3
BLOOD	25	1,25	8,0
SAYS	25	1,25	5,3
SHOULD	24	1,2	5,5
UPSET	23	1,15	8,7
MAKE	22	1,1	5,2
MIGHT	22	1,1	6,3
HEART	22	1,1	7,1
DISTRESS	22	1,1	9,1
SKIN	21	1,05	8,0
YEAR	21	1,05	4,4

The verb *TO CAUSE* collocates with the following negative words: *PROBLEMS, DAMAGE, HARM, SERIOUS, PAIN, OFFENCE, UPSET, DISTRESS*. They constitute words that describe *bad* states of affairs (*PROBLEMS, DAMAGE, HARM, PAIN, DISTRESS*) and *negative* outcomes of social interaction (*OFFENCE, UPSET*) which could be described as *unsociable* or *dissonant* in Osgood’s framework. We also see a collocate *SERIOUS* which is the extreme value of the humorous-serious parameter proposed by Bednarek.

Their accumulated normalized frequency is 19,15 and the sum of LogDice scores is 73,1. Since there are 8 negative words, we can calculate that 26,66% of the top 30 most common collocates are negative.

The neutral collocates include words describing objects or phenomena (*PEOPLE, TIME, BLOOD, HEART, SKIN, YEAR*). We also encounter a number of collocates that pertain to the category of *possibility/necessity* recognized by Bednarek (*CAN, COULD, WILL, WOULD, MAY, MIGHT, LIKELY, SHOULD*). Moreover, there are some *comparison* words (*MORE, MUCH, EVEN*) corresponding also to *graduation* in the appraisal theory. We also see some instances of using the verbs *TO SAY* (*SAID, SAYS*) used in the reporting context, *TO GET*, and *TO MAKE*. Interestingly, the latter is most often used in the context of bringing about something negative, as in the following concordance line:

do not wish to harm themselves. Severe anger can also **cause** people to think unclearly and make impulsive harmful decisions. People

The accumulated normalized neutral frequency is 64,95 and the sum of LogDice scores is 128,9. There are 21 neutral words, which accounts for 70% of the collocates analyzed.

Arguably, the sole positive collocate is *NEW*. In newspaper texts, it usually refers to novel solutions to the “problems” that the verb *TO CAUSE* brought about, or new information about the “damage” caused:

the viruses most likely to **cause** flu are identified and new vaccines made. chemicals such as histamine, that cause the distressing symptoms. In the new test, a sample of blood

The accumulated normalized positive frequency is 1,35 and the sum of LogDice scores is 4,7. This 1 positive word accounts for only 3,33% of the 30 collocates.

In summary, the verb *TO CAUSE* is mostly surrounded by neutral lexis in the newspaper texts (70%). However, there exists great disparity between the negative collocates (26,66%) and the positive ones (3,33%).

Table 29. Semantic Prosody of *TO CAUSE* in Newspapers

Positive Normalized Frequency	Positive LogDice Sum	Positive Percentage of Collocates
1,35	4,7	3,33%



Neutral Normalized Frequency	Neutral LogDice Sum	Neutral Percentage of Collocates
64,95	128,9	70%
Negative Normalized Frequency	Negative LogDice Sum	Negative Percentage of Collocates
19,15	73,1	26,66%

8.4.7 Collocates (Official Documents)

There are 920 instances of using the verb *TO CAUSE* in 387 official documents in BNC2014 corpus. Given the size of the corpus (7M), the normalized frequency of this item is 131,43. Using GraphCall feature, and qualitative selection of relevant lexis, we compiled a list of collocates.

After excluding articles, prepositions, pronouns, determiners, conjunctions (e.g., *THE, OF, TO, OR, THEY*), various forms of *TO BE* (e.g., *ARE, WAS, WERE*), *TO HAVE* (e.g., *HAVE, HAS*), *TO DO* (e.g., *DO*), numerals (e.g., *ONE*), we are left with the following list of the top 30 relevant collocates:

Table 30. Collocates of *TO CAUSE* in Official Documents

a collocate of <i>TO CAUSE</i>	number of occurrences	normalized frequency	LogDice Score
MATERIAL	116	16,57	10,1
FINANCIAL	109	15,57	6,8
STATEMENTS	83	11,86	7,5
ASSESSMENT	80	11,43	9,9
ERROR	80	11,43	11,2
FRAUD	79	11,29	10,8
FREE	79	11,29	10,3
INCLUDES	78	11,14	9,8
MISSTATEMENT	77	11,00	9,8
WILL	74	10,57	6,5
SIGNIFICANT	71	10,14	8,6
CAN	64	9,14	7,5
WOULD	61	8,71	7,7
RISK	61	8,71	7,4

COULD	61	8,71	8,8
DAMAGE	60	8,57	10,6
MAY	59	8,43	7,6
PROBLEMS	55	7,86	10
PEOPLE	40	5,71	7,3
CARRYING	39	5,57	8,6
COMPANY	36	5,14	5,2
ASSUMPTIONS	32	4,57	8,7
DEATH	31	4,43	9,6
MORE	31	4,43	6,5
YEAR	29	4,14	5,0
MANY	28	4,00	7,5
ADJUSTMENT	28	4,00	9,2
GOVERNMENT	27	3,86	6,6
CHANGES	27	3,86	7,4
CHANGE	27	3,86	7,6

The verb *TO CAUSE* collocates with the following negative words: *ERROR, FRAUD, MISSTATEMENT, RISK, DAMAGE, PROBLEMS, DEATH*. They constitute words that describe *bad* states of affairs (*DAMAGE, PROBLEMS, DEATH, RISK*) and failure to comply with procedures (*ERROR, FRAUD, MISSTATEMENT*) which could be described as *false* (*true-false* scale) or *disreputable* (*reputable-disreputable* scale) in Osgood's framework; they also could fall into category of *fake* (*genuine-fake* scale) in Bednarek's framework.

Their accumulated normalized frequency is 63,29 and the sum of LogDice scores is 69,4. Since there are 7 negative words, we can calculate that 23,33% of the top 30 most common collocates are negative.

The neutral collocates include words describing objects or phenomena (*PEOPLE, COMPANY, ASSUMPTIONS, YEAR, ADJUSTMENT, GOVERNMENT, CHANGE(S)*). Some words are used in a context of *financial procedures* (*MATERIAL, FINANCIAL, STATEMENT*) We also encounter a number of collocates that pertain to the category of *possibility/necessity* recognized by Bednarek (*WILL, CAN, WOULD, COULD, MAY*). Moreover, there are some *comparison* words (*MORE, MANY*) corresponding also to *graduation* in the appraisal theory. We also find some generally neutral lexi, namely *INCLUDES* and *CARRYING*.

The accumulated normalized neutral frequency is 161,29 and the sum of LogDices scores is 161,8. There are 21 neutral words, which accounts for 70% of the collocates analyzed.

The positive collocates of *TO CAUSE* are *FREE* and *SIGNIFICANT*, the latter pertaining to the *importance* scale recognized by Bednarek.

The accumulated normalized positive frequency is 21,43 and the sum of LogDice scores is 18,9. This 1 positive word accounts for only 6,66% of the 30 collocates.

In summary, the verb *TO CAUSE* is mostly surrounded by neutral lexis in the official documents (70%). However, there exists great disparity between the negative collocates (23,33%) and the positive ones (6,66%). Moreover, the average LogDice score favors the negative (9,91) and positive (9,45) over neutral (7,7).

Table 31. Semantic Prosody of *TO CAUSE* in Official Documents

Positive Normalized Frequency	Positive LogDice Sum	Positive Percentage of Collocates
21,43	18,9	6,66%
Neutral Normalized Frequency	Neutral LogDice Sum	Neutral Percentage of Collocates
161,29	161,8	70%
Negative Normalized Frequency	Negative LogDice Sum	Negative Percentage of Collocates
63,29	69,4	23,33%

8.4.8 Discussion: collocates of *TO CAUSE* across genres

Below, we present a summary table of our findings of semantic prosody of *TO CAUSE* across 7 genres:

Table 32. The comparison of Semantic Prosody of *TO CAUSE* across 6 subcorpora and the general BNC corpus

Sub(corpus)	PNF	PLD	PP	NNF	NLD	NP	NNF'	NLD'	NP'
General	2,34	7,6	3,33%	50,65	100,4	53,33%	35,58	107,7	43,33%
Academic Prose	5,4	8,1	3,33%	173,2	178,2	76,66%	36,35	54,3	20%
Elanguage	9,40	10,3	6,66%	129,6	123	60%	51,4	90,3	33,33%
Fiction	0	0	0%	85,5	144,6	80%	22,3	54,1	20%
Magazines	5,2	6,5	3,33%	162,93	185,6	83,33%	20,47	37,1	13,33%
Newspapers	1,35	4,7	3,33%	64,95	128,9	70%	19,15	73,1	26,66%
Official Documents	21,43	18,9	6,66%	161,29	161,8	70%	63,29	69,4	23,33%

In our study, we found — in line with the previous literature (e.g., Stubbs²⁴⁸) — that the verb *TO CAUSE* generally shows a strong inclination towards negativity. Even though the percentage of negative collocates was not overwhelming in any of the genres, their average LogDice scores were higher than for positive and neutral lexis.

In none of the genres the positive collocates overwhelmed the negative ones, and in most genres the negative collocates constituted at least 20% of lexis — only in magazines it was 13,33%, which was the lowest percentage overall. The general corpus has shown the most negative collocates (43,33%).

However, in the opening of this chapter, we cited studies which found much more overwhelmingly negative results for *CAUSE*. When Stubbs documented 80% of occurrences of *CAUSE* as being negative, Xiao and Eney reported 77,7% negative KWIC lines. What can be the reason for this discrepancy?

Firstly, Stubbs was researching the lemma *cause*, not only the verb, which itself could account for different results.

Secondly, both studies used different, smaller corpora (Stubbs — Brown Corpus; Xiao and McEnergy — Flob and FROWN). This point can be exemplified by the number of occurrences of the verb *CAUSE* found by Xiao and Eney — they found 287 instances, whilst we found 16 392 in the general BNC corpus. This could lead to more objective results on our end, but it's much more likely that the study design itself influenced the outcomes.

After all, the methodology of the studies was very different. Stubbs, and Xiao and McEnergy analyzed KWIC lines and ascribed the evaluative meaning to the entirety of an occurrence. Moreover, they claimed to analyze all the occurrences of the lemma (Stubbs) and verb (Xiao and McEnergy) in a corpus. We deployed collocate analysis of 30 most common relevant collocates — it is possible that enlarging the study sample would bring our results closer to those of aforementioned researchers. Additionally, our choice of collocates differs from how it is usually done in literature because we decided to include modal verbs (e.g., *CAN, MAY, COULD*) and comparison words (*MORE, MUCH, VERY*), in line with Bednarek's evaluative parameters, as neutral collocates.

8.5 Comparative Analysis

In this subchapter, we will compare the findings of semantic prosodies for the verbs *TO CAUSE* and *TO LEAD TO* across analyzed corpora.

8.5.1 *TO LEAD TO* vs. *TO CAUSE* (General)

The verb *TO CAUSE* (160,70) occurs more frequently in the entire BNC2014 corpus than *TO LEAD TO* (145,93). This suggests that the former serves a broader functional role, whilst the latter might show more specific or specialized usage.

The semantic prosody of *TO LEAD TO* is predominantly neutral (86,66%), reflecting a general descriptive tone often used to describe logical consequences or neutral phenomena. There is a modest presence of positivity (9,99%), slightly outweighing negativity (3,33%).

²⁴⁸ Stubbs, M. (1995). Collocations and semantic profiles: On the cause of the trouble with quantitative methods. *Function of Language*, 2, pp. 1-33.

TO CAUSE, on the other hand, demonstrates a markedly negative semantic prosody (43,33%), with nearly half of its most common collocates carrying negative connotations. Neutral collocates are present (53,33%) but do not offset the negative slant, while positive collocates (3,33%) are nearly absent.

Interestingly, the sum of LogDice of negative collocates of *TO CAUSE* is higher by 7,3 than the neutral, despite occurring 10% less often, which suggest bigger collocational strength between the verb and its negative collocates. Moreover, if we calculate and compare the average LogDice for neutral collocates (LogDice sum divided by the number of collocates) of *TO LEAD TO* (7,32) and *TO CAUSE* (6,9), we see a higher average collocational strength in the case of *TO LEAD TO*.

The collocates of both items show a number of possibility/necessity words (*TO CAUSE* — 7; *TO LEAD TO* — 6) but *TO LEAD TO* shows 3 times more comparison words (12 vs. 4). This might suggest that *TO CAUSE* is used more in contexts where absolute negativity is to be expressed, whilst *TO LEAD TO* is preferred when a comparison is in order.

In summary, generally, *TO CAUSE* shows negative semantic prosody, whilst *TO LEAD TO* neutral semantic prosody. Below we provide a summary table:

Table 33. The comparison of Semantic Prosody of *TO LEAD TO* and *TO CAUSE* in the BNC2014 corpus

	<i>TO LEAD TO</i>	<i>TO CAUSE</i>
NEGATIVE %	3,33%	43,33%
NEGATIVE LogDice	8,5	107,7
NEUTRAL %	86,66%	53,33%
NEUTRAL LogDice	190,4	100,4
POSITIVE %	9,99%	3,33%
POSITIVE LogDice	21,4	7,6

Therefore, we propose, that the general degree of synonymy between these two words is rather low. Although similar in their dictionary meaning, they occur with lexis showing largely distinct evaluative loads.

8.5.2 *TO LEAD TO* vs. *TO CAUSE* (Academic Prose)

The verb *TO LEAD TO* (373,65) occurs more frequently in the academic prose than *TO CAUSE* (247,1). This might mean that the former is used more broadly, while the latter is deployed in more specific cases.

The semantic prosody of *TO LEAD TO* is predominantly neutral (90%), reflecting a descriptive tone of usage. Interestingly, one third of the most frequent collocates constitute words of *comparison* and *graduation* (e.g., *MORE*, *HIGHER*). This might be the case because

in the genre of academic prose, authors strive to achieve objectivity and present their reasoning factually, without the addition of their subjective evaluations. Among the collocates exist a small degree of positivity (6,66%), almost in equilibrium with the negativity (3,33%).

TO CAUSE, in turn, shows a much higher degree of negative semantic prosody (20%), which is about 6 times more than for *TO LEAD TO*. However, the neutral collocates constitute a much clearer majority (76,66%) than it was in the case of *TO CAUSE* in the general corpus (53,33%). A similar tendency can be found — the genre of academic prose seems to be lowering the degree of negativity found in the surroundings of lexical items. The positive collocates were scarce (3,33%).

Interestingly, the average LogDice of neutral collocates of *TO LEAD TO* (7,84) is very similar to that of neutral collocates of *TO CAUSE* (7,47). Similarly, positive collocates of the former (7,5) are similar to those of the latter (8,1) with their collocational strength measured by the LogDice score. However, the negative collocates are not only more frequent in the case of *TO CAUSE*, their average LogDice (9,05) is also almost 10% higher than for the collocates *TO LEAD TO* (8,3).

The neutral collocates of both items show a similar number of *comparison* (*TO CAUSE* — 8; *TO LEAD TO* — 10) and *possibility/necessity* words (*TO CAUSE* — 7; *TO LEAD TO* — 6). This suggests that they could be deployed interchangeably in the comparative contexts. These verbs also share a positive collocate (*SIGNIFICANT*) which is used to underline importance, as well as a negative collocate (*LOSS*).

In summary, generally, *TO CAUSE* shows mild negative semantic prosody, while *TO LEAD TO* demonstrates almost exclusively neutral semantic prosody. Below, we provide a summary table:

Table 34. The comparison of Semantic Prosody of *TO LEAD TO* and *TO CAUSE* in the Academic Prose subcorpus

	<i>TO LEAD TO</i>	<i>TO CAUSE</i>
NEGATIVE %	3,33%	20%
NEGATIVE LogDice	8,3	54,3
NEUTRAL %	90%	76,66%
NEUTRAL LogDice	211,8	178,2
POSITIVE %	6,6%	3,33%
POSITIVE LogDice	15	8,1

Therefore, we propose, that in the academic prose genre, the degree of synonymy between these two verbs is higher than in the general corpus. However, one needs to keep in mind that *TO CAUSE* still shows a fairly high degree of negativity. One could draw the conclusion that these words are fairly synonymous in the neutral context:

Something **caused** a change.
Something **led to** a change.

However, in the negative context, the item TO CAUSE would be preferred:

Something **caused** damage.
Something ***led to** damage.

8.5.3 TO LEAD TO vs. TO CAUSE (Elanguage)

In this subcorpus, the verb *TO CAUSE* (158,8) occurs almost 2,5 times more frequently than *TO LEAD TO* (64,6). This is exactly an opposite tendency than the one found in the academic prose genre. Given that the disparity between the frequency of occurrence wasn't so marked in the general corpus (*TO CAUSE* was 10% more frequent), we could assume that the word *TO CAUSE* is an easier, more straightforward, word and is, therefore, more often deployed on the internet (where erudition gives way to simple communication) than in the academic prose. However, we ought to remember that this subcorpus was of the smallest volume (5M words) and could produce less statistically significant results.

If we assume that the negative collocates (13,33%) can even each other out with the positive ones (13,33%), we could state that the semantic prosody of *TO LEAD TO* is fully neutral. Moreover, neutral collocates (73,33%) constitute the majority. However, it would be much more accurate to state that this lexical item shows mostly neutral semantic prosody with some degree of ambiguity, which — if anything — leans towards negative because of a higher average LogDice score for the negative collocates (7,58) than the positive ones (4,43).

TO CAUSE shows 2,5 times more negative collocates (33,33%), and twice fewer positive ones (6,66%) than *TO LEAD TO*. However, its neutral collocates (60%) are almost twice as frequent as the negative ones. This suggests a negative semantic prosody, with a lower degree of negativity than the general corpus. Again, we cannot rule out the possibility of the size of the corpus influencing the results.

It is worth pointing out that both items have fairly low average LogDice scores for positive items (*TO CAUSE* — 5,15; *TO LEAD TO* — 4,43). This could constitute an argument for disregarding the relevance of the positive collocates in our analysis. In line with the frequency profile, *TO CAUSE* is also characterized by a higher average collocational strength with the negative items (9,03) than *TO LEAD TO* (7,58).

Both items share some positive (*NEW, BETTER*), neutral and negative (*PROBLEM, CANCER*) collocates. Their neutral collocates are also very similar (*MORE, MUCH, VERY, REALLY, CAN, WOULD, COULD, WILL, MAY, THING*). This degree of similarity, paired with the fact that — despite differences — the percentages for evaluative lexis are the closest in this genre, hints at a high degree of synonymy in the internet use.

In summary, *TO CAUSE* shows a negative semantic prosody, while *TO LEAD TO* is

co-occurs with rather neutral lexis, with a slight slant towards negativity, as found in the LogDice scores. Below, we provide a summary table:

Table 35. The comparison of Semantic Prosody of *TO LEAD TO* and *TO CAUSE* in the Elanguage subcorpus

	<i>TO LEAD TO</i>	<i>TO CAUSE</i>
NEGATIVE %	13,33%	33,33%
NEGATIVE LogDice	30,30	90,3
NEUTRAL %	73,33%	60%
NEUTRAL LogDice	136,2	123
POSITIVE %	13,33%	6,66%
POSITIVE LogDice	17,7	10,3

We propose that, these two verbs — although generally characterized by largely different evaluative profiles — are the most similar in their elanguage use (as compared with other genres). The peculiarity of this genre consists of a low entry barrier for creators (it is much easier to post online than to get published in a magazine or a scientific journal), higher tolerance for errors, and less formal tone. This allows for a recognition that the usage of verbs *TO LEAD TO* and *TO CAUSE* could be much more erroneous (or less in line with the typical collocational patterns). Such a conclusion would account for the atypical similarity of semantic prosodies of these items in the elanguage genre.

The pedagogical implication could be twofold. Firstly, L2 learners could be pointed to this atypical similarity. Secondly, they could be advised to treat the internet use cases with due caution.

8.5.4 *TO LEAD TO* vs. *TO CAUSE* (Fiction)

In this subcorpus, the verb *TO CAUSE* (111,55) is twice more frequent than *TO LEAD TO* (48,4). This is exactly an opposite tendency than the one found in the academic prose genre.

The verb *TO LEAD TO* collocates with predominantly neutral lexis (90%). There is a slight presence of positive (6,66%) and negative (3,33%) words, however, the latter has shown the weakest collocational strength among all the collocates analyzed in this study, as expressed by its LogDice score (3,1).

TO CAUSE, on the other hand, continues to show consistent results — the majority of collocates are neutral (80%) with a moderate average LogDice score (6,03) and we observe a fair share of negative words (20%) with a high average LogDice score (9,02). Unlike any other genre, fiction shows no positive collocates for *TO CAUSE*.

The degree of average collocational strength of the neutral collocates is similar among

the two verbs (*TO CAUSE* — 6,3; *TO LEAD TO* — 6,41), which would hint at the possibility of using these two interchangeably in neutral contexts. However, the examination of collocates shows a largely different pattern. Almost 41% of neutral collocates of *TO LEAD TO* constitute nouns that are, in the literal sense, either leading to something (*DOOR(S)*, *ROAD*, *CORRIDOR*, *WAY*, *PATH*, *STEPS*) or being the destination of such action (*ROOM*, *HOUSE*, *SIDE*). It is therefore mostly deployed as an illustration of physical space. *TO CAUSE* however, as it is lacking such literal meaning, shows no such usage. This finding points to the fact that even in the neutral context, the synonymy between the two verbs is virtually non-existent. However, it is worth underlining that both verbs were found to share a negative collocate — *DEATH*:

truth-speaking became impossible — because it **led to** immediate death — it had to be
disguised
the past week Monk has **caused** the death of a helpless man and

In summary, in fiction texts, *TO CAUSE* shows a mild negative semantic prosody and *TO LEAD TO* is predominantly neutral. Although the proportions of evaluative collocates in this genre are very similar to academic prose — where we proposed that they can be, to some degree, used interchangeably in the neutral context — a closer examination of collocates and KWIC lines shows that verbs *TO CAUSE* and *TO LEAD TO* are far from synonymous. This once again points to the limitation of quantitative collocate analysis and the necessity of combining different methods for analyzing semantic prosody in order to obtain relevant results.

Below, we provide a summary table:

Table 36. The comparison of Semantic Prosody of *TO LEAD TO* and *TO CAUSE* in the Fiction subcorpus

	<i>TO LEAD TO</i>	<i>TO CAUSE</i>
NEGATIVE %	3,33%	20%
NEGATIVE LogDice	3,1	54,1
NEUTRAL %	90%	80%
NEUTRAL LogDice	173,5	144,6
POSITIVE %	6,66%	0%
POSITIVE LogDice	14,7	0

These findings have practical implications for showing L2 learners the different evaluative profiles near-synonymous words can display. The analysis of the fiction genre has yielded results contrasting with other genres. Incorporating this knowledge into language pedagogy would equip student writers with a better understanding of the usage of *TO CAUSE* and *TO LEAD TO*.

8.5.5 *TO LEAD TO* vs. *TO CAUSE* (Magazines)

In the magazines subcorpus, the verb *TO CAUSE* (164,93) is more frequent than *TO LEAD TO* (134,86).

The collocates of the verb *TO LEAD TO* are predominantly neutral (90%). The negative words (6,66%) outweigh the positive ones (3,33%), in terms of the percentage of 30 most common collocates they constitute but their average LogDice score (6,45) is significantly lower (8,7) which suggests a balance between the two.

For *TO CAUSE* the majority of collocates are neutral (83,33%) with a moderate average LogDice score (7,42). The negative words (13,33%) are four times more frequent than the positive words (3,33%), and also show a much higher average LogDice score (9,26 vs. 6,5).

Both verbs exhibit a high degree of neutrality in the genre of magazines. The tendency however remain similar to previously compared subcorpora — *TO LEAD TO* has more neutral collocates (90% vs. 83,33%), however with a somewhat lower average LogDice scores (7,16 vs. 7,42). *TO CAUSE* shows twice more negative collocates (13,33% vs. 6,66%) and a much higher mean LogDice scores (9,25 vs. 7,42). The positive collocates are in equilibrium (3,33% both) with *TO LEAD TO* showing a higher average LogDice score (8,7 vs. 6,5).

It is worth pointing out that although the percentage of neutral collocates are comparable they exhibit different semantic profiles, which upon closer examination could point to different semantic prosodies of the verbs. 22,22% of the neutral collocates of *TO LEAD TO* are words pertaining to the category of money or economy (*CENT, PRICE(S), MARKET, PROFIT, CASH*). *TO CAUSE*, on the other hand, shows a less clear semantic profile, e.g., we find *time* words (*TIME, YEAR, DAYS*) or *computer technology* words (*SCREENSHOTS, GAME*).

In summary, in magazines, *TO CAUSE* shows a slight negative semantic prosody and *TO LEAD TO* is predominantly neutral. Both the discrepancy in the number of the evaluative collocates and their semantic profiles show a low degree of synonymy between the two verbs.

Below, we provide a summary table:

Table 37. The comparison of Semantic Prosody of *TO LEAD TO* and *TO CAUSE* in the Magazines subcorpus

	<i>TO LEAD TO</i>	<i>TO CAUSE</i>
NEGATIVE %	6,66%	13,33%
NEGATIVE LogDice	12,9	37,1
NEUTRAL %	90%	83,33%
NEUTRAL LogDice	193,4	185,6

POSITIVE %	3,33%	3,33%
POSITIVE LogDice	8,7	6,5

Our findings have practical implication for language pedagogy. Both the quantitative (percentages of collocates and LogDice scores) and qualitative (examination of collocates) analyses have shown differences between these supposedly synonymous verbs. Presenting such findings and/or empowering students to perform similar inquiries can aid students understanding of the specific usage of these verbs.

8.5.6 *TO LEAD TO* vs. *TO CAUSE* (Newspapers)

In the newspapers subcorpus, the verb *TO LEAD TO* (146,15) is almost 3 times more frequent than *TO CAUSE* (54,2). This points to the more general usage of the former and more specified usage of the latter.

The collocates of the verb *TO LEAD TO* are mostly neutral (80%). The negative words (13,33%) outweigh the positive ones (6,66%), both in terms of the percentage of 30 most common collocates they are found with (13,33% vs. 6,66%) and their average LogDice score (7,98 vs. 6,65).

The majority of collocates of *TO CAUSE* are neutral (70%). The negative words (26,66%) are eight times more frequent than the positive words (3,33%), and display almost twice higher average LogDice score (9,14 vs. 4,7).

Even though both verbs could be seen as showing a similar prosodic phenomenon — the majority of neutral collocates with the negative ones overwhelming the positive ones — the degree of it is much more outstanding in the case of *TO CAUSE*. It not only collocates with twice more negative words (26,66% vs. 13,33%) of a higher average LogDice score (9,14 vs. 7,98). It also shows less positive collocates (3,33% vs. 6,66%) with a lower mean LogDice score (4,7 vs. 6,65). Even the neutral statistics are consistent with these results — *TO CAUSE* shows less neutral collocates (70% vs. 80%) with a lower average collocational strength expressed by the LogDice score (6,14 vs. 6,84). All of this suggests that while *TO CAUSE* exhibits a negative semantic prosody, *TO LEAD TO* while capable of being surrounded by negative lexis — leans much more towards neutrality. Both items were found with the negative word *PROBLEMS* but they different in the rest of them (*TO LEAD TO* — *DEATH, LOSS, RISK*, and *TO CAUSE* — *DAMAGE, HARM, SERIOUS, PAIN, OFFENCE, UPSET, DISTRESS*). It shows that *TO LEAD TO* might be more suitable to express potential or actual *lack* of something (*LOSS, RISK*), whilst *TO CAUSE* tends to be used with physical (*DAMAGE, HARM, PAIN*) and psychological (*SERIOUS, OFFENCE, UPSET, DISTRESS*) unpleasanties.

The verbs also have shown different semantic profiles of their neutral collocates — *TO LEAD TO* was found with almost twice more (11 vs. 6) nouns, a large portion of which pertains to the category of public affairs (*POLICE, WORK, GOVERNMENT, UK*). *TO CAUSE* hasn't shown any clear semantic sets, however, one could notice that it collocated with twice more (4 vs. 2) non-modal verbs (besides *SAID* and *SAYS* — which was shared with

TO LEAD TO — also: *TO GET* and *TO MAKE*). One could point out that, since *TO CAUSE* collocated with such high frequency items (in the entire BNC: *TO MAKE* — 81 824, *TO GET* — 146 348, as compared with *PROBLEMS* — 13 157) with outstandingly low LogDice scores (*TO MAKE* — 1,1, *TO GET* — 1,3, as compared with *PROBLEMS* — 6,3), the relatively small frequency of occurrences of this verb in the subcorpus has influenced the findings. Nevertheless, the quantitative analysis has yielded consistent results with the other corpora.

In summary, in newspapers, *TO CAUSE* has shown a negative semantic prosody and *TO LEAD TO* is predominantly neutral, leaning towards negativity. The findings of analyses show a low degree of synonymy but the discrepancy in the frequencies of occurrences of these verbs shouldn't go unnoticed.

Below, we provide a summary table:

Table 38. The comparison of Semantic Prosody of *TO LEAD TO* and *TO CAUSE* in the Newspapers subcorpus

	<i>TO LEAD TO</i>	<i>TO CAUSE</i>
NEGATIVE %	13,33%	26,66%
NEGATIVE LogDice	31,9	73,1
NEUTRAL %	80%	70%
NEUTRAL LogDice	164,1	128,9
POSITIVE %	6,66%	3,33%
POSITIVE LogDice	13,3	4,7

Once again, the findings have practical implication for L2 teaching. Besides the usual notion of incorporating the findings — or even explorations — of semantic prosody in the language classroom settings, the example of *TO CAUSE* and *TO LEAD TO* in the newspaper subcorpus can be explored as an example of exercising caution in the analysis. After all, one should not only strive to compare the relevant collocational statistics but also pay attention to the discrepancies in, e.g., the frequencies of appearance of the items. Any sort of big difference in such metrics can put the findings into perspective.

This comparative analysis also serves as instantiation of the benefits of a more granular description of semantic prosody. For instance, simply stating — not untruthfully — that both verbs collocate with negative words would leave out the difference in the profile of the negative collocates. By doing so, the inclination of *TO CAUSE* to exhibit negative collocates pertaining to the category of *physical* or *psychological harm* (and *TO LEAD TO* showing *lack* words) would not be recognized.

8.5.7 *TO LEAD TO* vs. *TO CAUSE* (Official Documents)

In the official documents subcorpus, both verbs *TO LEAD TO* (146,86) and *TO CAUSE* (131,43) occur with similar frequency.



The collocates of the verb *TO LEAD TO* are predominantly neutral (90%). Like in the subcorpus of academic prose and fiction, the positive words are twice more frequent (6,66%) than the negative ones (3,33%).

Although the majority of collocates of *TO CAUSE* are neutral (70%), again the negative words (23,33%) outweigh the positive words (6,66%), however exhibiting similar average LogDice scores (9,91 vs. 9,45) both of which are particularly high.

The verb *TO CAUSE* has shown more than three times more negative collocates than to *LEAD TO* (23,33% vs. 3,33) with exceptionally high average LogDice score (9,91) for the negative words. Moreover, *TO LEAD TO* has a significantly higher percentage of neutral co-occurring words (90% vs. 70%), with similar average LogDice scores (7,3 vs. 7,7). One could argue that a lexical item could not be more clearly negative (in the case of *TO CAUSE*) and neutral (in the case of *TO LEAD TO*).

However, the high average LogDice score for the positive collocates of *TO CAUSE* (9,45) warrants a disclaimer. The fact that the words *FREE* and *SIGNIFICANT* have garnered such high LogDice scores, points at the possibility of a more nuanced usage of *TO CAUSE* in the genre of official documents.

Among the neutral collocates of *TO CAUSE* we can distinguish the category of *financial procedures* (*MATERIAL, FINANCIAL, STATEMENT*), and *parties of agreements* (*PEOPLE, COMPANY, GOVERNMENT*). The negative words co-occurring with *TO CAUSE* refer to a failure in compliance with the aforementioned procedures (*ERROR, FRAUD, MISSTATEMENT*). Similarly, the neutral collocates of *TO LEAD TO* fall into the category of financial procedures (*INVESTMENT, VALUE, CAPITAL, NUMBER, MANAGEMENT*) and parties of those (*GROUP, COMPANY, PEOPLE*). This points to a similar semantic preference of the two verbs.

In summary, in official documents, *TO CAUSE* has shown a negative semantic prosody and *TO LEAD TO* — neutral. According to our data, the words are not synonymous, however they exhibit similar semantic preference.

Below, we provide a summary table:

Table 39. The comparison of Semantic Prosody of *TO LEAD TO* and *TO CAUSE* in the Newspapers subcorpus

	<i>TO LEAD TO</i>	<i>TO CAUSE</i>
NEGATIVE %	3,33%	23,33%
NEGATIVE LogDice	8	69,4
NEUTRAL %	90%	70%
NEUTRAL LogDice	197,1	161,8
POSITIVE %	6,66%	6,66%
POSITIVE LogDice	15,2	18,9

The practical implications of these findings are in line with the previous subcorpora, however. We have shown that using both qualitative and quantitative analyses of semantic prosody can yield productive findings which can be applied in language pedagogy. As in the comparative analysis of the subcorpus of newspapers, we also want to bring our attention to the outliers in the data — in this example, a particularly high average LogDice score of the scarce positive collocates of *TO CAUSE*. A finding such as this one can provide additional anchor points in the analysis, which in turn allow for fostering a more nuanced understanding of the evaluative load of lexical items among L2 learners.

Moreover, the recognition of a similar semantic preference of both lexical items, further exemplifies the need to implement semantic prosody into language pedagogy — since failure to recognize the evaluative load of the analyzed verbs would lead to an exaggerated conclusion of similarity between them.

8.5.8 Discussion of the Comparative Analysis

The analysis of the semantic prosody of *TO CAUSE* and *TO LEAD TO* across various genres within the BNC2014 corpus reveals significant differences in their evaluative profiles, frequencies, and contextual uses. While these verbs share a general causative function, their collocational patterns and prosodic tendencies suggest distinct preferences and roles in language.

In the general corpus, *TO CAUSE* emerges as a more frequent lexical item, reflecting its broader applicability across genres. Its semantic prosody is distinctly negative, with nearly half of its most frequent collocates (43.33%) carrying adverse connotations. Neutral collocates constitute a slight majority (53.33%), but they fail to counterbalance the marked negativity, while positive collocates are scarce (3.33%). This finding underscores the strong association of *TO CAUSE* with contexts of direct and often undesirable consequences. By contrast, *TO LEAD TO* displays a predominantly neutral prosody (86.66%), with minimal negativity (3.33%) and a modest degree of positivity (9.99%). This profile aligns with its tendency to describe logical processes or gradual developments, suggesting its more specialized role in causative contexts.

The differences between those verbs become even more pronounced when analyzed within specific genres. In academic prose, *TO LEAD TO* is significantly more frequent than *TO CAUSE*. This genre preference reflects the descriptive and objective tone typical of academic writing, where *TO LEAD TO* is favored for its neutral and comparative collocates. Although *TO CAUSE* demonstrates a reduced degree of negativity (20%) compared to the general corpus, it retains a clear negative slant, highlighting its role in denoting concrete and often adverse effects. The similarity in the average collocational strength of their neutral and positive collocates hints at the possibility of these verbs being interchangeable in specific neutral contexts, though the negative associations of *TO CAUSE* remain more pronounced.

The genre of elanguage, characterized by its informal and unregulated tone, exhibits the closest semantic profiles for these verbs. Here, *TO CAUSE* is 2.5 times more frequent than *TO LEAD TO*, indicating its preference for straightforward communication. While *TO LEAD TO* maintains a largely neutral prosody, the slight ambiguity introduced by its negative

collocates leans it toward a more balanced profile. *TO CAUSE*, however, continues to exhibit a predominantly negative prosody, albeit with a lower degree of negativity than in the general corpus. The similarity in their evaluative proportions within this genre suggests a convergence of usage patterns, possibly influenced by the less formal and more flexible linguistic norms of online communication.

In fiction, *TO LEAD TO* is predominantly neutral, with collocates frequently describing spatial or physical progression. This literal interpretation diminishes its synonymy with *TO CAUSE*, which lacks such usage and retains a mildly negative prosody. The absence of positive collocates for *TO CAUSE* in this genre reinforces its evaluative bias, while *TO LEAD TO* remains versatile, though not synonymous, even in neutral contexts.

Magazines and newspapers exhibit similar trends, with *TO CAUSE* consistently showing a stronger negative prosody compared to *TO LEAD TO*. In magazines, the neutral collocates of *TO LEAD TO* often pertain to economic or financial topics, while *TO CAUSE* displays a broader but less defined semantic range. Newspapers, by contrast, highlight the potential for negativity in both verbs, though *TO CAUSE* is more explicitly associated with adverse outcomes such as *damage* and *harm*. The divergence in their collocates within these genres underscores their functional differentiation, with *TO LEAD TO* leaning toward neutrality and generality, while *TO CAUSE* remains specific and evaluatively loaded.

Official documents present a nuanced picture. While *TO CAUSE* continues to exhibit negative prosody, its high LogDice scores for positive collocates suggest occasional deployment in contexts emphasizing significance or value. *TO LEAD TO* retains its neutral profile, further solidifying its role in describing procedural or organizational developments. Both verbs share a semantic preference for financial and institutional contexts, though their evaluative differences remain evident.

Overall, the comparative analysis demonstrates that *TO CAUSE* and *TO LEAD TO* are far from interchangeable, despite their shared causative meaning. Their evaluative profiles diverge significantly, with *TO CAUSE* strongly associated with negative outcomes and *TO LEAD TO* exhibiting a more neutral and occasionally positive tone. These differences are amplified or mitigated by genre-specific conventions, highlighting the importance of context in the deployment of these lexical items. The findings underscore the necessity of incorporating semantic prosody into language pedagogy, enabling learners to navigate the nuanced evaluative meanings of near-synonymous verbs effectively.

8.6 CONCLUSION OF CHAPTER 8

This chapter provides an in-depth analysis of the semantic prosodies of *TO CAUSE* and *TO LEAD TO* across different genres within the BNC2014 corpus, shedding light on their evaluative tendencies, collocational patterns, and contextual preferences. The findings confirm that *TO CAUSE* and *TO LEAD TO* exhibit distinct semantic prosodies, reflecting their differential usage and connotations in various communicative contexts.

The verb *TO CAUSE* demonstrates a marked negative prosody, with many of its frequent collocates carrying negative connotations. This negative evaluative tendency is consistent across genres, though its intensity varies. For instance, in academic prose, *TO*

CAUSE shows a more neutral prosody, with evaluative meaning diluted by frequent neutral collocates like *CHANGE* and *PRESSURE*. Conversely, in elanguage and fiction, the negative prosody becomes more pronounced, indicating genre-driven differences in usage.

TO LEAD TO, by contrast, has a predominantly neutral semantic prosody, with the majority of its collocates describing logical or gradual processes. Its association with negativity is relatively weak, with only a small proportion of negative collocates across genres. Interestingly, *TO LEAD TO* occasionally conveys hints of a positive prosody, especially in academic prose and official documents, where collocates like *SIGNIFICANT* and *BETTER* emerge. However, in genres like newspapers, its negative prosody becomes more pronounced, likely reflecting the evaluative tone common in journalistic writing.

8.6.1 Limitations of the Study

Several methodological and analytical limitations should be acknowledged.

Firstly, the study relies exclusively on the BNC2014 corpus, which, although comprehensive, may not capture regional or register-specific variations present in other varieties of English. Including additional corpora could enhance the generalizability of the findings and expand its applicability to L2 learners who chose a different variety of English as their target.

Moreover, the analysis prioritizes the top 30 frequent, relevant collocates, which, while methodologically consistent, might exclude less frequent but potentially significant collocates. A broader analysis of concordance lines might reveal additional evaluative nuances. The notion of “relevance” of the collocates also differs from the literature. The categorization of collocates as neutral, positive, or negative is influenced by the frameworks applied (e.g., Appraisal Theory, Bednarek’s evaluative parameters) and assumptions on the part of the researcher, as explained in the methodology section. The interpretative nature of these frameworks introduces subjectivity, which may lead to variations in the assignment of evaluative load.

Lastly, although the widest possible context window (L10 – R10) was employed, one could argue that semantic prosodies might manifest in broader discursive contexts that exceed this range.

8.6.2 Implications for L2 Pedagogy

The findings have important implications for second language (L2) teaching and learning.

Educators should highlight the evaluative tendencies of verbs like *TO CAUSE* and *TO LEAD TO*, helping learners understand their nuanced usage in various contexts. Explicit instruction on semantic prosody could prevent pragmatic errors, such as using *TO CAUSE* in contexts requiring neutral or positive implications.

Moreover, L2 learners should be exposed to genre-specific examples to understand how semantic prosody shifts across communicative contexts. For instance, presenting *TO LEAD TO* in academic contexts versus journalistic writing can illustrate its versatility and evaluative nuances.

In general, emphasizing frequent collocates and their evaluative meanings can enhance learners' lexical competence, enabling them to produce natural and context-appropriate utterances.

8.6.3 Directions for Future Research

Building on this study, several avenues for future research emerge.

Analyzing the semantic prosodies of near-synonyms in other languages and comparing them with English could illuminate cross-linguistic patterns and inform multilingual pedagogical practices.

The elaboration and analysis of corpora from different varieties of English (e.g., American, Australian) or domain-specific corpora (e.g., medical, legal) could provide a more comprehensive understanding of how semantic prosody operates across Englishes. Moreover, the recent developments in large language models (LLM) technology can aid and automatize the process of corpora creation, which would allow for a more nuanced (specific to language variety, genre, topics, etc.) analysis. Utilizing AI-powered tools to analyze entire concordance lines, could offer rapid insights into semantic prosody and its broader discursive patterns, if not as a standalone tool, at least as an aid in exploring the further avenues for research.

More research regarding the effectiveness of pedagogical interventions is also needed. Designing and testing teaching materials based on semantic prosody and evaluating their effectiveness in improving L2 learners' pragmatic competence would provide practical validation for these findings.

In conclusion, this study underscores the importance of semantic prosody in shaping lexical meaning and contextual appropriateness. By integrating insights from this research into pedagogical and linguistic practices, educators, and researchers can better support learners in navigating the complexities of language use across genres.

9 SECOND LANGUAGE ACQUISITION AND LANGUAGE PEDAGOGY

We have provided an extensive overview of semantic prosody as it is seen now in linguistic literature, with the specific regard to its register-specific nature.

Next, we conducted a study of semantic prosodies of near-synonymous lexical items *TO CAUSE* and *LEAD TO*, taking into account their dependence on genres, in order to replicate previous findings and additionally show how register-specific semantic prosody can be practically applied to L2 teaching (here: for distinguishing between near-synonyms).

This chapter aims at providing a general introduction to the fields of Second Language Acquisition (SLA) and Language Pedagogy in order to provide a background for our didactic considerations.

9.1 HISTORICAL OVERVIEW

Second Language Acquisition (SLA) — as distinguished from First Language Acquisition (FLA) — represents a core area within Applied Linguistics. Although the name suggests putting focus on the second language one acquires, it could perhaps be better framed as “not-first” language acquisition, since it also used to refer to learning consecutive languages.

Second Language Acquisition (SLA) is closely interconnected with the field of *language pedagogy* (also called *L2 teaching*). One can also encounter the term *glottodidactics*, however it seems to be mostly present in Slavic linguistic literature (see: Róg²⁴⁹ or Gębał & Nawracka²⁵⁰).

Language teaching is predominantly understood through the concept of *method*. In efforts to enhance instructional practices, educators and researchers commonly focused on identifying the most effective teaching method²⁵¹. Method is a central part of the language teaching framework of *approach-method-technique* formulated in 1963 by Edward Mason Anthony Jr.²⁵² and is widely used in teacher training manuals²⁵³.

The groundwork for language pedagogy was laid by early structuralists. Thanks to Leonard Bloomfield and his influential textbook “Language” in 1933, linguistic data began to be viewed as empirical, thus introducing a scientific approach to the field. Another

²⁴⁹ Róg, Tomasz. 2014. 2014 The Shaping of Applied Linguistics and the Emergence of Glottodidactics.

²⁵⁰ Gębał, Przemysław & Nawracka, Monika. 2021. From foreign language teaching methodology to comparative glottodidactics: The formation of the Polish didactics of languages and cultures in the light of the development of European didactic thought. *European Journal of Applied Linguistics*.

²⁵¹ Hall, Graham. 2011. Exploring English Language Teaching: Language in Action. London, New York: Routledge.

²⁵² Anthony, E. M. 1963. Approach, method and technique. *English Language Teaching* 17: pp. 63–67.

²⁵³ Hall, Graham. 2011. Exploring English Language Teaching: Language in Action. London, New York: Routledge.

cornerstone for L2 teaching were ideas of Saussure²⁵⁴ in 1959 with his concepts of *langue* — the principles of a language — and *parole* — actual utterances being spoken. Structural linguistics analyzed language structure by gathering a set of expressions and attempting to classify all units within these expressions across various linguistic levels: morphemes, phonemes, verb phrases, categories, lexical noun phrases, and sentence types. From this approach, a method called Contrastive Analysis (CA) was born, consisting of the comparison of structures found in one’s native (L1) and target (L2) language and drills aimed at memorizing them²⁵⁵.

B.F. Skinner's seminal work *Verbal Behavior*²⁵⁶ in 1957 aimed to explain how language develops in humans. Skinner was influenced by the behaviorist theories of Ivan Pavlov, the Russian scientist, along with John Watson and Edward Thorndike, both American psychologists from the early twentieth century. The behaviorist perspective on language pedagogy was rooted in psychological concepts of “stimulus” and “response”, viewing language — and any skill — as a result of repeated reinforcement of expected responses. Myles²⁵⁷ notes that second language acquisition theories began as a supplement to language teaching pedagogy rooted in behaviorism, which was the dominant psychological theory at the time.

In response to large-scale studies on language acquisition and a growing emphasis on reading in the 1920s, the idea of *vocabulary control* took shape. Researchers identified a core set of around 2,000 words frequently appearing in written texts, reasoning that familiarity with this vocabulary set would significantly support reading skills. Alongside this, *grammar control* developed, focusing on the sentence structures most commonly used in spoken language²⁵⁸. This has important implication for the field of language pedagogy because, as it turned out, not all words (or structures) were of equal use to a language user and one could speed up the acquisition of proficiency in a language by prioritizing the more frequently occurring ones.

A significant shift in the understanding of second language acquisition was due to the works of Noam Chomsky and the nativist theories. His two magna opera (in 1957²⁵⁹ and 1965²⁶⁰), together with his criticism of Skinner’s behaviorist approach, led to the foundation of the general theory of Universal Grammar and the syntactic theory of Transformational-Generative Grammar.

Chomsky's concept of Universal Grammar posits that all languages share comparable fundamental structures governed by specific universal rules, enabling individuals to innately acquire language and use it effectively and creatively. This underlying universal structure was named Language Acquisition Device (LAD)²⁶¹. The primary support for the LAD is the

²⁵⁴ de Saussure, F. 1959. Course in general linguistics. New York: Philosophy Library.

²⁵⁵ Lado, R. 1957. Linguistics Across Cultures: Applied Linguistics for Language Teachers. Ann Arbor: University of Michigan Press.

²⁵⁶ Skinner, B. F. 1957. Century psychology series. Verbal behavior. London: Methuen.

²⁵⁷ Myles, Florence. 2010. The development of theories of second language acquisition. Language Teaching.

²⁵⁸ Hall, Graham. 2011. Exploring English Language Teaching: Language in Action. London, New York: Routledge.

²⁵⁹ Chomsky, N. 1957. Syntactic structures. Berlin: Mouton.

²⁶⁰ Chomsky, N. 1965. Aspects of the theory of syntax. Cambridge: MIT Press

²⁶¹ Chomsky, N. 1986. Knowledge of Language: Its Nature, Origin and Use. New York: Praeger

argument of the *poverty of the stimulus*. It asserts that without considerable innate grammatical knowledge, children would not be able to acquire language as rapidly as they do, especially since they lack access to negative evidence and seldom receive explicit instruction in their first language²⁶².

It has been recognized by Gass and Selinker²⁶³ that Universal Grammar served as the main framework behind child language acquisition for many years (around two decades since mid 1950s), but it has only been applied to second language acquisition in the mid 1980s. Since then, it has encountered several critiques.

Some researchers question the existence of a Language Acquisition Device (LAD) or Universal Grammar within the human brain, some are raising doubts about whether these constructs are applicable to second language learners at all²⁶⁴. Some scholars criticize Chomsky's research methodology, arguing that it fails to uncover any innate linguistic universals²⁶⁵. Furthermore, critics contend that the Universal Grammar theory does not align with all human languages, given that different languages exhibit unique characteristics and rules²⁶⁶ (e.g., Everett²⁶⁷ argues that Pirahã — a language used by an Amazon tribe — cannot be characterized with embedded recursion, which is said to be one of the universal features of all languages in the view of Transformational-Generative Grammar). These criticisms have contributed to a decline in support for Chomsky's Universal Grammar theory among some cognitive scientists and linguists.

Alongside the development of UG, various other conceptualizations have emerged. For instance, William Labov's²⁶⁸ *variability models* provided a framework for understanding how language use varies across different social groups and contexts, emphasizing the role of social factors in shaping linguistic behavior. Labov's work contributed to sociolinguistics by highlighting the fluid and dynamic nature of language, showing that linguistic features are not fixed but change depending on factors such as region, class, or ethnicity.

Swiss psychologist Jean Piaget situated language acquisition within the broader framework of cognitive development, asserting that a child must first grasp a concept before acquiring the language forms to express it²⁶⁹. For example, he highlighted *seriation*—the ability to compare and order objects by size—as a prerequisite for learning comparative adjectives like "bigger" or "smaller". Similarly, object permanence, the understanding that things continue to exist even when out of sight, emerges around 18 months and coincides with a significant increase in vocabulary, suggesting a connection between cognitive milestones and language development.

²⁶² VanPatten, B. Benati, A. G. 2010. Key Terms in Second Language Acquisition. Continuum.

²⁶³ Gass, S. & Selinker, L. 2008. Second language acquisition: An introductory course (3rd ed.). Mahwah, NJ: Lawrence Erlbaum.

²⁶⁴ Jing, D. 2017. A Critique to Fundamental Differences Hypothesis. *International Journal of English Linguistics*, 7(1): p. 137

²⁶⁵ Francis, Y., L. 2017. A refutation of universal grammar. *Lingua*, 193(193): pp. 1-22.

²⁶⁶ Nabeel, Z. 2016. The Problem of Universal Grammar with Multiple Languages: Arabic, English, Russian as Case Study. *International Journal of Advanced Computer Science and Applications*, 7(4).

²⁶⁷ Everett D. 2005. Cultural Constraints on Grammar and Cognition in Pirahã. „*Current Anthropology*”. Vol 46, No 4, pp. 621-646.

²⁶⁸ Labov, W. 1973. “The boundaries of words and their meanings”. *New Ways of Analyzing Variation in English*. Georgetown University Press; pp. 340–373.

²⁶⁹ Piaget, J. (1952). *The origins of intelligence in children*. New York: International Universities Press.

Piaget outlined four stages of cognitive development: *sensorimotor*, *preoperational*, *concrete operational*, and *formal operational*, each reflecting different linguistic capabilities. In his view, the relationship between cognitive development and language acquisition is essential, as cognitive processes form the foundation of linguistic abilities. Language learning is thus both a cognitive and linguistic process. Piaget's theory emphasizes that children actively build knowledge through interactions with their environment, including language, in contrast to nativist perspectives that attribute language acquisition to innate mechanisms.

The conceptualization of language took a significant turn with the rise of Cognitive Linguistics (CL), a theoretical approach that emerged from the work of scholars like George Lakoff, Charles Fillmore, and Ronald Langacker. Lakoff's *generative semantics*²⁷⁰ introduced the idea that meaning is deeply grounded in human cognition, and that our understanding of language is shaped by our experiences and mental structures. Similarly, Fillmore's *frame grammar*²⁷¹ and Langacker's *space grammar*²⁷² built upon the notion that language is not merely a set of abstract rules and computations, but a reflection of our cognitive processes, with language structures closely tied to perception via our senses and conceptualization of the world (*embodied cognition*).

In the view of Cognitive Linguistics, a child is born with innate cognitive abilities, such as the capacity to recognize similarities and make analogies. Children perceive patterns, which act as universal models for understanding physical actions and objects. Due to exposure to cultural and linguistic cues, linguistic categories are developed with regard to previously (and pre-linguistically) recognized schemata²⁷³. This cognitive process is referred to as *schematization*, and categories recognized as a result of it develop into *prototypes*²⁷⁴. Linguistic prototypes are idealized or typical representations of words or concepts. For instance, when considering the term *BIRD*, the prototype might be envisioned as a small, flying creature with feathers, despite the existence of birds that do not fully align with this image, (e.g., penguins or ostriches). These prototypes facilitate the cognitive process of classifying and recognizing entities based on shared characteristics, even if they do not precisely conform to the prototypical example.

Particularly salient to L2 teaching is the concept of *metaphor* and *metaphorization* developed by George Lakoff. It involves understanding one concept or domain through the lens of another²⁷⁵. For instance, time is often understood in terms of money, as seen in expressions like "I spent time at work today". Metaphors are ubiquitous, and vary across languages, which posits them as a useful framework when acquiring a new language.

Unlike the generative approach, which treats language as if it were a stand-alone

²⁷⁰ Lakoff, G. 1972. "Linguistics and natural logic." *Semantics of Natural Language*. Dordrecht: Reidel. pp. 545–665.

²⁷¹ Fillmore, C. J. 1977. "Scenes-and-frames Semantics." *Linguistic Structures Processing*. Amsterdam: North Holland; pp. 55–81.

²⁷² Langacker, R., W. 1982. "Space grammar, analysability, and the English passive." *Language* 58: pp. 22–80.

²⁷³ Bowerman, M. 1996. "The origins of children's spatial semantic categories: cognitive versus linguistic determinants". *Rethinking Linguistic Relativity*. Cambridge University Press; pp. 145–176.

²⁷⁴ Taylor, J. R. 1995. *Linguistic Categorization: Prototypes in Linguistic Theory*, 2nd ed., ch.2 p.21

²⁷⁵ Lakoff, G. 1987. *Women, Fire, and Dangerous Things: What Categories Reveal about the Mind*. The University of Chicago Press.

system, separate from cognition, Cognitive Linguistics views language as interconnected with human cognitive processes like perception and categorization. In CL-based L2 instruction, learners are given cognitive tools rather than rules to help them discover and understand the target language. These tools focus on the connections between different meanings of a linguistic form and mental images, and are presented in accessible language²⁷⁶.

Tomasello and his “Usage-Based Theory of Language Acquisition”²⁷⁷ also challenge the Universal Grammar theory of language acquisition, arguing that language development arises from universal aspects of human cognition, such as communicative needs and vocal-auditory processing. These lead to linguistic universals, like nouns and verbs, which reflect reference and predication²⁷⁸. He posits that two biologically evolved cognitive skills underpin language development: *intention-reading* and *pattern-finding*. Intention-reading involves prelinguistic abilities, such as sharing attention, establishing joint attentional frames, understanding communicative intentions, and imitating symbolic behaviors through perspective-taking. Pattern-finding refers to the ability to analyze auditory input, categorize percepts, and identify analogical patterns.

Tomasello argues that language learning stems from a child’s social-cognitive drive to understand others’ intentions and mental states, contrasting sharply with Chomsky’s innate universal grammar theory. His interactionist approach demonstrates how children acquire language through social interaction, joint attention, and pattern recognition, progressing from simple utterances to complex constructions. This developmental trajectory suggests grammar is learned gradually rather than being innate, aligning with a usage-based view that sees grammar as emerging from language use rather than preexisting it. Moreover, his theory has far-reaching implications for SLA, also in the context of incorporating semantic prosody into it, as interacting with the real, as-it-is-used language and recognizing attitudinal patterns among lexis is in line with the natural development of linguistic competences.

In a similar vein, interactionists like Jerome Bruner²⁷⁹ highlight the significance of *child-directed speech (CDS)*, which is specifically tailored to support language learning. CDS is a form of language adults use when speaking to young children, characterized by simplified vocabulary, exaggerated intonation, slower pace, and repetition to aid language learning. This adaptive input provides *scaffolding* that facilitates the acquisition process. In response to Chomsky’s LAD, Bruner introduced the concept of the *Language Acquisition Support System (LASS)* to underscore the importance of social and environmental factors. In LASS theory, the role of parents, caregivers, educators, peers, and media in fostering and supporting children’s linguistic development is paramount to seamless language acquisition.

The concept of scaffolding was actually introduced by Lew Vygotsky, together with his *Zone of Proximal Development (ZPD)* theory²⁸⁰. ZPD describes the gap between a child’s current language abilities and their potential performance when supported by an adult or more

²⁷⁶ Arnett, C., Jernigan, H., 2014. A cognitive grammar account of case for L2 students of German. *German as a Foreign Language*, 1, pp. 68–93.

²⁷⁷ Tomasello, M., 2003. *Constructing a Language: A Usage-Based Theory of Language Acquisition*, Harvard University Press.

²⁷⁸ *ibid.* p. 19

²⁷⁹ Bruner, J., 1983. *Child’s Talk: Learning to Use Language*. Oxford University Press.

²⁸⁰ Vygotsky L. S., 1962, *Thought and language*. Cambridge, Mass.: MIT Press.

capable peers. It represents capabilities that are being developed (but a child is not yet able to perform autonomously) with progress occurring through social interaction.

Another approach to language pedagogy worth mentioning is Error Analysis²⁸¹. Corder believed that errors could provide valuable insights into the process of Second Language Acquisition. Error Analysis (EA) is described as “the first method to study SLA, which contains an internal focus on learners’ creative capability (...). It is based on the explanation and investigation of actual learner errors in the second language, rather than on idealized linguistic structures credited to native speakers of L1 and L2”²⁸².

Learners' errors — on the path to fluency in the target language — came to be viewed as a distinct field in its own right. Corder recognized it under the term of *transitional competence*²⁸³, but the greatest currency was gained by the term *interlanguage* developed by Selinker in 1972²⁸⁴. Interlanguage refers to an idiolect — a dialect of an individual — formed by a second language learner, which retains certain characteristics of their first language (L1) and may involve the overgeneralization of some L2 rules in both writing and speaking. Learners may sometimes fail to achieve the desired level of L2 acquisition for various reasons, resulting in a plateau or *fossilization* — the solidification of erroneous patterns stemming from generalizations made on the basis of L1.

Another set of theories worth mentioning are those of Krashen²⁸⁵. He proposed 5 theses that provided significant insight into the field of Second Language Acquisition.

Firstly, the *Acquisition–Learning Hypothesis* offers a clear distinction between *acquisition* — a subconscious process — and *learning* — deliberate, conscious practice. According to Krashen, language skills develop solely through acquisition, with learning playing no role in improving language ability. This distinction is crucial for our considerations and provides insight into *implicit* and *explicit* knowledge of semantic prosody. Literature not always agrees on whether native speakers are conscious or not of the effects of semantic prosody, but it has been well-established that they are able to produce utterances that align with its patterns. Therefore, we can conclude that *acquiring* such patterns in L2 language production can be the ultimate goal of SLA. In line with that, exposing L2 learners to register-specific semantic prosody, should lead to the acquisition of native-like production patterns.

A further note on the idea of learning does not improve language ability is in order. The *Natural Order Hypothesis* — another theory of Krashen — suggests that language acquisition occurs in a fixed sequence, consistent across learners and unaffected by direct instruction. As noted by Krashen “research in child language acquisition proposes quite strongly that teaching (...) does not facilitate acquisition. Error correction in particular does not seem to help”²⁸⁶. He proposes that natural contact with the language, specifically reading,

²⁸¹ Corder, S. P. 1967. The significance of learner's errors. *International Review of Applied Linguistics*, 4, pp. 161-170

²⁸² Saville-Troike, M., & Barto, K. 2016. *Introducing second language acquisition*. Cambridge: Cambridge University Press.

²⁸³ Corder, S. P. 1967. The Significance of Learners’ Errors. *International Review of Applied Linguistics in Language Teaching*, 5, pp. 161-170.

²⁸⁴ Selinker, L. 1972. Interlanguage. *International Review of Applied Linguistics*, 10(3), 209–231.

²⁸⁵ Krashen, S.D.; Terrell, T.D. 1983, *The Natural Approach: Language Acquisition in the Classroom*, San Francisco: The Alemany Press

²⁸⁶ *ibid.* p.27

is the best way to acquire language proficiency, as exemplified by his later article²⁸⁷.

However, as we will shortly present, Krashen's claim does not hold up against research on educational interventions aimed at teaching the phenomenon of semantic prosody to advanced learners. Therefore, although children might have little use of such a complex idea as semantic prosody, older learners (or on later stages of language learning) can benefit from this, and others alike, concept. We would like to argue that this happens due to improvements in *metalinguistic ability*, the term describing one's awareness about the language as a phenomenon and its characteristics²⁸⁸. For instance, it consists of notions such as the understanding that what is being said goes beyond the literal meaning of lexical items, and competences such as manipulating the structure of language to attain irony or humor. In the light of metalinguistic ability, it becomes evident that the concept of semantic prosody can enrich learner's understanding of their target — and also native — language (more on that in the next chapter).

Returning to Krashen, his *Input Hypothesis* proposes that language learners advance in their proficiency when they understand language material that is just beyond their current level. Krashen designated this as a mathematical formula: $i+1$, with i representing the learner's present (inter)language stage and $+1$ signifying the subsequent level of language acquisition.

The *Monitor Hypothesis* posits that language knowledge gained through conscious learning serves only to check language output rather than generate spontaneous speech. However, we would like to offer a disclaimer, that this “mere” checking of speech — and consequent self-correction behavior — has been recognized as a factor improving future language production. As noted by McCormick and Vercellotti²⁸⁹ “self-initiated self-correction improves future language performance and that practice improves learners' ability to self-correct”. So, although Krashen's hypothesis can be insightful on the theoretical level, with regard to language pedagogy it should not undermine the rationale for teaching interventions.

Lastly, the *Affective Filter Hypothesis* maintains that language acquisition is hindered when learners experience negative emotions like fear or embarrassment, raising the *affective filter* and limiting their ability to absorb language.

Put together, theories reviewed in this subchapter underscore the complexity of language acquisition, reflecting a shift from viewing it as a purely innate or behavioral process to recognizing the interaction of cognitive, social, and environmental factors in shaping language learning. This historical trajectory illustrates how language acquisition theories have become more integrative, focusing on the interplay of nature, nurture, and the active role of learners in the process.

It becomes evident that deploying learning and teaching methods which are based on

²⁸⁷ Krashen, Stephen D. 1989. "We Acquire Vocabulary and Spelling by Reading: Additional Evidence for the Input Hypothesis" (PDF), *The Modern Language Journal*, 73 (4): pp. 440–464

²⁸⁸ Bialystok, E.; Ryan, E. B. 1985. "Toward a Definition of Metalinguistic Skill". *Merrill-Palmer Quarterly*. 31 (3): pp. 229–251

²⁸⁹ McCormick, D.E., Vercellotti, M. L. 2018. Self-correction Profiles of L2 English Learners: A Longitudinal Multiple Case Study. *The Electronic Journal for English as a Second Language*. Vol. 22, nr 3.

interaction with the real, as-it-is-used language (as it is the case with the corpus linguistics methods) can be insightful for learners and educators. This point is further elaborated in the next section, with particular focus on applying semantic prosody to SLA.

9.2 THE RATIONALE OF APPLYING SEMANTIC PROSODY TO SLA

Vocabulary is broadly regarded as essential to second language acquisition²⁹⁰. To know a word (or a lexical unit) primarily entails being aware of and able to use it syntactically, semantically, and pragmatically²⁹¹ — the two latter being closely related to the phenomenon of semantic prosody.

As Partington argued, information about semantic prosody is “vital for non-native speakers to understand not only what is grammatically possible in their language production but (...) also what is appropriate and what actually happens”²⁹².

It has been shown by Xiao & McEnery that, when learners lack knowledge of a word's semantic prosody, they find it challenging to use that lexical item effectively in communication²⁹³. In the same article, the researchers point to the fact that the intuition of L2 learners regarding the target language, unlike native speakers, is often not dependable, making it difficult for these learners to identify the semantic prosody of a lexical item by inference.

Other studies^{294,295} indicate that ESL/EFL learners frequently struggle with incorrect word choice due to a lack of awareness about semantic prosody. As noted by Zhang²⁹⁶, L2 learners and instructors typically encounter significant difficulty in understanding a word's pragmatic function (as opposed to its dictionary meaning, which tends to be much easier to express).

Interlinguistic studies^{297, 298} on semantic prosody have pointed to the fact that L2 instructors lack awareness of the critical role that semantic prosody plays and consequently undervalue its importance in instructional practices. The main focus is put on denotational meaning, with very little reference to connotative meanings, not to mention semantic prosody. Moreover, textbooks and bilingual dictionaries either fail to clearly convey the feature of semantic prosody or sometimes even offer inaccurate prosodic information, potentially misleading L2 learners. Unfortunately for them, textbooks have been shown to significantly

²⁹⁰ Laufer, B. 1997. What's in a word that makes it hard or easy: Some intralexical factors that affect the learning of words. In N. Schmitt & M. McCarthy (Eds.), *Vocabulary, description, acquisition and pedagogy*, pp. 140-155. Cambridge, UK: Cambridge University Press

²⁹¹ Carter, R. 1998. *Vocabulary: Applied linguistic perspectives* (2nd ed.). London: Routledge.

²⁹² Partington, A. 1998. *Patterns and meanings: Using corpora for English language research and teaching*. Philadelphia, PA: John Benjamins. p.8

²⁹³ Xiao, Z., & McEnery, A. 2006. Collocation, semantic prosody and near synonymy: A cross-linguistic perspective. *Applied Linguistics*, 27(1), pp. 103-129.

²⁹⁴ Wei, N.X. 2006. A corpus-based contrastive study of semantic prosodies in learner English. *Foreign Language Research*, 132, pp. 50-54.

²⁹⁵ Xiao, Z., & McEnery, A. 2006. Collocation, semantic prosody and near synonymy: A cross-linguistic perspective. *Applied Linguistics*, 27(1), 103-129.

²⁹⁶ Zhang, W. 2008. *In search of English as foreign language (EFL) teachers' knowledge of vocabulary instruction*. Unpublished doctoral dissertation, Georgia State University.

²⁹⁷ Wang, H., & Wang, T. 2005. A contrastive study on the semantic prosody of CAUSE. *Modern Foreign Language*, 28(3), pp. 297-307.

²⁹⁸ Wei, N.X. 2006. A corpus-based contrastive study of semantic prosodies in learner English. *Foreign Language Research*, 132, pp. 50-54.

influence the language use of L2 learners, particularly those with limited exposure to the target language²⁹⁹.

A specific area of interest for the considerations of applying semantic prosody in language pedagogy is the differentiation of near-synonyms, as noted by Tsui³⁰⁰. Distinguishing between words of akin meanings can prove difficult for L2 learners and the concept of SP helps in recognizing the subtle differences in how words are being used.

As noted by Zhang, “little work has been done to explore how to apply semantic prosody in ESL/EFL pedagogy”³⁰¹, which we believe can be safely generalized to the whole field of L2 learning. The following chapters (together with the entirety of this dissertations) aim at bridging this gap, providing crucial considerations of applying register specific semantic prosody to L2 teaching.

9.3 CONCLUSION OF CHAPTER 9

In this chapter, we explored the foundations of Second Language Acquisition (SLA) and its links to language pedagogy, setting the stage for our practical application of semantic prosody to L2 teaching. We reviewed the historical context of SLA, distinguishing it from First Language Acquisition and tracing how language teaching has evolved.

Beginning with structural linguistics and behaviorism, we highlighted the move towards understanding SLA through Chomsky’s Universal Grammar. We also discussed alternative approaches to UG, such as Cognitive Linguistics, interactionist views, Error Analysis and interlanguage theory, which reveal how learners progress through creative hypotheses and systematic errors. Krashen’s theories also provided crucial insights, notably his Acquisition–Learning Hypothesis, which suggests that natural exposure to language may foster language acquisition more effectively than conscious learning.

In the second part of the chapter, we introduced the concept of semantic prosody as a key to understanding lexical nuances. We argued that SP is vital for L2 learners to accurately interpret and use words in context, particularly when distinguishing between near-synonyms. However, SP remains underrepresented in many instructional materials, which often focus on dictionary meanings without addressing subtle connotative and pragmatic aspects. This chapter lays the groundwork for addressing this gap, with upcoming sections focusing on applying register-specific SP to enhance L2 teaching.

²⁹⁹ Lee, J. 2006. Subjunctive were and indicative was: A corpus analysis for English language teachers and textbook writers. *Language Teaching Research*, 10(1), pp. 80-93.

³⁰⁰ Tsui, A.B.M. 2005. ESL teachers’ questions and corpus evidence. *International Journal of Corpus Linguistics*, 10(3), pp. 335-356

³⁰¹ Zhang, W. 2009. Semantic Prosody and ESL/EFL Vocabulary Pedagogy. *TESL CANADA JOURNAL*. Vol. 26, nr 2

10 RECOMMENDATIONS AND TOOLS FOR INCORPORATING SEMANTIC PROSODY INTO L2 TEACHING

In this chapter, we offer considerations of the topic of the application of semantic prosody into L2 teaching and propose different ways in which it can be done.

We will strive to provide a science-based framework which should:

- (i) enhance students' awareness of semantic and pragmatic aspects related to semantic prosody,
- (ii) improve language competencies of students, and
- (iii) expand the didactic toolbox of educators.

10.1 TIMELY CONSIDERATIONS OF INTRODUCING SEMANTIC PROSODY — WHEN TO TEACH SEMANTIC PROSODY?

It has been recognized that specific learning materials should be introduced with a concept of progressive difficulty (see: Krashen's $i+1$). In order to frame our considerations on the background of students' proficiency, we briefly introduce the CEFR scale.

The CEFR scale³⁰² structures language proficiency into six levels, from A1 to C2, which are grouped into three general categories: Basic User, Independent User, and Proficient User. These levels can also be further adapted to meet local requirements and are defined by "can-do" statements. Below, we provide paraphrased descriptions of these levels.

Basic user — or beginner — is divided into A1 and A2 levels. *Lower-beginner* (A1) is able to understand and use common everyday expressions and basic phrases. Moreover, they can engage in simple interactions if the other person speaks slowly, clearly, and is willing to assist. *Upper-beginner* (A2) is able to understand sentences and common expressions related to areas of immediate relevance, such as basic personal and family information, shopping, local geography, and employment.

Independent user — or intermediate — is represented by B1 and B2 levels. Lower-intermediate (B1) is capable of understanding the main points of clear, standard input on commonly encountered topics. They can handle most situations that may arise and create simple, connected texts on familiar or personally interesting subjects. Upper-intermediate (B2) is able to grasp the main ideas in complex texts covering both concrete and abstract topics, including technical discussions within their area of expertise. They can interact with

³⁰² <https://www.coe.int/en/web/common-european-framework-reference-languages/level-descriptions> accessed: 27.10.2024

enough fluency and spontaneity to facilitate regular conversations with native speakers and produce clear, detailed text on diverse subjects.

Proficient user — or advanced — is divided into C1 and C2 levels. Lower-advanced (C1) is able to comprehend a broad range of demanding texts, detect implied meanings and express themselves fluently and spontaneously. They can use language in social, academic, and professional contexts, and produce clear, well-structured, and detailed texts on complex topics. Upper-advanced (C2) is easily able to comprehend almost everything heard or read. They can summarize information from diverse sources, skillfully reconstruct arguments and narratives into a cohesive presentation, and express themselves spontaneously, with high fluency and precision, distinguishing subtle nuances of meaning even in complex contexts.

From these descriptions, it becomes evident that the introduction of register-specific semantic prosody, as a *learning* (as opposed to *acquisition*) tool, should be of most advantage to more advanced learners, arguably from B2 onwards.

Before reaching B2 level, the focus should be put on communication skills, learning basic vocabulary, and the most useful syntactic structures. Introducing the concept of semantic prosody on A1-A2-B1 levels can lead to *information overload*, a phenomenon which has been found to lead to disengagement, confusion and therefore, worse learning outcomes³⁰³. However, as we will strive to underline, the materials (e.g., sample texts in textbooks) meant to expose learners to the real (as-it-is-used) language, can be tested on their representativeness, or even created, with the concept of register-specific semantic prosody in mind.

From the original descriptions of B2-C1-C2 levels³⁰⁴, we can conclude that more emphasis is being put on detailed, nuanced use of language. Specifically, on the C1 level the recognition of “implicit meaning” and using “language flexibly and effectively for social, academic and professional purposes” is stressed. In the description of the C2 level, we can find “differentiating finer shades of meaning even in more complex situations”.

All three of these quotes point to the rationale of using semantic prosody, with the two latter stressing its register-specific character. It becomes evident that the specific objectives advanced L2 learners face can be addressed with the use of interventions aimed at teaching about SP and acquiring native-like language patterns captured by SP.

10.2 OBJECTIVE CONSIDERATIONS — WHAT PRECISELY SHOULD BE TAUGHT?

The question from the title of this subchapter can be addressed from two perspectives.

One approach would be to teach semantic prosody as a concept. We laid groundwork for this in the previous chapters, where we analyzed and systematized semantic prosody as it is known today. Moreover, in the summary of chapter 7 we proposed a unified definition of semantic prosody, which is meant to serve educators (and learners) in their initial familiarization with the phenomenon in question.

The second approach would be: for which lexical items should semantic prosody be

³⁰³Masrek, M. N., Baharuddin, M. F. 2023. Screens, Streams, and Stress: A Qualitative Study on How Distance Learning Students Cope with Information Overload. *International journal of membrane science and technology*.

³⁰⁴<https://www.coe.int/en/web/common-european-framework-reference-languages/level-descriptions> [accessed: 27.10.2024]

taught? This subchapter provides a closer look at this issue.

Currently, a common understanding in language pedagogy is that not every word is of equal use to L2 learners. Therefore, when designing courses for learners of all levels, educators tend to use *frequency lists*. They consist of the most common lexical items in a given language, often from a specific genre.

It has been recognized that such lists are useful for learners and should be incorporated into L2 teaching³⁰⁵. The rationale of using frequency lists is that students should learn the most useful words first, as they will likely find them repeatedly in their exploration of, and expression in, a language.

Interestingly, Zipf's Law³⁰⁶ — which finds application in across many fields — describes the phenomenon where the frequency of a word is inversely proportional to its rank in a frequency list. In other words, the most common word appears approximately twice as often as the second-most common word, three times as often as the third, etc. We can say it makes strong statistical sense to find the most common lexical items and prioritize them in the study.

One such frequency list — in the academic genre of English language — is the Academic Word List, developed by Coxhead³⁰⁷. It consists of 570 word families that commonly occur in academic texts, which are not included in the General Service List (GSL). GSL is an earlier list of 2000 headwords created by Michael West in 1953 and revised and enlarged by John Bauman and Brent Culligan in 1995. It is claimed that familiarity with GSL should account for the knowledge of around 80% of words used in written academic texts in English, and AWL covers another 10%.

Ngoc, Dang & Webb³⁰⁸ analyzed and evaluated lists of high-frequency words based on their *lexical coverage*. One disambiguation note: this term usually refers to how many words from a specific text are known by someone — if a 100-word text has 95% of lexical coverage, 95 words should be known and 5 unknown³⁰⁹. However, in the Ngoc, Dang & Webb's study, the term is used as the percentage of the words which are found in 18 corpora that overlap with the analyzed frequency lists. They pointed out that Nation's most frequent 2,000 British National Corpus and Corpus of Contemporary American-English word families (BNC/COCA2000) has generally shown the greatest coverage and should be the most effective when teaching vocabulary to L2 learners.

It is widely recognized (e.g., notably by Charalabopoulou et al.³¹⁰, Ngoc & Dang³¹¹,

³⁰⁵ Mark, D., Johnson, Anthony, Acevedo, Leonardo, Mercado. 201). What Vocabulary Should We Teach? Lexical Frequency Profiles and Lexical Diversity in Second Language Writing. *Writing & Pedagogy*, 5(1): pp. 83-103.

³⁰⁶ Moreno-Sánchez, I.; Font-Clos, F.; Corral, A. (2016). "Large-scale analysis of Zipf's Law in English texts". *PLOS ONE*.

³⁰⁷ Zimmerman C. B., Burgmeier A., Zwier L. J., Rubin B. & Richmond K., 2012. *Inside Reading: The Academic Word List in Context*. 2nd ed. New York: Oxford University Press.

³⁰⁸ This, Ngoc, Yen, Dang., Stuart, Webb. 2016. Evaluating lists of high-frequency words. *ITL – International Journal of Applied Linguistics*, 167(2): pp. 132-158.

³⁰⁹ Pellicer-Sánchez A., Webb S., Wang A. 2024. How does lexical coverage affect the processing of L2 texts?

³¹⁰ Charalabopoulou, F., Gavrilidou, M., Johansson, S., Volodina E. 2012. Building Corpus-Informed Word Lists for L2 Vocabulary Learning in Nine Languages. pp. 49-53.

³¹¹ Ngoc, T., Dang, Y. 2019. Corpus-Based Word Lists in Second Language Vocabulary Research, Learning, and Teaching.

and Engen & Lijmach³¹²) that building corpus-informed word lists help students acquire the most useful vocabulary and speeds up the learning process. A *hapax legomenon* — a word occurring only once in a given corpus — appears as an ideal antithesis of what should be acquired by L2 learners.

We propose that pairing up the usage of frequency lists with (i) teaching, or (ii) empowering the exploration of, register-specific semantic prosody of items from such lists, can be of great aid to L2 learners.

10.3 METHODOLOGICAL CONSIDERATIONS — HOW SHOULD WE TEACH?

It has been recognized (e.g., by Folse³¹³) that word lists are often an unproductive way of presenting material to students. Therefore, one could argue that there is a discord in the literature when it comes to the usefulness of word lists... but it is not the case.

Word lists, especially corpus-based frequency lists, are proven to be a highly useful *study content* (as presented in the previous section). However, this claim does not address the question of the *methodology* used to teach it.

In 2014 Barbara Oakley and Terrence Sejnowski published a book³¹⁴ in which they argued that a lot of attention in public education systems is being put on *what* should be studied and very little instruction given to *how* one should study. They provide an overview of science-based tools for learning, including the provision of a learning-inductive environment, proper sleep and physical activity.

Similarly, this thesis would not be complete without a reference to how one can incorporate semantic prosody into L2 teaching.

Arguably, the instruction most often given to learners is to repeat the study content. Indeed, repetition — especially *spaced repetition*³¹⁵ — is a crucial concept in the acquisition of knowledge. However, it has been recognized that excessive repetition can negatively impact both memory retention and learner engagement³¹⁶.

Dunlosky et al.³¹⁷ found that two most useful techniques for learning are *practice testing* and *distributed practice*. The following, *interleaved practice*, *elaborative interrogation* and *self-explanation*, have been found to be less effective, however still on the positive side of the spectrum.

The concept of practice testing points to the fact that human brains learn the best when they have to actively recall — or even guess — the study content. This can be achieved through both written or spoken practice. With regard to register-specific semantic prosody, students could be first instructed to (i) infer the connotative load of a word, consecutively (ii)

³¹² Engen, J., Lijmbach, B. 2015. The effectiveness of frequency lists for vocabulary acquisition in formal and informal learning settings. 48: pp. 1-11.

³¹³ Folse, K. S. 2004. Vocabulary myths: Applying second language research to classroom teaching. University of Michigan Press.

³¹⁴ Oakley, B., & Sejnowski, T. 2014. Learning how to learn: How to succeed in school without spending all your time studying. TarcherPerigee.

³¹⁵ Smolen, P.; Zhang, Y., Byrne, J. H. 2016. "The right time to learn: mechanisms and optimization of spaced learning". Nature Reviews Neuroscience. 17 (2): pp. 77-88.

³¹⁶ MacLeod, C. 1985. Learning a list for free recall: Selective reminding versus the standard procedure. Memory & Cognition, 13(3): pp. 233-240.

³¹⁷ Dunlosky J., et al., 2013. „Strengthening the Student Toolbox: Study Strategies to Boost Learning”

provided feedback on what is found in corpora, and then (iii) fill the blanks created in an authentic (produced by native users) texts to boost their learning outcomes through testing. In line with that, Nurmala & Anggoro's study³¹⁸ finds that students who studied lexical items from high frequency lists via spontaneous creation of sentences containing them "were able to practice, using the vocabulary in context, and remember the words longer".

Distributed practice — as opposed to massed practice — constitutes a recommendation to repeat the study content over a longer time in order to facilitate its acquisition. It is related to the concept of the *forgetting curve*, which shows that the longevity of one's ability to recall study content is reinforced by repeating it on the successive days. For instance, spaced repetition systems — a common feature of language learning programs, e.g., Anki³¹⁹ — present the study content to the learner with a decreasing frequency if the attempts at recalling it are successful, and increasing frequency if learners fail at recalling the study content. The concept of distributed practice points at the rationale of working with the concept of register-specific semantic prosody over multiple study sessions. One could hypothesize, that this is exactly why forming a regular reading habit among L2 learners was recognized as Krashen as a highly effective learning method — it exposes learners to contextual and pragmatic information, as opposed to lists of words and their translations with no reference on how they are being used.

Interleaved practice assumes interleaving the concepts over a single study session. Instead of devoting a whole session to semantic prosody, it could therefore constitute a part of a short exercise (or even an auxiliary comment), interleaving a study of a grammatical concept and a group conversational exercise.

Elaborative interrogation and self-explanation point at the active processing of the study material through one's own exploration or a dialogue with a third party. In line with it, learners could be instructed to explain what semantic prosody is (or what shape it takes for a specific lexical item) to themselves, or during a dialogue with a partner.

Dunlosky also presents learning methods that his team found to be largely unsuccessful (rereading, highlighting/underlining, summarization, keyword mnemonic, and imagery for text). The striking finding was that these were the exact learning methods students used the most.

Interestingly, Dunlosky mentions that keyword mnemonic is "somewhat helpful for learning languages, but benefits are short-lived". We believe this propitious effect can be accounted for by the organization of *mental lexicon*.

Mental lexicon refers to "a mental dictionary which contains information about a word's pronunciation, meaning, syntactic attributes, and so on"³²⁰. Studies on mental lexicon, have revealed that lexical items are stored and recalled through various types of associations, which can take numerous forms³²¹. One of the ways in which brain associated lexical items is

³¹⁸ Nurmala N., Anggoro, J. K. 2023. Investigating Weekly Vocabulary List Utilization and Vocabulary Quiz Using Socratic in an EFL Context. MEXTESOL Journal, Vol. 47, No. 1

³¹⁹ <https://ankiweb.net/> [accessed: 28.10.2024]

³²⁰ Al-Dala'ien et al. 2015. Mental lexicon: A conceptual framework. International Journal of Scientific and Research Publications, Vol. 5, Issue 5.

³²¹ Nattinger, J. 1988. "Some current trends in vocabulary teaching." Vocabulary and language teaching, pp. 62-82.

meaning. As noted by Aitchison³²², humans often confuse words with similar meanings, e.g., asking for a “can-opener” when a speaker wants to crack a nut, so the desired lexical item should be “nut-cracker”. A conclusion can be drawn that, because of the way lexical items are organized in the mental lexicon, linking them with additional associations can account for their moderately higher effectiveness in language learning when compared to other field of study.

Moreover, Forster³²³ recognized a *frequency effect*, suggesting that words frequently encountered in a language are recognized more quickly than less common ones, therefore stored in a fashion that allows for a quicker recall. It underlines the rationale of using frequency lists in L2 study. Words that are related (e.g., near-synonyms) can be recognized faster when presented in rapid succession, which is recognized as pertaining to the process of lexical priming³²⁴. We have already referred to Hoey’s theory of lexical priming, with the specific reference to semantic prosody. Now, we propose that this theory can be of use not only in explaining how words gain semantic prosody (diachronic considerations, which were largely left out in this dissertation), but also as a rationale for incorporating register-specific semantic prosody into language pedagogy.

Semantic prosody, being a type of meaning with attitudinal aspect found in regular collocative patterns of a lexical item, fits well within the model of mental lexicon, as a concept predicting the association between lexical items. This recognition adds up to the list of arguments of incorporating semantic prosody into L2 teaching.

In our reasoning, semantic prosody is useful for learners because it provides additional usage-based, semantic and pragmatic information that allows L2 learners to associate lexical items in a more natural, native-like way — linking lexical items not only with other frequently used words but also with an overarching attitudinal hue.

10.3.1 Textbooks and Dictionaries

Another — indirect — way of incorporating semantic prosody into study content is the inclusion of its premises into the creation of textbooks and dictionaries.

Ji and We³²⁵ examined the semantic prosody of three lexical items in English-Chinese bilingual dictionaries. They analyzed terms such *SET IN* and *RIFE*. As it resulted, none of the dictionaries analyzed identified *SET IN* as having a negative semantic prosody. What’s more, they observed that *RIFE* was translated in a way that pointed to a positive semantic prosody.

In a study conducted by Wang³²⁶, five lexical items — *INCITE*, *IMPRESSIVE*, *CONTRIBUTE TO*, *PERSIST*, AND *PERSEVERE* — were analyzed across ten English-Chinese bilingual dictionaries. Wang discovered that *IMPRESSIVE* and *PERSEVERE* were accurately translated to reflect a positive semantic prosody; however, *INCITE* and *PERSIST* were not conveyed as having a negative semantic prosody in the dictionaries.

³²² Aitchison J., 2003. *Words in the Mind: An Introduction to the Mental Lexicon*. Wiley-Blackwell

³²³ Forster, K. I. 1976. Accessing the mental lexicon. In F. Wales & E. Walker (Eds). *New approaches to language mechanisms*. pp. 257-287

³²⁴ Traxler, M. J. 2011 *Introduction to psycholinguistics: Understanding language science*. John Wiley & Sons.

³²⁵ Ji, Y., We, J. 2000. Research into semantic prosody revisited. *Journal of Xiamen University*, 143, pp. 63-68.

³²⁶ Wang, Q. 2004. A Corpus-based study of semantic prosodies and bilingual dictionaries. Unpublished master’s thesis, Suzhou University, China.

Meanwhile, the phrase *CONTRIBUTE* has a neutral prosody. It is in line with Zhang's statement that "ESL/EFL textbooks or bilingual dictionaries do not explicitly represent the feature of semantic prosody or may provide inappropriate semantic prosodic information that can mislead language learners"³²⁷.

Lee (2011) illustrated the impact of semantic prosody on the writing of beginning and intermediate non-native English-speaking Korean students, noting that words like *BRING ABOUT*, *UTTERLY*, *PERSIST*, *PERSISTENT*, and *BENT ON* were frequently misused. He found also that these lexical items had semantic prosodies inaccurately presented in English-Korean dictionaries, leading to errors in the students' writing.

Pan and Feng³²⁸ argued that semantic prosody should be incorporated into dictionaries, particularly those intended for L2 learners. Along similar lines, Fuqua³²⁹ notes that it is essential to explicitly incorporate semantic prosodic information in bilingual dictionaries, particularly for lower-level and intermediate non-native students who frequently rely on these resources.

The complete incorporation of semantic prosody into lexicography is likely to take a long time, due to the nature of a meticulous task that is creating dictionaries. Both researchers and educators will need to be patient in their attempts at influencing this process.

However, an immediate step that educators can take in order to raise the quality of their L2 teaching can be supplementing dictionary definitions with remarks on how the word is used and how one can distinguish it from its near-synonyms. As presented in the previous chapters, register-specific semantic prosody can help achieve these exact objectives.

10.4 SUBJECTIVE CONSIDERATIONS — WHOM TO TEACH?

In this section, we will explore the question of how should be the direct beneficiary of incorporating register-specific prosody into language pedagogy.

As we will argue, introducing the concept (together with the exploration of either previously recognized semantic prosody, or the corpus data itself) can be of propitious effect to both educators and students.

10.4.1 L2 Educators

Before we address the issue of what can be done to instruct L2 learners, a note on teachers is in order. It has been recognized that L2 teachers play a crucial role in introducing their students to the concept of semantic prosody, acting as a key factor in conveying this idea effectively³³⁰.

For teachers to be able to convey — be it in explicit or implicit way — the concept of semantic prosody to their students, they ought to understand it themselves first. As noted by

³²⁷ Zhang, W. 2009. Semantic prosody and ESL/EFL vocabulary pedagogy. *TESL Canada Journal*, 26(2), 1-12.

³²⁸ Pan, F., & Peng, Y. 2003. Corpus-based analysis of semantic prosody and its applications. *Contemporary Linguistics*. 5(4): pp. 359-366

³²⁹ Fuqua J. 2014. Semantic Prosody: The Phenomenon of "Prosody" in Lexical Patterning. *The Journal of Language Teaching and Learning*, 2014-2, pp. 76-83

³³⁰ Ahmadian, M., Yazdani, H., & Darabi, A. 2011. Assessing English learners' knowledge of semantic prosody through a corpus-driven design of semantic prosody test. *English Language Teaching*, 4(4), pp. 288-298.

Kemp and Timms³³¹, the concept of semantic prosody is “largely subconscious for the proficient language user and rarely taught” to the teachers.

There are two main challenges in this regard.

First one, is the lack of unified view on semantic prosody. As with any emerging field, the early works on semantic prosody lack a coherent approach and sometimes even disagree (e.g., on the notion of covertness of semantic prosody). Although, a lot of contemporary works offer attempts at unifying, structuring and summarizing the concept of semantic prosody, they are typically less easily accessible for the public using search engines.

Secondly, the biggest challenge might be to incorporate the concept of semantic prosody in the teaching of languages which have not been extensively studied with reference to it. Instructing teachers of such languages on (i) creating representative corpora and (ii) frameworks to analyze semantic prosody, can be of significant help, not only to the teachers, but to the entire field of corpus linguistics. We will come back to the notion of promoting research on semantic prosody among non-linguists later in this chapter.

According to McGee³³² teachers should make a point of explicitly teaching semantic prosody to their students. As we mentioned in the previous section, the explicit information about semantic prosody can be of biggest benefit to more advanced learners. In line with this notion, when the study done by McGee references L2 learners, the actual group consisted of undergraduate students. Such people usually need to be able to present at least B1 or B2 proficiency.

However, for both less advanced (A1-A2-B1) and more proficient (B2-C1-C2) a practice of evaluating implicit knowledge of semantic prosody can be applied. As proposed by Zhang³³³, the use of corpus-assisted methods can help teachers get deeper insight into learners’ acquisition of natural (i.e., as it is used) language.

Timms & Kemp³³⁴ suggest that teaching trainee teachers about semantic prosody could be done by incorporating interactive activities, guided discussions, and opportunities for reflection and feedback, all designed to deepen trainees' understanding of semantic prosody. This approach not only applies theoretical knowledge to practical contexts but also fosters collaborative learning.

Therefore, we suggest that incorporating the concept of register-specific prosody in the formal training of teachers can be of great benefits to the learning outcomes of their students.

10.4.2 L2 Learners

Research suggests that non-native English-speaking students are more prone to

³³¹ Kemp J., Timms, L. 2022. Exploring semantic prosody with trainee teachers. *Teaching English with Corpora: A Resource Book*. Routledge.

³³² McGee, I. 2012. Should we teach prosodic awareness? *RELC Journal*, 43(2), pp. 169-186

³³³ Hong, Zhang. (2021). “What do you know about semantic prosody?” *Teaching and evaluating implicit knowledge of English with corpus-assisted methods*. *English in Education*, 55(4): pp. 337-350.

³³⁴ Kemp J., Timms, L. 2022. Exploring semantic prosody with trainee teachers. *Teaching English with Corpora: A Resource Book*. Routledge.

making errors in lexical collocations than in grammar^{335 336}.

Ahmadian and Yazdani³³⁷ emphasized that L2 students must learn the collocations characteristic of the language and be aware of the conditions surrounding semantic prosody, if they wish to reach high proficiency in a given language.

Zhang noted both similarities and differences in the collocations used by native English-speaking learners and Chinese non-native English-speaking learners, highlighting that semantic prosody is often either overrepresented or underrepresented in the language production of the latter. He noted that non-native English-speaking learners utilize “a number of interlanguage collocations and unusual collocations, which makes their English sound unnatural and less idiomatic”³³⁸.

It has also been recognized that evaluating students' understanding of semantic prosody can be done with the use of corpus-assisted methods, ensuring they can apply this knowledge in practical contexts. Zhang has shown that using corpus-assisted methods can help L2 learners better navigate their target language³³⁹. Comparing students' written (or spoken) assignment with how a given lexical item tends to be used (and what semantic prosody it exhibits) can help give more tangible feedback and ensure better learning outcomes.

Research suggests that explicit output task instruction, especially in the learners' first language, can enhance understanding of semantic prosody. A study by Nevisi et al.³⁴⁰ found that L1-based instruction proved to be more effective than approaches that relied solely on the second language (L2) in improving EFL learners' knowledge of semantic prosody. This finding is particularly interesting in the context of the — arguably — increasingly common belief that, if only possible, language classes ought to be conducted solely in the target language.

Our recommendation is that educators (first familiarized with semantic prosody themselves) can use it in the classroom setting to:

- (i) offer more accurate language training,
- (ii) provide more empirically based feedback, and
- (iii) raise students' awareness of the evaluative load of lexical items.

For considerations of the way in which such interventions can be designed, see section 10.3. The next sections investigate the third (iii) notion.

³³⁵ Namvar, F., Mohd Nor, N., Ibrahim, N., & Mustafa, J. 2012. Analysis of collocations in the Iranian postgraduate students' writings. *3L: Southeast Asian Journal of English Language Studies*, 18(1), pp. 11-22.

³³⁶ Shen, Y. 2009. Study on collocations in English writing by Chinese students. *Sino-US English Teaching*, 6(3), pp. 25-30.

³³⁷ Ahmadian, M., Yazdani, H., & Darabi, A. (2011). Assessing English learners' knowledge of semantic prosody through a corpus-driven design of semantic prosody test. *English Language Teaching*, 4(4), pp. 288-298.

³³⁸ Zhang, C. 2010. A Comparative Corpus-based Study of Semantic Prosody. *Journal of Language Teaching & Research*, 1(4), pp. 451-456

³³⁹ Hong, Zhang. 2021. “What do you know about semantic prosody?” Teaching and evaluating implicit knowledge of English with corpus-assisted methods. *English in Education*, 55(4): pp. 337-350.

³⁴⁰ Reza, B. N., Rasoul, M. H., Fatemeh, Z. D. 2018. The Impact of L1/L2-Based Explicit Output Task Instruction on Iranian EFL Learners' Semantic Prosody Learning. 2(2): pp. 51-74.

10.4.2.1 Empowering Students to Investigate Semantic Prosody

A study done by Dunlosky et al. underlined the importance of active engagement with the study content. A full application of this premise, would require students to explore semantic prosody for themselves. This concept is referred to in literature as *data-driven learning* (DDL).

Mansoori and Jafarpour³⁴¹ have found that deploying such method of instruction to Persian non-native English learners has yielded better results in the understanding of semantic prosody and vocabulary choice appropriateness, compared to traditional way of teaching it.

This can be achieved through standard scholar training, namely utilizing software such as LancsBox³⁴² or AntConc³⁴³ and uploading to them a corpus that one wishes to analyze. There are two main problems with this approach.

First and foremost, for a non-linguist, this will likely prove to be a time-consuming and difficult way of accessing information about semantic prosody. Such programs are versatile tools which can be used in a range corpus-linguistic studies. It might be unrealistic to expect non-linguist learners to learn how to use them, and — due to its time-consuming character — definitely can be seen as an ineffective learning method.

Moreover, choosing (or compiling) a corpus with all due scientific rigor is a difficult task, even for linguists with appropriate corpus-linguistic training. An additional issue with empowering students to venture out on their own explorations of corpora is, as stated by (...) corpora can be used to prove even mutually exclusive points. Non-linguists learners will likely draw inconsistent, or even false, conclusions. However, as long as they are provided guidance later on, this is in line with Dunlosky et al.'s recommendation of active engagement with the study content. Moreover, in his 2022 online lecture McEnery³⁴⁴, states that even when facing a statistically insignificant data — there: coming from a corpus that is too small to be statistically significant — we can, and perhaps should, still scrutinize the data and draw some (cautious) conclusions. We can conclude that if this is advised to researchers, non-linguistic learners are also, or even more so, free to explore their statistically insignificant corpora.

Below, we provide a list of free tools which can be used by both educators and students to scrutinize the (ideally register-specific) character of semantic prosody of a given lexical item.

10.5 FREE WEB-BASED CORPUS LINGUISTICS TOOLS

In order to point to facilitate the incorporation of semantic prosody into L2 teaching, we provide a list of solutions we found. They can be used by non-linguist learners & educators to access and scrutinize corpus-linguistic data in a less versatile (compared to desktop-based

³⁴¹Mansoori, N., Jafarpour, M. 2014. Teaching Semantic Prosody of English Verbs Through the DDL Approach and its Effect on Learners' Vocabulary Choice Appropriateness in a Persian EFL Context. *Advances in Language and Literary Studies*, 5(2): pp. 149-161.

³⁴²<https://lancsbox.lancs.ac.uk/> [accessed: 29.10.2024]

³⁴³<https://www.laurenceanthony.net/software/antconc/> [accessed: 29.10.2024]

³⁴⁴<https://www.youtube.com/watch?v=sEwyK8VcRQA> [accessed: 29.10.2024]

software) but more user-friendly way.

We limited our search to free and web-based tools.

In the spirit of SDG#4, the aim of which is to ensure free quality education for all, we wanted to verify if it is possible to incorporate register-specific semantic prosody in a cost-efficient way.

Since we propose these tools should be of use to non-linguists, we wanted to explore tools that require neither familiarization with complicated software nor convoluted configuration. Therefore, we limited our search to web-based solutions.

Below, we provide this list with a short commentary and a brief exercise demonstrating their usefulness. During such simple exploration, learners autonomously discover the evaluative load of lexical items and are able to draw conclusions for themselves, which should aid their learning and result in higher linguistic competence. In a classroom setting, students could compare their results and, if confronted with differing outcomes, decide to, e.g., enlarge the sample to reach more relevant conclusions.

10.5.1 Lancaster University Online Concordancer³⁴⁵

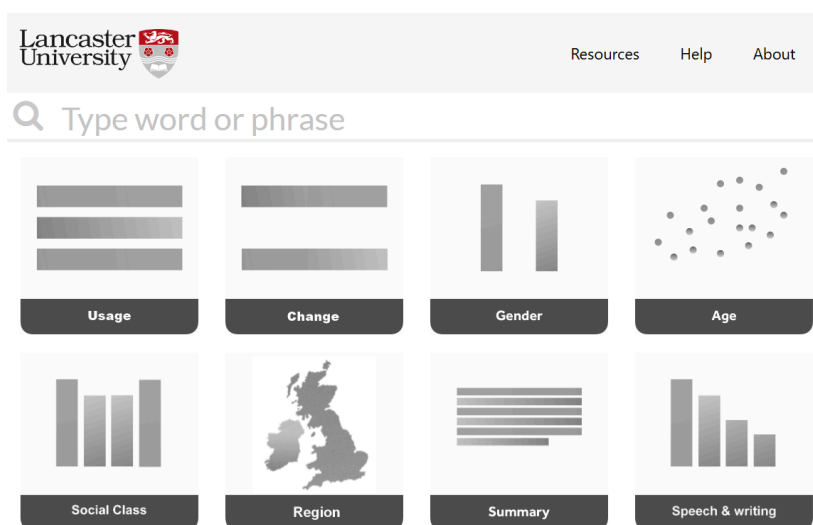


Fig. 1 Lancaster University Online Concordancer website

We open with this tool because in our view, it is the most versatile and yet very user-friendly.

After typing “a word or phrase” in the search bar, the user is able to analyze data from BNC1994 corpus and/or BNC2014 (which allows for the diachronic analysis, again, omitted in this dissertation). The tool displays KWIC data which can be analyzed based on: gender, age, social class, region of Great Britain and genre of the text (speech, e-language, fiction, magazines, newspapers, academic). Especially the latter features allows for seamless

³⁴⁵ <http://corpora.lancs.ac.uk/bnclab/search> [accessed: 29.10.2024]

incorporation of register-specific semantic prosody into L2 teaching.

Arguably, the single issue with this tool is the following: it can be used exclusively to analyze 2 predetermined corpora (one cannot import a corpus of choice), both of which reflect only British English. Less importantly, it does not show the collocates of the given lexical item, which makes the analysis somewhat more difficult.

Now, a simple exercise will follow to provide more insight into applying this tool into L2 teaching.

10.5.1.1 Exercise using Lancaster University Online Concordancer

To take advantage of this tool, learners can, for instance, type the expression “*cause VERB*” to analyze the semantic prosody of one of the items we have examined in our study. At first, the website will display the message: “The search for ‘*cause VERB*’ found 111 results (8.10 per million) in speech and 138 results (49.43 per million) in writing.” In order to perform further investigation, one needs to choose one of the following tools: *Usage* (showing keywords in context), *Change* (comparing the frequency of usage between BNC 1994 and BNC 2014, allowing for a diachronic comparison), *Gender* (showing the distribution of male and female language users across BNC 1994 and 2014), *Age* (displaying the age of a speaker and the relative frequency of their usage of an item), *Social Class* (determining which of 5 classes the language users belong to — *working class, middle class, student, retired, unknown* — and from which of the 2 corpora they are taken), *Region* (presenting the map of the British Isles with ascribed frequency of usage of the given item across regions), *Summary* (giving a brief summary together with some statistical data), *Speech & writing* (providing information about the occurrences of the word in each subcorpus: *Speech, Elanguage, Fiction, Magazines, Newspapers, Academic*).

In order to explore the semantic prosody of the verb *TO CAUSE* one can either choose the option *Usage* or *Speech & writing*. While both will provide access to Key Words In Context display, only the latter allows for the analysis across genres, therefore we advocate for picking this one. To exemplify the usefulness of this tool, we will compare the usage of *TO CAUSE* in *Fiction* and *Academic* subcorpora.

First, one needs to decide on the sample size. In our view, one can use the simple method of drawing 10 *random* lines. If one wished to ensure true randomness, one would have to download all the concordance lines (button *Save*) together with their index numbers and use a tool (e.g., Random Number Generator³⁴⁶) to generate 10 random numbers in a given range and then analyze the corresponding lines. However, for learning purposes, one can also simply choose the first 10 lines displayed by the program. Now, this is not a big enough sample to reach conclusions in all scientific rigor. Scholars have been analyzing largely varying number of concordance lines (50 for Sarhad & Mahmood³⁴⁷, 100 for Begagić³⁴⁸ or even all occurrences in a corpus for Stubbs³⁴⁹), which tend to be much bigger than 10.

³⁴⁶ <https://www.calculator.net/random-number-generator.html> [accessed: 01.01.2025]

³⁴⁷ sarhad, J., & Mahmood, R. (2023). A Corpus-based Study of Semantic Prosody across a Native Corpus. *Journal of Garmian University*, 10(3), pp. 902-909.

³⁴⁸ Begagić, M. 2013. Semantic preference and semantic prosody of the collocation make sense. *Jezikoslovlje*. pp. 403-416.

³⁴⁹ Stubbs, M. (1995). Collocations and semantic profiles: On the cause of the trouble with quantitative methods. *Function of Language*, 2, pp. 1-33.

However, non-linguists might struggle with such a thorough analysis, therefore we decided to propose a smaller sample, which would pertain more to the category of a *pilot study*, an initial exploration of the phenomenon.

Next, one needs to ascribe the chosen lines with an evaluative description (e.g., using negative-positive polarity or other frameworks described in chapter 5). After our analysis of the first 10 concordance lines in fiction genre, we have found that 1 of them was used in positive context, 3 in neutral context, and 6 were deployed in the negative context. For instance, we decided that the following line is used in negative context because *ACCIDENTS* are undesirable outcomes:

Mitch was already struggling Hurrying was only going to **cause accidents**
Nevertheless by mutual agreement they continued with the descent

For the academic subcorpus we found different results. No lines were positive, and both negative and neutral lines have been found 5 times. To show our reasoning, the following line was described as negative because qualifying decisions as *SUBOPTIMAL* hints at their poor quality:

information and market failures and externalities all of which **cause** individual optimizing
farmers to make decisions that are suboptimal or

The last step is comparing the results across genres. From what we found, the verb *TO CAUSE* is devoid of positive hues in the academic genre, with a moderate degree of negativity (50%) on par with neutrality (50%). In the fiction genre, more instances were negative (60%), but we found a slight positive hue (10%), and less neutral usages (30%). These findings could point to a clear negative semantic prosody of *TO CAUSE* in academic genre and more ambiguous one in fiction.

By applying this tool, learners can gain valuable insights into how specific verbs like *TO CAUSE* function across different contexts and genres, contributing to a deeper understanding of language patterns. This method enables students to model the interaction between word usage and genre-specific conventions, which is crucial for analyzing the subtleties of language acquisition. For example, contrasting the semantic prosody of *TO CAUSE* in fiction versus academic texts not only reveals genre-specific patterns but also supports learners in discerning the role of context in shaping meaning—a fundamental aspect of SLA. Through such an exploration, students can build their capacity to interpret and apply language structures in varied communicative settings, thereby enhancing their linguistic proficiency and understanding of pragmatic meaning. Furthermore, the ability to select, analyze, and compare different samples encourages critical thinking and fosters analytical skills.

10.5.2 WebCorp Concordancer³⁵⁰



³⁵⁰ <https://www.webcorp.org.uk/live/> [accessed: 29.10.2024]

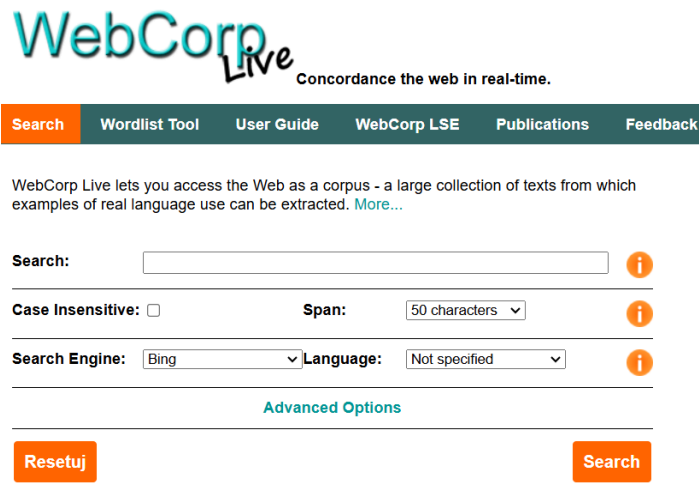


Fig. 2 WebCorp Concordancer website

WebCorp is a toolkit that provides access to the World Wide Web as a corpus.

It can be used to draw data in 42 languages (Albanian, Arabic, Bulgarian, Catalan, Chinese, Croatian, Danish, Dutch, English, Estonian, Finnish, French, German, Greek, Hebrew, Hungarian, Icelandic, Indonesian, Italian, Japanese, Korean, Latvian, Lithuanian, Malay, Norwegian, Persian, Polish, Portuguese, Romanian, Russian, Serbian, Slovak, Slovenian, Spanish, Swedish, Thai, Turkish, Ukrainian, Vietnamese) together with varieties of international languages (e.g., English, Spanish, German, French, Dutch), using Bing web search engine. Moreover, it can display collocates of the searched lemma, sort it based on their position (N left, N right) or date of publishing.

In regard to the analysis of register-specific semantic prosody, the search can be limited to the specific websites provided by the user. Moreover, one can determine keywords that must appear on these websites. These two features combined help encounter semantic prosodies in the specific genre or register. However, one needs to put in more effort (as compared to the previous tool), since WebCorp is unable to recognize the genre of a given search itself, making it more difficult to infer register-specific semantic prosody using it.

In the post search options, one can filter findings by the date of their publishing, which allows for diachronic considerations. Another useful feature, displayed after the initial search, is showing the collocates, which aids the analysis of the results, and excluding stopwords (such as, “a” or “the”) from the list of collocates.

The tool does not support importing external corpora.

Next, we’ll engage in a straightforward exercise to better understand how this tool can be applied to L2 teaching.

10.5.2.1 Exercise using WebCorp Concordancer

Unlike Lancaster University Online Concordancer, this tool is not able to filter the results according to their part of speech, therefore we can only analyze the entire lemma *CAUSE*, only in the internet genre. Accidentally, this will only exclude the gerund



(*CAUSING*) while all the other verbal forms will be included (*CAUSE, CAUSED, CAUSES*), however we will also get, e.g., the noun.

In the search bar, one should type the phrase “cause”, and determine the span — we advocate for 10 words. The website then will show 14 websites together with the concordance lines drawn from them. With WebCorp Concordancer, one should be aware that often the results will contain many results from online dictionaries, which may not reflect the actual usage, but rather prescriptive examples. Whether one decides to filter those out or include them is up to one’s decision — we decided to keep them in.

Similarly to the previous exercise, we take 10 concordance lines — 1 from each of the first 10 websites — and analyze their evaluative load. We found that 5 lines were negative, 1 was positive and 4 were neutral. To show our reasoning, the following line achieved the negative status because the described medical symptoms are negative outcomes:

collect in your bladder, which can irritate the bladder and **cause** symptoms of overactivity constipation conditions affecting the lower urinary tract

These results suggest a negative semantic prosody of the lemma *CAUSE* within the internet genre.

In SLA, the ability to critically analyze corpus data aids in understanding how meaning is shaped by context. By using this tool, learners can explore how different lexis function across various genres, such as the internet genre in this case. This type of analysis helps learners identify potential patterns in language usage, such as the consistent negative semantic prosody of *CAUSE* in online contexts. By selecting a sample of concordance lines and evaluating their context, learners practice the interpretation of the pragmatics of language use. Such activities foster a deeper understanding of how language operates in real-world settings, particularly how specific words convey different nuances. These insights are crucial for second language learners, as they can apply this knowledge to understand and produce language more effectively across different registers. Furthermore, by considering whether to include or exclude prescriptive examples, learners develop their ability to make informed decisions about linguistic data.

10.5.3 Sketch Engine for Language Learning (SKELL)³⁵¹



Sketch Engine for language learning

Search bar with a magnifying glass icon, the text "word or phrase", a keyboard icon, and a dropdown menu set to "English".

ABOUT SKELL

Fig. 3 SKELL website

SKELL is a basic tool designed for language students and teachers to quickly verify if or how a specific phrase or word is commonly used by native speakers of a language.

One can see examples of usage (KWIC), syntactically organized collocates (word sketch) and similar words (some of them are near-synonyms, but some are also more loosely linked). SKELL allows users to run searches in English, German, Italian, Estonian, Russian, and Czech.

It does not allow for a distinction of the register of the findings. As mentioned on the website, the corpus analyzed by SKELL is a “collection of texts such as news, academic papers, Wikipedia articles, open-source books, web pages, discussion forums, blogs, etc.”. It also does not allow users to import their own corpora.

A brief activity will now follow to illustrate the practical use of this tool in L2 instruction.

10.5.3.1 Exercise using Sketch Engine for Language Learning

This one is arguably the simplest tool to use. One only needs to type in the word or a phrase and will be shown the concordance lines in the section *Examples*. Just like the previous tool, one can only analyze lexis in a single predetermined corpus and have no option of indicating the part of speech one wishes to scrutinize.

Analogously to the previous exercises, we take the first 10 concordance lines displayed and analyze them qualitatively. We found that no words were used in positive context, while the negative occurrences (7) far outweigh the neutral ones (3).

To show our reasoning, we decided that the following line is negative because the direct object of the verb (*HARMFUL HEALTH EFFECTS*) is unfavorable.

Do wind turbines **cause** harmful health effects?

The findings indicate a clear negative semantic prosody associated with

CAUSE.

This tool, despite its simplicity, offers valuable insights into lexical usage, enabling learners to explore the semantic prosody. By analyzing the first 10 concordance lines, learners

can begin to recognize patterns in how words are used in different contexts, aiding their understanding of both meaning and usage. For SLA, tools like this are instrumental in helping learners identify the emotional or evaluative tone of words, which is essential for understanding and producing language in context. Furthermore, by analyzing a small, manageable sample of concordance lines, learners foster both analytical and interpretive abilities crucial for second language learning. This tool can be effectively used in the classroom or self-study to raise awareness of how specific words function, contributing to a deeper understanding of language use and meaning.

10.5.4 NoSKetchEngine³⁵²

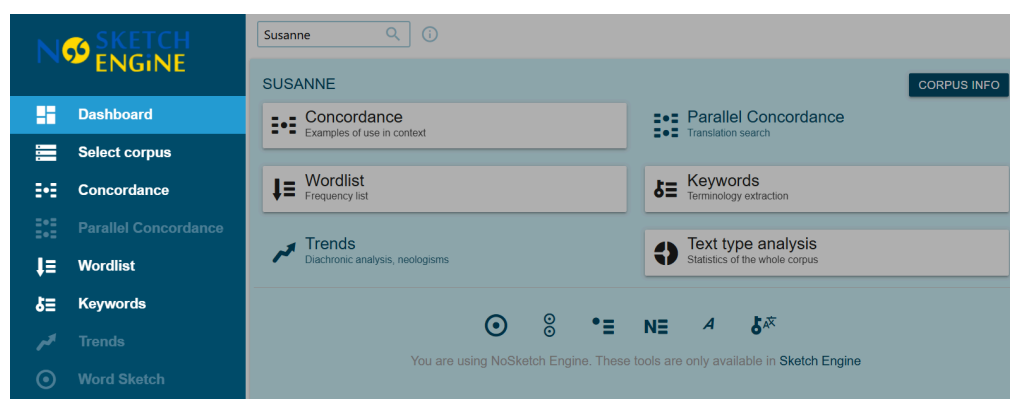


Fig. 4 NoSKetchEngine website

This tool is already very advanced, and most of the features will not be of big use for non-linguists. However, in the free version it gives a much more limited range of options, which are still relevant to our considerations of applying it into L2 teaching. Moreover, it allows analyzing data in many languages and different corpora, which finally made us decide on including it.

It is available in a range of languages (Albanian, Bosnian, Montenegrin, Serbian, Bulgarian, Catalan, Spanish, Croatian, Czech, Danish, Dutch, French, English, Estonian, Finnish, French, Gaelic, Galician, German, Greek, Hungarian, Icelandic, Italian, Japanese, Latvian, Lithuanian, Macedonian, Norwegian, Polish, Portuguese, Romanian, Serbian, Slovenian, Turkish, Ukrainian, Russian) and provides a variety of corpora, some of which allow for register-specific analysis (e.g., spoken corpora from parliaments of a specific country). Moreover, in the concordance section, one can choose a subcorpus from the previously chosen corpus, and filter the search with regard to a specific lemma, which can also make the search more register-specific.

It can perform a variety of advanced searches, filtering, data annotation, statistical measuring etc. This is precisely why using this tool would, arguably, require some prior training.

NoSKetchEngine is a versatile tool, downsides of which (in the context of L2 teaching) include its complexity and lack of the option to import one's own corpora.

³⁵² <https://www.clarin.si/ske/#open> [accessed: 01.11.2024]

To help deepen the understanding of this tool's application in L2 education, a short exercise will now take place.

10.5.4.1 Exercise using NoSKetchEngine

As indicated in the description, this tool is much more advanced than the previous ones, so one needs to start by choosing the corpus. We have opted for ukWaC (British Web).

Next, one needs to pick an appropriate tool, in our case *Concordance*. Here, there is a decision to be made — one can either use a *basic* search or go to *advanced* option. Since we would like to analyze the verb *TO CAUSE*, we selected the latter. Next we indicated the query type (*word*), and part of speech (*verb*), and subsequently typed “cause” in the search bar.

As in the previous exercises, we now proceed to the analysis of the first 10 concordance lines. We found 5 lines to be negative and 5 to be neutral.

To exemplify, the following line has been ascribed with neutrality because the outcome of the verb *TO CAUSE* is a technical eventuality, with no evaluation or attitude associated with it:

this command should **cause** the remote side to close the TELNET connection

The results reveal a negative semantic prosody linked to *TO CAUSE*.

The advanced functionality of this tool offers greater precision for learners, allowing them to focus on specific parts of speech, such as the verb *TO CAUSE*, and refine their analysis. In the case of this tool, learners can be encouraged to engage with a more complex interface that enhances their ability to conduct in-depth linguistic analyses. This fosters a deeper understanding of how verbs like *TO CAUSE* behave across different contexts, which is propitious for second language acquisition. In SLA, such exercises help learners not only identify patterns in word usage but also understand the broader implications of how certain words, contribute to the overall meaning in various genres or registers. The process of selecting specific search parameters and analyzing the resulting concordance lines also trains learners in the critical skills of corpus-based research, which helps refine their language proficiency. Furthermore, the ability to discern the evaluative nuances of language, as seen in the neutral and negative contexts of *TO CAUSE*, enhances learners' sensitivity to pragmatic meaning, an important aspect of mastering a second language.

10.5.5 KonText³⁵³

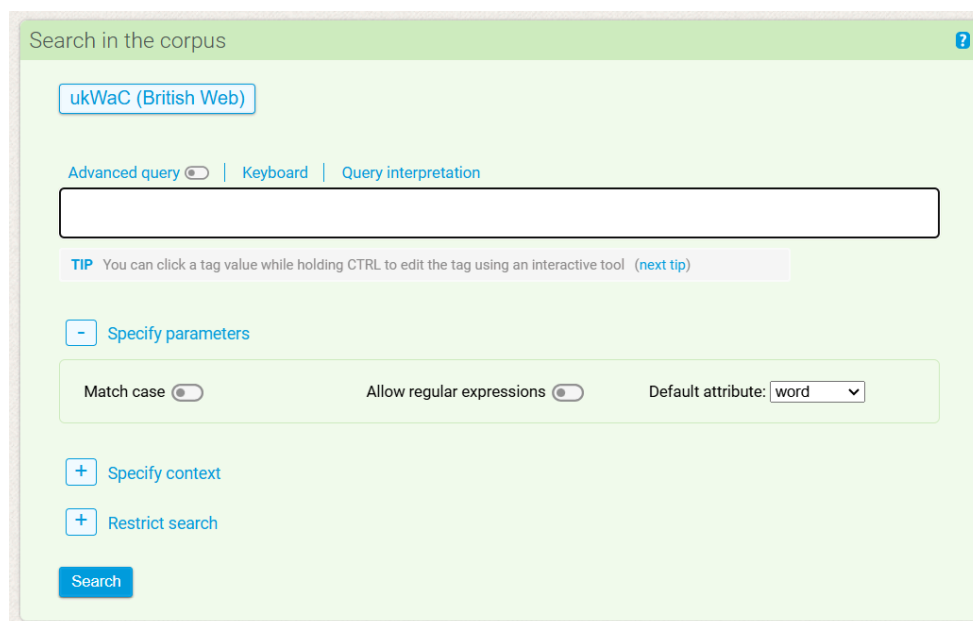


Fig. 5 KonText website

KonText, in its free version, allows only for KWIC analysis.

However, it is available for many languages (Slovenian, Croatian, Bosnian, Serbian, Montenegrin, Macedonian, Serbo-Croatian, Bulgarian, Czech, Slovak, Polish, English, Danish, Dutch, Estonian, Finnish, French, Gaelic, German, Greek, Hungarian, Icelandic, Italian, Japanese, Latvian, Lithuanian, Portuguese) and a variety of specialized corpora (e.g., Wikipedias, MA/PhD works, parliamentary corpora, etc.).

Sometimes it provides an option of choosing a subcorpus, which allows for register-specific analysis. Moreover, it allows for indicating the part of speech.

Following this, a quick exercise will help clarify how this tool is utilized in L2 teaching.

10.5.5.1 Exercise using KonText

Similarly to NoSKetchEngine, this tool is highly advanced. First step of using is to pick the appropriate corpus. In order to use a different corpus than the previous ones, we have selected a parallel corpus TRANS5: angleško.

Then, in the search bar one needs to indicate the query, in our example “cause” and proceed to the KWIC display. Since the program is very complicated, we decided that it is not realistic to assume L2 learners and educators will learn the regular expressions and other advanced ways of manipulating the searches, therefore we will simply analyze the word *CAUSE*.

We found that all 10 lines were negative. To show our reasoning, this line has been recognized as negative because PUBLIC HEALTH CONCERN is an unfavorable outcome:

WNV infection has become recognised as a major **cause** of public health concern in Europe.

Avian influenza Develop

These findings show a negative semantic prosody associated with the word CAUSE.

The advanced capabilities of this tool, enable a more nuanced analysis of words like *CAUSE* across different languages and contexts. Even without delving into more complex search techniques, learners can still gain valuable understanding by analyzing concordance lines for basic evaluative patterns, such as the consistently negative semantic prosody of *CAUSE* in the sample. By working with such advanced tools, learners can develop critical corpus analysis skills, which are essential for understanding how meaning is constructed and conveyed in real-world language use. For SLA, this kind of exposure helps learners appreciate the subtleties of word meanings, while also enhancing their ability to compare and contrast language use across different registers, genres, and languages.

10.5.6 Corpuscle³⁵⁴

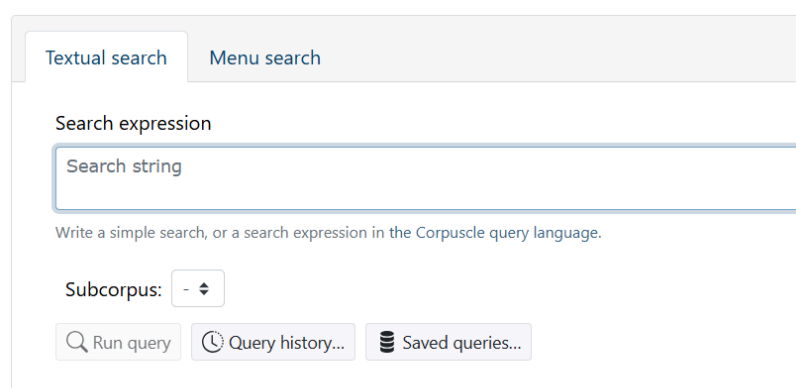


Fig. 6 Corpuscle website

Corpuscle is available for 17 languages, out of which 7 are not restricted by licenses (Abkhazian, Georgian, Old Georgian, Old Norse, Slovenian, Svan, Mingrelian). However, after getting the appropriate licenses, one can find specialized corpora for more popular tongues (e.g., English, Spanish) as well as a selection of minority languages (e.g., Faroese, Tigrinya).

It is able to display concordances, word lists, collocations, distributions, and timeline of occurrences.

The downside of this solution is its complexity and non-user-friendly design. However, we decided to include it because it allows for the analysis of less popular languages, which in our view is a serious gap in the entirety of the analyzed tools.

Since English is not one of the languages that can be analyzed in the scope of the free plan of this tool, we decided to leave it without the accompanying exercise.

10.5.7 Other Tools & Desktop Software

We also found a variety of solutions for languages that have been covered by the previous tools and which do not constitute a significant addition to the list.

We list them in this section: WebClark.Org³⁵⁵ for Bulgarian, Concordancer of the Croatian National Corpus for Croatian³⁵⁶, KORP for Danish³⁵⁷ and Swedish³⁵⁸, Corpus Gysseling for Dutch³⁵⁹, Latvian National Corpora Collection for Latvian and Lithuanian³⁶⁰, and CINTIL for Portuguese³⁶¹.

Lastly, many tools — free, paid, standalone, web-based — can be found on the lists of Corpus-Analysis.Com³⁶² and Corpus Query Tools³⁶³.

Our search of web-based free tools showed that no significant addition should be made to our list — none of the tools there adds a new language or a way of analysis that would be worth mentioning. However, we decided to mention these websites in order to provide educators with a starting point for their search, in case they decide to introduce some standalone, offline tools in their classrooms.

10.5.8 Conclusion of the Review of the Tools

What stands out from this review of tools, is that very few of these solutions can be applied to languages other than the major ones. If one would like to enrich their learning (or teaching) of the languages such as Kashubian, or Galician, they would be facing a scarcity of resources. The same can be said about dialects of languages (e.g., Azorean Portuguese).

Moreover, except for the tool provided by Lancaster University, none of them allows for intuitive register or genre analysis — it is possible in NoSKetchEnging and KonText, but arguable they lack a user-interface which would allow for intuitive compiling of the searches.

Additionally, none of these tools — perhaps except for WebCorp — allow for creating one's own corpora, which would allow for a more personalized analysis of register-specific aspects of semantic prosody.

Therefore, a need for the development of a multilanguage, user-friendly, register/genre-specific corpus-linguistic tool becomes evident.

In the light of the advancements in Artificial Intelligence (AI), upgrading currently available concordancers with an AI-powered web-crawling tool that would be able to recognize and download text from a specific register/genre appears as a resource-efficient and accessible way forward.

A challenge to this proposition is the question of the possibility of training AI to recognize different genres and language varieties. This would need to be determined by further researchers with more computational background.

³⁵⁵ <http://webclark.org/> [accessed: 29.10.2024]

³⁵⁶ <https://corpora.clarin.hr/crystal/#dashboard?corpname=cesaric> [accessed: 29.10.2024]

³⁵⁷ <https://alf.hum.ku.dk/korp/> [accessed: 29.10.2024]

³⁵⁸ <https://spraakbanken.gu.se/korp/> [accessed: 29.10.2024]

³⁵⁹ <https://corpusgysseling.ivdnt.org/corpus-frontend/Gysseling/search> [accessed: 29.10.2024]

³⁶⁰ <https://korpuss.lv/en/> [accessed: 29.10.2024]

³⁶¹ <https://portulanclarin.net/workbench/cintil-concordancer/> [accessed: 29.10.2024]

³⁶² <https://corpus-analysis.com/> [accessed: 29.10.2024]

³⁶³ <https://www.clarin.eu/resource-families/corpus-query-tools#desktop-tools> [accessed: 29.10.2024]

In summary, these corpus tools offer significant potential for enhancing language pedagogy. By enabling detailed analysis of semantic prosody and frequency distributions, learners are allowed to engage with authentic language use across different genres and registers, thus facilitating a deeper understanding of linguistic patterns. The ability to conduct genre-specific searches and the inclusion of diverse corpus features—such as regional variations, age, and social class—provides learners with a comprehensive view of how language functions in various contexts. Moreover, these tools can support personalized learning by enabling the exploration of different linguistic elements, fostering more individualized approaches to language acquisition. The continued development of such tools, especially with the integration of AI, could further enrich SLA by providing even more tailored and accessible resources for learners.

10.6 CONCLUSION OF CHAPTER 10

Incorporating register-specific prosody into language pedagogy offers significant benefits for both L2 educators and learners.

Educators play a crucial role in teaching the concept of semantic prosody, which remains largely unconscious for proficient language users and is often neglected in teacher training. To address this, teachers must first understand semantic prosody themselves, leveraging interactive activities to deepen their knowledge. Explicit instruction on semantic prosody can particularly benefit advanced learners, while evaluating implicit knowledge through corpus-assisted methods can enhance understanding for all proficiency levels.

For L2 learners, understanding lexical collocations and the conditions surrounding semantic prosody is essential for achieving high proficiency. Research indicates that non-native speakers tend to mismanage collocations, resulting in unnatural language use. Teaching students to evaluate their own use of semantic prosody through corpus-assisted methods provides practical feedback, while explicit output tasks, especially those utilizing their first language, enhance comprehension. Active engagement through data-driven learning (DDL) empowers learners to investigate semantic prosody independently, though challenges remain in accessing and analyzing corpus data effectively.

A review of web-based corpus linguistics tools highlights the need for user-friendly, multilingual resources that facilitate register-specific analysis. While existing tools are valuable, they often lack intuitive interfaces for genre analysis and do not allow for the creation of personalized corpora. Future developments, particularly in AI technology, could lead to more efficient corpus tools that support diverse language instruction and enhance the learning experience.

11 CONCLUSIONS

In this thesis, we have thoroughly examined the phenomenon of semantic prosody with special regard to its register-specific nature. We have provided a chronological review of semantic prosody, exploring its scope and nature, as well as its intuitive and hidden aspects. By analyzing the evaluative load of semantic prosody, including the positive-negative polarity, and more nuanced frameworks, we have aimed at bringing together and unifying the diverse claims found in literature. Moreover, we explored the application of semantic prosody into language pedagogy, offering both theoretical insights and practical recommendations. By integrating corpus linguistics methodologies with pedagogical frameworks, we have sought to bridge the gap between linguistic research and language education. In this final chapter we revisit the key findings, connecting them across the thesis' chapters, and underscoring the contributions to both linguistic theory and teaching practice.

The dissertation began by establishing the foundational understanding of semantic prosody, which can be defined as the evaluative meaning that lexical items manifest through repeated collocations in specific contexts. It explored the evolution of semantic prosody research, tracing its origins from early studies to contemporary debates, which highlight its contested nature, especially regarding its scope, hiddenness, and implications. Consequently, it delved into the concept of semantic prosody, distinguishing it from related concepts such as semantic preference, collocation, and colligation. This theoretical framework is essential for a comprehensive understanding that integrates both pragmatic and semantic dimensions.

Next, we investigated the implicit (or hidden) nature of semantic prosody, with evidence drawn from psycholinguistic and corpus studies. It was argued that while prosody is often unconscious, language users can exhibit both intuitive and explicit awareness of its evaluative charge, which informs subsequent teaching approaches. The thesis then moves beyond a simplistic binary of positive and negative prosody, introducing the idea of nuanced evaluative dimensions and genre-specific variations. We explored dualistic prosody and the emerging theoretical perspectives, enriching the understanding of evaluative tendencies in language.

A cross-linguistic perspective was also considered, with comparisons between different languages. This section revealed how cultural and linguistic factors shape prosodic patterns, highlighting the challenges L2 learners face and offering strategies to address them. Subsequently, the genre- and register-specific aspects were examined, which concluded the groundwork before the empirical study.

The conducted study then examined two verbs — *TO CAUSE* and *TO LEAD TO* — across different registers, including general, academic, elanguage, fiction, magazines,

newspapers, and official documents subcorpora of BNC2014. The analysis revealed significant variations in their semantic prosody, demonstrating that these verbs carry distinct evaluative connotations depending on the genre. These findings underscore the importance of context in shaping semantic prosody and emphasize the need for context-aware teaching strategies in L2 instruction.

This thesis makes several contributions to the fields of linguistics and language pedagogy. Theoretically, it advances our understanding of semantic prosody by emphasizing its register-specific nature and exploring its cross-linguistic manifestations. Methodologically, it demonstrates the utility of corpus-based tools and techniques in uncovering subtle prosodic patterns. Pedagogically, it offers practical strategies for integrating semantic prosody into L2 instruction, addressing a critical gap in existing teaching practices.

This dissertation has demonstrated the significance of register-specific semantic prosody in L2 teaching, particularly in refining the understanding of word usage in different communicative contexts. By analyzing corpus data, this research has provided evidence that semantic prosody is not uniform across registers and that such variations have direct pedagogical implications. Semantic prosody can explain, for instance, why some phrases sound natural while others do not, even if they are grammatically correct. By integrating corpus findings into pedagogical materials, learners can develop greater sensitivity to these nuances.

One of the key contributions of this research has been the clarification and unification of the nomenclature and frameworks used to describe semantic prosody. Previously, inconsistencies in definitions and classifications made it difficult for scholars and educators to fully integrate this concept into language pedagogy. By systematizing the terminology and providing a clear framework, this thesis has facilitated pedagogical integration by allowing for more seamless incorporation of semantic prosody into educational materials and teacher training programs. It has enhanced future research consistency, since it empowered scholars to build upon a unified theoretical foundation, reducing ambiguity and improving the comparability of findings across different linguistic contexts. With reference to language pedagogy, the thesis has also supported language curriculum development — with a clear framework, curriculum designers can more effectively include semantic prosody in teaching materials, ensuring that students gain a structured understanding of its role in communication.

The findings have broader implications for language education. By raising awareness of semantic prosody, educators can equip learners with the tools to navigate complex evaluative meanings and produce contextually appropriate language. This is particularly valuable for advanced learners aiming to achieve native-like fluency and for those engaging with academic or professional registers where prosodic nuances are more pronounced. As it has been recognized, traditional vocabulary teaching often relies on decontextualized word lists or dictionary definitions. Studies reveal that words are best learned in their natural usage environments, where learners can observe patterns of semantic prosody. This knowledge can help prevent learners from unintentionally using words in pragmatically inappropriate ways. This is of paramount importance, since there is evidence that L2 learners frequently struggle with collocations, particularly when words carry unintended evaluative connotations.

Corpus-informed materials can expose learners to authentic language use, ensuring they understand not only what words mean, but how they function within discourse. Additionally, deploying corpus tools enables learners to engage in data-driven learning (DDL), where they actively explore language patterns rather than relying solely on explicit instruction. This approach fosters learner autonomy and encourages deeper cognitive engagement with language.

The study's interdisciplinary approach highlights the potential for collaboration between linguists, educators, and technologists. Future research could build on this work by exploring prosodic patterns in underrepresented languages and registers, developing automated tools for teaching semantic prosody, and examining its role in other areas of language use, such as translation and intercultural communication. Researchers could conduct controlled classroom studies comparing traditional vocabulary teaching with corpus-informed approaches to assess their effectiveness in promoting retention and accurate usage of register-specific semantic prosody. Moreover, long-term studies tracking L2 learners' acquisition of semantic prosody over time would provide deeper insights into how corpus-based instruction impacts learning trajectories. Additionally, since many language instructors remain unfamiliar with corpus tools, future research could explore how teacher training programs might incorporate corpus-based methodologies to enhance instructional effectiveness in the most effective way available.

A major challenge in applying corpus linguistics to language pedagogy is the complexity of corpus tools and software, which can be difficult for both educators and learners to use effectively. The deployment of AI-powered tools, such as Gemini³⁶⁴ or ChatGPT³⁶⁵, can revolutionize this aspect by eliminating the need for specialized software. Instead of requiring knowledge of corpus linguistics interfaces, learners, and educators can simply interact with AI systems that provide corpus-derived insights in a user-friendly way. Students and teachers can be encouraged to ask AI-powered tools to analyze word usage, identify semantic prosody, and generate contextual examples instantly, making learning more intuitive and accessible. Additionally, the integration of AI-driven corpus linguistics tools has the potential to democratize access to high-quality language education by providing free or low-cost learning resources. Traditional corpus software often requires institutional access or paid subscriptions. AI-based platforms, however, can offer open-access tools that make linguistic data readily available to learners worldwide. AI-powered chatbots can serve as personal language tutors, providing instant feedback on semantic prosody, collocational patterns, and pragmatic nuances, thus reaching students in underserved or resource-limited regions.

In conclusion, this thesis underscores the transformative potential of semantic prosody in enhancing L2 learning. By bridging linguistic theory and practical pedagogy, it lays the groundwork for more nuanced, context-aware approaches to language education, ultimately fostering deeper and more authentic learning experiences.

³⁶⁴ <https://gemini.google.com/> [access: 03.04.2025]

³⁶⁵ <https://chatgpt.com/> [access: 03.04.2025]

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<https://www.youtube.com/watch?v=sEwyK8VcRQA> [accessed: 29.10.2024]

LIST OF FIGURES

Fig. 1 Lancaster University Online Concordancer website.....	130
Fig. 2 WebCorp Concordancer website.....	133
Fig. 3 SKELL website.....	135
Fig. 4 NoSKetchEngine website.....	136
Fig. 5 KonText website.....	138
Fig. 6 Corpuscle website.....	139

LIST OF TABLES

Table 1. Top 20 adjective pairs with a value assigned in Osgood et al.'s study.....	38
Table. 2 Top 10 positive-prosody and top 10 negative-prosody words in the BNC corpus, as recognized by Dilts and Newman.....	39
Table 3. Collocates of TO LEAD TO in the general corpus.....	62
Table 4. Semantic Prosody of TO LEAD TO in BNC2014.....	64
Table 5. Collocates of TO LEAD TO in Academic Prose.....	64
Table 6. Semantic Prosody of TO LEAD TO in Academic Prose.....	66
Table 7. Collocates of TO LEAD TO in Elanguage.....	66
Table 8. Semantic Prosody of TO LEAD TO in Elanguage.....	68
Table 9. Collocates of TO LEAD TO in Fiction.....	69
Table 10. Semantic Prosody of TO LEAD TO in Fiction.....	70
Table 11. Collocates of TO LEAD TO in Magazines.....	71
Table 12. Semantic Prosody of TO LEAD TO in Magazines.....	73
Table 13. Collocates of TO LEAD TO in Newspapers.....	73
Table 14. Semantic Prosody of TO LEAD TO in Newspapers.....	75
Table 15. Collocates of TO LEAD TO in Official Documents.....	75
Table 16. Semantic Prosody of TO LEAD TO in Official Documents.....	77
Table 17. The comparison of Semantic Prosody of TO LEAD TO across 6 subcorpora and the general BNC corpus.....	77
Table 18. Collocates of TO CAUSE in BNC2014.....	80
Table 19. Semantic Prosody of TO CAUSE in BNC2014.....	81

Table 20. Collocates of TO CAUSE in Academic Prose.....	82
Table 21. Semantic Prosody of TO CAUSE in Academic Prose.....	84
Table 22. Collocates of TO CAUSE in Elanguage.....	84
Table 23. Collocates of TO CAUSE in Elanguage.....	86
Table 24. Semantic Prosody of TO CAUSE in Fiction.....	87
Table 25. Semantic Prosody of TO CAUSE in Fiction.....	88
Table 26. Semantic Prosody of TO CAUSE in Magazines.....	89
Table 27. Semantic Prosody of TO CAUSE in Magazines.....	91
Table 28. Semantic Prosody of TO CAUSE in Newspapers.....	91
Table 29. Semantic Prosody of TO CAUSE in Newspapers.....	93
Table 30. Collocates of TO CAUSE in Official Documents.....	94
Table 31. Semantic Prosody of TO CAUSE in Official Documents.....	95
Table 32. The comparison of Semantic Prosody of TO CAUSE across 6 subcorpora and the general BNC corpus.....	96
Table 33. The comparison of Semantic Prosody of TO LEAD TO and TO CAUSE in the BNC2014 corpus.....	98
Table 34. The comparison of Semantic Prosody of TO LEAD TO and TO CAUSE in the Academic Prose subcorpus.....	99
Table 35. The comparison of Semantic Prosody of TO LEAD TO and TO CAUSE in the Elanguage subcorpus.....	100
Table 36. The comparison of Semantic Prosody of TO LEAD TO and TO CAUSE in the Fiction subcorpus.....	102
Table 37. The comparison of Semantic Prosody of TO LEAD TO and TO CAUSE in the Magazines subcorpus.....	103
Table 38. The comparison of Semantic Prosody of TO LEAD TO and TO CAUSE in the Newspapers subcorpus.....	104

**Table 39. The comparison of Semantic Prosody of TO LEAD TO
and TO CAUSE in the Newspapers subcorpus.....106**



This thesis explores register-specific semantic prosody and its role in L2 teaching, examining how words acquire evaluative connotations through habitual collocations. While well-studied theoretically, its teaching applications remain underexplored.

A corpus-based analysis of TO LEAD TO and TO CAUSE across registers reveals prosodic variations in academic, conversational, and literary contexts. Findings inform L2 pedagogy, proposing strategies to enhance learner comprehension and production through semantic prosody integration.