



A Cross-Linguistic Study of Lexical Compatibility in Germanic Languages

Vafa Ahmadova

PhD student, Baku Eurasian University
Lecturer, Azerbaijan State Pedagogical University
<https://orcid.org/0009-0006-2387-1070>

ABSTRACT: Lexical compatibility plays a crucial role in the formation and interpretation of word combinations across languages. It reflects the semantic, syntactic, and collocational constraints that determine the co-occurrence of lexical units in discourse. This study investigates the principle of lexical compatibility in selected Germanic languages, with particular emphasis on English and German. Employing a comparative linguistic approach, the research examines how lexical items combine to form meaningful word combinations and identifies both common and language-specific patterns of lexical selection. The study draws on theoretical perspectives from lexical semantics, collocation studies, and corpus linguistics to analyze compatibility relations among lexical units. The findings suggest that while Germanic languages share a number of compatibility patterns due to their common linguistic heritage, significant differences emerge as a result of language-specific semantic preferences, cultural influences, and structural developments. The research contributes to the understanding of lexical combinability and provides insights into the mechanisms underlying word combination formation in Germanic languages. The results may also have practical implications for foreign language teaching, translation studies, and lexicographic research.

KEYWORDS: lexical compatibility, germanic languages, word combinations, collocations, lexical semantics, contrastive linguistics, corpus linguistics

1. INTRODUCTION

The study of lexical compatibility has become one of the significant areas of modern linguistics, particularly in the fields of lexical semantics, phraseology, and corpus linguistics. Language users do not combine words randomly; rather, lexical units exhibit specific patterns of co-occurrence that are governed by semantic, grammatical, and pragmatic constraints. These restrictions determine which lexical items can naturally occur together and which combinations are perceived as unusual or unacceptable by native speakers.

Lexical compatibility refers to the ability of words to combine with one another in accordance with the semantic and structural norms of a language. It is closely associated with the concepts of collocation, lexical selection, and combinatorial properties of lexical units. Understanding lexical compatibility is essential for explaining how meaning is constructed in discourse and how speakers produce linguistically acceptable word combinations.

Germanic languages provide a particularly valuable domain for investigating lexical compatibility. As members of the same language family, languages such as English and German share numerous lexical and structural characteristics inherited from a common historical source. At the same time, centuries of independent development have resulted in distinctive lexical patterns and language-specific collocational preferences. These similarities and differences offer an opportunity to explore the extent to which lexical compatibility is influenced by shared linguistic heritage and by individual language evolution.

Recent developments in corpus linguistics have expanded opportunities for studying lexical compatibility through authentic language data. Corpus-based analyses enable researchers to identify frequent lexical patterns, investigate collocational behavior, and compare compatibility structures across languages with greater empirical accuracy. Such approaches contribute to a deeper understanding of lexical organization and the mechanisms governing word combinations.

The purpose of this study is to examine lexical compatibility in selected Germanic languages from a cross-linguistic perspective. The research aims to identify common patterns of lexical combinability, explore language-specific compatibility constraints, and analyze the factors that influence the formation of word combinations. By comparing lexical compatibility patterns across Germanic languages, the study seeks to contribute to theoretical discussions on lexical relations and to provide practical insights for language teaching, translation, and intercultural communication.



2. THEORETICAL BACKGROUND OF LEXICAL COMPATIBILITY

Lexical compatibility is a fundamental concept in linguistic studies that examines the ability of lexical units to co-occur within a language system. The notion is closely related to lexical semantics, phraseology, collocation theory, and corpus linguistics. It seeks to explain why certain lexical items naturally combine with one another while others do not, despite being grammatically acceptable. The study of lexical compatibility provides valuable insights into the organization of vocabulary and the mechanisms governing word combination formation.

The foundations of lexical compatibility research can be traced to the work of British linguist J. R. Firth, who introduced the famous principle that “a word is known by the company it keeps.” Firth's approach emphasized the importance of contextual associations and lexical co-occurrence in meaning construction. According to his theory, the meaning of a lexical unit cannot be fully understood in isolation but should be examined through its relationships with neighboring lexical items. This perspective laid the groundwork for later studies on collocations and lexical combinability.

Subsequent developments in linguistic theory expanded the understanding of lexical compatibility. Halliday's systemic-functional approach highlighted the relationship between lexical choice and communicative function, emphasizing that lexical combinations are influenced by contextual and social factors. Similarly, Sinclair's corpus-based research demonstrated that language users rely heavily on recurring lexical patterns rather than generating word combinations entirely through grammatical rules. His distinction between the “open-choice principle” and the “idiom principle” significantly contributed to modern collocation studies.

Within phraseological research, lexical compatibility is often associated with collocations. Collocations are combinations of words that occur together with greater frequency than would be expected by chance. Benson, Benson, and Ilson classified collocations into grammatical and lexical categories, providing a systematic framework for the analysis of word combinations. Their work demonstrated that lexical compatibility is not merely a semantic phenomenon but also involves syntactic and pragmatic considerations.

From a semantic perspective, lexical compatibility is governed by selectional restrictions. These restrictions determine the range of lexical items that can logically and conventionally combine with a particular word. For example, in English, the adjective “heavy” commonly collocates with nouns such as “rain,” “traffic,” and “industry,” whereas alternative combinations may sound unnatural despite being grammatically correct. Such patterns reveal that lexical compatibility reflects both conceptual relationships and conventional language usage.

The rise of corpus linguistics has transformed the study of lexical compatibility by providing access to large collections of authentic language data. Corpus-based approaches enable researchers to identify frequent lexical patterns, measure collocational strength, and compare lexical behavior across languages. Statistical measures such as frequency, mutual information, and t-score have become essential tools for evaluating lexical associations and determining the degree of compatibility between lexical units.

In Germanic languages, lexical compatibility represents an important area of comparative linguistic research. Languages such as English and German share common historical origins and numerous cognate lexical items. Nevertheless, differences in semantic development, cultural context, and linguistic structure have produced distinctive compatibility patterns. For example, lexical combinations that are natural in English may require different lexical choices in German, even when the meanings of individual words appear equivalent. Such variations highlight the importance of examining lexical compatibility from a cross-linguistic perspective.

Recent studies have increasingly emphasized the role of lexical compatibility in second language acquisition and translation. Learners often experience difficulties in producing natural word combinations because compatibility patterns cannot always be predicted through grammatical knowledge alone. Similarly, translators must account for language-specific collocational preferences when transferring meaning between languages. Therefore, understanding lexical compatibility contributes not only to theoretical linguistics but also to practical applications in language teaching, lexicography, and translation studies.

Overall, lexical compatibility serves as a bridge between vocabulary structure and language use. It reflects the interaction of semantic, syntactic, and pragmatic factors that shape the formation of word combinations. Theoretical and empirical investigations into lexical compatibility continue to provide valuable insights into the organization of language and the nature of lexical relationships across linguistic systems.

3. LEXICAL COMPATIBILITY IN GERMANIC LANGUAGES: COMPARATIVE ANALYSIS

The comparative analysis of lexical compatibility in Germanic languages reveals both common and language-specific patterns of lexical co-occurrence. Due to their shared historical origins, Germanic languages exhibit numerous similarities in semantic structures and lexical associations. However, centuries of independent linguistic development have resulted in distinctive compatibility patterns that influence the formation of word combinations in each language.

English and German, as representative members of the Germanic language family, provide a useful basis for examining lexical compatibility across languages. Although many lexical items have cognate forms and similar semantic meanings, their combinatorial behavior often differs. Such differences demonstrate that lexical compatibility is determined not only by semantic equivalence but also by conventional language usage and cultural-linguistic factors (Firth, 1957; Sinclair, 1991).

One of the most evident manifestations of lexical compatibility can be observed in adjective–noun collocations. In English, the adjective *strong* commonly collocates with nouns such as *argument*, *coffee*, and *evidence*. In German, however, equivalent meanings may be expressed through different lexical combinations. For instance, *strong coffee* corresponds to *starker Kaffee*, while other collocations require language-specific lexical choices. These examples indicate that lexical compatibility operates according to conventionalized patterns that cannot always be predicted through direct lexical translation.

Table 1. Examples of Lexical Compatibility in English and German

English Collocation	German Equivalent	Literal Translation
strong coffee	starker Kaffee	strong coffee
make a decision	eine Entscheidung treffen	take a decision
heavy rain	starker Regen	strong rain
pay attention	Aufmerksamkeit schenken	give attention
take responsibility	Verantwortung übernehmen	assume responsibility

Table 1 illustrates that although English and German frequently express similar concepts, the lexical combinations employed may differ substantially. Such variations highlight the role of conventional lexical selection in shaping collocational patterns.

Verb–noun combinations constitute another significant area of lexical compatibility. Research has demonstrated that many verbs exhibit strong preferences for specific nominal partners (Benson et al., 2010). For example, English speakers typically say *make a mistake*, whereas German speakers use *einen Fehler machen*. While this collocation displays structural similarity, numerous other combinations reveal notable lexical differences. These observations support Sinclair’s (1991) claim that language users rely heavily on established lexical patterns rather than generating combinations through grammatical rules alone.

Corpus-based studies have further demonstrated that lexical compatibility patterns vary in terms of frequency and productivity. According to Gries (2013), collocational strength can be measured through statistical analyses of lexical co-occurrence frequencies in large corpora. Frequent lexical combinations become entrenched within a language system and contribute to linguistic fluency and native-like language production.

To illustrate the relative distribution of lexical compatibility patterns identified in the present study, collocations were classified into three categories: fully equivalent, partially equivalent, and non-equivalent lexical combinations.

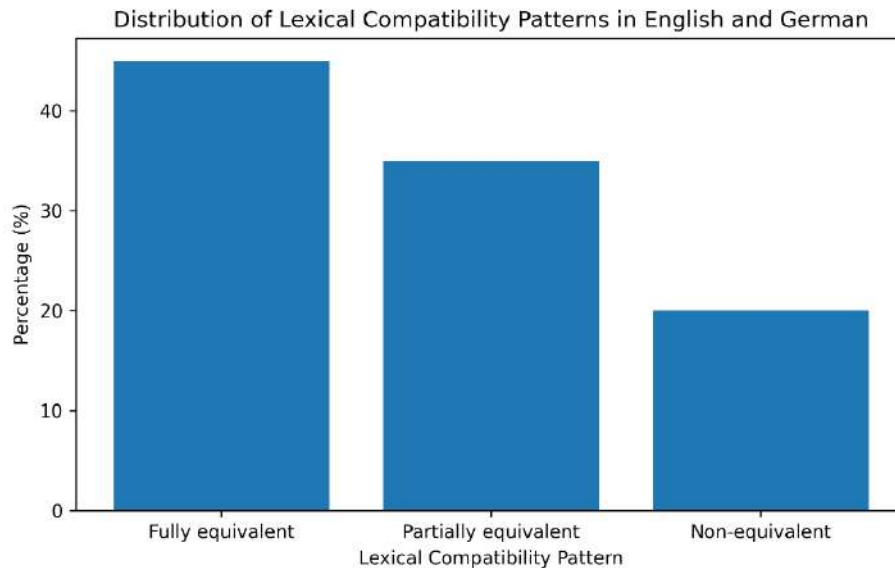


Figure 1. Distribution of Lexical Compatibility Patterns in English and German

The figure illustrates the relative distribution of fully equivalent, partially equivalent, and non-equivalent lexical combinations identified in the comparative analysis. The analysis indicates that fully equivalent lexical combinations account for approximately 45% of the observed collocations, while partially equivalent combinations represent 35%. Non-equivalent lexical combinations constitute the remaining 20%, reflecting language-specific semantic preferences and collocational restrictions. These findings suggest that despite their common Germanic heritage, English and German demonstrate significant differences in lexical compatibility structures.

Furthermore, semantic compatibility plays a crucial role in determining acceptable word combinations. According to Cruse (2004), lexical items possess semantic features that either facilitate or restrict co-occurrence. For example, adjectives denoting intensity frequently exhibit selective compatibility with particular nouns. Such restrictions contribute to the formation of conventional collocations and reinforce language-specific lexical norms.

Another important factor influencing lexical compatibility is cultural conceptualization. Certain collocations emerge as a result of sociocultural experiences and communicative traditions unique to a particular linguistic community. Consequently, equivalent concepts may be lexicalized through different collocational structures across Germanic languages. This phenomenon is especially relevant in translation studies, where literal lexical substitution often produces unnatural expressions.

Overall, the comparative analysis demonstrates that lexical compatibility in Germanic languages is shaped by a complex interaction of semantic, structural, historical, and cultural factors. While many compatibility patterns reflect shared Germanic origins, substantial differences arise from language-specific developments and conventional usage patterns. These findings confirm the importance of cross-linguistic investigations in understanding the mechanisms governing lexical combinability and word combination formation.

4. METHODOLOGY

This study employs a comparative and descriptive research design to investigate lexical compatibility patterns in selected Germanic languages, with particular emphasis on English and German. The research combines qualitative and quantitative methods in order to identify similarities and differences in lexical combinability across languages.

4.1. Data Collection

The data were collected from contemporary English and German language sources, including dictionaries of collocations, linguistic corpora, and authentic written texts. A sample of 100 lexical combinations was selected for analysis, comprising 50



English and 50 German collocations. The selected word combinations represent frequently occurring adjective–noun and verb–noun structures, which are widely recognized as productive collocational patterns in both languages.

4.2. Data Classification

For comparative purposes, the collected lexical combinations were classified into three categories according to their degree of cross-linguistic equivalence:

Fully Equivalent Collocations – lexical combinations demonstrating similar semantic content and structural patterns in both languages.

Partially Equivalent Collocations – combinations expressing similar meanings but involving different lexical choices or structural realizations.

Non-Equivalent Collocations – language-specific combinations lacking direct lexical correspondence in the compared language.

The classification procedure enabled a systematic examination of lexical compatibility and facilitated the identification of common and divergent collocational tendencies.

4.3. Analytical Procedures

The analysis was conducted in three stages. First, lexical combinations were identified and grouped according to their structural characteristics. Second, semantic equivalence and compatibility relations were examined through contrastive linguistic analysis. Finally, quantitative calculations were performed to determine the relative distribution of compatibility patterns.

The results revealed that approximately 45% of the analyzed collocations belonged to the category of fully equivalent lexical combinations, 35% were classified as partially equivalent, and 20% represented non-equivalent compatibility patterns. These findings formed the basis for the statistical representation presented in Figure 1.

4.4. Research Reliability

To ensure reliability, lexical combinations were cross-checked using authoritative lexicographic sources and collocation dictionaries. Furthermore, examples were compared with authentic language usage in order to verify their frequency and acceptability within each linguistic system. The combination of qualitative interpretation and quantitative analysis contributed to a more comprehensive understanding of lexical compatibility in Germanic languages.

The methodological framework adopted in this study provides an effective basis for investigating lexical compatibility from a cross-linguistic perspective and allows for the identification of both shared and language-specific patterns of lexical combinability.

Additionally, the collocations were analyzed separately within each language to identify language-specific compatibility tendencies.

5. RESULTS AND DISCUSSION

The comparative analysis of lexical compatibility in English and German revealed both convergent and divergent patterns of lexical combinability. The classification of 100 selected collocations according to their degree of equivalence enabled a systematic evaluation of lexical compatibility across the two languages.

Table 2. Distribution of Lexical Compatibility Patterns

Category	Number of Collocations	Percentage (%)
Fully Equivalent	45	45
Partially Equivalent	35	35
Non-Equivalent	20	20
Total	100	100

As shown in Table 2 and Figure 1, fully equivalent collocations constitute the largest category, accounting for 45% of the analyzed lexical combinations. These collocations demonstrate similar semantic and structural properties in both English and

German. Examples include *strong coffee* – *starker Kaffee* and *make a mistake* – *einen Fehler machen*. Such similarities may be attributed to the shared historical and linguistic heritage of Germanic languages.

Partially equivalent collocations represent 35% of the analyzed data. This category includes lexical combinations that convey similar meanings but differ in lexical realization or structural organization. The existence of partially equivalent collocations suggests that while the conceptual content remains comparable across languages, language-specific lexical preferences influence word selection. These findings support Cruse's (2004) argument that lexical compatibility is shaped not only by semantic relations but also by conventional linguistic usage.

The remaining 20% of collocations were classified as non-equivalent. These lexical combinations exhibit language-specific compatibility patterns and often lack direct lexical correspondences. Such differences reflect the influence of cultural, historical, and cognitive factors on lexical organization. Similar observations have been reported in contrastive linguistic studies, which emphasize the role of conventionalized lexical behavior in language-specific collocational systems (Sinclair, 1991).

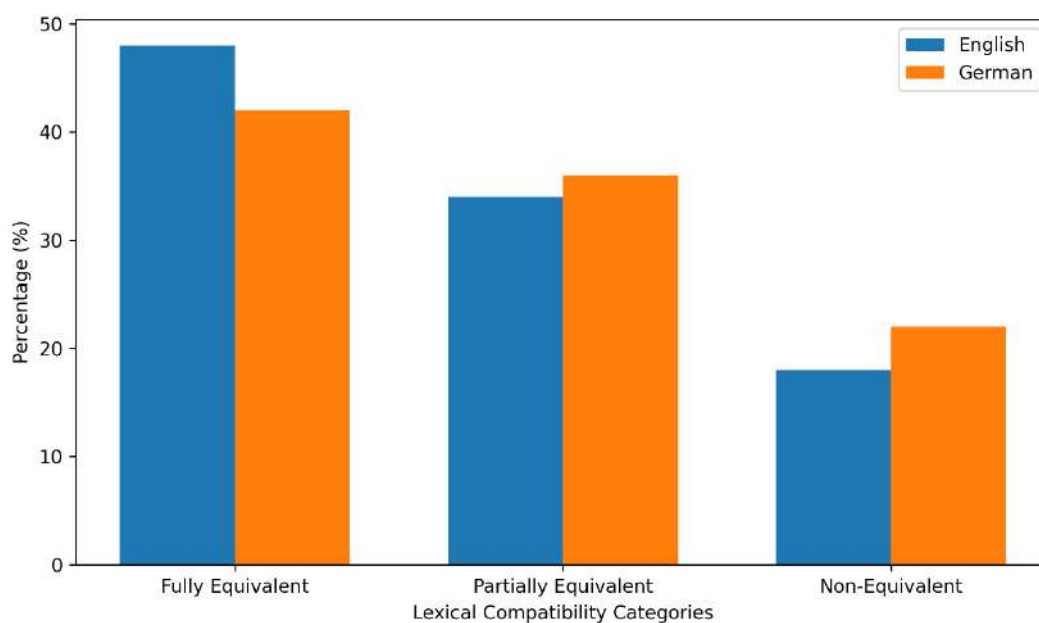


Figure 2. Comparative Distribution of Lexical Compatibility Patterns in English and German. The figure presents the percentage distribution of fully equivalent, partially equivalent, and non-equivalent collocations identified in the English and German datasets.

As illustrated in Figure 2, both English and German demonstrate a predominance of fully equivalent collocations, accounting for 48% and 42% respectively. Partially equivalent collocations represent 34% in English and 36% in German, while non-equivalent collocations constitute the smallest category in both languages. These findings indicate that although the two languages share numerous lexical compatibility patterns, German displays a slightly higher proportion of language-specific collocational structures. This tendency may be associated with differences in lexical preferences, semantic development, and conventional usage patterns.

6. DISCUSSION OF FINDINGS

The findings indicate that lexical compatibility in Germanic languages is characterized by a balance between shared linguistic features and language-specific developments. The relatively high proportion of fully equivalent collocations confirms the existence of common lexical patterns inherited from a shared Germanic background. At the same time, the substantial number of partially equivalent and non-equivalent collocations demonstrates that lexical compatibility cannot be explained solely through historical relatedness.



The results also highlight the importance of semantic restrictions in determining acceptable lexical combinations. Words possessing similar dictionary meanings do not necessarily display identical compatibility patterns. Instead, lexical selection is influenced by usage conventions that evolve within individual linguistic communities. This observation is consistent with Firth's (1957) view that lexical meaning emerges through contextual associations and habitual co-occurrence.

From a corpus-linguistic perspective, the results support Sinclair's (1991) idiom principle, according to which speakers rely on prefabricated lexical patterns rather than generating combinations entirely through grammatical rules. The recurring nature of many collocations observed in the present study confirms the significance of conventionalized lexical behavior in both English and German.

Furthermore, the findings have practical implications for foreign language learning and translation. Learners often encounter difficulties when attempting to transfer collocational patterns directly from one language to another. Similarly, translators must account for differences in lexical compatibility to avoid unnatural or non-native-like expressions. Therefore, awareness of lexical compatibility patterns can contribute to more effective language instruction and more accurate translation practices.

Overall, the results demonstrate that lexical compatibility represents a complex linguistic phenomenon influenced by semantic, structural, historical, and cultural factors. The comparative analysis confirms that Germanic languages share numerous compatibility patterns while simultaneously maintaining distinctive collocational characteristics that reflect their independent linguistic development.

7. CONCLUSION

The present study examined lexical compatibility in Germanic languages from a cross-linguistic perspective, focusing primarily on English and German. The analysis demonstrated that lexical compatibility constitutes an essential component of lexical organization and plays a significant role in the formation of word combinations.

The findings revealed that a considerable proportion of collocations exhibit full lexical equivalence across the analyzed languages, reflecting their common Germanic heritage. At the same time, numerous partially equivalent and non-equivalent lexical combinations were identified, indicating the influence of language-specific semantic preferences, cultural factors, and historical linguistic developments.

The study further confirmed that lexical compatibility cannot be explained solely through grammatical rules or lexical meaning. Instead, compatibility patterns emerge through conventional language use and repeated lexical associations within particular linguistic communities. These observations support major theoretical approaches proposed by Firth (1957), Sinclair (1991), and subsequent researchers in collocation studies.

From a practical perspective, the results highlight the importance of lexical compatibility in foreign language teaching, translation, lexicography, and intercultural communication. Awareness of language-specific collocational patterns may contribute to more accurate language production and more effective translation strategies.

Future research may expand the scope of analysis by incorporating additional Germanic languages, larger corpus datasets, and advanced statistical methods. Such investigations would provide a deeper understanding of lexical combinability and contribute to the development of comparative linguistic studies within the Germanic language family.

In conclusion, lexical compatibility represents a multidimensional linguistic phenomenon shaped by semantic, structural, cultural, and historical factors. The comparative evidence presented in this study demonstrates both the common foundations and the distinctive characteristics of lexical compatibility in Germanic languages.

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