



## ARTICLE

# A Study of the Versatility of ‘Over’ and Other Prepositions

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## ABSTRACT

This study investigates the multifunctionality of English prepositions—focusing on “over”—analyzing their usage as prepositions and adverbs. Using data from the British National Corpus, the research employs statistical methods, including Z-scores and correlation analysis, to examine the variability in prepositional and adverbial functions across ten common English prepositions. The findings reveal that “over” exhibits significant versatility, frequently shifting from a prepositional role to an adverbial function, making it more complex and challenging than other prepositions. The study highlights the inverse relationship between prepositional and adverbial usage, suggesting that prepositions heavily used in one function tend to be less prominent in the other. The educational implications of these findings underscore the need for targeted instructional strategies in teaching English as a second or foreign language, emphasizing the dual roles of prepositions like “over” and incorporating authentic language examples to enhance learner comprehension.

**Keywords:** Prepositional Complexity; Adverbial Usage; English Language Learning; Polysemy; English Preposition

## 1. Introduction

Prepositions are key components of English, linking nouns, pronouns, and phrases to other words. Despite their seemingly simple role, prepositions exhibit remarkable syn-

tactic flexibility, often taking on additional roles as adverbs or complements depending on their contextual usage. Among these, the preposition “over” stands out due to its particularly versatile nature, functioning in multiple grammatical

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capacities with a frequency that appears to exceed that of most other prepositions<sup>[1, 2]</sup>.

The ability of a preposition to function as a preposition and an adverb is one of the key aspects of its multifunctionality. Prepositions like ‘over’ can also function as adverbs, modifying verbs or clauses instead of simply linking sentence elements. The dual functionality of ‘over’ poses cognitive challenges, especially for non-native speakers. According to cognitive load theory, words with multiple grammatical roles, such as “over,” demand more mental resources, leading to misinterpretation or errors, especially when these roles shift unpredictably based on the context<sup>[3]</sup>.

In addition to its dual functionality, ‘over’ demonstrates *polysemy*—a term used in linguistics to describe when a single word has multiple, related but distinct meanings. The preposition “over” can convey spatial relationships (e.g., “the plane flew over the city”), temporal duration (e.g., “over the weekend”), or abstract relations (e.g., “to have control over something”), further complicating its comprehension. Such polysemy requires language users to constantly interpret the word’s meaning based on surrounding cues, adding to the cognitive load for native and non-native speakers<sup>[4, 5]</sup>.

The frequent use of “over” as an adverb adds a layer of complexity to its already versatile prepositional function. When “over” functions as an adverb, it does so independently of a noun phrase, often modifying actions, states, or events. This characteristic makes its meaning and grammatical role more context-dependent and challenging to predict, adding to the difficulty in comprehension and usage<sup>[6]</sup>. Furthermore, adverbial uses of prepositions require a more nuanced understanding of context, as these forms often convey abstract, idiomatic, or metaphorical meanings, further complicating the learning process for second language learners<sup>[2]</sup>.

Prepositions play a crucial role in English grammar, yet their multifunctionality and context-dependent role shifts present significant challenges for both learners and educators. Prepositions like “over” extend beyond merely linking nouns and pronouns, functioning as adverbs and performing various grammatical roles. However, traditional grammar instruction often fails to adequately address this versatility, leaving learners underprepared to navigate the complexities of prepositions that change their function based on context. Without a clear understanding of these multiple roles, learners may struggle to accurately interpret and use prepositions,

which can directly affect their comprehension and communicative abilities in English. Therefore, there is a pressing need for research that delves into the multifaceted use of prepositions, like “over,” and translates these findings into educational practices. This study aims to fill that gap by analyzing the syntactic complexities of “over” and applying the results in a pedagogical context to enhance language instruction.

This paper explores the multifaceted usage of “over” through a statistical lens, comparing its usage patterns with other common prepositions in the English language. By analyzing the frequency of “over” as a preposition and adverb, we uncover the unique syntactic challenges and complexities associated with “over.” The findings from this study have significant implications for the practical teaching of English as a second language. Understanding the nuanced roles of prepositions like “over” can enhance learners’ comprehension and usage, particularly when educators adopt instructional strategies that address both the prepositional and adverbial functions of such versatile prepositions. This research underscores the need for targeted, context-driven teaching approaches that help learners navigate the complexities of multifunctional prepositions, ultimately improving their language proficiency. Specifically, this study seeks to answer two key questions: (1) How does the multifunctionality of the preposition “over,” particularly its ability to shift between prepositional and adverbial roles, impact the cognitive load experienced by native and non-native English speakers? and (2) What role does context play in the comprehension and usage of the preposition “over,” and how can instructional strategies be designed to improve learners’ ability to navigate its polysemous and multifunctional nature?

## 2. Literature Review

The study of prepositions has long been a focus of linguistic research due to their fundamental role in the structure of English sentences. Prepositions connect nouns, pronouns, and phrases to other elements within a sentence, thereby establishing relationships of time, space, direction, and more<sup>[7]</sup>. Despite their seemingly straightforward function, prepositions exhibit remarkable syntactic versatility, often functioning as adverbs or complements depending on their con-

text<sup>[8]</sup>. For instance, studies by Levinson and Tyler and Evans highlight the complexity of prepositional usage, noting that prepositions frequently extend beyond their primary locative functions to express abstract relationships and temporal aspects<sup>[2, 9]</sup>. This flexibility is not limited to a few prepositions; it is a characteristic feature of the prepositional category as a whole<sup>[10]</sup>.

Linguistic literature has extensively documented the multifunctionality of prepositions. Multifunctionality allows words like ‘over’ to serve multiple grammatical roles, such as preposition and adverb, depending on context. For example, “over” is multifunctional because it acts as a preposition indicating spatial relationships (“The bird flew over the tree”) and as an adverb (“He fell over”), among other uses. In addition, Lindstromberg noted that “over” serves various functions, including spatial, metaphorical, and idiomatic roles<sup>[11]</sup>. Cognitive linguistic approaches, such as those proposed by Lakoff, have further explored the polysemy of “over,” demonstrating how its meaning shifts depending on a sentence’s spatial and contextual cues<sup>[6]</sup>. This polysemy has made “over” a subject of interest in studies of prepositional semantics and cognitive linguistics<sup>[2]</sup>.

According to cognitive load theory—which suggests that our brains have limited capacity to process information—words with multiple functions require more mental effort to interpret<sup>[3]</sup>. This is especially true for prepositions like ‘over,’ which switch between acting as prepositions and adverbs. Furthermore, polysemy theory (Lakoff, 2008) highlights that prepositions with varied meanings, such as “over,” introduce greater complexity, making it harder for users to determine the intended meaning in different contexts. This multifunctionality complicates language processing and increases the likelihood of misinterpretation or errors, particularly for language learners. Thus, some researchers have proposed targeted instructional strategies that emphasize the contextual usage of prepositions<sup>[2]</sup>. For example, studies by Ellis and Nation suggest that a focus on usage-based learning can help learners internalize the nuanced functions of prepositions, including those of “over”<sup>[12, 13]</sup>. These approaches align with the broader trend in language teaching toward emphasizing authentic language use and the importance of context in meaning-making.

In terms of the semantic approach, several recent studies addressed the cognitive semantic aspects of “over”<sup>[14–16]</sup>.

For instance, Mori studied the semantics of “over” using a cognitive linguistic approach, highlighting its three-dimensional (3D) image schema where the size and form of the trajectory (TR) and landmark (LM) are topologically flexible<sup>[14]</sup>. Mori found that “over” carries a range of distinct meanings and suggested an alternate analysis that simplifies its cognitive linguistic understanding. The study emphasized the role of structured 3D image schemas in understanding spatial language. Similarly, Roussel explored “over” with perceptual computation and its connection to theoretical and temporal principles, finding that “over” conveys the ego’s perception and evaluation of space and time rather than specific metrics or positions<sup>[15]</sup>. Both studies underline the importance of context and how the recipient interprets “over” based on their alignment with the speaker’s space–time coordinates.

Additionally, some studies have continued to investigate the grammatical flexibility of prepositions like “over,” particularly its frequent use as a preposition and an adverb<sup>[17, 18]</sup>. The ability of “over” to serve in multiple syntactic roles—linking nouns and phrases as a preposition while also modifying verbs and clauses as an adverb—poses significant cognitive demands for language users. Cappelle highlights that learners often struggle with distinguishing between the prepositional and adverbial uses of “over,” as its function frequently shifts based on contextual cues<sup>[17]</sup>. This syntactic duality requires language users to adapt quickly to changing sentence structures, increasing the likelihood of processing difficulties, particularly for second language learners<sup>[18]</sup>.

Moreover, a corpus-based study by Laufer et al. showed that non-native speakers overgeneralize “over” in prepositional contexts, often misapplying it in sentences where it functions as an adverb<sup>[19]</sup>. These findings underscore the importance of explicit instruction in teaching the distinct syntactic roles that “over” can play, as misinterpretation of its function can lead to confusion in meaning and usage. Targeted educational strategies focusing on the syntactic versatility of common prepositions like “over” have been shown to improve learner outcomes<sup>[20]</sup>.

The pedagogical implications of prepositional complexity have been a major focus in second language acquisition research. For instance, Celce–Murcia and Larsen–Freeman discussed the difficulties non-native speakers faced when mas-

tering prepositions, noting that their abstract and idiomatic uses often lead to persistent errors<sup>[21]</sup>. This challenge is particularly true for prepositions like “over,” which have multiple meanings that are not always directly translatable into other languages<sup>[22]</sup>. In addition, Aajami investigated the effectiveness of the cognitive linguistic approach in learning the semantics of English prepositions and found that the participant made significant progress in understanding the semantics of the targeted English prepositions<sup>[16]</sup>. To this end, this study reveals the inherent complexities of “over,” explores its dual function as both a preposition and an adverb, and suggests potential implications for linguistic theory and contributions to language pedagogy.

### 3. Method

This study investigates the multifunctionality of the preposition “over” compared to other common English prepositions. The research analyzes prepositions’ usage as prepositional or adverbial elements, excluding their role as complements. Complement usage was excluded because this study focuses on the syntactic roles of prepositions and adverbs, allowing for a clearer examination of their multifunctionality. The data for this study came from the British National Corpus (BNC), a comprehensive repository of contemporary English texts that includes written and spoken material. We chose the BNC for its extensive coverage and representativeness, offering a broad sample of English usage across various contexts and registers.

The prepositions selected for analysis—“in,” “on,” “at,” “to,” “for,” “with,” “about,” “from,” “by,” and “over”—were chosen because they are core prepositions frequently used in English to express spatial, temporal, and abstract relationships. These prepositions play essential roles in English grammar and are widely used in both everyday conversation and written texts. Analyzing their usage patterns is crucial for understanding the multifunctionality and complexity of prepositions. Additionally, these prepositions perform a variety of syntactic roles, making them ideal candidates for comparing their functions as prepositions and adverbs. We used AntConc 4.3.1, a widely used corpus linguistics tool, to extract instances of these prepositions from the BNC. It is a highly useful tool for analyzing corpus data, offering an intuitive user interface and powerful features that allow for

easy analysis of word or phrase frequencies and patterns in texts. The software not only enables precise identification and classification of prepositions as either prepositional or adverbial elements, but also provides filtering and sorting functions that help users explore specific syntactic or semantic contexts. Additionally, the tool is capable of handling large volumes of text efficiently, making it ideal for analyzing extensive corpora. This made it an essential tool in understanding the multifunctionality of prepositions in this study.

After extraction, we categorized the data into two primary usage types: prepositional use, where the preposition links a noun or pronoun to another element in the sentence, and adverbial use, where the preposition functions independently, modifying a verb, adjective, or another adverb. Then we calculated the frequency of each preposition’s usage in these categories, with descriptive statistics such as mean, median, standard deviation, and range used to summarize the data.

Calculated z-scores helped to understand how each preposition deviates from the mean usage, highlighting those prepositions that exhibit particularly high or low usage in either category. Additionally, a correlation analysis helped explore the relationship between the frequency of prepositional and adverbial uses, shedding light on whether a high frequency in one type of usage correlates with a low frequency in the other. Further, to assess the potential difficulty of each preposition based on its multifunctionality, we ranked prepositions according to the frequency of their adverbial usage. This ranking relied on the assumption that prepositions more frequently used as adverbs present greater complexity and thus pose more challenges in language usage.

### 4. Results

The prepositional and adverbial usage analysis across the selected prepositions revealed significant differences in how frequently these prepositions function as prepositions or adverbs. The results highlight the unique behavior of “over” compared to other prepositions, particularly in its adverbial usage, which indicates its multifunctional nature. The descriptive statistics for the frequency of each preposition’s usage as a preposition or an adverb are in **Table 1**. It provides the mean, median, standard deviation, and range of

usage across the ten prepositions. While the usage of prepositions as prepositions is relatively consistent, with a mean of 91.7 and a lower standard deviation, the adverbial usage varies more significantly, indicating the multifunctionality of certain prepositions like “over.”

The frequent role-switching of ‘over’ between preposition and adverb, as in ‘The bird flew over the house’ and ‘The game is over,’ highlights its unique versatility. Recent studies confirm this multifunctionality. For instance, Cappelle highlights how “over” frequently shifts between syntactic categories, making it more challenging for language learners to grasp its various roles<sup>[17]</sup>. Similarly, Gilquin argues that the polysemy of “over” allows it to perform diverse grammatical functions that are not typical of other prepositions, further cementing its status as an outlier in terms of functional diversity<sup>[18]</sup>.

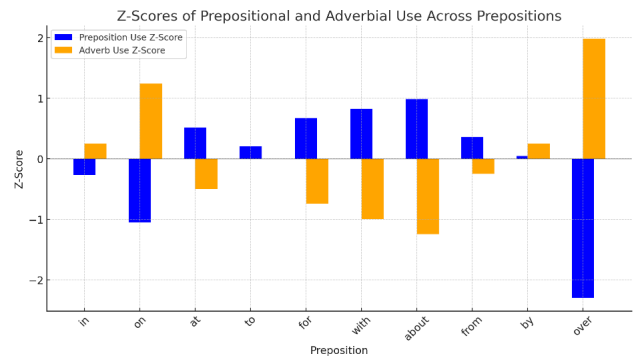
**Table 1.** Descriptive statistics for prepositional and adverbial usage.

Measure	Preposition Use	Adverb Use
Mean	91.7	7.0
Median	93.5	6.5
Standard Deviation	6.40	4.03
Range	77 to 98	2 to 15

Calculating z-scores helped determine how each preposition’s usage deviates from the mean. The results, presented in **Table 2** and visualized in **Figure 1**, highlight the prepositions that stand out in prepositional or adverbial usage. Z-scores measure how far a data point is from the mean, with negative z-scores indicating usage below the average and positive z-scores showing usage above the average.

**Table 2.** Z-scores for prepositional and adverbial usage.

Preposition	Preposition Use Z-Score	Adverb Use Z-Score
In	-0.266	0.248
On	-1.048	1.241
At	0.516	-0.497
To	0.203	0.000
For	0.672	-0.745
With	0.829	-0.993
About	0.985	-1.241
From	0.360	-0.248
By	0.047	0.248
Over	-2.299	1.986



**Figure 1.** Z-scores of prepositional and adverbial use across prepositions.

The z-score analysis reveals that “over” has a significant negative z-score in preposition use (-2.299) and a significant positive z-score in adverb use (1.986). This result indicates a much less frequent use of “over” as a preposition and more frequently as an adverb than other prepositions. For “over,” the negative z-score in its prepositional use highlights how infrequently it functions in this role compared to the other prepositions, while the positive z-score in its adverbial use underscores its prevalence in non-prepositional contexts. This divergence from the norm reinforces the idea that “over” is more versatile and shifts from its traditional role more frequently. “On” also shows a similar pattern, although to a lesser extent.

Next was a correlation analysis to explore the relationship between prepositional and adverbial usage frequency—the results are in **Table 3**.

**Table 3.** Correlation between prepositional and adverbial usage.

Usage Type	Correlation Coefficient
Preposition vs. Adverb	-0.979

The strong negative correlation (-0.979) indicates that prepositions frequently used as prepositions are less likely to be used as adverbs, and vice versa. This inverse relationship between prepositional and adverbial usage highlights the multifunctionality of prepositions like “over,” which shift roles depending on the context. A strong negative correlation means that as the frequency of prepositional use increases, the likelihood of the same word functioning as an adverb decreases. In the case of “over,” its frequent use as an adverb corresponds with a reduced occurrence as a preposition, reinforcing its role as a highly versatile and multifunctional preposition. This supports the notion that certain preposi-

tions, like “over,” are more prone to this type of functional shift, showcasing their ability to transition fluidly between different grammatical categories.

The present authors then ranked the prepositions according to the frequency of their adverbial usage, with the assumption that higher adverbial use indicates greater complexity. This approach aligns with cognitive load theory, where multifunctionality increases cognitive demands<sup>[3]</sup>, and polysemy theory, which shows that words with multiple meanings—such as prepositions acting as prepositions and adverbs—require more interpretive effort, thus adding complexity<sup>[6]</sup>. **Table 4** shows the rankings.

**Table 4.** Difficulty ranking based on adverb usage.

Preposition	Preposition Use Rank	Adverb Use Rank
In	1	10
On	2	9
At	3	8
To	4	7
For	5	6
With	6	5
About	7	3.5
From	8	3.5
By	9	2
Over	10	1

The rankings indicate that “over” ranks highest in difficulty due to its high frequency of adverbial usage, followed by “on,” “in,” and “by.” Prepositions with significant adverbial functions tend to pose more language processing and usage challenges because they require learners to distinguish between multiple roles based on context.

Additionally, these rankings highlight how prepositions with lower adverbial usage, such as “at” or “with,” tend to exhibit more stable syntactic roles, making them less cognitively demanding for learners. Studies such as Lindstromberg and Tyler and Evans suggest that prepositions like “at” and “with” are often used in more predictable, locative or static contexts, which limits their semantic complexity<sup>[2, 11]</sup>. This reduced complexity is reflected in their lower cognitive load for language learners, as these prepositions do not require constant reinterpretation based on context. Conversely, prepositions like “over” or “on,” which frequently alternate between different syntactic roles (prepositional and adverbial), create greater challenges for learners due to their higher variability in usage patterns. This aligns with cognitive lin-

guistic research, which highlights the need for increased cognitive effort when processing multifunctional words<sup>[2, 11]</sup>.

## 5. Discussion

This study explored the multifunctionality of English prepositions, focusing on “over” by examining their usage as prepositions and adverbs. The statistical analysis, including z-scores and ranking based on adverbial usage, revealed significant variability among the selected prepositions. “Over” emerged as the most complex and versatile preposition, frequently shifting from its traditional prepositional role to an adverbial function. This adverbial usage adds complexity because it requires interpreting the preposition independently of a noun phrase, demanding greater contextual understanding and cognitive processing. Unlike its prepositional role, which typically establishes straightforward spatial or temporal relationships, adverbial usage involves modifying verbs or entire clauses, making its function more context-dependent and versatile across different sentence structures. This multifunctionality suggests that “over” presents more language processing and usage challenges than other prepositions.

The z-score analysis shows that ‘over’ deviates more from the mean in both its prepositional and adverbial roles, underlining its syntactic flexibility. This result highlights that “over” is less predictable in its usage, requiring more contextual cues for accurate interpretation. This flexibility is not only a matter of grammatical roles but also relates to how “over” conveys different meanings depending on its function in a sentence.

The findings of this study are consistent with Cappelle and Gilquin, who highlighted the significant cognitive demands posed by prepositions with dual functions<sup>[11, 18]</sup>. Cappelle’s observation that learners often struggle to distinguish between prepositional and adverbial uses of “over” is particularly relevant here, as our results underscore the same pattern of complexity. Furthermore, the study supports Gilquin’s argument that syntactic duality, like that seen in “over,” increases cognitive load, making it essential for language learners to develop a deeper contextual understanding of such prepositions<sup>[18]</sup>. The evidence of “over” functioning as both a preposition and an adverb adds another layer of complexity to its interpretation<sup>[11]</sup>. He noted that multifunctionality increases the difficulty of mastering prepositions.

This dual function requires users to constantly switch between recognizing “over” as a spatial preposition (e.g., “The bird flew over the house”) and an adverb (e.g., “The meeting is over”). The results of this study further support the argument that prepositions like “over” are outliers in terms of their functional versatility and their cognitive processing demands.

The strong negative correlation between prepositional and adverbial usage further underscores the inverse relationship in their roles; prepositions heavily used in one function tend to be less prominent in the other. This pattern highlights the inherent complexity of prepositions in the English language and suggests that certain prepositions, due to their multifunctionality, require a higher cognitive load for native speakers and learners.

The inverse correlation observed between prepositional and adverbial functions suggests a broader linguistic pattern in English prepositions. The more frequently a preposition functions as an adverb, the less likely it is to maintain its traditional prepositional role, as evidenced by “over.” This supports the idea that prepositions are not static in their syntactic roles but dynamically shift depending on the surrounding linguistic environment. Such findings point to a nuanced understanding of prepositional usage, where a preposition like “over” does not conform to traditional boundaries, reinforcing its classification as a multifunctional preposition<sup>[2]</sup>. They suggest that the cognitive load involved in processing such words is directly related to their functional variability.

These findings align with the corpus-based study by Laufer et al., which indicated that non-native speakers tend to overgeneralize the use of prepositions in one role, often failing to adapt to their adverbial function<sup>[19]</sup>. The observed negative correlation in this study supports Laufer et al.’s conclusion that prepositions like “over” are particularly prone to misuse due to their role-shifting nature. Our data reinforces the need for targeted educational interventions to address this complexity.

Laufer et al.’s work, which emphasized the overgeneralization of prepositional roles by non-native speakers, further supports the complexity observed in this study<sup>[19]</sup>. The tendency for learners to misinterpret “over” as strictly a preposition or adverb highlights the cognitive challenges posed by its multifunctionality. The role-shifting nature of “over” adds to the potential for misinterpretation, even among

native speakers, as they too must rely on contextual cues to correctly interpret the word’s function. This adds weight to the argument that prepositions like “over” require more nuanced processing strategies and reflects the inherent difficulty in mastering such polysemous words in English.

One limitation of this study is that it focused primarily on “over” and a select few prepositions. This may not represent the full range of multifunctional prepositions in the English language. Additionally, the study’s reliance on corpus data may not fully capture real-time language use and learners’ cognitive processing in a classroom setting. Future research should investigate a broader range of prepositions and include empirical data on learners’ interactions with such prepositions in authentic contexts.

## 6. Conclusions

This study has demonstrated that the multifunctionality of “over” creates significant cognitive demands for both native and non-native English speakers, especially in distinguishing between its prepositional and adverbial roles. The findings of this study are consistent with Cappelletti and Gilquin, who highlighted the cognitive challenges posed by prepositions with dual functions<sup>[17, 18]</sup>. Additionally, the results support the argument that prepositions like “over” require more nuanced processing strategies due to their frequent role shifts, as discussed in studies by Laufer et al.<sup>[19]</sup>. Future research should explore how instructional strategies can be adapted to help learners navigate the complexities of multifunctional prepositions like “over.” Further studies could investigate how other prepositions with dual roles impact language comprehension and usage, especially among non-native speakers. Empirical research examining how learners process such prepositions during communication tasks would be valuable in developing more effective teaching approaches.

In conclusion, the syntactic versatility of “over” presents significant challenges for language learners. These findings highlight the need for targeted educational interventions that address the complexities of multifunctional prepositions. By adopting context-driven teaching approaches, educators can help learners improve their understanding and usage of these prepositions, ultimately enhancing their overall language proficiency.

## Educational Implications

The findings of this study carry significant implications for language education, particularly in teaching English as a second or foreign language (ESL/EFL). The multifunctionality of prepositions like “over” necessitates targeted instructional strategies that address their various roles. Traditional grammar instruction often emphasizes prepositions in their most common function—linking nouns and pronouns to other sentence elements. However, given the high frequency of prepositions like “over” functioning as adverbs, educators should incorporate more comprehensive lessons that cover these dual roles.

From a pedagogical perspective, this requires a shift from the conventional approach that often focuses on static grammar rules, towards a more dynamic and context-sensitive teaching strategy. As Ellis emphasizes in his work on second language acquisition, learning grammar in isolation from context limits a learner’s ability to apply grammatical rules in real-world communication<sup>[23]</sup>. Therefore, instructional methods should integrate both the prepositional and adverbial functions of words like “over” within authentic language contexts. This can be achieved through task-based learning approaches that require students to process language input and use prepositions flexibly, promoting a deeper understanding of their multifunctionality<sup>[23]</sup>.

Geventa, who advocate for usage-based learning approaches that focus on the syntactic versatility of prepositions, strongly support these educational implications<sup>[20]</sup>. The current study’s emphasis on explicit instruction for prepositions’ adverbial roles aligns with their findings, which suggest that learners benefit from contextualized practice and corpus-based examples. By integrating such methods into language instruction, educators can help students navigate the challenges of prepositions like “over.” Additionally, the ranking of prepositions by their adverbial usage, as observed in this study, further supports Geventa’s argument for prioritizing high-frequency, complex prepositions in teaching materials<sup>[20]</sup>.

Research into cognitive load theory further supports the need for focused instruction on multifunctional prepositions<sup>[3]</sup>. The high cognitive demands associated with words like “over” arise from their polysemy and syntactic variability, which requires learners to continuously interpret their function based on context. Incorporating scaffolded learning

strategies that gradually introduce both the prepositional and adverbial uses of “over” can reduce this cognitive load. For instance, scaffolding could begin with isolated examples of prepositional use before advancing to complex sentences where the preposition serves an adverbial role. As learners become more comfortable with the dual functions, they can transition to more complex, authentic language tasks that require the flexible use of “over” in varied contexts<sup>[3]</sup>.

Explicit teaching of prepositions’ adverbial functions can help learners better understand the fluidity of these words within different contexts. For example, incorporating contextualized practice activities, where learners encounter prepositions in prepositional and adverbial forms, can facilitate a deeper understanding and more flexible use of these words. Additionally, using corpus-based examples in the classroom can provide learners with authentic language data, showing how prepositions like “over” are used in real-life communication.

Contextualized teaching has been shown to significantly improve retention and usage accuracy, particularly for complex grammatical structures<sup>[24]</sup>. In this regard, the use of corpus linguistics tools allows educators to present learners with real-world examples of prepositions in both prepositional and adverbial roles, enabling them to observe these shifts in context. This method not only improves comprehension but also enhances learners’ ability to produce language naturally. Additionally, such a data-driven approach to teaching prepositions like “over” fosters a learner-centered environment where students are encouraged to discover patterns in usage, leading to better long-term retention and application of these linguistic structures.

This study has demonstrated the syntactic versatility of prepositions, particularly emphasizing “over” and its frequent shifts between prepositional and adverbial functions. The complexity of “over” as a preposition and an adverb highlights the cognitive demands it places on language users, particularly non-native speakers. The strong inverse relationship between prepositional and adverbial usage further underscores the need to approach these dual roles with targeted educational strategies. In light of these findings, educators must address the multifunctionality of prepositions in language instruction. Prepositions like “over,” “on,” and “by,” which frequently function as prepositions and adverbs, should receive more focused attention in the classroom. Con-



textualized exercises incorporating both functions will help learners navigate these complexities more effectively.

Moreover, the importance of differentiated instruction cannot be overstated when dealing with such multifunctional elements. Learners exhibit varied levels of cognitive readiness and linguistic proficiency, and therefore, instruction must be tailored to address these differences. Vygotsky's theory of the zone of proximal development suggests that learners perform tasks more effectively when scaffolded instruction within their developmental readiness<sup>[25]</sup>. In the case of multifunctional prepositions, educators could employ differentiated tasks where students engage with prepositions like "over" according to their individual proficiency levels, gradually increasing the complexity of exercises as their understanding deepens. Such an approach ensures that all learners, regardless of their starting point, are provided with the appropriate level of challenge and support to achieve mastery.

## Author Contributions

T.K.: Conceptualization, Methodology, Data Collection, Formal Analysis, Writing—Original Draft, Visualization. S.P.: Literature Review, Data Curation, Writing—Review & Editing, Supervision, Project Administration.

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Not applicable.

## Informed Consent Statement

Not applicable.

## Data Availability Statement

The data analyzed in this study were sourced from the British National Corpus (BNC). The BNC is publicly accessible, and data supporting the reported results can be accessed via the British National Corpus website at <http://www.nat-corp.ox.ac.uk>. Please note that certain portions of the data

may be subject to restrictions based on licensing agreements.

## Conflicts of Interest

The authors declare no conflict of interest.

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