

Research Articles

Prepositional Syntax in English Relative Clauses: A Study of Tertiary Students' Writing

Abstract

Relative clauses are essential components of complex sentence structures, and their correct usage is crucial for academic writing. This study investigated the prepositional syntax of English relative clauses in writings by tertiary students. The objective of the study was to identify common patterns and errors in the use of prepositions in relative clauses. By analysing students' written test, the research sought to understand how students placed the prepositions within relative clauses, the challenges they faced more frequently, and how they could be resolved. This study adopted transformational generative grammar as theoretical framework. With three research questions which guided the study, quantitative method was employed to provide a detailed examination of the use of prepositions by the students. The population of the study was the six tertiary educational institutions in Owerri educational zone of Imo State, from which three were selected using purposive sampling method. The institutions selected were Imo State University, Imo State Polytechnic and Alvan Ikoku Federal University of Education. A total of 300 samples were used, with 100 samples from each institution, comprising equal number of males and females. The data were analysed using arithmetic means and simple percentage. Results revealed that while students often demonstrated an understanding of relative clause construction, there were recurring issues with prepositional placement and selection, leading to syntactic inaccuracies. It has been proved that the students found it difficult to use the prepositions in relative clauses due to the complex syntactic structure of the English relative clauses. It was also evident in the findings that preposition stranding was more prevalent in the students' writing. The findings underscored the need for targeted instructional strategies to enhance students' syntactic skills in academic contexts. The study contributed to the field of applied linguistics and education by offering insights into the syntactic challenges faced by the students and suggesting pedagogical approaches to improve their writing proficiency.

Keywords: Relative clauses; prepositional placement; pied-piping; stranding; generative grammar

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Introduction

The study of prepositional syntax in English relative clauses offers a fascinating lens through which to examine the complexities of language acquisition and usage among tertiary education students. Relative clauses, which provide essential information about nouns, are integral to the structure of English sentences, yet they often present challenges to learners, particularly in the use of prepositions. This study is about prepositions, and more specifically prepositions placed in stranded position at the end of a relative clause and prepositions dragged along with a *wh*-word as a result of

movement, a syntactic arrangement known as preposition stranding (PS) and preposition pied-piping (PP), respectively. PS and PP with *wh*-relativisers in English have been known as a controversial issue in English grammatical structures. For example:

(1) (a) She is the one from whom I bought the book. (Preposition pied-piping)

(b) She is the one who I bought the book from. (Preposition stranding)

The major difference between examples (1a) and (1b) is the syntactic position of the preposition *from*, but the semantic denotations are the same. To further explain this, the prepositional phrase *from* as in (1a) is colligated with the relativiser *whom*, as in *from whom*. Radford (2009) indicates that when the structure is used in this way, it is syntactically called preposition pied-piping (PP). On the contrary, the prepositional phrase *from*, as in (1b), is *situ* or stranded at the end, technically known as preposition stranding (PS) or orphanage (Radford, 2009).

This study is not focused on the study of the semantic denotations between PS and PP with *wh*-relativisers. However, issues that need studying and discussing are their different syntactic functions and (pragmatic aspects). With these different placements of prepositional phrase, the question being asked is when and why one variant is used over the other (Hoffmann, 2007). Specifically, this study has its focus on pied-piping and preposition stranding in the context of relative clauses, as it examines how tertiary education students navigate the complexities of prepositional syntax within relative clauses. The nuances of preposition placement can lead to ungrammatical sentences, inconsistencies, thereby affecting the clarity of the students' academic writing. By analysing a selection of essays written by students, this research seeks to identify patterns in prepositional usage and assess the effectiveness of pedagogical approaches in teaching relative clauses.

While previous studies focusing on the syntactic functions and pragmatic aspects of PS and PP with *wh*-relativisers selected the data from international corpora and academic research articles, this study contributes to the perspectives of tertiary students in Nigeria, who are English as second language learners (ESL). This study also contributes to the broader field of applied linguistics and language teaching and learning. The research provides insights that can inform teaching practices and enhance students' writing skills. An understanding of the challenges and strategies employed by tertiary education students in mastering prepositional syntax in relative clauses not only enriches comprehension of the English language teaching and learning, but also supports the development of more effective instructional methodologies.

Statement of the Problem

The English relative clause is complex in nature because the sentence where it is found contains a matrix clause and an embedded clause which modifies a noun phrase in the matrix clause (Akmajian, Demers, Farmer & Harnish, 2008). The problem of the complex syntactic structure of English relative clauses emanates from comprehending and identifying the embedded clause on the one hand, while tracking the matrix clause on the other (Krashen & Robin, 1983). The placement of prepositions in relative clauses is a major problem area for learners of English as a second language (ESL). Relative clause structure gets more complicated when a prepositional phrase is involved. The basic problem is deciding what to do with the preposition. Where does the preposition go when the clause is put into the sentence? As mentioned by Cesteros (2019), English as foreign language (EFL) learners show

their huge confusion regarding the grammaticality of preposition stranding and pied-piping preposition with wh-relativisers in English. As ESL learners struggle with making this type of combination, some avoid the preposition completely. The issue of transformation caused by movement rules also poses difficulties in the learning of the English relative clauses as the learner may find it difficult to understand the relativisation process of the relative clause.

Objective of the Study

The objectives of this research are to:

- 1. analyse the use of prepositions in relative clauses by tertiary education students**
2. identify the common patterns and usage of preposition pied-piping and stranding by the students
- 3. assess the effectiveness of pedagogical approaches in teaching relative clauses**

Research Questions

The following research questions guided this study:

1. What are the typical syntactic structures of relative clauses used by tertiary education students?
- 2. How do tertiary education students place prepositions in relative clauses?**
- 3. Which preposition variant do tertiary education students use more frequently in writing?**

Review of Related Literature

This section focuses on previous works of linguists that relate to the topic under investigation, both theoretically and empirically. This section presents the syntax of preposition movement. In addition, the concepts of complements and adjuncts are clarified, and previous studies of relative clauses, their types, relativisation process and PP and PS with wh-relativisers are also reviewed subsequently.

Syntax of Preposition and Movement in Transformational Generative Grammar

Generative linguists believe that language is systemic (Radford, 2009) or each language has its own system to be used. In order to acquire language, having patterns and systems allow us to acquire and understand language effectively. PS is a linguistic phenomenon in many languages around the world, such as Danish, English, Norwegian and Swedish. In English, leaving a preposition alone at the end without having its complements, as: *in which house you stay in*, could be regarded as ungrammatical or unacceptable in standard English (Coopmans & Schippers, 2008; Radford, 2009). So, the prepositional phrase *in* must be pied-piped with its complement. In this case, the prepositional phrase *in* is the head, while *which house you stay* is the complementizer phrase (CP) (Radford, 2009). So, leaving the head at the end without its complement can result in ungrammaticality. In present-day reference grammars, prepositions are described as a part of speech that expresses a relation between two entities; prepositions are links which, unlike adverbs or particles, govern another element in the

clause with which they are syntactically and notionally related (Yanez-Bouza, n. a.). In English, prepositional phrases may be targeted by movement, resulting in all or part of the preposition undergoing movement. When the entire PP moves, a pied-piped construction occurs. When only the prepositional complement (P-complement) moves, leaving the preposition, a p-stranding construction occurs (Enzinna & Thompson, 2014).

Wh-Relativisers and Syntactic Functions of Complement and Adjunct

This section provides the definitions of complement and adjunct. Complement is grammatically required in a sentence such as *drinking coffee* as in *Kate enjoys drinking coffee*. Omitting the complement *drinking coffee* of the transitive verb *enjoy* leads to ungrammaticality of a sentence. In contrast, the concept of adjunct refers to additional information, such as place, manner and time. Omitting adjuncts does not affect the grammaticality of the sentence. For example, *I will get to church tomorrow*. The word *tomorrow* is an adjunct indicating time. Relativisers interchangeably known as relative pronouns are wh-expressions, such as *which*, *who* and *what*. They are used to introduce relative clauses, as in (4).

4 (a) Mary, a smart girl in this class, won the government scholarship in France.

(b) James bought this house, which is three bedrooms, one kitchen and one living room.

The relativizers *who* and *which* are complementizer heads. They are used as the heads of relative clauses to introduce supplementary or additional information. In other words, they are non-restrictive relative clauses, where the information can be omitted without affecting the grammaticality of the sentence (Radford, 2009). They are considered as supplementary or additional information regarding the characteristics of the head noun and arithmetic numbers of the head noun. This explanation is exemplified in (4a) that is supplementary information about subjectivity or personal comment. In (4b), the relative clause provides additional information about the numerical data.

Some may ask why PP and PS should be studied with relative clauses. The answer is provided by Wongkittiporn (2023) that there is a higher tendency for PP and PS to occur with relative clauses more than other constructions. The principles of complements and adjuncts are unavoidable in the study of syntax. Classifying them helps us consider which piece of information is required grammatically.

Typical Syntactic Structure of English Relative Clause

Trask (1993) asserts that "a relative clause is a type of embedded clause that serves to modify a noun phrase". The English relative clause is typically a constituent of the noun phrase (NP) whose head it modifies. This suggests that a relative clause is a functional component of a larger construction. Ndimele (2007) and Omorodion (2011) corroborate Trask's statement as they assert that the relative clause performs the function of an adjective, in the sense that it can modify a nominal element, which suggests that it qualifies a noun in a sentence. A relative clause refers back to the NP which is its antecedent, enables the speaker to be more specific and provides additional information about the referent. An antecedent is "a linguistic unit from which another unit in the sentence derives its interpretation (anaphoric reference), typically, a later unit" (Crystal, 2015). For example:

3a. The shirt [RC that Mike bought] is red and black.

Shirt is an antecedent of *that*.

b. The person [RC who wanted the garage] sold new cars.

person is an antecedent of *who*.

In the sentences 1(a) and (b) above, the groups of words within the square brackets are samples of relative clauses.

Relative clauses typically begin with relative pronouns which are referred to as relative markers, and are called *wh*-words because they begin with *wh* (Anyanjanor, 2017). The relative pronouns include: *who*, *whom*, *which*, *that*, *whose*, adverbials such as *when*, *where*, *why* and *how*. Relative pronouns relate to the nouns which immediately precede them. Ndimele's (1999) statement reinforces the views of Anyanjanor on relative clause as he points out that a relative clause is often introduced by a *wh*-word *who*, *which*, *whose*, *whom*, a complementiser such as *that* or it may contain no overt *wh*-word or complementiser.

Linguists such as Ndimele (1999); Aarts (2018); Radford, (2009); and Crystal (2015) advance two major types of relative clauses: restrictive and non-restrictive relative clauses. Aarts (2018) states that the non-restrictive relative clause does not add further information that contributes to identifying the noun phrase in question. He affirms that in non-restrictive relative clause, there is a comma which marks the relative clause off intonationally. The author argues that the restrictive relative clause looks exactly the same as the non-restrictive relative clause, except that there is no comma, which is a sign that there is no pause after the noun phrase when the sentence is uttered. This presupposes that the restrictive relative clause uniquely identifies a particular person or thing to which reference is being made.

Radford (2006), in an analysis of *wh*-constructions states that a *wh*-expression in a relative clause may indicate a null spell-out of *wh*-pronouns in certain relative clauses, resulting in bare relative clauses. The source remarks that though those relative clauses do not contain overt relative pronouns, they undergo *wh*-movement. Radford concludes that relative clauses contain *wh*-expressions which have undergone *wh*-movement, and are positioned at the front of the relative clause. Another special feature of the relative clause revealed by Radford is the pied-piping of prepositions along with some *wh*-pronouns, such as *whom*, *which*, and *whose*, in order to ensure convergence (p.143). This he instances thus:

4(a). It is difficult to find someone [to whom you can relate]. (PP)

(b). It is difficult to find someone who you can relate to. (PS)

Radford explains that the whole preposition (pp) to whom, in sentence 4(a) above is moved to specifier-complementiser position, thereby obtaining the following structure:

5. [CP to whom [C $\varnothing$ EF] [TP you [T can] [VP [V relate] to whom]]]. The stranding constraint prevents the preposition to from being stranded at the end of the relative clause as in: *who you can relate to* in the sentence 4b above (p.143).

Tallerman (2005); and Haegeman (1994), in different discussions on *wh*-construction and relative clauses, name two properties by which relative clauses can be identified. First, the English relative clause follows immediately after the head noun with overt or covert *wh*-relative. Tallerman exemplifies as follows:

- 6a. She snarled at the students [who had not read the book].
- b. The paper [that we will discuss next week] looks really interesting.
- d. They wrote a review of that concert [they heard in Newcastle].

Tallerman (p. 228)

The source explains that the appearance of the *wh*-words as in sentences 6a-b above or the use of covert or bare relative in sentence d, immediately after the head noun, may help to detect relative clauses in the sentences given above.

Carlson (1977) further enunciates the differences between English restrictive and non-restrictive relative clauses as follows: Unlike restrictive relative clauses, non-restrictive relative clauses must be introduced by a *wh*-form, never by *that* or null ($\emptyset$) relative, and may co-occur with some types of head nouns such as proper nouns. The two types of relative clauses are not associated with the same semantic structures. For example, the non-restrictive relative clause is like a sentence that is joined together, while the restrictive relative clause is more like an adjective.

Relativisation Process in Relative Clauses

Lamidi (2013), in a work on relative constructions in transformational grammar, posits that a clause is relativised when an NP within it is identical with the antecedent noun phrase of the matrix clause, and is therefore changed to a relative pronoun, that is moved from its original position to the complement position of the relative clause. The author further states that when a relative pronoun is moved from its original position to the complement position, it leaves a trace at the extraction site. The trace is co-indexed, which means that it is assigned the same subscript with the moved element. This is illustrated by the following sentences which D-structure and S-structure follow in succession:

7. D-structure: The car [John bought the car] runs very fast

8. S-structure: The car [which John bought] runs very fast.

The source further elaborates that at the D-structure above, the NP (the car) in the embedded clause is identical with the head NP, the car, in the matrix, while at the S-structure, through relativisation, the identical NP in the embedded clause changes to a relative pronoun *which* and moves to the complementiser position of the embedded clause. The author concludes that relativised clauses do not only occur in the subject position, but can also occur in the noun phrase object of the verb phrase, the noun phrase object of preposition and the noun phrase subject complement that occurs after a copula (Lamidi, 2013).

Zagood (2012) construes relativisation as “a process a sentence is embedded within another higher-order or superordinate clause as a modifier in a noun phrase such that the embedded clause becomes a part of the super-ordinate or main clause”. The author contends that the relative clause is always missing a constituent which shares the same semantic representation with the head noun and the structural location of this missing constituent is referred to as the gap, that is, trace. Zagood concludes that the embedding process in relative clause involves the identification of the identical noun phrase, selection of appropriate relative pronoun to substitute the identical noun phrase, relative pronoun (*wh*-)fronting in the relativised clause and placement of the relative clause after the

antecedent which it modifies (p.52).

Empirical Studies on PP and PS with Wh relativizers

Levin & Lindquist (2007) used British English newspapers as in The Times of London, Today and The Sun to examine their use of PS in English, as in (9).

9. Joan Crawford would have loved a part like this one, *which* Ms. Kidman apparently fought tooth and painted nail *for*. (Levin & Lindquist, 2007)

Example (9) represents PS, whereby the preposition *for* is placed at the final position of the sentence. The preposition phase *with* and *for* are frequently used with the relativiser *which* as in *for which* and *with which*. However, there are different frequencies in the use of the preposition *which* regarding being pied-piped and stranded.

Using Acceptability Judgement Task (AJT), Cesteros (2019) investigated Spanish university native speakers' judgement on PS and PP with wh-relativisers. The participants in this study were asked to judge the sentence, as in (10).

(10) This is one of the worst illnesses which a person can suffer from (Cesteros, 2019).

The results in Cesteros's (2019) study show that the percentages of acceptability and unacceptability in PS appear to be 63.19 percent and 36.80 percent, respectively. On the other hand, the percentage of acceptability and unacceptability of PP appears at 36.81 percent and 63.2 percent, respectively.

Adejare (2021) selected Nigerian English academic writings to study the use of PS and PP. The materials were gathered from International Corpus of English Nigeria (ICE-Nigeria). This corpus includes information such as Academic Writing Humanities, Academic Writing Natural Science, Academic Writing Social Science, and Academic Writing Technical. The results show a tendency that PP is preferred in academic writing.

Gries' corpus data (2002) indicates that P-Stranding Constructions occur more frequently than Pied-Piped Constructions. According to the data, P-Stranding and Pied-Piped Constructions occur in written data with the same frequency; however, P-Stranding Constructions occur in 100% of spoken data, indicating that English speakers prefer P-Stranding Constructions in discourse. There are some restrictions on whether pied-piping or preposition stranding can occur within a relative clause. Firstly, relative clauses introduced by the zero or that relativizers do not allow pied-piping, whereas relative clauses beginning with a WH-relativiser typically permit both (Hoffmann, 2005). This is illustrated with another modified example drawn from the research:

11 a. The merits that a president should be selected on...

b. *The merits on that a president should be selected...

12 a. The merits (zero) a president should be selected on...

b. *The merits on (zero) a president should be selected...

Secondly, non-finite relative clauses do not permit relativisation with that (12ab) or allow preposition stranding with wh-relativizers (13cd):

13 a. a philosophy (zero) to live by

- b. *a philosophy that to live by
- c. a philosophy by which to live
- d. *a philosophy which to live by

Thirdly, the syntactic role of the prepositional phrase (that is, whether the preposition is an adjunct or a complement) also affects the way in which pied-piping and preposition stranding occur (Hoffman, 2005).

Relative clauses are the context in which preposition placement is most frequent (Hoffmann, 2011). In this clause type, pied-piped prepositions are more frequent than stranded ones. In a separate analysis of the relative clause data, Hoffmann factors in the syntactic complexity of the relative clause, based on Lu's (2002) complexity metric and restrictiveness. For non-restrictive relative clauses, the proportion of stranded prepositions is higher than for restrictive ones. According to Hoffmann (2011) "non-restrictive relative clauses are not necessary for the identification of the reference of the antecedent NP. Therefore, the filler-gap identification process in non-restrictive relative clauses is less complex [. . .], which also accounts for the favouring stranding effect.

Prentza (2012) in a work on second language acquisition of complex structures emphasises that for a relative clause, which functions as object of a preposition, the preposition can be stranded or pied-piped along with the *wh*-word, with the following examples:

- 14a. The friend [who] I sent a letter to (Preposition stranding).
- b. The friend [to whom] I sent a letter (Preposition pied-piping).

Prentza is not specific about when a preposition may be dragged (pie-piped) along with a relative pronoun or left stranded at the end of a relative clause.

Theoretical Framework

The concept of generative grammar (GG) has its exponent in Noam Chomsky in the 1950s. Chomsky (1980a) explains that when a linguist's grammar is referred to as generative, it means that it is sufficiently explicit to determine how sentences of the language are in fact, characterised by the grammar. The author furthers that transformational generative grammar starts with explicit generative formal description of grammar through rules which however, expand to include transformations that take place when variants are from basic sentence structures, as a result of re-arrangement that could come from expansion, addition, deletion, reduction, inversion, substitution, questioning or replacement. The author further argues that the thrust of transformational generative grammar is the recognition that language is productive, complex and a sentence has D-structure and S-structures.

For a study on preposition-pied-piping and preposition stranding, generative grammar framework is a suitable theoretical framework. This is because of the core concepts of generative grammar such as movement, which is vital in the understanding of both PP (where the preposition moves along with its complement) and PS (where the preposition stays in place while its complement moves). Movement in the context of generative grammar is an important syntactic operation that explains

how constituents can shift positions in a sentence to satisfy various linguistic requirements. Movement helps in the comprehension of PP and PS by elucidating how prepositions interact with their complements.

Methodology

This study population was the students of tertiary institutions in Owerri and Orlu educational zones of Imo State, South East, Nigeria. The participants were drawn from Imo State University (IMSU), Owerri, Imo State Polytechnic (IMOPOLY), Omuma and Alvan Ikoku Federal University of Education (AIFUE). The institutions were selected based on certain considerations. For instance, it was impossible to study the entire student population due to limited time, limited human and material resources, large size of the population and the spread of the institutions. The researcher took cognisance of the factors above in order not to end up generating hurried research findings.

The principle behind the selection process was based on purposive sampling method, which was based on the researcher's judgement of choosing the sample to be studied appropriately (Etikan, Musa, & Alkassim, 2016). The proportion of the target population used as sample size was one hundred students from each of the three tertiary institutions selected, making a total of three hundred samples. The number was deemed to be representative of the population, as findings from the study of the sample formed the basis for generalisation. The units of study were final year English language Bachelor of Arts (B.A.) undergraduate students, final year Higher National Diploma (HND) students who had studied English as general studies from first year of their National Diploma (ND) to the final year HND and final year degree English/Education undergraduate students from IMSU, IMOPOLY and AIFUE, respectively. The final year students were selected because they had spent the longest time studying English in the institutions. Students' written test was used for data collection. A written test was considered appropriate to enable wider coverage and it was good for a large sample size. It was objective, easy to tabulate and analyse. The study was primarily quantitative using arithmetic means and simple percentage.

It is important to note that out of the total three hundred students who participated, two hundred and sixty two responded, with a shortfall of thirty two respondents. This explained the use of a total of two hundred and sixty two samples as the actual data – 90 from IMSU, 92 from IMOPOLY, and 80 from AIFUE.

Data Presentation and Analysis

For the essay, data extracts were isolated and analysed, with focus on the extracts that suited the research problem. The sentence under focus in the extract is: *The one I was talking to went in and brought a matchet to hit the other woman.*

It was observed that the student placed the preposition, *to*, at the end of the relative clause. That showed preposition stranding. It showed that the student was unable to place the preposition, *to*, properly in the relative clause in the construction. That was because the student was not aware of the presence of the relative clause as the relative pronoun was a zero relative. Again, it could be deduced that the student was not knowledgeable in the use of prepositions in relative clauses in formal writing.

Table1: Data on the Placement of Prepositions by IMSU students

Item No.	Male scores Female scores	Total
1	7 21	28
2	29	29
3	14 16.5	30.5
4	6 25.5	31.5
5	5 26.5	31.5
Total score	32 118.5	150.5
No of Respondents	41 49	90
Mean	0.78 2.41	1.67

Source: 2024 survey

From the Table 1, the entire number of respondents was 90, with a sum score of 150.5 and a criterion mean score of 1.55. The male students were 41 in number, with a total score of 32, while the female students were 49 in number, with a total of 118.5 scores. The mean scores of male and female students were 0.78 and 2.41, respectively. The result showed the female students scored above the criterion mean of 1.55 and better than the male students within the place of prepositions. Since the mean score of the female students was above the criterion mean, while the mean score of the male students was less than the criterion mean, it therefore meant the female students did not find it as difficult to place the prepositions in relative clauses as the male students did.

Table 2: Data on the Placement of Prepositions in Relative Clauses by Imopoly Students

Item No.	Male scores	Female scores	Total
1	11.5	17	28.5
2	9.5	15.5	25
3	8	13	21
4	10.5	9	19.5
5	7.5	13.5	21
Total score	47	68	115
No of Resp	45	47	92

Mean	1.04	1.45	1.25
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Source: 2024 survey

From Table 2 above, the total number of the respondents was 92, out of which 45 were males, while 47 were females. It was observed from the table that the total score of the respondents was 115, with an expected mean score of 1.25. The result showed a general poor performance of students in their use of the prepositions in relative clauses. For instance, the male students had a total score of 47, with a mean score of 1.04, while the female students, with a total score of 68, had a mean score of 1.45. Though the female students had a mean score higher than the criterion mean, the performance was generally poor. Comparatively, however, the female students performed far better than the male students, which meant that, the female students found it a lot less difficult to place the prepositions correctly in relative clause constructions than the male students.

Table 3: Data on the Placement of Prepositions in Relative Clauses by AIFUE Students

Item No.	Male scores	Female scores	Total
1	24		24
2	4	19	23
3	4	28	32
4	2	17.5	19.5
5	6	23.5	29.5
Total score	16	112	128
No of Resp	32	48	80
Mean	0.5	2.33	1.6

Source: 2024 survey

From Table 3 above, it was observed that the total score of the students was 128, out of which the male students scored 16, while the female students scored 112. The males had a mean score of 0.5 in their proper placement of the prepositions in relative clauses, which was less than the criterion mean of 1.6, whereas the mean score of female students amounted to 2.33, higher than the criterion mean. Hence, the female respondents were able to place the prepositions more correctly in relative clauses compared with the males.

Discussion of Findings

Placement of prepositions was one of the problems students encountered in the use of prepositions in relative clauses. The students were always in a dilemma about how to handle the prepositions, whether to drop, pied-pipe the prepositions or to leave them stranding at the end of the relative clause. This showed the complex structure of English relative clauses that made the students find the study of relative clauses difficult, thereby confirming the word of Hoffman (2011).

One special feature of the relative clause which Radford (2006; 2009) revealed was the pied-piping of prepositions along with wh-pronouns such as *whom*, *which* and *whose*, in order to ensure convergence. Though preposition stranding may be allowed in informal usage, specifically in utterances, it is not allowed in formal writing. Radford noted that the stranding constraint prevented the prepositions from being stranded at the end of the relative clause. That was the case with the relative clause, *I was talking to*. Another reason was that the students were not aware that when a preposition is followed by a noun or pronoun and has an object, it should rarely be placed at the end of a sentence. The preposition *to*, therefore moves to specifier-complementiser position as in:

D-structure: [The one [went in [I was talking to] the one]]].

S-structure: [NPThe one_i [CP to whom_i [IP I was talking] t_i] went in.

Through the process of transformation, the co-referential NP, the one, in the D-structure is relativised in the S-structure as *whom*, dragging (pied-piping) the preposition *to* along to specifier complementiser position in the S-structure through wh-movement. The movement leaves a trace (*t_i*) in the position from where item has been moved. It is important to note here that the relative pronoun, which is originally *who*, changes to *whom* as a result of preposition pied piping. Since the student found it difficult to place the preposition, *to*, in the relative clause construction, *I was talking to*, the researcher's question on whether the students in tertiary institutions find it difficult to place the prepositions in relative clauses is affirmed.

From this study, it is good to say that generally, the students have reached a certain level of proficiency in the English language usage. Most importantly, the study revealed some areas of difficulty as well as ease in the use of relative clauses in sentences. The study thus revealed that, the female students found it less difficult to place the prepositions in relative clauses than the male students. It then implied that though the complex structure of English relative clauses accounted for the difficulty in the use of relative clauses by students in tertiary education, the female students generally, had a better understanding of the complex syntactic structure of the English relative clauses than the male students.

The findings on research question three showed that the preposition variant the students used more frequently in their writing was preposition stranding. This research revealed the major areas of difficulty that students encountered in their usage of relative clauses due to their complex syntactic structure, which is the obligatory pied-piping of prepositions with some wh-markers in relative clauses. Most second language users leave the prepositions stranded in relative clauses, whether in writing or in speech as portrayed in the student's essay. The findings tally with and are given credence by Cesteros (2019) that English as foreign language (EFL) learners show their huge confusion regarding the grammaticality of preposition stranding and pied-piping preposition with wh-relativizers in English.

Fascinating facts revealed in this research were the influences of gender and institution on the placement of the prepositions. For instance, a comparison of the scores of male and female

respondents revealed that in the placement of the prepositions and in all the institutions, the female students did not have as much difficulty as the male students in the target structures. A comparison of the institutions showed that the final year university undergraduate degree English students generally found the placement of the prepositions less difficult than the students from the other strata of tertiary institutions. However, the final year Higher National Diploma male students in the polytechnic found it least difficult among the male students, to place the prepositions.

Recommendations

It is essential that the English language teacher pays more attention to the aspects of grammar that may create problems in the acquisition of relative clauses such as pronouns, prepositions, clauses, complex sentence structures generally and their components.

It is suggested that when teaching relative clauses to students, the teachers should provide them with well-written sample papers showing the features and functions of relative clauses and to have the students probe the traits by themselves rather than giving them a detailed account of relative clauses only. This self-directed and independent approach would enhance the students' understanding of relative clause structures.

While teaching the prepositions, the English language teacher should make the student understand the syntactic structure of relative clauses, the syntax of preposition pied-piping and wh-movement in English relative clauses.

Conclusion

This study investigated the prepositional syntax of English relative clauses in writings by tertiary students in order to identify how the students place the prepositions within the English relative clauses in sentence constructions, and the common patterns in their use of prepositions in relative clauses, highlighting frequent syntactic structures, the variants students use more frequently, and how errors could be resolved.

As evident in the analysis of both the primary and secondary data, the study met its objectives, answered the research questions and scholarly addressed the problem that informed the investigation. It has been proved that the students found it difficult to use the prepositions in relative clauses due to the complex syntactic structure of the English relative clauses. It was also evident in the findings that preposition stranding was more prevalent in the students' writing, which showed their lack of understanding of the syntactic role of the prepositional phrase (that is, whether the preposition is an adjunct or complement) which also affects the way in which pied-piping and preposition stranding occur.

A fascinating contribution to knowledge in this study was the finding that gender had an influence on the use of relative clauses and placement of the prepositions among the students in tertiary institutions. This research work revealed that the female subjects had less difficulty in their placement of prepositions in relative clauses in sentences than their male counterparts. It then meant that the female students had a much better understanding of the prepositions in relative clause structure than the male students.

For further studies, the same research could be carried out, with a focus on age, in order to investigate the influence of age and first language on the level of difficulty in relative clause usage,

especially the placement of prepositions in relative clauses. Such a study, apart from satisfying the intellectual curiosity of the researcher, would reveal the extent of the influence of the learner's first language (L1) on relative clause acquisition.

References

- Aarts, B. (2018). *English Syntax and Argumentation* (5th ed.). London: PALGRAVE
- Adejare, R. A. (2021). Preposition pied-piping and stranding in academic and popular Nigerian English Writing. *International Journal of English Linguistics*, 1(4), 40 – 57.
- Akmajian, A., Demers, R. A., Farmer, A., & Harnish, R.M. (2008). *An Introduction to Language and Communication* (5th ed.). New Delhi: Prentice-Hall of India Private Limited.
- Anyanor, T.A. (2017). *English Across Disciplines* (2nd ed.). Owerri: Readon Publishers Ltd.
- Carlson, G.N. (1977). Amount relatives. *Language*, 53(3), 520-542. Stable, URL: <http://www.jstor.org/stable/413175>.
- Cesteros, N. M. (2019). An empirical Study on the acquisition of English prepositional relative clauses by Spanish native speakers. https://uvadoc.uva.es/bitstream/handle/10324/39535/TFM_F2019
- Chomsky, N. (1980a). *Rules and Representations*. Oxford: Blackwell.
- Crystal, D. (2015). *A Dictionary of Linguistics and Phonetics*, 6th edition. Oxford: Blackwell Publishing.
- Enzina, N., & Thompson, E. (2014). The minimalist structure principle and the processing of preposition stranding. *Proceedings of the 31st West Coast Conference on Formal Linguistics*, Robert E. Santana-LaBarge (ed.), 141 – 149. Somerville, MA, Cascadia.
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purpose sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1 – 4.
- Gries, S. T. (2002). Preposition stranding in English: Predicting speakers' behaviour. In *Proceedings of the Western Conference in Linguistics*, 12, 230 – 241. Fresno, CA, California State University. www.linguistics.edu/faculty/stgriesresearch/overview-research.html
- Haegeman, L. (1994). *Introduction to Government and Binding* (2nd ed.). Oxford: Blackwell.
- Hoffmann, T. (2005). Variable vs categorical effects: Preposition pied-piping and stranding in British English relative clauses. *Journal of English Linguistics*, 33(3), 257 – 297.
- Hoffmann, T. (2007). 'I need data which I can rely on': Corroborating empirical evidence on preposition placement in English relative clauses. In S. Featherstone, & W. Sternefeld (eds.). *Roots: Linguistics in Search of its Evidential Base*, 161 – 183. Berlin, Germany: De Gruyter.
- Hoffmann, T. (2011). *Preposition Placement in English: A Usage-based Approach*. Cambridge: Cambridge University Press.
- Krashen, D.S., & Robin, S.C. (1983). Acquisition of complex sentences in esl. *Second Language Studies: Series on Issues in Second Language Research*. Massachusettes: Newbury House Publishers, Inc.
- Lamidi, M. T. (2013). *Aspects of Chomskyan Grammar*. Ibadan: University Press PLC.
- Levin, M., & Lindquist, H. (2007). A preposition is something which you should never end a sentence with: A corpus-based study on preposition stranding. <https://www.dva-portal.org/smash...>
- Lu, B. (2012). How does language encode performance limitation into its structure? Unpublished Manuscript.
- Ndimele, O.M. (1999). *A First Course on Morphology and Syntax*. Port Harcourt: M and J Grand Orbit Communication Ltd.

- Ndimele, O.M. (2007). *An Advanced English Grammar and Usage*. Aba: National Institute of Nigeria
- Omorodion, G. N. (2011). *The Basic Grammar of English*. Ibadan: Spectrum Books Limited.
- Prentza, A.I. (2017). Second Language acquisition of complex structures: The case of English restrictive relative clauses. *Theory and Practice of Language Studies*, 2(7), 1330-1340.
- Radford, A. (2006). *Syntax: A minimalist Introduction*. Cambridge: Cambridge University Press
- Radford, A. (2009). *An Introduction to English Sentence Structure*. Cambridge: Cambridge University.
- Trask, R. L. (1993). *A Dictionary of Grammatical Terms in Linguistics*. London & New York: Routledge.
- Tallerman, M. (2005). *Understanding Syntax* (2nd ed.). London: Hodder Education.
- Wongkittiporn, A. (2023). Syntactic functions and pragmatic aspects of preposition stranding and preposition pied-piping with wh-relativisers: perspectives from English novels. *Asia Social Issues*
<https://so06.tci-thaijo.org>
- Yanez – Bouza, N. (n. a.). *Grammar, Rhetoric and Usage in English: Preposition Placement, 1500 – 1900*. Cambridge: Cambridge University Press.
- Zagood, M.J.M. (2012). A contrastive study of relativisation in English and Arabic with reference to translation pedagogy. A PhD thesis, Durham University.

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