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Analysis of Minimalist Syntactic Complexity in English Writing among Secondary Level Students

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Abstract: *This research is an analysis of minimalist syntactic complexity in the syntactic structures of secondary-level students of government schools. It highlights the null constituents in the syntactic structures of students writing in annual examinations. It also finds the occurrences of null constituents in the written syntactic structures of the students. For this purpose, the researchers selected ten government high schools [male students] of district Mardan. In this research, a hundred samples of attempted answer sheets of English paper (class 9 & 10) were collected through a random sampling technique. The theoretical framework of the Noam Chomskys Minimalist program was used for this research. The syntactic structures of the attempted answer sheets of the students were analysed through parsing (tree diagram) with the perspective of minimalism. The data were analysed qualitatively and quantitatively; the null constituents are discussed qualitatively, and the occurrences of null constituents shown are quantitatively through tabulation.*

Key Words: Answer Sheet, English Writing, Minimalism, Secondary Level, Syntactic

Introduction

Grammar is traditionally subdivided into two different but interrelated areas of study – morphology and syntax (Radford, 2006). Generative grammar investigates that sentences are generated by a subconscious set of procedures. These procedures are part of our minds. In this generative grammar, the goal of syntactic theory is to model these procedures. In other words, we are searching to figure out what is subconsciously known to us about the syntax of the English language. In generative grammar, the means for modelling these procedures is through a set of formal grammatical rules. These rules have been defined further in Minimalism by Noam Chomsky. The study of language belongs in the humanities. The method involves observing some data, making some generalisations about patterns in the data, developing hypotheses that account for these generalisations, and testing the hypotheses against more data. Finally, the hypotheses are revised to account for any new data and then tested again (Carnie, 2013, as cited in Saleem, 2018).

In district Mardan, the total number of government high/higher schools is two hundred. It has a total of 58,627 students (boys & girls) enrolled in government high schools (DEOM, 2018). The students of Mardan speak Pashto as a local language and Urdu as a National language. The impact of their mother

tongue does exist in the acquisition and learning of English as a second or an international language. The researchers conducted research in the field of English language teaching, textbook analysis, grammatical analysis and others. The area of syntax is also analysed by researchers; however, minimalistic syntactic analysis is the missing area which needs to be researched. This research is the minimalist syntactic analysis of the written English syntactic structure used by the students in the exam [session 208-19].

The current model of syntactic theory, minimalism, is in generative linguistics, which deals with the perennial question of how to link sound and meaning. The Minimalist Program is a collection of four articles, the theory of Principles and Parameters, some notes on Economy of Derivation and representation, a Minimalist Program for linguistic theory and Categories and transformations. The rest three articles have appeared elsewhere and are reprinted here with minor revisions. The fourth was circulated in manuscript form earlier in 1995 and is commonly referred to as chapter four (Chomsky, 1997).

Null constituents (empty categories) have grammatical and semantic features but lack audible phonetic features-silent or are inaudible (Radford, 2009). There could be Null subjects, Null auxiliaries, Null T in auxiliaries finite clauses, Null T in bare infinitive clauses, Null C in finite clauses, Null C in non-finite clauses, Null determiners and quantifiers. Researchers have been doing research in syntactic analysis and academic discourse, but no research has been done on analysing the syntactic structure of students' exam writings at the secondary level of Khyber Pakhtunkhwa Elementary and Secondary Education Department with a minimalist perspective. Therefore, the present research is aimed to analyse English papers of secondary school level (class 9 & 10) students syntactically through parsing rules.

Statement of the Problem

The teachers teach sentence structure through tenses, voices and narration to the students in the classroom. The students cram or comprehend the grammatical structure of the sentence. The problem is faced when one asks a student to write an essay or creative paragraph on any topic of his own choice. This is known that sentence structure is important for writing any piece of written task. This research aimed to analyse the syntactic structures of the students of government high schools in order to know the weak part of the students.

Research Objectives

1. To analyse the minimalist syntactic complexity in English writing of the students of class 9 and class 10.
2. To identify null constituents in the students writing at the secondary level.

Research Questions

1. How do students of secondary level structure sentences in their exam writings [English writing]?
2. What type of null constituents do secondary-level students use in their exam writing?

Significance of the Study

The study seeks to explore the syntactic structure of academic discourse at the secondary level. The students use sentences to answer the questions asked on the question paper. However, the syntax is an element of core linguistics; it gives knowledge about the sentence, which is helpful to know about the syntactic patterns. The students writing in the exam is explored from the perspective of the minimalist program. Therefore, this research is aimed to analyse the sentence structure on the answer sheet of the students for their home exam. This study helps the students to know their structure levels. Also, the curriculum designer of the secondary level gives more focus on the syntax of the students, which results positively in their exam writing.

Delimitation of the Study

The present study is limited to syntactic structures of English syntax used by the

students during exam writing in the attempt of an English paper. The English papers for classes 9 and 10 of the home exam students were collected from the ten government secondary schools in district Mardan. Moreover, the study is delimited to the generative perspective of language. The modern notions of descriptivism are inculcated; however, the minimalist program is opted for the present research and delimited to null constituents.

Literature Review

The Minimalist Program is the foundation of minimalism and its application in syntax. It tries to cover the syntax from a very different and new approach to see and investigate the minimal unit of a sentence. The minimalist approach is a successful attempt which makes us know about the locality and minimal units of the syntax (Chomsky, 1997). Null constituents are grammatically and semantically featured, but they have no phonetic features, which are similar to inaudible, the slots of a sentence which are left empty by the speaker intentionally or unintentionally. Researchers have worked and tried to fill the gap from different dimensions (Radford, 2009).

Luria (1977) conducted an investigation of children learning to write in their first language by using error analysis. Given lists of words they could not memorise, children invented their own scribbles to aid their memory. From these case histories, Luria characterised writing as a way of organising internal psychological operations. Luria's study demonstrated the usefulness of both failure and error analysis to gain knowledge of the intangible mental process.

According to Kroll (1979), a key concern in every question paper exam of native language users or second language users should consider the question of errors in writing because no single written standard may be considering the distinguished written product in English. Mistakes of learners are often the result of internally consistent and carefully worked out but misguided interpretations of language. Error analysis has offered the insight that many

errors on the part of ESL students stem from intralingual errors within English.

Although an emphasis on error avoidance may be detrimental to the writer, the analysis of errors during the writing process can be a useful tool when it is considered apart from actual writing instruction. This focus elevates the status of errors from something that is undesirable to that of a guide to the inner workings of the language learning process (Kim, 1998). According to Chandio, Khan & Samiullah (2013):

The condition of creative writing skills of students at North and South Punjab schools is not satisfactory. One reason is the large number of students in classes. When the results were compared in terms of the number of students in class, it was found that students in small classes performed better (p.328-9).

Aziz, Umar & Mustaf (2015) have conducted research on the students of higher secondary school level and their learning problems and strategies. They have contributed to the field of English and say:

"English as they are not interested in students. Teachers considered that only class time was their duty time. After class time, students are not their responsibility. The mean score for the use of language material such as AV Aids in the class is 1.04, which shows that teachers do not use AV aids in the class to enhance the English learning abilities of students. The lack of availability of AV aids is a major problem in Pakistan. Lack of professionals to handle these AV aids is also one of these causes." (p.60)

Furthermore, research was conducted in Malaysia in the field of academic writing and errors in academic writing by the students. According to Singh, Singh, Razak &Ravinthar (2017):

"There are nine types of grammatical errors made by the ESL students, including errors in Subject-Verb Agreement, Verb Tense, Noun, Preposition, Adjective, Article, Pronoun, Adverbs and Conjunctions. The analysis of the students' grammatical errors revealed that these students have a poor command of the

English language. Errors are expected in the process of learning, and it is very important to identify the cause behind their occurrence." (p.25)

However, the mentioned researches show that the researchers covered the aspects of English language writing in a different parametric module. The gap in this research is the syntactic analysis has not been made with the minimalist syntactic complexity approach in English writing at the secondary level in district Mardan, Khyber Pakhtunkhwa.

Null Constituents

In the area of null constituents, Soriano (1989) conducted research on Strong pronouns in null-subject languages and the avoid pronoun Principle. This is a comparative study of English and Spanish in which the major focus is on the null category in the syntactic study. Postal (1969) has argued for the existence of phonologically empty nouns, that is, nouns without a PF representation. They have been argued to appear inside a series of grammatical elements, like pronominal and elliptical noun phrases. Hence, phonologically empty nouns have been argued to be complements of (some) pronouns. Further, according to Morrow (1986),

"Editors of subject matter textbooks for six-, seven-, and eight-year-olds might utilise specific data on syntactic complexity when developing texts. To encourage comprehension, the syntactic complexity of texts should not exceed that of the children's language to any great degree (p.147)."

Macdonald's (2016) study has contributed to the null subject in English and Ịzọn languages, where the null subject has been researched more in this research article, a comparative syntactic review of the null-subject parameter in English and Ịzọn languages. This study has shown the comparison of two languages and the position and occurrence of the null subject. The study exposes that the null-subject constituent is not a distinctive feature of English syntax but a feature of Ịzọn syntax. It is important because it pays fresh

linguistic data to the principles and parameter theory.

Ewie and Lomotey (2016) in Akans students of high school, the study was made on an L1 intrusion in the L2 writing. The students' 90 essays of written work were collected for the research. According to Ewie and Lomotey (2016):

"The study found that grammatical errors were more frequently committed than lexical errors. It was also discovered that the grammatical errors committed frequently by the students were in this order: tense errors, agreement errors, number errors (singular/plural errors), article errors, and prepositional errors. Effective and appropriate writing is teachable and learnable, but before this can be achieved, both teachers and students have a major role to play in improving the students writing skills in relation to grammatical and lexical errors." (p.480)

The research was conducted by Saleem (2018) at two universities in Islamabad, where he collected data from the teachers of these universities. The transcribed data were analysed for syntactic purposes. The findings suggest that the teachers of these universities have null categories in their speeches within the classroom lectures. Many researchers believe that information concerning the acquisition of syntactic patterns in children's language is critical in the development of reading materials. Research by Strickland (1962), Ruddell (1965), Templin (1966), and Robertson (1968) confirms the importance of the relationship between children's familiarity with syntactic patterning and their level of comprehension in reading.

The previous studies how the research has been done on the several aspects of syntax. Researchers have conducted their research on the parametric level of the sentence. Thus, the need for the present study comes to front that a minimalist approach could be applied to the written data of students' exam writing so that we could also see the sentential level of written English at the high school level. This research analyses students' exam writing at four high schools in District Mardan, KP. In the previous

study, it has not been noticed that English language use in writing has been analysed syntactically with a minimalistic perspective.

Research Methodology

This covers the methodology for the current study, which consists of two major parts, data collection and theoretical framework. Data collection is the first part which discusses the procedure of data collection like research design, population and sample, while the second part is the theoretical framework which discusses in detail its components. In the theoretical framework—minimalist program—of Noam Chomsky, three major areas with subdivision are highlighted, defined and explained. The three areas are null constituents, wh-movement and head-movement. The current research is delimited to null constituents, and it is discussed with its subcategories.

Research Design

The research design of this study includes qualitative analysis and quantitative analysis. In the qualitative method, I analysed the syntactic patterns. On the other hand, the frequency of syntactic patterns is analysed quantitatively.

Data Collection

Data was collected from Government Higher Secondary Schools, Elementary and Secondary.

Education Department, Khyber Pakhtunkhwa. The questions and answers were taken from textbooks [for classes 9 & 10] of Khyber Pakhtunkhwa textbook board Peshawar.

Population

The total number of higher/high secondary schools in district Mardan is two hundred (DEOM, 2018). The population was ten government high schools in district Mardan.

Sample

A random sampling technique was used in order to give an equal chance to every attempted paper to be taken for analysis. This allows for making a free, biased selection of the participant. The sample of a hundred attempted answers sheet of English papers of textbooks of class 9 and class 10 [fifty answer sheets from class 9 and fifty answer sheets from class 10] students are taken from the selected schools' students.

Theoretical Framework

The minimalist program was used in this study, especially with reference to the minimalist hold of the syntactic phenomenon of Chomsky (1995). It is focused on the processes of the minimalist program in which the study makes extensive use of them. The null categories were the main focus of this research which is explained here.

Null Subjects

A sentence contains a subject; when the subject is not apparent, it is called a null subject. The subject is present semantically and functionally, but it is not present phonologically. According to the Null subject phenomenon, it is sometimes known as subject drop or subject non-drop. Languages are divided into two categories in respective null subjects, i.e. pro-drop languages and non-pro-drop languages. Those languages which permit sentences of that particular language to structure without the existence of a subject are pro-drop languages, like Chinese, Russian and Spanish. Those languages which do not permit sentences of that particular language to structure without the existence of a subject are non-pro-drop languages like English, French and German. The speakers of the English language make the production of a sentence with/without a subject that is explicit like colloquial, baby talk and imperative. In the English language, the null subjects are categorised into three types which are; imperative null subject, non-finite null subject and truncated null subject. These types of invalid subjects are explained with examples below.

Imperative Null Subjects

The imperative sentence starts with the first form of a verb, where the subject is implicit in the imperative sentence. Thus the subject is a null subject which is called an imperative null subject. It is shown in the example below. Example: Open the window.

NP-N (Sub)- Ø VP-V-open DP-D- the NP-N-window

In the example, the noun phrase has no phonological presentation, which is a null subject. The rest slots of the sentence are verb phrase (open) and determiner phrase (the window).

Non-Finite Null Subjects

In the English language, we have finite and non-finite sets of words and sentences. In English, the finite category does not have a null subject, while in non-finite clauses, the null subject is null. It contains clauses like the main clause and complement clause. However, in these clauses verb is not used for agreement or tense.

Truncated Null Subject

The truncated null subject is the third kind of null subject, and truncation means omitting. The English language allows the truncation process of one or more words at the start of a sentence; if this happens, then it is called a truncated null subject. This truncation occurs in many styles, like the writing of a diary in English and informal spoken English. The English are used as colloquial, where the pattern of questioning is changed.

Null Auxiliaries

In a sentence, the auxiliary has its own place, which contributes to the syntactic structure and its semantic field. The null auxiliary is a concept where we find a sentence without the phonological presentation of auxiliary. Null auxiliaries are shown in example (b).

Example:

a) He migrating to Canada.
b) He Aux Ø migrating to Canada.

In sentence (a), we see that the verb shows present continuous tense where he follows aux "is," and the verb will be the first form with ing. We see that the auxiliary is null here, but the rest of the slot is affected by the existing hidden auxiliary like migrating. This could be migration or migrated or migrated, but the null aux left its effect on the verb.

Null T in Auxiliariless Finite Clauses

In minimalist syntactic analysis through parsing, the maximal projection is a tense projection (TP). Tense is the main part of the sentence in generative and minimalist syntax. However, a clause that is finite, having no auxiliary, and the tense is null is known as null T in auxiliaries finite clause. Null T in Auxiliariless finite clauses exist in compound and complex sentences.

Null T in bare Infinitive Clauses

Null T in a bare infinitive clause is null tense in bare infinitive which means 'to-less clause. An Independent clause is a simple sentence, and the sentence needs tense to be explicit. Whenever tense is null in a bare infinitive clause and the clause is affected by the null constituent, it is in the category of Null T in a bare infinitive clause. Null T in the bare infinitive clause is elaborated in examples (a) & (b).

Example: a) It has never known [Zia criticises everyone]

b) It has never known Zia (to- Ø) criticise everyone.

In sentence (a), it is a bare infinitive, and the tense is null here, which makes another syntactic structure for the sentence.

Null C in Finite Clauses

Null C in finite clauses is an operation where the complementiser (C) in a sentence or clause becomes null, and the clause is finite. Then we say that it is Null C in a finite clause in the example below.

Example:

a) She does know I have left the university.

b) She does know (if/that) I have left the university.

Sentence (a) and sentence (b) have two clauses. Sentence (a) has a null complementiser, which is shown in sentence (b), i.e. if/that.

Null C in Non-finite Clauses

Null C in non-finite clauses is a null complementiser in a clause which is a non-finite clause like 'for & to infinitive clauses (Radford, 2009b). The complementiser phrases are presented through the infinitival complementiser in the example (a) & (b) below.

a) I shall call [for him to meet the doctor]
b) I wanted [for you to sign the application]

The type of bracket in sentences (a) & (b), the infinitive complement clauses found after verbs like 'want in a sentence (b) and 'call in a sentence (a).

Null Determiners and Quantifiers

Null determiners and quantifiers are the parts of null constituents which means the phonological empty slot of determiners is a null

determiner, and the phonological empty slot of the quantifier is a null quantifier in a clause or sentence. In syntax, noun expression has two types, i.e. nominal and bare nominal. Nominal is simply a noun expression, while bare nominal is a noun expression which has an overt quantifier or determiner (Chomsky, 1965). These both are parts of the syntactic pattern, which is further exemplified below.

Bare nominal example (a) for determiner

a) *John* encourages *Kin*.

Both the italicised are without determiner in example (a). It means determiner is null here, while in the English language, a noun takes determiner or quantifier.

Data Analysis

The collected data were analysed qualitatively and quantitatively. All the sentence structure was examined and analysed syntactically. The syntactic structures of the selected answer sheets are presented through a tree diagram. In the collected fifty answer sheets samples of class 10, the following types of null constituents were found, which are presented in table 1 with sentences from the answer sheets of the English subject.

Table 1. Sentence Structure of Samples [class10]

S. No	Type of Null Constituents	Sentences (from students' answers sheet)	Sentence Structure (null constituents-Italicized)	Unit Name/Number
1	Null Subjects	Decided to pay those ten pieces to the merchant as well.	*Al-Mansoor* decided to pay those ten pieces to the merchant as well.	The Caliph and the Gardener / 2
		Yes, a business centre.	Yes, *the place* was only a business centre.	The Income-Tax Man / 6
		Apologised to the woman	*He* apologised to the woman.	Begum Rana Liaqat Ali Khan/ 5
		Become narrow by nicotine.	*The blood* vessels become narrow by nicotine.	Tobacco and Your Health / 8
		Consider him as a businessman.	*He* consider him as a businessman.	The Income-Tax Man / 6
		Written on the package of cigarettes is that it causes mouth and lung cancer.	*The warning* Written on the package of cigarettes is that it causes mouth and lung cancer.	The Income-Tax Man / 6

Table 1 presents the positioning of subjects in the written language of students on their answer sheets of English papers. The null subjects re-found in the syntactic structures of the students, which are italicised. Further, the null auxiliary is presented in table 2.

Table 2. Sentence Structure of Samples

2	Null Auxiliary	It ten o' clock at night.	It *was* ten o' clock at night.	After Twenty Years / 3
		Family of Holy Prophet (SAW) traced back to Hazrat Ismail AS) and Ibrahim (AS)	Family of Holy Prophet (SAW) *is* traced back to Hazrat Ismail AS) and Ibrahim (AS)	The last Address of the Holy Prophet Muhammad (SAW) / 1
		The rest of people gone their home.	The rest of people *have* gone their home.	After Twenty Years / 3
		There a restaurant and a cigar store.	There *was* a restaurant and a cigar store.	After Twenty Years / 3
		Blood vessels are narrower because of nicotine.	Blood vessels *have become* narrower because of nicotine.	Tobacco and Your Health / 8 Tobacco and Your Health / 8

Table 2 shows the allocation of auxiliaries in the written language of students on their answer sheets of English papers. It further explains the syntactic structure of students contains null auxiliary. The sentence in figure 1 is presented with a tree diagram in order to show the null category in the syntactic structure.
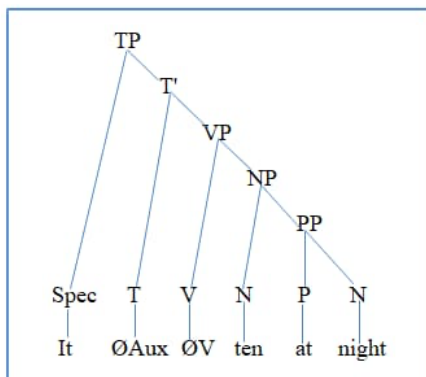
Example 1: It Ten Oclock at Night

Figure 1: Null Auxiliary Example 1

In figure 1 the example (1) is analysed through the parsing rule. The surface structure of example (1) has grammatical words. But the slots of some of the words are empty, which makes the null constituents in the syntactic structure of this sentence. According to minimalist analyses, the description of the sentence structure is from right to left, which is shown in figure 1. This sentence is analysed with a minimalistic view, where the possible slots are shown in figure 4.1. The slots for this sentence structure are PP (N-night), NP (N-ten), then VP (ØV), T (ØAux) and TP (Spec-it). This is an imperative null subject because the imperative subject is null in this syntactic structure. Therefore, example (1) has a null subject and null tense in its syntactic form.

Null Constituents Frequency

The students of class 10 have certain null categories on their attempted answer sheets. The frequency of null constituents is described in table 3.

Table 3. Detail of Frequency of Null Constituents in Fifty Samples

S. No	Name of Null-Constituents	Frequency
1	Truncated Null Subject	250

2	Non-finite Null Subject	220
3	Imperative Null Subject	300
4	Null Auxiliaries	60
5	Null Determiners	190
6	Null Quantifiers	245
7	Null tense in bare infinitive clauses	30
Total		1295

Table 3 illustrates that the answer sheets of the students contain null categories. The total number of null constituents is 1295, which is a significant figure. These null categories are counted manually and presented in the tabulation. The null categories are searched in all selected samples. Each category is noticed in a single sample of the student and then added for the presentation in table 3. The second column of the table represents the null constituents, and the last column states the frequency of each rowed null category. However, in fifty samples from ten different schools of the district, Mardan has a total of seven types of null categories with a frequency of a total of twelve hundred and ninety-five in the attempted answer sheets. It states that the students have null constituents in their writings at the time of attempting the English paper of their exam.

In addition, in the collected samples of fifty answer sheets of class 9, the following types of null constituents are found, which are presented in table 4. with sentences from the paper English answer sheet.

Table 4. Sentence Structure of Students [class 9]

S#	Type of Null Constituents	Sentences (from students answers sheet)	Sentence Structure (null constituents-Italicized)	Unit Name/Number
1	Null Tense	Almighty Allah special importance to tolerance in the Holy Quran.	Almighty Allah *gives* special importance to tolerance in the Holy Quran.	Prophet Muhammad (SAW), The Model of Tolerance / 1
		The main idea of that lesson that Allama Iqbal tries his level best to awaken the Muslims.	The main idea of *is* that lesson that Allama Iqbal tries his level best to awaken the Muslims.	Iqbals message to Youth / 2
		Religious harmony when there is love, affection, peace and tolerance.	Religious harmony *means* when there is love, affection, peace and tolerance.	Letter to the Newspaper Editor/ 10
		The songs of hope pleasant for a person.	The songs of hope *are* pleasant for a person.	Hope is the with Feathers / Poem-1
2	Null Determiner	River carries along with it a great deal of yellow mud.	*This* river carries along with it a great deal of yellow mud.	Muslims of China / 9
		Family of Holy Prophet (SAW) traced back to Hazrat Ismail AS) and Ibrahim (AS)	*The* family of *the* Holy Prophet (SAW) traced back to Hazrat Ismail AS) and Ibrahim (AS)	The last Address of the Holy Prophet Muhammad (SAW) / 1
		One of modern inventions of science is electricity.	One of modern *the* inventions of science is electricity.	Essay question: Science in the service of Man
3	Null Tense	TV for advertisement of family planning.	TV *is used* for advertisement of family planning.	Essay question: Television

4	Null Truncated Subject	Balakot the epicenter of 2005 earthquake.	Balakot *was* the epicenter of 2005 earthquake.	The Kaghan Valley / 13
		Yes,	Yes, *I think that television* is a useful source of information.	Letter to the Newspaper Editor/ 10
		One a dog stole a piece of meat from a butchers shop. Ran away and wanted to eat it all alone.	One a dog stole a piece of meat from a butchers shop. *He* ran away and *he* wanted to eat it all alone.	Story: The Dog and his Shadow

The table 4 shows the allocation of auxiliaries in the written language of students on their answer sheets of English papers. It further explains the syntactic structure of students contain null tense [as an example/sample]. The sentence in figure 1 is presented with tree diagram in order to show the null category in the syntactic structure.

Example 2: The Songs of Hope *are* Pleasant for a Person.
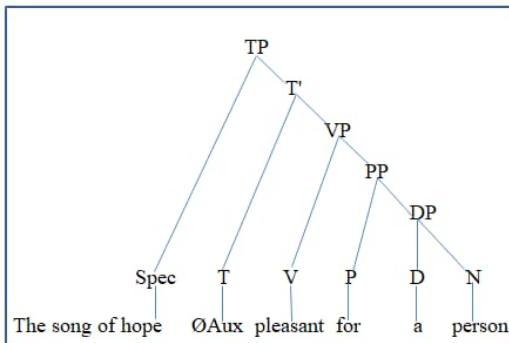

Figure 2: Null Auxiliary Example 2

In figure 1, example (1) is analysed through the parsing rule. The surface structure of example (1) has grammatical words. But the slots of some of the words are empty, which makes the null constituents in the syntactic structure of this sentence. According to minimalist analyses, the description of the sentence structure is from right to left, which is shown in figure 1. This sentence is analysed with the minimalistic view, where the possible slots are shown in figure 1. The slots in this sentence structure are NP (N-night, D-a), PP (P-for), T' (ØT), TP (Spec-N-hope, P-of, Adj-songs, D-

the). This is null tense in this syntactic structure.

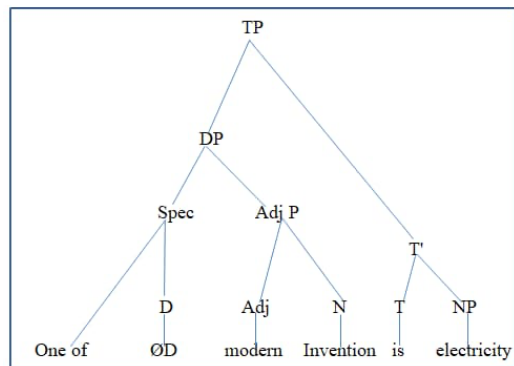**Example 3:** One of Modern *the* Inventions of Science is Electricity

Figure 3: Null Auxiliary Example 3

In figure 3, example (3) is analysed through the parsing rule. The surface structure of example (3) has grammatical words. The slots of some of the words are empty, which makes the null constituents in the syntactic structure of this sentence. According to minimalist analyses, the description of the sentence structure is from right to left, which is shown in figure 3. This sentence is analysed with the minimalistic view, where the possible slots are shown in figure 3. The slots for this sentence structure are NP (N-electricity), T' (T-is), TP (Spec-N-invention, AdjP-modern, DP-ØD, PP-of, D-one). This is null tense in this syntactic structure.

The students of class 9 have certain null categories on their attempted answer sheets. The frequencies of null constituents are noted in table 5.

Table 5. Detail of Frequency of Null Constituents in Fifty Samples

S. No	Name of Null-Constituents	Frequency
1	Truncated Null Subject	300
2	Non-finite Null Subject	280
3	Imperative Null Subject	340
4	Null Auxiliaries	80
5	Null Determiners	220
6	Null Quantifiers	285
7	Null tense in bare infinitive clauses	50
Total		1555

Table 5 shows the answer sheets of the students contain null constituents. The figure of total occurrences, i.e. 1555, is a significant figure, and it is also greater than class 10. The null categories are counted manually and noted in the tabulation. The null categories are searched in all selected samples. Each category is found in a single sample of the student and then added for the analysis in table 5. The second column of the table represents the null constituents, and the last column states the frequency of each rowed null category. However, the answer sheets of class 9 students have a total number of seven null categories with the frequency of 1555 in the attempted answer sheets of the English paper. The students have null constituents in their writings at the time of attempting the English paper of their exam.

Conclusion

The analysed data shows that the students of selected higher schools in district Mardan use syntactic structures during session which contain null constituents. Language is all about its rules and principles when we talk about a scientific study and core linguistics particularly. The other branches of linguistics do support language as communicative purpose but as far as syntax is concerned, it has made slots for every word and the arrangement responsibility is shouldered by the rules of syntax. A message may depend on two things, first is grammatical units and second pragmatics (Saleem, 2018). Firstly, when a sentence is uttered; it has

meaning which depends upon the slots of structure. The slots are filled in a sentence for the listener or reader. Secondly, the 56 samples of attempted answer sheets are analysed with help of minimalistic approach which show the actual sentence structure used by the students in their examination of English paper. The students of class 9 and 10 of the mentioned four schools of district Mardan have seven null categories in their syntactic patterns of academic language. Further, it is found that students have lack awareness of sentence use which show their weak performance in English paper in terms of points/scores.

Findings

The research findings suggest that Minimalism is an approach which works in the classroom in order to help the students to know the minimal pair of the structure used in their written form of language. It helps them to get to know about the comprehension level and the production of the language and its syntactic structure. The data analysed shows the students at the secondary level use language which has seven types of null constituents in the syntactic patterns, i.e. Imperative Null Subject, Non-finite Null Subject, Truncated Null Subject, Null Auxiliaries, Null Determiners and Null Quantifiers. Minimalism applied to classroom discourse expresses that the minimal pair is the important element of a sentence structure which shapes all properties of a structure of a sentence. The detail of the findings is presented in table 6.

Table 6. Detailed Frequencies of Null Constituents

S. No	Total Schools	Class	Answer Sheets	Null Constituents	Frequency
1	Ten	10	50	Seven	1295
2		9	50		1555
Total			100		2850

Table 6 shows the frequency of null constituents in the attempted answer sheets of the selected students. The first column illustrates the serial number, while the second column; demonstrates the total number of null schools, i.e. 10. The third column shows the class level from where the data was collected. The fourth column shows the number of samples from classes 9 & and 10 total collected samples and the number of null constituents present in the syntactic structures of the students. The fifth column shows the frequency of null constituents present in total answer sheets of class 9 and class 10 [1295+1555=2850]. However, the findings of the data analysis are significant in terms of this research which could be used for further guidance and research.

Finding

Findings are mentioned here:

- The sentence structures of the students of the ten selected schools have seven types of null categories.
- They do make the slots empty in the essay part of the paper and in the short answer portion [section B, questions from textbook of class 9 & 10].
- The finding suggests that class 9 has a high number of null constituents occurrences than class 10 of the selected schools.
- The students' answer sheets were analysed line by line, which showed less syntactic awareness in the structures.
- The students write and use the less syntactically correct structure of sentences.

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